IMPORTANT NOTICE

THE ATTACHED BASE OFFERING CIRCULAR IS AVAILABLE ONLY TO CERTAIN PERSONS OUTSIDE OF THE U.S.

IMPORTANT: You must read the following before continuing. The following notice applies to the attached base offering circular (the **Base Offering Circular**) following this notice, and you are therefore advised to read this notice carefully before reading, accessing or making any other use of the Base Offering Circular. In accessing the Base Offering Circular, you agree to be bound by the following terms and conditions, including any modifications to them any time you receive any information from the Issuer, the Arrangers and the Dealers (each as defined in the Base Offering Circular) as a result of such access.

NOTHING IN THIS ELECTRONIC TRANSMISSION CONSTITUTES AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY SECURITIES IN THE UNITED STATES IN ANY JURISDICTION WHERE IT IS UNLAWFUL TO DO SO. THE NOTES DESCRIBED IN THE BASE OFFERING CIRCULAR (THE **NOTES**) HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE **SECURITIES ACT**) OR ANY U.S. STATE SECURITIES LAWS AND MAY NOT BE OFFERED OR SOLD IN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR THE BENEFIT OF, U.S. PERSONS AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT UNLESS AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT IS AVAILABLE AND IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND ANY OTHER JURISDICTION.

THE BASE OFFERING CIRCULAR IS NOT BEING DISTRIBUTED TO, AND MUST NOT BE PASSED ON TO, THE GENERAL PUBLIC IN THE UNITED KINGDOM. RATHER, THE COMMUNICATION OF THE BASE OFFERING CIRCULAR AS A FINANCIAL PROMOTION IS ONLY BEING MADE TO THOSE PERSONS WHO HAVE PROFESSIONAL EXPERIENCE IN MATTERS RELATING TO INVESTMENTS FALLING WITHIN ARTICLE 19(5) OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (FINANCIAL PROMOTION) ORDER 2005 (THE **ORDER**) OR HIGH NET WORTH ENTITIES, AND OTHER PERSONS TO WHOM IT MAY LAWFULLY BE COMMUNICATED, FALLING WITHIN ARTICLE 49(2)(A) TO (D) OF THE ORDER (EACH SUCH PERSON BEING REFERRED TO AS A **RELEVANT PERSON**). THIS COMMUNICATION IS BEING DIRECTED ONLY AT RELEVANT PERSONS AND ANY INVESTMENT OR INVESTMENT ACTIVITY TO WHICH THIS COMMUNICATION RELATES WILL BE ENGAGED IN ONLY WITH RELEVANT PERSONS. NO PERSON OTHER THAN A RELEVANT PERSON SHOULD RELY ON IT.

THE BASE OFFERING CIRCULAR MAY NOT BE FORWARDED OR DISTRIBUTED TO ANY OTHER PERSON AND MAY NOT BE REPRODUCED IN ANY MANNER WHATSOEVER. ANY FORWARDING, DISTRIBUTION OR REPRODUCTION OF THE BASE OFFERING CIRCULAR IN WHOLE OR IN PART IS UNAUTHORISED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS. IF YOU HAVE GAINED ACCESS TO THIS TRANSMISSION CONTRARY TO ANY OF THE FOREGOING RESTRICTIONS, YOU ARE NOT AUTHORISED AND WILL NOT BE ABLE TO PURCHASE ANY NOTES.

Confirmation of your Representation: By accessing the Base Offering Circular you confirm to us that: (i) you understand and agree to the terms set out herein; (ii) you consent to delivery of the Base Offering Circular and any amendments or supplements thereto by electronic transmission; (iii) you will not transmit the Base Offering Circular (or any copy of it or part thereof) or disclose, whether orally or in writing, any of its contents to any other person; and (iv) you acknowledge that you will make your own assessment regarding any credit, investment, legal, taxation or other economic considerations with respect to your decision to subscribe or purchase any of the Notes. In order to be eligible to view the Base Offering Circular or make an investment decision with respect to the Notes, investors must be non-U.S. persons outside the U.S. The Base Offering Circular is being sent at your request and by accepting the e-mail and accessing the Base Offering Circular, you shall be deemed to have represented to us that (1) you and any customers you represent are not U.S. persons or acting for the account or benefit of any U.S. person and that are outside the U.S., its territories and possessions (including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and the Northern Mariana Islands), any State of the United States or the District of Columbia, (2) the electronic mail address that you gave us and to which this transmission has been delivered is not located in the U.S., (3) you are a person who is permitted under applicable law and regulation to receive the Base Offering Circular and (4) you consent to delivery of the Base Offering Circular by electronic transmission.

You are reminded that the Base Offering Circular has been delivered to you on the basis that you are a person into whose possession the Base Offering Circular may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not, nor are you authorised to, deliver the Base Offering Circular to any other person. Failure to comply with this directive may result in a violation of the Securities Act or the applicable laws of other jurisdictions.

The Base Offering Circular does not constitute, and may not be used in connection with, an offer or solicitation in any place where offers or solicitations are not permitted by law. If a jurisdiction requires that an offering of Notes be made by a licensed broker or dealer and the Arrangers and the Dealers or any affiliate of the applicable Arrangers or Dealers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by such Arranger or Dealer or such affiliate on behalf of the Issuer or holders of the Notes in such jurisdiction.

Under no circumstances shall the Base Offering Circular constitute an offer to sell or the solicitation of an offer to buy any securities in any jurisdiction. Recipients of the Base Offering Circular who intend to subscribe for or purchase the Notes are reminded that any subscription or purchase may only be made on the basis of the information contained in the Base Offering Circular. The Base Offering Circular may only be communicated to persons in the United Kingdom in circumstances where Section 21(1) of the Financial Services and Markets Act 2000 does not apply.

The Base Offering Circular has been sent to you in an electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of electronic transmission and consequently none of the Issuer, the Arrangers and the Dealers or any person who controls them nor any director, officer, employee or agent of them or affiliate of any such person accepts any liability or responsibility whatsoever in respect of any difference between the Base Offering Circular distributed to you in electronic format and the hard copy version available to you on request from the Issuer, the Arrangers and the Dealers. Please ensure that your copy is complete. If you received the Base Offering Circular by e-mail, you should not reply by e-mail to this transmission. Any reply to e-mail communications, including those you generate by using the “reply” function on your e-mail software, will be ignored or rejected. You are responsible for protecting against viruses and other destructive items. Your use of this e-mail is at your own risk, and it is your responsibility to take precautions to ensure that it is free from viruses and other items of a destructive nature.

BASE OFFERING CIRCULAR

ABU DHABI FUTURE ENERGY COMPANY PJSC – MASDAR

(*incorporated with limited liability in the Emirate of Abu Dhabi, United Arab Emirates*)

U.S.$3,000,000,000
Euro Medium Term Note Programme

Under this U.S.$3,000,000,000 Euro Medium Term Note Programme (the **Programme**), Abu Dhabi Future Energy Company PJSC – Masdar (the **Issuer** or **Masdar**) may from time to time issue notes (the **Notes**) denominated in any currency agreed between the Issuer and the relevant Dealer (as defined below).

Notes may be issued in bearer or registered form (respectively **Bearer Notes** and **Registered Notes**). The maximum aggregate nominal amount of all Notes from time to time outstanding under the Programme will not exceed U.S.$3,000,000,000 (or its equivalent in other currencies calculated as described in the Programme Agreement described herein), subject to increase as described herein.

The Notes may be issued on a continuing basis to one or more of the Dealers specified under "*Overview of the Programme*" and any additional Dealer appointed under the Programme from time to time by the Issuer (each a **Dealer** and together the **Dealers**), which appointment may be for a specific issue or on an ongoing basis. References in this Base Offering Circular to the **relevant Dealer** shall, in the case of an issue of Notes being (or intended to be) subscribed by more than one Dealer, be to all Dealers agreeing to subscribe for such Notes.

An investment in Notes issued under the Programme involves certain risks. For a discussion of these risks see "*Risk Factors*".

Application has been made to the London Stock Exchange plc (the **London Stock Exchange**) for Notes issued under the Programme during the period of 12 months from the date of this Base Offering Circular to be admitted to the London Stock Exchange's International Securities Market (the **ISM**). The ISM is not a United Kingdom (**UK**) regulated market for the purposes of Regulation (EU) No 600/2014 on markets in financial instruments as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (**EUWA**) (**UK MiFIR**).

The ISM is a market designated for professional investors. Notes admitted to trading on the ISM are not admitted to the Official List of the UK Financial Conduct Authority (FCA). The London Stock Exchange has not approved or verified the contents of this Base Offering Circular.

References in this Base Offering Circular to the Notes being **admitted to trading** (and all related references) shall mean that such Notes have been admitted to trading on the ISM, so far as the context permits.

This Base Offering Circular does not constitute a prospectus for the purposes of a listing or an admission to trading on any market in the UK which has been designated as a regulated market for the purposes of UK MiFIR and has not been approved by the FCA pursuant to the Official Listing of Securities, Prospectus and Transparency (Amendment etc.) (EU Exit) Regulations 2019.

This Base Offering Circular does not constitute a prospectus for the purposes of a listing or an admission to trading on any market in the European Economic Area (the **EEA**) which has been designated as a regulated market for the purposes of the Markets in Financial Instruments Directive (Directive 2014/65/EU), as amended, **MiFID II**), and has not been approved by the competent authority in any member state of the EEA pursuant to Regulation (EU) 2017/1129.

Notice of the aggregate nominal amount of Notes, interest (if any) payable in respect of Notes, the issue price of Notes and certain other information which is applicable to each Tranche (as defined under "*Terms and Conditions of the Notes*") of Notes will be set out in a pricing supplement document (the **Pricing Supplement**) which, with respect to Notes to be admitted to trading on the ISM, will be delivered to the London Stock Exchange. Copies of Pricing Supplements in relation to Notes to be admitted to trading on the ISM may also be published on the website of the London Stock Exchange through a regulatory information service or may be published in such other manner permitted by the International Securities Market Rulebook effective as of 1 January 2021 (as may be modified and/or supplemented and/or restated from time to time, the **ISM Rulebook**).

The Notes have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the **Securities Act**) or any U.S. State securities laws and may not be offered or sold in the United States or to, or for the account or the benefit of, U.S. persons as defined in Regulation S under the Securities Act unless an exemption from the registration requirements of the Securities Act is available and in accordance with all applicable securities laws of any state of the United States and any other jurisdiction.

The Issuer has been rated A+ by Fitch Ratings Limited (**Fitch**) and A2 by Moody's Investors Service Limited (**Moody's**). The Programme is expected to be rated A+ by Fitch and A2 by Moody's.

Each of Fitch and Moody's is established in the UK and is registered under Regulation (EC) No. 1060/2009 as it forms part of domestic law by virtue of the EUWA (the **UK CRA Regulation**). Fitch is not established in the EEA and has not applied for registration under Regulation (EC) No. 1060/2009 (as amended) (the **CRA Regulation**). The ratings issued by Fitch have been endorsed by Fitch Ratings Ireland Limited in accordance with the CRA Regulation and have not been withdrawn. Fitch Ratings Ireland Limited is established in the EEA and registered under the CRA Regulation. As such, Fitch Ratings Ireland Limited is included in the list of credit rating agencies published by the European Securities and Markets Authority (**ESMA**) on its website (at https://www.esma.europa.eu/credit-rating-agencies/cra-authorisation) in accordance with the CRA Regulation. Moody's is not established in the EEA and has not applied for registration under the CRA Regulation. The ratings issued by Moody's have been endorsed by Moody's Deutschland GmbH in accordance with the CRA Regulation and have not been withdrawn. Moody's Deutschland GmbH is established in the EEA and registered under the CRA Regulation. As such, Moody's Deutschland GmbH is included in the list of credit rating agencies published by ESMA on its website (at http://www.esma.europa.eu/credit-rating-agencies/cra-authorisation) in accordance with the CRA Regulation.

Notes issued under the Programme may be rated or unrated by any one or more of the rating agencies referred to above. Where a Tranche of Notes is rated, such rating will be disclosed in the Pricing Supplement and will not necessarily be the same as the rating assigned to the Programme by the relevant rating agency . A security rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by the assigning rating agency.

Amounts payable on Floating Rate Notes will be calculated by reference to one of EURIBOR, SHIBOR, HIBOR, SIBOR, EIBOR, SAIBOR, BBSW, PRIBOR, CNH HIBOR, TRLIBOR or TRYLIBOR, TIBOR, SOFR, SONIA and €STR as specified in the applicable Pricing Supplement. As at the date of this Base Offering Circular, the administrators of EURIBOR, SIBOR, BBSW and PRIBOR are included in the register of administrators of the FCA's register of administrators under Article 36 of Regulation (EU) No 2016/1011 as it forms part of domestic law by virtue of the EUWA (the **UK Benchmarks Regulation**). As at the date of this Base Offering Circular, the administrators of HIBOR, CNH HIBOR, TRLIBOR or TRYLIBOR, TIBOR, SOFR, SONIA and €STR are not included in the FCA's register of administrators under Article 36 of the UK Benchmarks Regulation. As far as the Issuer is aware, (a) SHIBOR, EIBOR, SOFR, SONIA and €STR do not fall within the scope of the UK Benchmarks Regulation by virtue of Article 2 of that regulation and (b) the transitional provisions in Article 51 of the UK Benchmarks Regulation apply, such that the Treasury Markets Association of Banks, Refinitiv Benchmark Services (UK) Limited, the Banks Association of Turkey, Thompson Reuters and the JBA TIBOR Administration are not currently required to obtain authorisation/registration (or, if located outside the UK, recognition, endorsement or equivalence).

Arrangers

Citigroup	**First Abu Dhabi Bank**

Dealers

BNP PARIBAS	**Citigroup**
First Abu Dhabi Bank	**HSBC**
SMBC Nikko	**Société Générale Corporate & Investment Banking**

Standard Chartered Bank

The date of this Base Offering Circular is 17 July 2023.

IMPORTANT INFORMATION

This Base Offering Circular does not comprise a base prospectus for the purposes of either Regulation (EU) 2017/1129 or Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA (the UK Prospectus Regulation), and has not been approved as such by the competent authority in any member state of the EEA or the FCA.

The Issuer accepts responsibility for the information contained in this Base Offering Circular and the applicable Pricing Supplement for each Tranche of Notes issued under the Programme. The Issuer, having taken all reasonable care to ensure that such is the case, the information contained in this Base Offering Circular is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import.

Where information has been sourced from a third party, the Issuer confirms that such information has been accurately reproduced and that, so far as it is aware, and is able to ascertain from information published by the relevant sources, no facts have been omitted which would render the reproduced information inaccurate or misleading.

Neither the Arrangers nor the Dealers have independently verified the information contained herein. Accordingly, no representation, warranty or undertaking, express or implied, is made and no responsibility or liability is accepted by the Arrangers or the Dealers as to the accuracy or completeness of the information contained in this Base Offering Circular or any other information provided by the Issuer in connection with the Programme. No Arranger or Dealer accepts any liability in relation to the information contained in this Base Offering Circular or any other information provided by the Issuer in connection with the Programme.

Neither the Arrangers nor the Dealers make any representation or provide any assurance as to the suitability of any Notes, including the listing or admission to trading thereof on any dedicated "green", "environmental", "sustainable", "social" or other equivalently-labelled segment of any stock exchange or securities market, or to fulfil any green, social, environmental or sustainability criteria required by any prospective investors. No Arranger or Dealer has undertaken, nor are they responsible for, any assessment of the eligibility criteria for Eligible Green Projects (as defined herein), any verification of whether the Eligible Green Projects meet such criteria, the monitoring of the use of proceeds of any Notes (or amounts equal thereto) or the allocation of the proceeds by the Issuer to particular Eligible Green Projects. A prospective investor should have regard to the information set out in "*Use of Proceeds*" below and determine for itself the relevance of such information for the purposes of an investment in Notes together with any other investigation it deems necessary. Neither the Arrangers nor the Dealers make any representation as to the suitability or contents of the Green Finance Framework (as defined herein), any second party opinion delivered in respect thereof or any public reporting by or on behalf of the Issuer in respect of the application of the proceeds of any issue of Notes, all of which are not, nor shall be deemed to be, incorporated in and/or form part of this Base Offering Circular.

No person is or has been authorised by the Issuer or any of the Arrangers or Dealers to give any information or to make any representation not contained in or not consistent with this Base Offering Circular or any other information supplied in connection with the Programme or the Notes and, if given or made, such information or representation must not be relied upon as having been authorised by the Issuer or any of the Arrangers or Dealers.

Neither this Base Offering Circular nor any other information supplied in connection with the Programme or any Notes (a) is intended to provide the basis of any credit or other evaluation or (b) should be considered as a recommendation by the Issuer or any of the Arrangers or Dealers that any recipient of this Base Offering Circular or any other information supplied in connection with the Programme or any Notes should purchase any Notes. Each investor contemplating purchasing any Notes should make its own independent investigation of the financial condition and affairs, and its own

appraisal of the creditworthiness, of the Issuer. Neither this Base Offering Circular nor any other information supplied in connection with the Programme or the issue of any Notes constitutes an offer or invitation by or on behalf of the Issuer or any of the Arrangers or Dealers to any person to subscribe for or to purchase any Notes.

Neither the delivery of this Base Offering Circular nor the offering, sale or delivery of any Notes shall in any circumstances imply that the information contained herein concerning the Issuer is correct at any time subsequent to its date or that any other information supplied in connection with the Programme is correct as of any time subsequent to the date indicated in the document containing the same. The Arrangers or Dealers expressly do not undertake to review the financial condition or affairs of the Issuer during the life of the Programme or to advise any investor in Notes issued under the Programme of any information coming to their attention.

IMPORTANT – EEA RETAIL INVESTORS – If the Pricing Supplement in respect of any Notes includes a legend entitled "Prohibition of Sales to EEA Retail Investors", the Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the EEA. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, **MiFID II**); or (ii) a customer within the meaning of Directive (EU) 2016/97 (the **Insurance Distribution Directive**), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in the Prospectus Regulation. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the **PRIIPs Regulation**) for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

IMPORTANT – UK RETAIL INVESTORS – If the Pricing Supplement in respect of any Notes includes a legend entitled "Prohibition of Sales to UK Retail Investors", the Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the UK. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA; or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (the **FSMA**) and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of the UK Prospectus Regulation. Consequently no key information document required by Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the **UK PRIIPs Regulation**) for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

MIFID II PRODUCT GOVERNANCE / TARGET MARKET – The Pricing Supplement in respect of any Notes will include a legend entitled "MiFID II product governance" which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any person subsequently offering, selling or recommending the Notes (a **distributor**) should take into consideration the target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

A determination will be made in relation to each issue about whether, for the purpose of the Product Governance rules under EU Delegated Directive 2017/593 (the **MiFID Product Governance Rules**), any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise neither the Arrangers nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the MiFID Product Governance Rules.

UK MIFIR PRODUCT GOVERNANCE / TARGET MARKET – The Pricing Supplement in respect of any Notes will include a legend entitled "UK MiFIR Product Governance" which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any distributor should take into consideration the target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the **UK MiFIR Product Governance Rules**) is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

A determination will be made in relation to each issue about whether, for the purpose of the UK MiFIR Product Governance Rules, any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise neither the Arrangers nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the UK MiFIR Product Governance Rules.

NOTIFICATION UNDER SECTION 309B(1)(C) OF THE SECURITIES AND FUTURES ACT 2001 (2020 REVISED EDITION) OF SINGAPORE, AS MODIFIED OR AMENDED FROM TIME TO TIME – Unless otherwise stated in the applicable Pricing Supplement all Notes issued or to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded Investment Products (as defined in the Singapore Monetary Authority (the **MAS)** Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

IMPORTANT INFORMATION RELATING TO THE USE OF THIS BASE OFFERING CIRCULAR AND OFFERS OF NOTES GENERALLY

This Base Offering Circular does not constitute an offer to sell or the solicitation of an offer to buy any Notes in any jurisdiction to any person to whom it is unlawful to make the offer or solicitation in such jurisdiction. The distribution of this Base Offering Circular and the offer or sale of Notes may be restricted by law in certain jurisdictions. The Issuer, the Arrangers and the Dealers do not represent that this Base Offering Circular may be lawfully distributed, or that any Notes may be lawfully offered, in compliance with any applicable registration or other requirements in any such jurisdiction, or pursuant to an exemption available thereunder, or assume any responsibility for facilitating any such distribution or offering. In particular, no action has been taken by the Issuer, the Arrangers or the Dealers which is intended to permit a public offering of any Notes or distribution of this Base Offering Circular in any jurisdiction where action for that purpose is required. Accordingly, no Notes may be offered or sold, directly or indirectly, and neither this Base Offering Circular nor any advertisement or other offering material may be distributed or published in any jurisdiction, except under circumstances that will result in compliance with any applicable laws and regulations. Persons into whose possession this Base Offering Circular or any Notes may come must inform themselves about, and observe, any such restrictions on the distribution of this Base Offering Circular and the offering and sale of Notes. In particular, there are restrictions on the distribution of this Base Offering Circular and the offer or sale of Notes in the United States, the EEA, the UK, the United Arab Emirates (the **UAE**) (excluding the Abu Dhabi Global Market and the Dubai International Financial Centre), the Abu Dhabi Global Market, the Dubai International Financial Centre, the Kingdom of Saudi Arabia, the Kingdom of Bahrain, Singapore, Hong Kong and Japan, see "*Subscription and Sale*".

NOTICE TO THE RESIDENTS OF THE KINGDOM OF BAHRAIN

In relation to investors in the Kingdom of Bahrain, Notes issued in connection with this Base Offering Circular and related offering documents may only be offered in registered form to existing accountholders and accredited investors as defined by the Central Bank of Bahrain (the **CBB**) in the Kingdom of Bahrain where such investors make a minimum investment of at least U.S.$100,000 or any equivalent amount in another currency or such other amount as the CBB may determine.

This Base Offering Circular does not constitute an offer of securities in the Kingdom of Bahrain pursuant to the terms of Article (81) of the Central Bank and Financial Institutions Law 2006 (decree Law No. 64 of 2006).

This Base Offering Circular and related offering documents have not been and will not be registered as a prospectus with the CBB. Accordingly, no Notes may be offered, sold or made the subject of an invitation for subscription or purchase nor will this Base Offering Circular or any other related document or material be used in connection with any offer, sale or invitation to subscribe or purchase securities, whether directly or indirectly, to persons in the Kingdom of Bahrain, other than to accredited investors for an offer outside the Kingdom of Bahrain.

The CBB has not reviewed, approved or registered this Base Offering Circular or related offering documents and it has not in any way considered the merits of the Notes to be offered for investment, whether in or outside the Kingdom of Bahrain. Therefore, the CBB assumes no responsibility for the accuracy and completeness of the statements and information contained in this Base Offering Circular and expressly disclaims any liability whatsoever for any loss howsoever arising from reliance upon the whole or any part of the content of this Base Offering Circular. No offer of Notes will be made to the public in the Kingdom of Bahrain and this Base Offering Circular must be read by the addressee only and must not be issued, passed to, or made available to the public generally.

NOTICE TO THE RESIDENTS OF THE KINGDOM OF SAUDI ARABIA

This document may not be distributed in the Kingdom of Saudi Arabia except to such persons as are permitted under the Rules on the Offer of Securities and Continuing Obligations issued by the Capital Market Authority of the Kingdom of Saudi Arabia (the **Capital Market Authority**).

The Capital Market Authority does not make any representation as to the accuracy or completeness of this document, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorised financial adviser.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Historical financial statements

The financial statements relating to Masdar and its consolidated companies (the **Group**) and included in this Base Offering Circular are:

- the audited consolidated financial statements as at and for the year ended 31 December 2022 (the **2022 Financial Statements**); and

- the audited consolidated financial statements as at and for the year ended 31 December 2021 (the **2021 Financial Statements** and, together with the 2022 Financial Statements, the **Financial Statements**).

The Financial Statements have been prepared in accordance with International Financial Reporting Standards (**IFRS**) issued by the International Accounting Standards Board (**IASB**) and requirements of applicable laws, including UAE Federal Decree Law No. 32 of 2021 which came into effect on 2 January 2022 and replaced UAE Federal Law No. 2 of 2015 (as amended) and Law No. (1) of 2017 (as amended) issued by the Abu Dhabi Department of Finance. IFRS comprise accounting standards issued by the IASB as well as interpretations issued by the International Financial Reporting Interpretations Committee (**IFRIC**).

Masdar's financial year ends on 31 December and references in this Base Offering Circular to **2020**, **2021** and **2022** are to the 12-month period ending on 31 December in each such year.

Discontinued operation in 2021 and material acquisition in 2022

During 2021, Mubadala Investment Company PJSC (**MIC**) announced the sale of a majority interest in Masdar to Abu Dhabi National Energy Company PJSC (**TAQA**) and Abu Dhabi National Oil Company (**ADNOC**).

The transaction involved the sale of the Clean Energy (**CE**) business with MIC retaining the Sustainable Real Estate (**SRE**) business. The transaction was not completed until 1 December 2022 and the SRE business was classified as held for sale in the consolidated statement of financial position as at 31 December 2021 and as discontinued operations in the consolidated statements of comprehensive income for each of 2022 and 2021 (in the 2022 Financial Statements) and 2021 and 2020 (in the 2021 Financial Statements). See note 29.2 to the 2021 Financial Statements for tables showing the re-presentation adjustments for SRE as a discontinued operation in 2020.

On 30 November 2022 and as part of the transaction referred to above, Masdar acquired a 100 per cent. interest in the shares of Ninety Sixth Investment Company LLC, a company registered in the UAE. This company holds investments in jointly controlled renewable energy projects in the United States and was previously wholly-owned by Mubadala. It was transferred at a price equal to the book value of its assets and liabilities on 30 November 2022. See note 29.2.1 to the 2022 Financial Statements.

Comparative information for 2020 in the 2021 Financial Statements

During 2021, management identified certain errors impacting Masdar's audited consolidated financial statements as at and for the year ended 31 December 2020 (the **2020 Financial Statements**), including the fact that Nur Navoi FE Uzbekistan, a subsidiary of Masdar, was incorporated in 2020 but financial information for Nur Navoi FE Uzbekistan was erroneously not consolidated in the 2020 Financial Statements. This information has been consolidated in the 2021 Financial Statements, restating the 2020 balances.

See note 29 to the 2021 Financial Statements for tables showing the restatement adjustments attributable to Nur Navoi FE Uzbekistan and a change in the valuation of certain investment property under construction attributable to the SRE business.

Reflecting the above facts, all financial information for 2020 included in this Base Offering Circular is restated information derived from the 2021 Financial Statements. Save where otherwise specifically stated, all financial information for each of 2022 and 2021 has been derived from the 2022 Financial Statements.

Auditors and unaudited information

The Financial Statements have been audited by KPMG Lower Gulf Limited, independent auditors (the **Auditors**), in accordance with International Standards on Auditing, who have issued unqualified reports on the Financial Statements.

Certain non-IFRS financial information

This Base Offering Circular includes certain financial information which has not been prepared in accordance with IFRS and which also constitute alternative performance measures for the purposes of the ESMA Guidelines on Alternative Performance Measures (**APM**s). None of this financial information is subject to any audit or review by independent auditors. This financial information is contained in "*Selected financial information—Selected ratios*" and is unaudited financial information which has been extracted without material adjustment from the accounting records of the Group which form the underlying basis of the Financial Statements.

Masdar believes that the presentation of these APMs is helpful to investors because these and other similar measures are widely used by certain investors, security analysts and other interested parties as supplemental measures of performance and liquidity. However, none of the APMs is a measure of financial performance under IFRS and should not be considered in isolation or as a substitute for operating profit, cash flow from operating activities or other financial measures of the Group's results of operations or liquidity computed in accordance with IFRS. Other companies, including those in the Group's industry, may calculate the APMs differently from the Group. As all companies do not calculate APMs in the same manner, the Group's presentation of these APMs may not be comparable to other similarly titled measures of other companies.

PRESENTATION OF OTHER INFORMATION

Currencies

Unless otherwise indicated, in this Base Offering Circular, all references to:

- **dirham** and **AED** are to the lawful currency of the United Arab Emirates; and
- **U.S. dollars** and **U.S.$** are to the lawful currency of the United States.

The Group's functional currency is dirham and the Group prepares its financial statements in dirham.

The dirham has been pegged to the U.S. dollar since 22 November 1980. The mid-point between the official buying and selling rates for the dirham is at a fixed rate of AED 3.6725 = U.S.$1.00.

Third party and market share data

This Base Offering Circular contains information regarding the Group's business and the industry in which it operates and competes, which the Group has obtained from third-party sources. Where third-party information has been used in this Base Offering Circular, the source of such information has been identified.

In some cases, independently determined industry data is not available. In these cases, any Group market share data included in this Base Offering Circular is referred to as having been estimated. All such estimates have been made by the Group using its own information and other market information which is publicly available. Masdar believes that these estimates of market share are helpful as they give prospective investors a better understanding of the industry in which the Group operates as well as its position within that industry. Although all such estimations have been made in good faith based on the information available and the Group's knowledge of the market within which it operates, Masdar cannot guarantee that a third-party expert using different methods would reach the same conclusions.

Where information has not been independently sourced, it is the Group's own information.

No incorporation of website information

Masdar's website is www.masdar.ae. The information on this website or any other website mentioned in this Base Offering Circular or any website directly or indirectly linked to these websites has not been verified and is not incorporated by reference into this Base Offering Circular, and investors should not rely on it.

Definitions

In this Base Offering Circular:

- **Abu Dhabi** means the Emirate of Abu Dhabi;
- **GCC** means the Gulf Cooperation Council (comprising Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE); and
- **MENA region** means the region comprising the Middle East and North Africa.

Rounding

The Financial Statements present the Group's results in thousands of dirham. Certain financial statement data in this Base Offering Circular has been expressed in millions of dirham and rounded to one decimal place, with 0.050 being round up and 0.049 being rounded down. As a result of such rounding, the totals of financial statement data presented in tables in this Base Offering Circular may vary slightly from the arithmetic totals of such data. Where used in tables, the figure "**0**" means that the data for the relevant item has been rounded to zero and the symbol "—" means that there is no data in respect of the relevant item.

In addition, all change, percentage and percentage change data in this Base Offering Circular has been calculated based on the dirham financial information included in the Financial Statements and presented in thousands of dirham and rounded to one decimal place, with 0.050 being round up and 0.049 being rounded down.

THE GROUP'S PROJECTS

As at 31 March 2023, the Group had ownership interests in 34 operational utility scale renewable energy generation projects, 13 utility scale renewable energy generation projects which are under construction and four utility scale renewable energy generation projects which it refers to as committed projects.

As at 31 March 2023, the Group was also committed to acquire a wind project in the United States under a share purchase agreement, although the Group recently terminated its commitment under this agreement in accordance with its terms. As a result, this project has not been included in the list of the Group's projects as at 31 March 2023 and all operational information in relation to the Group's projects as at 31 March 2023 and 31 December 2022 excludes this project.

In this Base Offering Circular, references to the following projects are to:

Operational projects

Baynouna	the 200 MW solar photovoltaic power project located near Tilal Al Rukban, Jordan and undertaken by Baynouna Solar Energy PSC (the **Baynouna project company**), in which the Group has an effective 70 per cent. shareholding through Baynouna Holdings B.V. which is equity accounted as a joint venture.
Big Beau Solar	the 168 MW solar photovoltaic power and 40 MW battery storage project located in Kern County, California, United States and undertaken by Big Beau Project Company (DE LLC), in which the Group has an effective 50 per cent. shareholding through BigBeau Class B Holdco which is equity accounted as a joint venture.
Coyote	the 243 MW wind power project located at Scurry County, Texas, United States and undertaken by Coyote Wind, LLC, in which the Group has an effective 50 per cent. shareholding through Blue Palm Class B Wind HoldCo which is equity accounted as a joint venture.
Desert Harvest 1	the 114 MW solar photovoltaic power project located at Riverside County, California, United States and undertaken by DH1 Project Company, in which the Group has an effective 50 per cent. shareholding through Blue Palm B Solar Holdco which is equity accounted as a joint venture.
Desert Harvest 2	the 100 MW solar photovoltaic power and 40 MW battery storage project located at Riverside County, California, United States and undertaken by DH2 Project Company, in which the Group has an effective 50 per cent. shareholding through Blue Palm B Solar Holdco which is equity accounted as a joint venture.
DEWA III	the 800 MW solar photovoltaic power project in the Emirate of Dubai, UAE and undertaken by Shuaa Energy 2 PSC (the **DEWA III project company**), in which the Group has an effective 24 per cent. shareholding through Emirates Solar Power Company LLC which is equity accounted as a joint venture.
Dudgeon	the 402 MW wind power project off the Norfolk coast in England undertaken by Dudgeon Offshore Wind Limited (the **Dudgeon project company**), in which the Group has a direct 35 per cent. shareholding and which is equity accounted as a joint venture.

Dumat Al Jandal	the 400 MW wind power project in Dumat al Jandal, Saudi Arabia and undertaken by Dumat Al Jandal Wind Company for Energy LLC (the **Dumat Al Jandal project company**), in which the Group has an effective 34.3 per cent. shareholding through Dumat Wind Contracting Company LLC which is equity accounted as a joint venture.
Gallery Grajewo	the 14 MW wind power project located in Grajewo County in the Podlaskie Voivodeship in north-eastern Poland and undertaken by Contino Omikron sp. z o.o. (the **Gallery Grajewo project company**), in which the Group has an effective 50 per cent. shareholding through Fonnes Sp. z.o.o. which is equity accounted as a joint venture.
Gallery Mlawa	the 37 MW wind power project located in Mława County in the Mazovian Voivodeship in east-central Poland and undertaken by Pileus Energy sp. z o.o. (the **Gallery Mlawa project company**), in which the Group has an effective 50 per cent. shareholding through Fonnes Sp. z.o.o. which is equity accounted as a joint venture.
Hywind	the 30 MW floating offshore wind power project located off the coast of Aberdeenshire in Scotland and undertaken by Hywind (Scotland) Limited (the **Hywind project company**), in which the Group has a direct 25 per cent. shareholding and which is equity accounted as a joint venture.
Krnovo Wind	the 72 MW wind power project located in Savnik Municipality in the centre of Montenegro and undertaken by Krnovo Green Energy d.o.o., in which the Group has a direct 49 per cent. shareholding and which is equity accounted as a joint venture.
Las Majadas	the 273 MW wind power project located at Willacy County, Texas, United States and undertaken by Las Majadas Wind Farm, LLC, in which the Group has an effective 50 per cent. shareholding through Blue Palm Class B Wind HoldCo which is equity accounted as a joint venture.
London Array	the 630 MW wind power project in the outer Thames Estuary off the Kent coast in England. The Group has a 20 per cent. share in the London Array project which is a consolidated unincorporated joint operation.
Maverick 1	the 173 MW solar photovoltaic power project located at Riverside County, California, United States and undertaken by Maverick Solar LLC, in which the Group has an effective 50 per cent. shareholding through Blue Palm B Solar Holdco which is equity accounted as a joint venture.
Maverick 4	the 136 MW solar photovoltaic power project located at Riverside County, California, United States and undertaken by Maverick Solar 4 LLC, in which the Group has an effective 50 per cent. shareholding through Blue Palm B Solar Holdco which is equity accounted as a joint venture.
Nur Navoi	the 100 MW solar photovoltaic power project located in the Navoi Region of Uzbekistan and undertaken by Nur Navoi Solar LLC (the **Nur Navoi project company**) which is wholly owned by the Group and accounted for as a subsidiary.
Pertamina Geothermal	the 13 geothermal working areas with a total installed capacity of 1,877 MW located in Indonesia in which Pertamina Geothermal Energy Tbk has rights.

	The Group acquired a 15 per cent. shareholding in Pertamina Geothermal Energy Tbk in 2023, which it accounts for as an equity accounted investee. The Group considers its minority shareholding in Pertamina Geothermal to be a single project for the purposes of disclosure in this Base Offering Circular.
Rocksprings	the 149 MW wind power project located in Val Verde County, Texas, United States and undertaken by Rocksprings Val Verde Wind LLC (the **Rocksprings project company**), in which the Group has an effective 50 per cent. shareholding through Val Verde Wind Holdco III LLC which is equity accounted as a joint venture.
Shams	the 100 MW concentrated solar power project in the Western Region of the Emirate of Abu Dhabi undertaken by Shams Power Company PJSC (the **Shams project company**), in which the Group has a direct 51 per cent. shareholding and which is equity accounted as a joint venture.
Sterling Wind	the 30 MW wind power project located in Lea County, New Mexico, United States and undertaken by AEM Wind LLC, in which the Group has an effective 50 per cent. shareholding through Sterling Wind Phase I Holdings LLC which is equity accounted as a joint venture.
Tafila Wind	the 117 MW wind power project located near Tafila, Jordan and undertaken by Jordan Wind Power Company PSC (the **Tafila Wind project company**), in which the Group has a direct 50 per cent. shareholding and which is equity accounted as a joint venture.
Tesla Wind	the 158MW wind power project located 47 kilometres northeast of Belgrade, Serbia and undertaken by Vetroelektrane Balkana D.O.O. Beograd, in which the Group has an effective 60 per cent. shareholding through Tesla Wind D.O.O. Beograd which is equity accounted as a joint venture.
Blue Palm projects	the Coyote project, the Desert Harvest 1 project, the Desert Harvest 2 project, the Las Majadas project, the Maverick 1 project and the Maverick 4 project, the project company for each of which is held by Blue Palm Class B Solar Holdco (in the case of the solar projects) and Blue Palm Class B Wind Holco (in the case of the wind projects) which are each an equity accounted investee.
Infinity platform projects	a portfolio of four operational utility scale and three operational non-utility scale solar power projects located in Egypt and, through its ownership of 100 per cent. Of Lekela, a portfolio of seven operational utility scale wind power projects in South Africa, Egypt and Senegal held by Infinity Power Holding B.V. (referred to as the **Infinity platform**), in which the Group has a direct 49 per cent. shareholding and which is equity accounted as a joint venture.
Under construction projects	
Al Dhafrah	the 1,580 MW solar photovoltaic power generation project located in Al Dhafra in the Emirate of Abu Dhabi, UAE and undertaken by Dhafrah PV2 Energy Company LLC, in which the Group has a direct 20 per cent. shareholding and which is equity accounted as a joint venture.
Arlington Birmingham	the 20 MW energy storage project located in the midlands in England and being developed by Arlington Group Services Limited, in which the Group acquired all of the shares in 2023 and which is accounted as a subsidiary.

Arlington Royle Barn Road	the 35 MW energy storage project located in the north of England and being developed by Arlington Group Services Limited.
Arlington Welkin Road	the 20 MW energy storage project located in the north of England and being developed by Arlington Group Services Limited.
Cirata	the 150 MW floating solar photovoltaic power project located in West Java province, Indonesia and undertaken by PT Pembangkitan Jawa Bali Masdar Solar Energi (the **Cirata project company**), in which the Group has a direct 49 per cent. shareholding and which is equity accounted as a joint venture.
East Rockingham	the 29 MW waste-to-energy and materials recovery project located near Perth, Australia and undertaken by East Rockingham RRF Project Co Pty Ltd as trustee for the East Rockingham RRF Project Trust (the **East Rockingham project company**), in which the Group has an effective 36.67 per cent. shareholding through East Rockingham RRF Holdco Trust 2 which is equity accounted as a joint venture.
Garadagh	the 230 MW solar photovoltaic power project located at Area 60, nine kilometres northwest of the Atlat settlement in the Republic of Azerbaijan, and undertaken by Masdar Azerbaijan Energy LLC (the **Garadagh project company**), in which the Group has a direct 100 per cent. shareholding through Masdar Azerbaijan LLC which is fully consolidated as a subsidiary.
Jeddah South	the 300 MW photovoltaic solar power project located in Jeddah, Saudi Arabia and undertaken by South Jeddah Noor PV Energy Company (the **Jeddah South project company**), in which the Group has a direct 35.7 per cent. shareholding and which is equity accounted as a joint venture.
Jizzakh	the 220 MW solar photovoltaic power project to be constructed in Jizzakh, Uzbekistan and undertaken by "Nur Jizzakh Solar PV" Foreign Enterprise LLC (the **Jizzakh project company**), in which the Group has a direct 100 per cent. shareholding through Jizzak Holding RSC Limited which is fully consolidated as a subsidiary.
Samarkand	the 220 MW solar photovoltaic power project to be constructed in Samarkand, Uzbekistan and undertaken by "Nur Samarkand Solar PV" Foreign Enterprise LLC (the **Samarkand project company**), in which the Group has a direct 100 per cent. shareholding through Nur Samarkand Holding RSC Limited which is fully consolidated as a subsidiary.
Sharjah WTE	the 30 MW multi-fuel conventional waste-to-energy plant located in the Emirate of Sharjah, UAE and undertaken by Sharjah Waste to Energy Company LLC, in which the Group has a direct 50 per cent. shareholding and which is equity accounted as a joint venture. This project became operational on 1 May 2023.
Sherabad	the 457 MW solar photovoltaic power project to be constructed in Sherabad, Uzbekistan and undertaken by "Nur Sherabad Solar PV" Foreign Enterprise LLC (the **Sherabad project company**), in which the Group has a direct 100 per cent. shareholding through Nur Sherbad Holding RSC Limited which is fully consolidated as a subsidiary.

Zarafshan	the 500 MW wind power project located in the Navoi Region of Uzbekistan and undertaken by Shamol Zarafshan Energy FE LLC (the **Zarafshan project company**), in which the Group has a direct 100 per cent. shareholding through Shamol Zarafshan LLC which is fully consolidated as a subsidiary.

Committed projects

Amaala	the 500 MW solar photovoltaic power project to be located on the Red Sea in Saudi Arabia and undertaken by Masdar and Électricité de France (**EDF**)
AYG-1	the 200 MW solar photovoltaic power project to be developed between the administrative territories of the Talin and Dashtadem communities in the Aragatsotn Marz region in the Republic of Armenia and undertaken by Masdar Armenia 1 CJSC
Bukhara	the 250 MW solar photovoltaic power and 62 MW battery storage project to be located in the Bukhara region of Uzbekistan and undertaken by "Nur Bukhara Solar PV" Foreign Enterprise LLC.
Noor Midelt	the 400 MW solar photovoltaic power project to be located at Midelt in Morocco and undertaken by Noor Midelt Solar Hybrid 1 Company

All references to megawatts (**MW**) and gigawatts (**GW**) in relation to the Group's projects are to units of alternating current rather than direct current.

In calculating its utility-scale project numbers, the Group has excluded any project with a capacity under 10 MW and has counted its 15 per cent. investment in Pertamina Geothermal as a single project for this purpose.

References in this document to **gross generation capacity** in relation to the Group's projects mean the nameplate capacity of each project, irrespective of the Group's ownership level in the project company. References to the Group's **proportionate share of the capacity** of its projects mean, in relation to each project, the gross generation capacity multiplied by the Group's proportionate shareholding in the project company.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Some statements in this Base Offering Circular may be deemed to be forward-looking statements. Forward-looking statements include statements concerning the Issuer's plans, objectives, goals, strategies, future operations and performance and the assumptions underlying these forward-looking statements. When used in this document, the words "anticipates", "estimates", "expects", "believes", "intends", "plans", "aims", "seeks", "may", "will", "should" and any similar expressions generally identify forward-looking statements. These forward-looking statements are contained in the sections entitled "*Risk Factors*" and "*Description of the Group*" and other sections of this document. The Issuer has based these forward-looking statements on the current view of its management with respect to future events and financial performance. Although the Issuer believes that the expectations, estimates and projections reflected in its forward-looking statements are reasonable as at the date of this Base Offering Circular, if one or more of the risks or uncertainties materialise which the Issuer has identified in this Base Offering Circular, or if any of the Issuer's underlying assumptions prove to be incomplete or inaccurate, the Issuer's actual results of operation may vary from those expected, estimated or predicted.

Any forward-looking statements contained in this Base Offering Circular speak only as at the date of this Base Offering Circular. Without prejudice to any requirements under applicable laws and regulations, the Issuer expressly disclaims any obligation or undertaking to disseminate after the date of this Base Offering Circular any updates or revisions to any forward-looking statements contained in it.

SUITABILITY OF INVESTMENT

The Notes may not be a suitable investment for all investors. Each prospective investor in the Notes must determine the suitability of that investment in light of its own circumstances. In particular, each prospective investor may wish to consider, either on its own or with the help of its financial and other professional advisers, whether it:

(i) has sufficient knowledge and experience to make a meaningful evaluation of the Notes, the merits and risks of investing in the Notes and the information contained in this Base Offering Circular or any applicable supplement;

(ii) has access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the Notes and the impact the Notes will have on its overall investment portfolio;

(iii) has sufficient financial resources and liquidity to bear all of the risks of an investment in the Notes, including Notes with principal or interest payable in one or more currencies, or where the currency for principal or interest payments is different from the prospective investor's currency;

(iv) understands thoroughly the terms of the Notes and is familiar with the behaviour of any relevant indices and financial markets; and

(v) is able to evaluate possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

Legal investment considerations may restrict certain investments. The investment activities of certain investors are subject to investment laws and regulations, or review or regulation by certain authorities. Each prospective investor should consult its legal advisers to determine whether and to what extent (1) Notes are legal investments for it, (2) Notes can be used as collateral for various types of borrowing and (3) any other restrictions apply to its purchase or pledge of any Notes. Financial institutions should consult their legal advisers or the appropriate regulators to determine the appropriate treatment of Notes under any applicable risk-based capital or similar rules.

STABILISATION

In connection with the issue of any Tranche of Notes, the Dealer or Dealers (if any) named as the Stabilisation Manager(s) (or persons acting on behalf of any Stabilisation Manager(s)) in the applicable Pricing Supplement may over-allot Notes or effect transactions with a view to supporting the market price of the Notes at a level higher than that which might otherwise prevail. However stabilisation may not necessarily occur. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the offer of the relevant Tranche of Notes is made and, if begun, may cease at any time, but it must end no later than the earlier of 30 days after the issue date of the relevant Tranche of Notes and 60 days after the date of the allotment of the relevant Tranche of Notes. Any stabilisation action or over-allotment must be conducted by the relevant Stabilisation Manager(s) (or persons acting on behalf of any Stabilisation Manager(s)) in accordance with all applicable laws and rules.

CONTENTS

Page

OVERVIEW OF THE PROGRAMME

The following overview does not purport to be complete and is taken from, and is qualified in its entirety by, the remainder of this Base Offering Circular and, in relation to the terms and conditions of any particular Tranche of Notes, the applicable Pricing Supplement. The Issuer and any relevant Dealer may agree that Notes shall be issued in a form other than that contemplated in the Terms and Conditions of the Notes (the Conditions), in which event, and if appropriate, a new Base Offering Circular or a supplement to this Base Offering Circular will be published.

Words and expressions defined in "*Form of the Notes*" and "*Terms and Conditions of the Notes*" shall have the same meanings in this overview.

Issuer:	Abu Dhabi Future Energy Company PJSC – Masdar
Issuer Legal Entity Identifier (LEI):	213800BBECR1I9FTPZ70
Risk Factors:	There are certain factors that may affect the Issuer's ability to fulfil its obligations under Notes issued under the Programme. In addition, there are certain factors which are material for the purpose of assessing the market risks associated with Notes issued under the Programme and risks relating to the structure of a particular Series of Notes issued under the Programme. See "*Risk Factors*".
Description:	Euro Medium Term Note Programme
Arrangers:	Citigroup Global Markets Limited First Abu Dhabi Bank PJSC
Dealers:	BNP Paribas Citigroup Global Markets Limited First Abu Dhabi Bank PJSC HSBC Bank plc SMBC Nikko Capital Markets Limited Société Générale Standard Chartered Bank and any other Dealers appointed in accordance with the Programme Agreement.
Certain Restrictions:	Each issue of Notes denominated in a currency in respect of which particular laws, guidelines, regulations, restrictions or reporting requirements apply will only be issued in circumstances which comply with such laws, guidelines, regulations, restrictions or reporting requirements from time to time (see "*Subscription and Sale*") including the following restrictions applicable at the date of this Base Offering Circular.

Notes having a maturity of less than one year

Notes having a maturity of less than one year will, if the proceeds of the issue are accepted in the UK, constitute deposits for the purposes of the prohibition on accepting deposits contained in section 19 of the FSMA unless they are issued to a limited class of professional investors and have a denomination of at least £100,000 (or its equivalent in another currency), see "*Subscription and Sale*".

Principal Paying Agent:	Citibank N.A., London Branch.
Programme Size:	Up to U.S.$3,000,000,000 (or its equivalent in other currencies calculated as described in the Programme Agreement) outstanding at any time. The Issuer may increase the amount of the Programme in accordance with the terms of the Programme Agreement.
Distribution:	Notes may be distributed by way of private or public placement and in each case on a syndicated or non-syndicated basis.
Currencies:	Subject to any applicable legal or regulatory restrictions, notes may be denominated in any currency agreed between the Issuer and the relevant Dealer.
Maturities:	The Notes will have such maturities as may be agreed between the Issuer and the relevant Dealer, subject to such minimum or maximum maturities as may be allowed or required from time to time by the relevant central bank (or equivalent body) or any laws or regulations applicable to the Issuer or the relevant Specified Currency.
Issue Price:	Notes may be issued on a fully-paid basis and at an issue price which is at par or at a discount to, or premium over, par.
Form of Notes:	The Notes will be issued in either bearer or registered form as described in "*Form of the Notes*". Registered Notes will not be exchangeable for Bearer Notes and *vice versa*.
Fixed Rate Notes:	Fixed interest will be payable on such date or dates as may be agreed between the Issuer and the relevant Dealer and on redemption and will be calculated on the basis of such Day Count Fraction as may be agreed between the Issuer and the relevant Dealer.
Floating Rate Notes:	Floating Rate Notes will bear interest at a rate determined on the basis of the reference rate set out in the applicable Pricing Supplement.
	Interest on Floating Rate Notes in respect of each Interest Period, as agreed prior to issue by the Issuer and the relevant Dealer, will be payable on such Interest Payment Dates, and will be calculated on the basis of such Day Count Fraction as may be agreed between the Issuer and the relevant Dealer.

The margin (if any) relating to such floating rate will be agreed between the Issuer and the relevant Dealer for each Series of Floating Rate Notes.

Floating Rate Notes may also have a maximum interest rate, a minimum interest rate or both.

Benchmark Discontinuation**:** In the event that a Benchmark Event (or, if applicable, a Benchmark Transition Event and its related Benchmark Replacement Date) occurs, such that any rate of interest (or any component part thereof) cannot be determined by reference to the original benchmark or screen rate (as applicable) specified in the applicable Pricing Supplement, then the Issuer may (subject to certain conditions) be permitted to substitute such benchmark and/or screen rate (as applicable) with a successor, replacement or alternative benchmark and/or screen rate (with consequent amendment to the terms of such Series of Notes and, potentially, the application of an Adjustment Spread (which could be positive, negative or zero)). See Condition 5.2(b)(iv) for further information.

Zero Coupon Notes: Zero Coupon Notes will be offered and sold at a discount to their nominal amount and will not bear interest.

Redemption: The applicable Pricing Supplement will indicate either that the relevant Notes cannot be redeemed prior to their stated maturity (other than for taxation reasons or following an Event of Default) or that such Notes will be redeemable at the option of the Issuer and/or the Noteholders (including following the occurrence of a Change of Control Event) upon giving notice to the Noteholders or the Issuer, as the case may be, on a date or dates specified prior to such stated maturity and at a price or prices and on such other terms as may be agreed between the Issuer and the relevant Dealer.

Notes having a maturity of less than one year may be subject to restrictions on their denomination and distribution, see "*Certain Restrictions - Notes having a maturity of less than one year*" above.

Change of Control: If so specified in the applicable Pricing Supplement, each holder will have the right to require the redemption of its Notes if a Change of Control Event occurs as further described in Condition 7.4.

Denomination of Notes: The Notes will be issued in such denominations as may be agreed between the Issuer and the relevant Dealer save that the minimum denomination of each Note will be such amount as may be allowed or required from time to time by the relevant central bank (or equivalent body) or any laws or regulations applicable to the relevant Specified Currency, see "*Certain Restrictions - Notes having a maturity of less than one year*" above, and save that the minimum denomination of each Note will be €100,000 (or, if the

	Notes are denominated in a currency other than euro, the equivalent amount in such currency).
Taxation:	All payments in respect of the Notes will be made without withholding or deduction for or on account of taxes imposed by a Tax Jurisdiction as provided in Condition 8. In the event that any such withholding or deduction is made, the Issuer will, save in certain limited circumstances provided in Condition 8, be required to pay additional amounts to cover the amounts so withheld or deducted.
Negative Pledge:	The terms of the Notes will contain a negative pledge provision as further described in Condition 4.
Cross Default:	The terms of the Notes will contain a cross default provision as further described in Condition 10.
Status of the Notes:	The Notes will constitute direct, unconditional, unsubordinated and (subject to the provisions of Condition 4) unsecured obligations of the Issuer and will rank *pari passu* among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations (other than subordinated obligations, if any) of the Issuer, from time to time outstanding.
Rating:	The Programme is expected to be rated A+ by Fitch and A2 by Moody's. Series of Notes issued under the Programme may be rated or unrated. Where a Series of Notes is rated, such rating will be disclosed in the applicable Pricing Supplement and will not necessarily be the same as the rating(s) assigned to the Programme. A security rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by the assigning rating agency.
Listing:	Application has been made for Notes issued under the Programme to be admitted to trading on the ISM.
Governing Law:	The Notes and any non-contractual obligations arising out of or in connection with the Notes will be governed by, and shall be construed in accordance with, English law.
Selling Restrictions:	There are restrictions on the offer, sale and transfer of the Notes in the United States, the EEA, the UK, the United Arab Emirates (excluding the Abu Dhabi Global Market and the Dubai International Financial Centre), the Abu Dhabi Global Market, the Dubai International Financial Centre, Kingdom of Saudi Arabia, Kingdom of Bahrain, Singapore, Hong Kong and Japan and such other restrictions as may be required in connection with the offering and sale of a particular Tranche of Notes, see "*Subscription and Sale*".
United States Selling Restrictions:	Regulation S, Category 2. TEFRA C/TEFRA D/TEFRA not applicable, as specified in the applicable Pricing Supplement.

Use of Proceeds:	An equivalent amount will be applied by the Issuer in accordance with the Green Finance Framework. See "*Use of Proceeds*".

RISK FACTORS

In purchasing Notes issued under the Programme, investors assume the risk that the Issuer may become insolvent or otherwise be unable to make all payments due in respect of the Notes. There is a wide range of factors which individually or together could result in the Issuer becoming unable to make all payments due. The Issuer may not be aware of all relevant factors and certain factors which it currently deems not to be material may become material as a result of the occurrence of events outside the Issuer's control. The Issuer has identified in this Base Offering Circular a number of factors which could materially adversely affect its business and ability to make payments due in respect of the Notes.

In addition, factors which are material for the purpose of assessing the market risks associated with Notes issued under the Programme are also described below.

Prospective investors should also read the detailed information set out elsewhere in this Base Offering Circular and reach their own views prior to making any investment decision.

FACTORS THAT MAY AFFECT THE ISSUER'S ABILITY TO FULFIL ITS OBLIGATIONS UNDER NOTES ISSUED UNDER THE PROGRAMME

The Group is a developer of, and an investor in, renewable energy generation assets. Each of these assets is typically developed by its own project company and the Group's shareholding in each project company varies, typically between 20 per cent. and 100 per cent. All of the Group's interests in energy generation assets are consolidated, either fully or on an equity-accounted basis. As a result, the performance of each project company impacts the Group's overall performance to a greater or lesser degree, depending on the Group's shareholding in that project company and the size of its generation facility. References in this section to the Group's project companies or the Group's projects should be read as references to the project companies and projects in which the Group has invested.

Masdar is reliant on the performance of, and dividend distributions and other cash distributions from, a limited number of its project companies

Masdar conducts its operations principally through, and derives almost all of its revenue from, its project companies, and has limited revenue generating operations of its own. Consequently, Masdar's cash flows and ability to meet its cash requirements, including its obligations in respect of Notes issued under the Programme, depend upon the profitability of, and cash flows from, its project companies, including their ability to make distributions to Masdar, whether by way of dividends or payments under inter-company loans extended to them, and pay fees to Masdar for any services provided to them by Masdar.

As at 31 December 2022, Masdar had one fully consolidated operational project, being the Nur Navoi project, and one operational project accounted as a joint operation, being the London Array project. Together, these projects accounted for 79.6 per cent. of its revenue in 2022 compared to 98.2 per cent. in 2021 and 94.1 per cent. in 2020. The power purchase agreement (**PPA**) for the London Array project expires on 1 November 2025 and the Group expects that the project company will thereafter sell the electricity generated on a merchant basis and the project will continue to benefit from the UK government's incentive scheme until March 2033. Nevertheless, no assurance can be given that the London Array project will generate revenue at levels similar to those currently generated after the expiry of the PPA. Any material deterioration in the results of operations, cash flows or financial condition of the London Array project would have a material adverse effect on the Group.

As at 31 December 2022, Masdar also had 22 operational project companies that were managed by equity-accounted investees. As a result, Masdar records only its proportionate share of the profit or loss made by these entities in its income statement under the line item "Share of results of equity-accounted investees, net". Masdar's share of the results of its equity-accounted investees, net amounted to AED 59 million in each of 2022 and 2021 and AED 0.2 million in 2020.

The share of results in relation to each equity-accounted project company that is taken to Masdar's income statement is not a proxy for cash flow. The share of results in relation to a particular equity-accounted project company is derived from its net income, but this factors in several non-cash items and adjustments including depreciation, foreign exchange movements, fair value movements on hedges, and other valuation adjustments. Furthermore, cash distributions to Masdar from its equity-accounted project companies are not restricted to distributions out of net income. Distributions also include (i) the payment of development fees, (ii) development cost recoveries, (iii) the proceeds of refinancing non-recourse project debt and (iv) the replacement of cash funded reserve accounts with bank guarantees. The net income of each equity-accounted project company is also impacted by the accounting treatment adopted, which can result in a significant disparity compared to the cash distributions received by Masdar from that project company. Within the Group there are a number of different accounting policies adopted at its project companies, including conventional IFRS, IFRIC 12, UK generally accepted accounting principles (**GAAP**), UK Financial Reporting Standard 102 and US GAAP. These different accounting treatments may also result in further differences.

Only six of Masdar's equity-accounted investees and financial investments generated cash distributions in excess of AED 50 million to Masdar in 2022 compared to three in 2021 and two in 2020. These were the Dudgeon project company and the Hywind project company (in all three years), the Shams project company (in 2022 and 2021) and the Zouk Charging Infrastructure Fund, the Tesla Wind project company and the DEWA III project company (in 2022). As a result, any material deterioration in the results of operations, cash flows or financial condition of these investees and investments could have a material adverse effect on the Group. In each of 2022, 2021 and 2020, Masdar received cash distributions (comprising dividends, payments under shareholder loans and other payments) from its project companies and other cash income (including special projects income) totalling AED 1,030 million, AED 562 million and AED 1,970 million, respectively. These cash flows are an important source of cash for Masdar, and any material reduction in them could have a material adverse effect on the Group.

The generation of electricity from renewable energy sources depends heavily on suitable meteorological conditions (including favourable supply of solar or wind resources) over which the Group has no control

The Group operates solely in the renewable energy power market and a significant majority of its projects are either solar- or wind-powered.

Production levels for the Group's solar and wind projects are dependent upon adequate sunlight and wind conditions, respectively, which are beyond the Group's control and can vary significantly from period to period, are subject to seasonal variations and are difficult to predict. Such variability, as well as general weather conditions and unusually severe weather, may result in volatility in production levels and profitability. For example, winds exceeding certain speeds may require the Group to halt its turbines or stall its concentrated solar power (**CSP**) or photovoltaic (**PV**) panels. Similarly, solar energy projects are dependent on suitable solar conditions and associated weather conditions, and excessive temperatures may reduce solar energy production. Many of the Group's projects have been affected from time to time by such conditions.

The Group's businesses forecast electricity production based on normal weather representing a long-term historical average. Solar and wind resource estimates are based on historical experience when available and on resource studies conducted by an independent consultant and are not expected to reflect actual solar or wind energy production in any given year. There can be no assurance that planning by the Group for possible variations in normal weather patterns and potential impacts on the operations of the Group's project companies can prevent these impacts or accurately predict future weather conditions or climate changes and, as a result, the Group may experience volatility in its results.

Any sustained decrease in wind or solar resources for any of the reasons discussed above could materially adversely impact one or more of the generation projects operated by the Group's project companies and thus have a material adverse effect on the Group, particularly in the case where the project company impacted is a subsidiary or a material equity-accounted investee.

The Group's projects may be exposed to operational risks causing the assets to fail to perform in line with expectations

The Group's projects may encounter operational difficulties that cause them to perform at a level below that assumed and therefore earn less revenue than anticipated. Contractual arrangements governing certain of the Group's PPA or its other offtake agreements may include key performance indicators (**KPI**s), against which the performance of the projects will be measured. Where such KPIs are not met, the offtaker may be entitled, pursuant to the terms of the offtake arrangements, to withhold part or all of the contractual payment payable to the project company, vary the price payable under the offtake arrangement, or terminate the offtake arrangement by declaring the project company to be in default. In some cases, for example the Group's Blue Palm project companies, the project company may also be liable for liquidated damages if it fails to deliver the contracted amount of energy and these damages may be uncapped in amount.

Although PV and CSP installations have few moving parts and operate, generally, over long periods with minimal maintenance, and wind installations use proven technology that typically operates reliably with planned maintenance, there is still a risk of equipment failure due to wear and tear, design error or operator error with respect to each solar and wind project and any material equipment failure could adversely affect the returns of the project company and therefore the Group.

Additionally, given the long-term nature of solar and wind power generation projects and the fact that these types of power generation plant as well as waste-to-energy plants (a small number of which the Group also operates) are a relatively new investment class, there is limited experience regarding very long-term operational problems that may be experienced in the future.

Additional operational risks may include:

- adverse environmental changes and weather patterns which decrease the amount of electricity produced by a renewable energy generation asset;

- failure or deterioration of equipment, for example the Group's Coyote project experienced a collapsed turbine in December 2021 that needed to be replaced and is expected to be in place and operating by the end of 2023 and a main bearing failure in another turbine in July 2022 which resulted in the turbine being out of service for a lengthy period. As a result of the main bearing failure, 32 turbines were investigated with four found to require blade realignment and seven requiring blade replacements;

- poor performance of counterparties, including suppliers and contractors;

- transmission system congestion; and

- labour issues, including workforce strikes.

In order to mitigate identified risks, the Group or the project company will implement a maintenance programme for the generation assets and will typically appoint operations and maintenance (**O&M**) contractors with strong track records to carry out the maintenance. Typically each O&M contract will contain KPIs the same as or similar to the performance criteria contained in the relevant offtake arrangement to enable the Group or the project company to have recourse to the O&M contractor, in some cases on a liquidated damages basis, for any loss of revenue caused by a failure to meet any KPI.

Operational risks are inherently difficult to forecast and the Group may not be able to identify all such potential operational risks that its projects are exposed to and the steps taken to mitigate an operational risk may not be sufficient to prevent the project failing or underperforming. The protections contained in the relevant O&M contracts (or any other mitigating actions taken by the Group or its project companies) may not be sufficient to cover all losses suffered. The Group is also exposed to the risk that an O&M contractor (or its guarantor) becomes insolvent or is otherwise unable to pay its debts as they fall due, and is therefore unable to pay the damages specified in the relevant O&M contract.

Whilst the Group seeks to diversify its exposure to engineering, procurement and construction (**EPC**) contractors, O&M contractors and manufacturers of key parts (such as solar panels and wind turbines) across its portfolio, the same entity may be appointed at multiple projects. These multiple appointments create a concentration risk that would magnify the quantum of any losses should the relevant entity become insolvent or otherwise be unable to fulfil its obligations under each of its contracts. Although these contracts will typically include termination rights for the Group or the project company in such circumstances, there is a risk that the Group may incur costs in the procurement of a replacement contractor or supplier, and the terms of the replacement contract may be less favourable to the Group.

Recently, there have been concerns about failures of wind turbines manufactured by Siemens Gamesa, resulting in a 37 per cent. fall in the share price of its parent company, Siemens Energy, on 23 June 2023. Of the Group's 1,166 wind turbines in operation, 156, or 1.3 per cent., were manufactured by Siemens Gamesa, including 60 wind turbines at its Coyote project in relation to which the Group has experienced certain issues as described above.

The occurrence of any of the risks described above, whether alone or in combination with other risks described above and particularly in the case where the project company impacted is a subsidiary or a material equity-accounted investee, could have a material adverse effect on the Group.

A significant portion of the Group's business and financial performance is dependent on the level of demand for power and, therefore, directly dependent on the general economic performance and consumer demand in any given country where the Group operates or seeks to operate

A number of the Group's project companies may, in the future when their PPAs or other offtake arrangements expire, sell their power in the merchant market, meaning the plant typically sells electricity in a competitive wholesale power market rather than to a contractual offtaker. In these cases, the Group may be exposed to any significant decrease in the price or demand for power in the relevant market. The Group's forecasts of future demand for power in the regions in which it operates are based on a number of assumptions including, but not limited to, demographic analysis, consumption patterns, gross domestic product (**GDP**) growth, government subsidy availability and population growth and may be inaccurate.

Demand for power is significantly affected by changes in global and regional economic, financial and political conditions that are outside of the Group's control, including as a result of the imposition of trade barriers, sanctions, boycotts and other measures, significant variations in the exchange rates applicable to currencies in the countries in which the Group operates, trade disputes and work stoppages, particularly in the transportation services industry, and acts of war (such as the Russian invasion of Ukraine in early 2022), hostilities, natural disasters, pandemic diseases (such as the coronavirus disease 2019 (**COVID-19**) pandemic) or terrorism. Any such occurrence could, in the future, materially negatively affect the supply and demand for, or the prices of, the energy produced by the Group on a merchant basis, which could have a material adverse effect on the Group.

The Group is exposed to the risk of delays, cost overruns and quality of workmanship issues in the construction of the projects which it is responsible or jointly responsible for developing when such delays, cost overruns and quality issues are not covered under the relevant EPC contracts

As at 31 March 2023, the Group had 13 projects under construction and a further four committed projects (which it defines as projects which have been awarded and/or are at a late stage of development) which it is responsible or jointly responsible for developing. During the development phase of a project, which is the phase beginning from the request for proposal through to achieving financial close, there is an inherent risk of material delays in achieving the financial close of a project. The reasons for this include delays in obtaining all necessary development and construction permits and licences, including applicable land, electricity and environmental permits. The Group has in the past experienced delays in achieving financial close for certain projects. For example, the committed Noor Midelt project in Morocco, which is a hybrid of CSP and PV technologies that will have a total installed capacity of 800 MW when built, has experienced a significant delay in achieving financial close which stems from factors affecting the Moroccan agency for renewable energy which is responsible for procuring the project. In the event the Group is unable to take a project to financial close, it may lose its bid bond and be required to write off any initial development costs, including the costs of early works executed by the EPC contractor pursuant to a limited notice to proceed under the applicable construction contracts and any pre-financial close hedging undertaken by the Group for subsequent novation to the project company, and the Group would also not receive the anticipated revenues from the project.

During the construction phase, which is the period from financial close to the commercial operation date (**COD**) of a project, there is an inherent risk of material delays in the construction of a project due to a variety of reasons, including:

- delays in obtaining or renewing any necessary construction permits and licences;
- delays caused by external events, such as the delays caused to multiple Group projects by the restrictions put in place around the world to combat COVID-19 and the disruption experienced in supply chains due to these restrictions and, more recently, the Russian invasion of Ukraine;
- unforeseen site issues or commissioning issues;
- inadequate quality of construction;
- installed equipment not meeting the required standards;
- failures of sub-contractors and suppliers; or
- bankruptcy of the contractor.

In addition, because most of the projects being developed by the Group utilise a single turnkey EPC contract (under which the relevant contractor or contractor consortium assumes all responsibility for the development, construction process and work), if the contractor or contractor consortium defaults on its obligations under the EPC contract, the Group could face significant delays and cost overruns with respect to the project in question. These delays or cost overruns may be potentially greater in instances where a contractor must be replaced as result of its default.

For example, in 2022, the Paris Commercial Court granted the opening of a procédure de sauvegarde (safeguard procedure) in respect of the parent company and guarantor of the contractor in respect of the now operational Sharjah WTE project in the UAE, which resulted in an event of a default under the construction contract and a related financing agreement. The construction contract was ultimately terminated in 2022 and the contractor's bonding was successfully liquidated in order to meet cost overruns. While the project has experienced delays, it has successfully reached the commissioning stage, defaults under the financing have been remedied or waived, lenders have continued disbursing and replacement contractors have been appointed to take over its completion and operation. Although in this case the only impact on the Group was foregone revenue caused by the delay in completion of construction and the Group did not have to fund any cost overruns or increase its equity commitment to the project, the situation may be materially different in other cases of contractor default.

In addition, problems relating to the quality of workmanship by the EPC contractor may result in defects in the project which may result in significant delays or cost overruns if identified prior to the COD, or unplanned outages of the project, equipment failure, unforeseen capital expenditures and health and safety hazards, all of which could have an adverse impact on the completion or operations of the project. For example, on the East Rockingham project, due to COVID-19 restrictions, the boiler was manufactured and transported to Australia in a knocked down condition and, upon assembly, the dimensional design did not match the site requirements resulting in significant delays.

Moreover, the project companies that are constructing projects which have long-term PPAs may be required to pay liquidated damages to the offtaker should a project fail to achieve its COD in accordance with any deadline specified in the PPA. Any non-payment by the project company of the delay-related liquidated damages could trigger the right for the offtaker to call on the performance bond to recover such liquidated damages. Furthermore, if the project company does not reach the COD by the long-stop date, the offtaker may have the right to terminate the PPA and is generally under no obligation to purchase the project, although if the offtaker nevertheless elects to do so it is typically only required to pay for the outstanding debt as part of termination payment. For example, construction of the Group's under construction Cirata project in Indonesia has been delayed beyond the PPA long-stop date to achieve COD due to a combination of the effects of the COVID-19 pandemic and global supply-chain delays. However, the offtaker has granted an extension of the long-stop date and has reserved its right to claim delay-related liquidated damages. The Cirata project company has a back-to-back right to claim delay-related liquidated damages under the construction contract, although no assurance can be given that it will be successful in recovering the full amount that it is required to pay.

In addition, in the event that an EPC contractor is either unable to meet the performance specifications or it delays the project construction beyond the long-stop date agreed under a long-term PPA, the offtaker can exercise its right to reject the plant, which could lead to a loss for the Group of equity invested and expected equity returns. Notwithstanding that most EPC contracts provide a right to the project company to reject the plant from the EPC contractor and claim liquidated damages suffered from the EPC contractor, the project company may nevertheless suffer a residual loss. In addition, in the event of the insolvency, administration, winding up of, or similar events relating to, the EPC contractor, the project company may incur penalties under the long-term PPA in relation to any material delays in the completion of the project, incur additional expenditure in procuring a new EPC contractor and/or suffer total loss of the project and investment, should the offtaker terminate the PPA. In the case of an EPC contractor's insolvency, the project company may not be able to recover the contract price already paid to the EPC contractor. While the project company can enforce the performance bond posted by an EPC contractor to recover its losses, performance bonds typically vary in value from 10 per cent. to 30 per cent. of the EPC contract's value and may not, therefore, fully cover the EPC contractor's outstanding liabilities to the project company, and there is also a risk of the project company being unable to collect on the bank guarantees issued on behalf of the EPC contractor either due to local regulations of certain countries or a failure of the bank providing the guarantee.

In the event of cost overruns in the construction of certain projects, which are not compensated under the project-related agreements, the shareholders may be responsible for those costs. For instance, as a shareholder in the operational Dumat Al Jandal project in Saudi Arabia, the Group has had to contribute additional equity to meet customs duties payable due to a delay in obtaining a tax exemption.

As a result, to the extent a delay in completion, cost overruns or quality issues are not attributable to risks borne by the EPC contractor, and to the extent not covered by the insurance for the project, the delays could have adverse monetary consequences to the project company and therefore the Group.

If any of the above risks (which are not adequately addressed through insurance or in the relevant EPC contract through liquidated damages or some other form of compensation) materialise during the construction phase of a project, this may significantly delay the completion of the project, require the payment of liquidated damages by the project company and deprive it of its forecasted revenues or materially impact the Group's reputation, any of which could have a material adverse effect on the Group.

Offtakers under PPAs with the Group's project companies may experience financial difficulties and be unable to fulfil their obligations under these agreements

Most of the Group's projects operate on the basis of a single offtaker that has committed in advance to purchase the actual power output of the relevant projects at tariffs set out in the PPA.

A significant proportion of these offtakers are government-related entities with direct government credit support pertaining to the project, such as guarantees, or government-related entities with no direct government credit support but with other forms of contractual protection. For example, the operational DEWA III project in Dubai benefits from a Dubai Department of Finance guarantee and the operational Dumat Al Jandal project and under construction Jeddah South project in Saudi Arabia, benefit from a Saudi Electricity Company undertaking or alternative government credit support unless the offtaker maintains a rating of at least BBB. Even when the Group's offtakers do obtain government guarantees for their obligations under the relevant PPAs, the relevant government may not always have a credit rating that is investment grade. As at 31 December 2022, the Group had five operational projects with government-related offtakers where the government had a non-investment grade credit rating. In other cases, the relevant offtaker may be a commercial company purchasing the output for its own use, for example in the case of the under construction East Rockingham project in Australia the electricity offtaker is a lithium miner, whereas the main source of revenue will be from municipal waste supply.

For all of the Group's projects which have PPAs, the Group is reliant on the creditworthiness of its offtakers or the entities which provide credit support to the offtakers (or to the projects directly), and thus is exposed to the risk that an offtaker (or its guarantor) fails to make payments under the PPA, which may result in a default under the relevant PPA.

In addition, under many PPAs (typically those that last for all or nearly all of the expected life of the project), if the agreement is terminated prior to the expiry of its term (other than where the project company is in default), the relevant project company is intended to be compensated through the payment of a termination payment by the offtaker, which would cover the outstanding debt owed by the project company but may be lower than the amount of payments that would otherwise be made by the offtaker pursuant to the PPA. In such circumstances, there is a risk that an offtaker (or its guarantor) may either refuse or be unable to make the termination payment, which could have a material adverse effect on the Group.

In addition, there can be no assurance that any offtaker will not breach its purchase obligations or seek to renegotiate the terms of its PPA, for example if a wholesale power market is introduced in the relevant jurisdiction, which could potentially create alternative competitive power purchase opportunities for the offtaker.

If any of the above risks were to materialise, this could have a material adverse effect on the Group, particularly in the case where the project company impacted is a subsidiary or a material equity-accounted investee.

Offtakers may be entitled to terminate a project company's PPA for certain defaults by the project company, in which case the project company will lose its sole or main source of revenue and could suffer a financial penalty

Under most of the Group's PPAs, the offtaker is entitled to terminate the PPA if an event of default by the project company occurs and the default is not cured within the agreed cure period. The events of default typically include, without limitation:

- a failure by the project company to achieve the project's COD before the long-stop date, see "—*The Group is exposed to the risk of delays, cost overruns and quality of workmanship issues in the construction of the projects which it is responsible or jointly responsible for developing when such delays, cost overruns and quality issues are not covered under the relevant EPC contracts*" above;

- a wilful and unexcused failure by the project company to operate the relevant plant for a specified period of time (usually more than two consecutive days);

- a failure by the project company to obtain and maintain approvals required under law or by its regulator in order to perform its obligations under the PPA;

- a failure by the project company to pay any liquidated damages within specified time periods;

- the abandonment of the project;

- a material breach by the project company of its obligations under the PPA that is not remedied within the specified time period;

- failure to execute and bring into effect, or termination of, certain agreements; and
- the project company's insolvency or similar events.

If such a termination occurs, the relevant project company will lose its sole or main source of revenue. Moreover, if the offtaker exercises any right it may have to take over the project following termination of the PPA, the purchase price will not include the return of equity and the project company's shareholders (including the Group) will suffer a loss of investment in that project. In some instances, the offtaker may also call in the construction and performance bonds and claim damages. If a termination of a PPA in the case of an event of default by any project company occurs, this could have a material adverse effect on the Group, particularly in the case where the project company impacted is a subsidiary or a material equity-accounted investee.

The Group depends on the performance by the O&M contractors of their contractual obligations in respect of its projects

The Group's project companies rely on O&M contractors for the operation and maintenance of their plants. The Group is therefore dependent on the performance of these companies and may be exposed to any failure in performance, such as, for example, a failure to maintain an adequate stock of critical spare parts which could result in reduced generation or extended outages.

The Group's project companies may be exposed to increased costs (including inflation-related increased costs) under their O&M agreements to the extent that any O&M agreement allows the O&M contractor to pass through increased costs to a project company and this may adversely affect the Group's revenue from that project company.

In addition, there can be no assurance that a Group's project company will be able to replace any defaulting O&M contractor with a suitable replacement in time to avoid breaching its obligations under its PPA and/or its financing agreements. In addition, there can be no assurance that any replacement service provider would be able to adequately or timely meet the operational requirements of any given plant, if at all, or that the agreement with any such replacement service provider would not be on more onerous terms.

With respect to the projects in which a Group company is the O&M contractor or subcontractor (for example the operational Nur Navoi project in Uzbekistan and the under construction Jeddah South project), there is a risk that the O&M costs incurred by the Group, which include costs related to labour, operations, maintenance and repair and environmental compliance, may be significantly higher than budgeted, in particular because not all of the Group's costs may be fixed for the duration of the O&M contract. Consequently, any increase in costs, to the extent not compensated by adjustments under the contract for fixed and variable O&M revenues, could impact the profitability of the Group and, as a result, could have a material adverse effect on the Group. In addition, if a Group company fails to comply with its obligations under its O&M agreement, the affected agreement could be terminated or not renewed, which could also have a material adverse effect on the Group.

The Group is exposed to the risks relating to the extension or non-extension of certain of its PPAs

In the case of Group projects which have PPAs with terms that are significantly shorter than the expected life of the generating assets, the Group may seek to sign an extension to the relevant PPA, secure a new PPA or sell its output in the merchant market. In these cases, there can be no assurance that the terms secured by the project company after expiration of the initial PPA will generate returns that match or exceed those secured by the project company under the initial PPA. If this is the case, the Group's returns from the affected project company may diminish.

Under the terms of certain of the Group's projects, principally those where the term of the PPA matches the expected life of the project, the relevant project company is, following the expiry of its PPA, typically required to dismantle the plant and remove it from the project site with an obligation to return the land to its original condition at time of handover in line with the relevant land lease agreement, unless the PPA is extended by the mutual agreement of the offtaker and the project company. Consequently, the relevant project company will only be able to generate revenue from the operation of its plant for the term of the PPA (unless the project company is able to sell its power generated on a merchant basis or the PPA is extended). Any extension to the term of the relevant PPA will ultimately depend on the requirements of the offtaker at the relevant time and will require an extension of the land lease agreement and may be on terms different to those signed in the initial contract, such as increased cost. In addition, a project company may incur additional expenses in relation to refurbishing its plant, if required, which will need to be recovered from the operations during the extension term of the PPA.

Furthermore, the life of the Group's assets may be shorter than it originally assumed, resulting in a reassessment of useful life and thus a higher depreciation charge or an impairment charge.

Any of the above factors could have a material adverse effect on the Group.

At the expiration of their operating life, each project will need to be decommissioned, which may result in decommissioning costs being incurred by the project company which may prove to be greater than budgeted for

A project company may be required to decommission its project at the end of its operating life. Delays in decommissioning the equipment, or damage caused to a counterparty's premises during such decommissioning, may cause the project company to incur liabilities that it may not be able to fully recover under the terms of any contract with a third party that the project company has appointed to decommission the project.

The physical location, maintenance and operation of the project assets may pose health and safety risks to those involved during maintenance, replacement or decommissioning. A project company may be liable under environmental and health and safety legislation for any accidents that may occur in the relevant jurisdiction, to the extent such loss is not covered under any of its existing insurance policies or, where applicable, the contractual provisions in place do not adequately cover the project company's liability.

Should any liabilities (relating to health and safety or otherwise) arise against a project company during the operation or decommissioning of its project, this could have a material adverse effect on the Group.

The Group's projects could experience critical equipment failure and/or unplanned power outages beyond what is contractually permitted, reduced output and unanticipated capital expenditures

The operation of the Group's projects involves risks that include the breakdown or failure of equipment or processes and performance below expected levels of output or efficiency. Equipment failures and performance issues can stem from a number of factors, including human or other errors in operation, lack of maintenance and general wear over time. As a result, the Group's projects require planned periodic major overhaul activities to avoid unplanned outages, which may also reduce the expected level of output or efficiency as well as require significant investment costs and expenses by the Group.

Unplanned outages of power generating units, including extensions of scheduled outages due to mechanical failures or other problems relating to the Group's power generation facilities, occur from time to time and are an inherent risk of the Group's business. In the past and as is typical in the power generation industry, the Group's projects have experienced unplanned outages due to various equipment failures. For example, in January 2023, the Dumat Al Jandal project was shut down as a precautionary measure due to a transformer issue related to the grid although, because the outage was instructed by the offtaker, the project company continued to receive payment for energy deemed to be generated, rather than actually generated. In addition, the London Array project experienced a mis-designed cable protection system that damaged the outer layers of the array cables, leading to deterioration of the cable cores and hence mechanical damage followed by electrical failure over time. Significant remedial work has been performed since to address the issue and reduce risks of further array cables failing. Unplanned outages of a project company's power generating units typically increase the project company's O&M expenses, which may not be recoverable under the relevant PPA and may reduce the project company's sales of energy or require the project company to incur significant costs (which it may be unable to pass through to customers) as a result of operating at a higher cost per unit of output.

In addition, the project company and the O&M contractor (which would adversely impact the Group where the O&M contractor is a Group company) could suffer significant losses due to the costs of repair, the associated loss in revenue during the period when the project remains non-operational, the incurrence of liability for liquidated damages and/or other penalties and/or increased insurance costs. While the Group's project companies have property damage and business interruption insurance in place to cover a portion of any such losses, there can be no assurance that any losses would be covered fully by their insurance. Any such failure will increase the Group's power forced outage rates and result in additional expenses and a prolonged failure could impact the reputation of the affected project company and the O&M services provider, each of which (particularly where the O&M provider is a Group company) could have a material adverse effect on the Group.

In addition, the equipment at the plants, whether old or new, requires periodic upgrades, maintenance, improvement or repair, and replacement equipment or parts may be difficult to obtain in circumstances when the project company relies on a single supplier and/or a small number of suppliers of equipment or where suppliers become insolvent. The inability to obtain replacement equipment or parts may negatively impact the ability of the relevant plant to perform and could, therefore, have a material impact on the relevant project company's business, financial position and results of operations.

Moreover, where certain critical equipment needs to be replaced due to its failure or malfunctioning, this could result in significant capital expenditure for the relevant project company, which may need to be procured by it if it is not covered under the supplier's warranty period or latent defect period or any property damage insurance taken out by the project company with respect to its project. In the event the total amount of expenditure needed to rectify such failure exceeds the amount of funds available to the project company, including insurance and warranty proceeds, it would need to raise additional debt or equity funding for the project, which could have a material adverse effect on such project company's business, financial position and results of operations.

Any unexpected failure, including failure associated with breakdowns, forced outages or any unanticipated capital expenditures at the Group's projects (not covered under the supplier's warranty period or latent defect period or any property damage insurance taken out by the project company or the limited unplanned outage cover taken by the Group), could result in reduced revenue and profitability and jeopardise the ability of the affected project company to pay its debt and other obligations and make distributions to the Group and thus have a material adverse effect on the Group, particularly in the case where the project company impacted is a subsidiary or a material equity-accounted investee.

Most of Masdar's operational project companies are joint ventures which subjects it to a range of additional risks

The Group typically secures projects through co-investment or joint venture structures with other partners, which range from local companies based in the jurisdiction of the project to multinational project corporations. Although the Group aims to implement governance measures, such as veto rights for the Group on significant actions, where the Group does not control or manage a project, the project may not be operated effectively or in the Group's best interests.

In addition, co-investments and joint ventures expose the Group to risks customary in joint venture arrangements including, but not limited to, the risk that the third-party investor or co-venturer breaches local law (including anti-corruption, bribery and tax laws) or defaults on its obligations to the detriment of the Group. The Group's reputation may be adversely impacted if a partner breaches local laws and the Group may have to make cash contributions if its partners are unable to comply with their funding commitments. The Group also faces the risk that its partners may have different business or investment objectives and may have the ability to block business, financial or management decisions that the Group believes are crucial to the success of the project or investment concerned. Many of the shareholders' agreements that Group companies have entered into state that, in the event of a material breach by a shareholder of the terms of such agreement, the defaulting shareholder is required to sell at a discount its stake in the project company to the non-defaulting shareholders. If a Group company commits such a material breach, it could result in the Group company being forced to sell its stake in the relevant joint venture at a loss or, conversely, take a higher share in the joint venture than previously expected, which could have a material adverse effect on the financial performance and business of the Group.

In addition, under the shareholders' agreements that Group companies have entered into, while the distribution policy is enshrined in the shareholder agreement and usually articulates the maximisation of distributions, the approval of co-venture partners is required for the Group to receive distributions of funds from a project. Similarly, the co-venture partner's approval is required on other reserved matters and there can be no assurance that such partners will act in the best interests of the rest of the shareholding group. If any of these risks materialise, including a voting deadlock on reserved matters, this could have a material adverse effect on the Group.

Claims of the Noteholders against Masdar in respect of amounts due under Notes issued under the Programme will be structurally subordinated to the claims of the creditors of all of Masdar's subsidiaries and equity-accounted investees

Masdar is a holding company and its operations are principally conducted through its subsidiaries and equity-accounted investees. Since these subsidiaries and equity-accounted investees are not providing guarantees or any other form of security with respect to Notes to be issued under the Programme, Noteholders will not have any recourse to, or any direct claim on, the cash flows or assets of these companies (including any cash that appears in Masdar's balance sheet but is legally owned by such subsidiaries and equity-accounted investees and not at the free disposal of Masdar), and these subsidiaries and equity-accounted investees will have no obligation, contingent or otherwise, to pay amounts due in respect of the Notes, or to make funds available to Masdar to make those payments.

Moreover, Masdar's project companies have incurred, and will continue to incur in the future, substantial amounts of debt in order to finance their operations. See "—*The ability of most of the Group's project companies to pay dividends is restricted under their financing arrangements*" below. The relevant financing arrangements or other contracts to which these entities are a party may contain certain financial covenants and/or restrictions on their ability to distribute dividends or make other payments to Masdar. Most of Masdar's project companies are principally funded through non-recourse project finance facilities. Claims of the secured and unsecured creditors of these entities (including trade creditors, banks and other lenders but excluding debtors in respect of the non-recourse debt) will have priority with respect to the assets of these entities over any claims that Masdar or the creditors of Masdar, as applicable, may have with respect to those assets. Accordingly, if Masdar became insolvent at the same time as one or more of its project companies, the claims of the Noteholders against Masdar in respect of the Notes would be structurally subordinated to the claims of all entitled creditors of the insolvent project companies.

The Group is exposed to risks relating to the repayment of its debt, the availability of debt financing and the requirement to make additional equity investments

The Group operates in a capital intensive business sector. In order to finance, or assist in the financing of, its existing projects under construction or committed projects and any future projects and acquisitions, or expansions to the Group's existing projects, or any refinancings in relation to its existing projects, the Group primarily relies on its ability to procure commercial financing on competitive market terms. The Group's ability to obtain external financing and the cost of such financing are dependent on numerous factors including general economic and market conditions, international and domestic interest rates, credit availability from banks and other financiers, investor confidence in the Group and the success of its business. Should the Group be unable to raise additional financing in the future on terms that are not onerous to the Group, the financial performance of the Group and its ability to expand will be adversely impacted, which could have a material adverse effect on the Group.

In addition, the Group operates in a sector that requires significant equity investment into projects that will not generate revenue during the period when they are under construction. For example, in the case of solar PV plants and wind plants (both depending on size) the construction period could be around 18 months, whereas for solar CSP plants the construction period could be around 24 months (depending on various factors). As at 31 December 2022, the Group's non-current bank borrowings amounted to AED 1,780 million and its current bank borrowings amounted to AED 688 million. The Group's borrowings include consolidated non-recourse debt at the London Array and Nur Navoi projects, which amounted to AED 1,626 million as at 31 December 2022, and borrowings under other facilities. As at 31 December 2022, the Group's total contingent liabilities (in the form of corporate guarantees to support equity bridge loans and associated interest rate hedging in relation to the Dumat Al Jandal, Nur Navoi, Al Dhafrah and Jeddah South projects), which could be converted into funded exposure and increase the Group's overall indebtedness, amounted to AED 843 million. In addition, the Group had performance guarantees against various projects amounting to AED 2,315 million as at 31 December 2022, capital commitments amounting to AED 926 million (excluding its share in the commitments of joint ventures and equity-accounted investees which amounted to AED 38 million) and commitments towards financial investments held at fair value through profit and loss of AED 114 million at the same date.

Masdar's principal sources of liquidity include dividends, fees, repayment of interest and principal on shareholder loans made by it to its project companies, proceeds of new debt raised, refinancing proceeds and proceeds from partial asset sales. If these liquidity sources are insufficient to repay the debt commitments as they mature or to fund the Group's other liquidity needs in the longer term and the Group is not able to find alternative sources of funding, the Group may need to enter into negotiations with its creditors to restructure some of its borrowing arrangements. There can be no assurance that any restructuring negotiations entered into would be successful and any failure to successfully restructure its debt could result in the Group's insolvency.

Furthermore, under the shareholders' agreements or associated documents relating to its project companies, the Group could be required to contribute funds to its project companies in the event of cost overruns and in certain other circumstances. In addition, the Group may choose to contribute further funds to a project if the board of directors of Masdar determines that this is in the best interests of the Group's business. Such additional funding obligations could materially affect the financial position of the Group, particularly in the event of an unplanned contribution for which the project company is not otherwise compensated under a PPA. Unplanned contributions occur when the Group injects cash to help bridge any temporary liquidity shortfalls. Recent examples include the Dumat Al Jandal project which experienced a temporary funding shortfall due to a delay in obtaining a tax exemption for customs duties due in Saudi Arabia.

The Group's project companies are exposed to risks relating to existing and future leverage

As is typical in project finance transactions, the Group's project companies are highly leveraged and have project level indebtedness outstanding on a non-recourse basis, meaning that the debt is repayable solely from the project's revenues and the repayment of the loans (and interest thereon) is secured solely by the capital stock, physical assets, contracts, insurance policies and cash flows of that project. In addition, the project companies may raise additional debt in the future to the limited extent permitted under their financing and project arrangements. Subject to any restrictions contained in its existing financing agreements or any new financing agreements, the increased leverage and indebtedness of a particular project company could, amongst other things:

- impose restrictions pursuant to financing arrangements on the ability of such project company to make dividend payments to the Group;

- in the case of additional indebtedness, increase the amount of finance charges incurred by the project company and, in turn, reduce the amount of net cash that it generates;

- particularly in the case of the financings for any projects (such as Dumat Al Jandal and Jeddah South) that are structured as soft mini perm financings (i.e. financings which, while having a long-dated contractual maturity, have built in incentives to refinance with permanent financing at an earlier date, typically three to five years, after the project is operational, the failure of which results in the margin on the financing increasing and most, if not all, of the project's available cash flow being used to pay down the principal amount of the financing), there can be no assurance that the existing financing arrangements will be able to be refinanced on similar terms or at all. Should any project company be unable to obtain financing in the future (on terms that are not more onerous than its current arrangements), its financial performance will be impacted by requiring an increased portion of cash flow from operations to be dedicated to making payments in respect of its indebtedness, thereby reducing its ability to use cash flow to fund operations and capital expenditures and to make distributions of dividends, which could have a material adverse effect on the business, financial position and results of operations of the project company and the Group;

- limit their ability to obtain additional financing for working capital, capital expenditures, project development, debt service requirements and general corporate or other purposes; and
- increase the likelihood of failure to meet their respective financial and other obligations.

The existing leverage and any potential increase in the leverage of a project company could reduce the cash flows to the Group and have a material adverse effect on the Group.

Any of the Group's project companies may experience events of default under its financing arrangements

Provisions governing events of default are typical in project finance structures and are included in the financing documentation entered into between the Group's project companies and their lenders. The occurrence of an event of default could restrict a project company's ability to make distributions or pay dividends to its shareholders (including the Group). In addition, a large portion of the Group's assets (including its ownership interests in various project companies) is secured in favour of the lenders, who could enforce such security upon the occurrence of a significant and continuing event of default. This could lead to the Group losing all or part of its investment in a project, which could have a material adverse effect on the Group. The Group currently has technical defaults on its Sharjah WTE and Cirata projects which have been triggered by construction delays and are being waived on a rolling basis, see "—*The Group is exposed to the risk of delays, cost overruns and quality of workmanship issues in the construction of the projects which it is responsible or jointly responsible for developing when such delays, cost overruns and quality issues are not covered under the relevant EPC contracts"* above. No assurance can be given that it will continue to secure the necessary waivers.

The obligations of the project companies under their financing arrangements are typically secured against, among other things, certain project accounts, plant and equipment, intellectual property, insurance proceeds and (in some cases) shares. Upon an event of default, the financiers are entitled to enforce their security. This may lead to the shareholders losing all or part of their investment in the project.

In addition, a material event of default occurring at a fully consolidated project company could result in a reclassification of the project company's affected debt from a long-term liability to a current liability, which could have an adverse impact on the Group's consolidated balance sheet and financial condition.

Furthermore, as is customary for project finance structures, most of the project finance arrangements entered into by the Group's project companies contain financial indebtedness cross default provisions. These provisions allow lenders to invoke an event of default under the financing arrangements as soon as the relevant project company and/or another party that is material to the project (such as the shareholders, offtakers and contractors) triggers an event of default (often in excess of an agreed monetary threshold) under other financing agreements.

In some instances, cross default provisions could apply to a default by other counterparties of a project company, such as the EPC contractor or the O&M contractor for the project. If these counterparties suffer a default in other transactions, including those unrelated to the project, an event of default could occur under the project agreements, even in the absence of any default by the project company. The occurrence of an event that triggers a cross default provision could have a material adverse effect on the Group, particularly in the case where the project company impacted is a subsidiary or a material equity-accounted investee.

Notwithstanding that Masdar is indirectly 95.71 per cent. owned by the government of Abu Dhabi, the Notes are not guaranteed by the government of Abu Dhabi and the government of Abu Dhabi is under no obligation to extend financial support to Masdar

Although the Abu Dhabi government is a 95.71 per cent. indirect shareholder of Masdar, potential investors should note that the Abu Dhabi government does not guarantee the obligations of Masdar in respect of any Notes issued under the Programme and Noteholders therefore do not benefit from any legally enforceable government backing. Although the Abu Dhabi government has in the past provided significant financial support to companies in which it holds ownership interests, including Masdar, it is under no obligation to extend financial support to Masdar in the future and, accordingly, may not do so. Reflecting its significant indirect shareholding in Masdar, the Abu Dhabi government is in a position to control the outcome of actions requiring shareholders' approval through its ability to approve the election of all the members of the MIC and ADNOC Boards and influence the appointment of members of TAQA's Board through its ownership of TAQA's ultimate controlling shareholder, ADQ. The interests of the Abu Dhabi government may be different from those of Masdar's creditors (including the Noteholders).

Masdar's ability to meet its obligations under the Notes is solely dependent on its ability to fund such amounts from the Group's operations, profit and cash flow or from external borrowings. In addition, any sustained period of low oil prices in the future could materially reduce the likelihood of financial support for the Group from the government of Abu Dhabi

The ability of most of the Group's project companies to pay dividends is restricted under their financing arrangements

A Group project company typically makes payments through a cash waterfall mechanism in its financing documents, pursuant to which the costs of the project company, such as O&M fees, taxes, debt payments, salaries and similar payments, are paid before its shareholders receive distribution of cash flows such as dividends, payments on shareholder loans and other subordinated payments to the shareholders. Additionally, certain of the Group's project companies are required to set aside an annual percentage of net profits to statutory reserves up to a set threshold. For example, any project company incorporated in the UAE is required to set aside annually 10 per cent. of its net profit to statutory reserves until the statutory reserve reaches 30 per cent. of its share capital. Similar provisions apply in Morocco, Saudi Arabia, Egypt, Jordan and potentially other countries in which the Group's projects are located.

The ability of the Group's project companies to distribute cash flows is dependent on satisfying certain covenant tests and conditions under their financing arrangements, which typically include:

- completion of the project;
- the occurrence of the first repayment date and the payment of all amounts due and payable on such date with respect to the facilities utilised to finance the project;
- no actual or potential event of default has occurred under the finance documents and is then continuing or would result from the payment of such dividends;
- a reserve (or credit support) equal to not less than six months of debt service is in place; and
- the debt service cover ratio is in excess of the debt service cover ratio test level for dividend payments for the relevant calculation period.

Individual project companies must also satisfy certain other conditions to be able to pay dividends. These covenant tests and conditions restrict the ability of the relevant project company to pay dividends.

Should any of the Group's project companies be unable to pay dividends as a result of restrictions under their financing agreements after the point at which the Group had budgeted for such distributions to be received, this could have a material adverse effect on the Group.

The Group is exposed to risks relating to interest rate volatility

Under the terms of their financing arrangements, the project companies pay interest based on reference rates plus a margin. Under most of the Group's project financing arrangements, the Group or the project companies are required to hedge all or a portion of their exposure to interest rate volatility during the construction and operation period. The Group and its project companies are also exposed to interest rate volatility with respect to their financing arrangements once their hedging arrangements expire, or to the extent that they otherwise have any unhedged exposure to such volatility, or if the Group or the project companies fail to otherwise successfully implement their strategies to mitigate the interest rate risk. Out of the total loan amounts, the unhedged exposure of the Group's projects in respect of interest rate fluctuations varies from zero to 50 per cent. over the term of the project's debt in line with the respective contractual requirements, with increasing percentages of unhedged exposure arising as the amount of debt scheduled to be outstanding is significantly reduced. In addition, if a hedge is not entered into at the appropriate time, it may subsequently become more expensive than initially estimated. Furthermore, certain types of economic hedging activities may not qualify for hedge accounting under IFRS, resulting in increased volatility in the Group's results of operations.

The Group's 2022 Financial Statements contain a sensitivity analysis which indicates that if interest rates had been 100 basis points higher or lower and all other variables had been held constant, the Group's profit for 2022 would have decreased or increased, respectively, by AED 7 million reflecting the impact on the Group's variable rate instruments and its other comprehensive income net of tax would have decreased or increased respectively by AED 18 million reflecting the impact on its interest rate swaps in respect of its total bank borrowing.

The Group was adversely affected by the COVID-19 pandemic and more virulent variants of COVID-19 or the emergence of other unrelated pandemic diseases in the future could also adversely affect the Group's operations

COVID-19 was first reported in December 2019 and subsequently spread throughout the world to countries and jurisdictions in which the Group operates. Almost all countries which were affected took actions to reduce the spread of the disease, including imposing temporary lock downs on residents and instituting international travel restrictions. The COVID-19 pandemic and the response to it had adverse repercussions across regional and global economies and financial markets, which adversely affected the jurisdictions in which the Group operates. The COVID-19 pandemic had an adverse impact on the Group in a number of ways as described in more detail below and more virulent variants of COVID-19 or the emergence of other unrelated pandemic diseases in the future could also have a material adverse effect on the Group.

Certain of the Group's projects under construction in 2020 and 2021 experienced delays as a result of workforce absences and supply chain disruptions relating to the COVID-19 pandemic. The only two projects materially impacted were the Sharjah WTE project and the Cirata project, both of which are in technical default. See "—*The Group is exposed to the risk of delays, cost overruns and quality of workmanship issues in the construction of the projects which it is responsible or jointly responsible for developing when such delays, cost overruns and quality issues are not covered under the relevant EPC contracts*" above and "—*Any of the Group's project companies may experience events of default under its financing arrangements*" above. In addition:

- the Baynouna project company in Jordan has agreed a settlement with the contractor in relation to its force majeure claims under which the contractor withdrew its claims against the Baynouna project company and the Baynouna project company waived its delay-related liquidated damages related to achieving the project completion. The delay in achieving project completion has, however, impacted the expected internal rate of return of the Baynouna project company's shareholders; and

- the Dumat Al Jandal project was significantly impacted by the COVID-19 pandemic due to restrictions imposed by different authorities in Saudi Arabia, including curfews and work from home, travel and visa processing restrictions, which resulted in manufacturing and logistics delays. In December 2022, the Dumat Al Jandal project company submitted a claim to the offtaker for both time (approximately six months) and cost (approximately U.S.$50 million) which was largely related to the pandemic and which is not yet resolved.

The COVID-19 pandemic also significantly increased economic and demand uncertainty and led to disruption and volatility in the global capital markets during 2020, which increased the cost of capital and adversely impacted access to capital.

The Group is exposed to the risks relating to the ongoing military conflict between Russia and Ukraine

On 24 February 2022, Russian military forces invaded Ukraine and the conflict is still ongoing. Although the length, impact and outcome of the conflict in Ukraine is unpredictable, this conflict has resulted in, and could lead to further, significant market and other disruptions, including significant volatility in commodity prices due to the impact on the supply of energy resources and other commodities, instability in financial markets, supply chain interruptions, political and social instability and changes in consumer or purchaser preferences.

The sanctions and other measures imposed on Russia, the existing and potential further responses from Russia to such sanctions, as well as any increase in political tensions and military actions, could further adversely affect supply chains, the global economy and financial markets and could, as a result, adversely affect the Group's projects, which could, in turn, have a material adverse effect on the Group.

The Group is exposed to risks relating to greenfield projects

The development of greenfield projects forms an important aspect of the Group's growth strategy and these development projects in general place significant demands on the Group's management, financial and other resources and require it to continuously develop and improve its operational, financial and internal controls. In particular, ongoing expansion within the Group's current or target markets increases the challenges involved in financial and technical management, recruitment, training and retaining sufficiently skilled technical and management personnel and developing and improving internal administrative infrastructure. Moreover, the Group is exposed to the risk that it may underestimate the actual costs associated with the development of greenfield projects during the bidding process for such projects, as well as associated risks accompanying the development and construction of such projects, see "*—The Group is exposed to the risk of delays, cost overruns and quality of workmanship issues in the construction of the projects which it is responsible or jointly responsible for developing when such delays, cost overruns and quality issues are not covered under the relevant EPC contracts*" above. In addition, in cases where the Group expands into new jurisdictions and/or geographic regions it may become subject to increased challenges and risks, including those relating to novel regulatory regimes, unfamiliar commercial, labour and bureaucratic environments, bribery and corruption and uncertainty regarding the legal framework to which any offtake arrangements that the Group enters into will be subject. In certain markets, including those where the Group may currently have memoranda of understanding with the relevant government or where the public power policy is less clearly defined, the Group may also engage in direct negotiation for projects in lieu of a predetermined tender process, in which case the Group will be exposed to a risk that until a PPA is signed the offtaker could reverse its decision to award a project to the Group arbitrarily or as a result of influence by competitors of the Group.

The Group's growth is dependent upon its ability to meet these challenges successfully and may require significant expenditure and allocation of valuable management resources. The inability to manage such growth effectively may have a material adverse effect on the Group.

Investments in green hydrogen producing facilities may subject the Group to increased challenges and risks

A part of the Group's strategy involves making significant investments in green hydrogen producing facilities, which, reflecting the fact that green hydrogen is an emerging technology, may subject the Group to increased challenges and risks, including:

- variability of renewable energy resources in relation to the proposed output levels, in line with any renewable energy based project;
- EPC arrangements may not cover all possible construction related risks including risks of delay or performance shortfall;
- integration risks of the upstream renewable energy production with the downstream electrolysis and process elements to produce green hydrogen and (to the extent required in a project) the associated transportation vector; and
- counterparty risks in relation to any non-sovereign offtake and various project agreements.

There can be no guarantee that the Group will be able to successfully meet such challenges or adequately manage such risks in relation to any of its green hydrogen growth initiatives.

The Group is exposed to risks relating to acquisitions of brownfield assets

The Group has in the past, as in the case of its Blue Palm projects in the United States and the Infinity platform, acquired, and expects in the future to pursue the acquisition of, ownership interests in brownfield operational projects. Pursuing and completing acquisitions involves a number of risks, including but not limited to:

- the impact of unforeseen risks, such as contingent or latent liabilities relating to the acquired project, that may only become apparent after the acquisition is completed. While the Group carries out due diligence on prospective acquisitions, the Group may not discover all potential operational deficiencies in such projects;
- the failure to properly manage the acquired project or an inability of the Group to achieve any anticipated benefits or cost savings from the project in the time frame anticipated, or at all;
- unforeseen legal, regulatory, contractual, labour or other issues arising out of the acquisitions and risks associated with operating acquired assets in developing countries. The Group will not have a history of owning and operating the acquired projects, despite these projects potentially having significant operating histories at the time the Group acquires them, and possibly limited or no experience operating in the country or region where these projects are located. In particular, where the Group enters into new markets, it may be exposed to a variety of economic, political, legal and operational risks with which it has little experience; and
- significant unexpected liabilities or contingencies arising from the project acquisitions, for which the Group may not be fully indemnified.

In addition, activities related to such acquisitions may consume a significant portion of the Group's management's focus and could increase the Group's leverage. Future acquisitions may be large and complex, and the Group may not be able to complete them as planned or at all. There can be no assurance that the Group will be able to negotiate the required agreements, overcome any local or international political, social or commercial opposition, and obtain any necessary licences, permits and financing. Any significant opposition, along with adverse political developments, could hinder or prevent the Group's development of any acquired projects which could, in turn, have a material adverse effect on the Group.

The Group is exposed to risks relating to competition and pricing

The market for new renewable energy power projects in which the Group operates is characterised by numerous competitors (including both domestic and international), many of whom may have extensive and diversified developmental or operating experience and/or financial resources similar to or greater than the Group. Furthermore, in recent years, the renewable energy power industry has been characterised by strong and increasing competition with respect to both greenfield assets and acquiring existing generation assets. In certain markets, including the UAE with respect to the DEWA V solar PV project in which the Group is not involved, this competition has caused, and may cause in the future, reductions in prices contained in new power contracts and, in many cases, have caused higher acquisition prices for existing assets through competitive bidding practices. The evolution of competitive electricity markets and the development of highly efficient power plants have also caused, or are anticipated to cause, price pressure in certain power markets where the Group sells, or intends to sell, its power. Moreover, some competitors may enter into joint bids on specific projects with an equipment provider, which may limit the Group's ability to secure equipment from such provider for the project. In addition, competitors in certain jurisdictions may engage in collusion and other unfair competitive business practices, which may distort the fairness in competition during the tender process, while the Group itself may become the target of anti-trust laws, which reduce its ability to compete for bids in jurisdictions in which it holds a more dominant market position, see "*—The Group is subject to a variety of antitrust laws and similar legislation and legislation relating to unfair competitive practices and similar behaviour in the jurisdictions where it operates*" below.

Furthermore, any sudden material increase in the demand for power in any of the regions in which the Group's projects operate, including as a result of macroeconomic factors, could result in it being unable to meet such demand either through its existing or new projects, which may result in an increased number of competitors entering the markets.

Increased competition in the future resulting in competitive pressure on pricing and terms for acquisitions or PPAs or causing the Group to lose out on involvement in major projects as discussed above could have a material adverse effect on the Group.

The Group may be unable to maintain the quality of its operations and its reputation may be damaged as a result

The Group's ability to operate its existing projects in an efficient manner in accordance with the relevant requirements, successfully tender for new projects and maintain good relationships with its various partners is dependent on its ability to maintain high standards of operations, health, safety, security and environmental compliance, efficiently manage its projects and the quality of its management personnel. There is no certainty that these standards will be maintained in the future. There is also a possibility that the Group's operations may be adversely affected if there is any environmental damage, or bodily harm to employees of the Group, a project company or any other party, or to members of the public due to the activities of the Group or the relevant project company. Any occurrence of environmental damage or loss of life or serious injury as a result of any breach of applicable safety legislation may result in a disruption of the affected project company's operations or cause reputational harm, and significant liability could be imposed on such project companies for damages, clean-up costs, penalties and/or compensation as a result, see also, "*—The Group is exposed to risks relating to the environmental regulations in the jurisdictions in which it operates and to changes to those environmental regulations*" and "*—The Group may be subject to liabilities as a result of violations of health, safety and security standards*" below.

There is also a strong possibility that the Group's reputation will suffer in the event of any adverse impact on the government of a country or that country's utility services as a result of the activities of the Group or the relevant project company. In addition, if the Group suffers such reputational damage either inside or outside the countries in which it operates, it may be unable to secure new projects. Any such occurrence could have a material adverse effect on the Group.

The operations of the Group could be adversely affected by currency movements and could further be impacted by changes in existing and new exchange rate controls and/or restrictions on transfer to foreign investors of proceeds from their investment

The UAE dirham is currently pegged to the U.S. dollar. As a result, the Group does not consider that it is exposed to material currency risk in relation to fluctuations in the U.S. dollar and dirham exchange rate. Nevertheless, any adverse change in, or removal of, this currency peg (or that of any other currency which is pegged to the U.S. dollar and to which the Group has exposure, such as the Saudi Arabian riyal) for any reason, could have a material adverse effect on the Group.

In certain markets where the Group operates, the Group may not be able to secure appropriate hedging or protection with respect to the availability and repatriation of foreign exchange in relation to any distributions made by the project company (which may be made in the currency of the local jurisdiction) to the Group or any monies to be received from or paid to suppliers and vendors whose contracts may not be denominated in dirham. For as long as the Group's financial statements are denominated in dirham, any adverse change in the regulatory environment relating to the remittance of such foreign exchange in the relevant jurisdictions could expose the Group to material variations in the foreign exchange rates, which could have a material adverse effect on the Group.

In addition, the governments of several countries in which the Group operates, such as Morocco and Egypt, have periodically implemented policies imposing restrictions on the remittance to foreign investors of proceeds from their investments or restricting the inflow of funds to such countries in order to control inflation, limit currency volatility and improve local economic conditions. Furthermore, restrictions on transfers of funds abroad can also impair the ability of Group companies to access capital markets, prevent them from servicing debt obligations that are denominated in non-local currencies and prevent or delay them from paying dividends to the Group. If any of the Group's subsidiaries or project companies are unable to make distributions to the Group because of restrictions on the transfers of currencies, the Group would need to obtain these funds from other sources, which funds may not be available on attractive terms. The occurrence of any of these risks could have a material adverse effect on the Group.

The Group's internal controls may not always prevent losses and, in particular, the Group is heavily reliant on its IT infrastructure, which may fail or be adversely affected by cybercrime

The Group and its project companies implement internal controls designed to minimise risks and protect their assets, promote operational efficiency and encourage adherence to all applicable regulations and policies. These controls may not, however, always be effective in preventing losses. For example, in October 2022, the Group was informed of a fraud that had diverted approximately U.S.$5.5 million (AED 20.2 million) during the PPA settlement process from July through September 2022, see "*Description of the Group—The Group's projects—Operational projects—United States Projects—Rocksprings*".

The Group is heavily reliant on the uninterrupted operation of its and its project companies' information technology (**IT**) infrastructure, which include, among others, complex and sophisticated computer, telecommunication, supervisory control, data processing, data acquisition and data monitoring systems. If the IT infrastructure, including back up facilities and emergency recovery procedures, used throughout the Group's business and by its project companies, including the project companies' plants, were to fail or become subject to disruption for any reason, the failure could lead to significant increased costs, reductions in output and loss of critical data at one or more project companies, which could result in losses for the affected project companies.

In addition, remote working during and following the COVID-19 pandemic lockdown in the UAE and elsewhere has and continues to put additional strain on the reliability of the Group's IT infrastructure. Moreover, there is a risk that the IT security systems set up by the Group and its project companies to help prevent cyberattacks or leaks of sensitive information could be affected by cybercrimes. In addition to adversely impacting business operations, a failure in any operations monitoring systems (which focus on plant availability, activity and efficiency, operational oversight, health and safety, and compliance with environmental laws and regulations) could lead to non-compliance with permit requirements and the imposition of fines or penalties on the relevant project company.

Any such IT infrastructure failure or cyberattack impacting the Group or any of its project companies could have a material adverse effect on the Group, particularly in the case where the project company impacted is a subsidiary or a material equity-accounted investee.

The Group's operations could be adversely affected by force majeure events such as health crises (including the COVID-19 pandemic), fire, floods, earthquakes, tsunami, sandstorms, explosions, acts of terrorism or sabotage, the imposition of international sanctions or other events outside of the Group's or a project company's control

The Group's facilities and business operations (including its projects) could be adversely affected or disrupted by force majeure events such as health crises (including the COVID-19 pandemic), fire, floods, earthquakes, tsunami, sandstorms, explosions, acts of terrorism or sabotage, the imposition of international sanctions which could hinder key deliveries (for example critical spare parts) to its plants in a timely manner or other events outside the Group's or a project company's control. For example, a winter storm in Texas in February 2021 impacted two of the Group's projects in the United States. The Rocksprings plant experienced damaged wind turbines and generation impairment as a result of heavy icing, which resulted in the Rocksprings project company agreeing financial settlements under its offtake agreements in respect of its failure to deliver power and a class action lawsuit was instituted for wrongful death, personal injury and damages, see "*Description of the Group—Litigation—Rocksprings project*". The Los Majadas project could not produce sufficient volumes of power to cover its firm delivery obligations and incurred additional costs of U.S.$62 million under its offtake arrangements. Separately, in September 2021, the Desert Harvest 2 project experienced a fire in a power electronics inverter which resulted in the inverter needing to be replaced under warranty and an insurance claim for losses incurred.

The two most significant contributors to the Group's revenue are the London Array project and the Nur Navoi project and the Group's most material equity-accounted investees in terms of cash generation are the Dudgeon project company, the Hywind project company and the Shams project company and a catastrophic loss experienced by any of these projects would have a material negative impact on the Group. The Group's project companies maintain comprehensive insurance policies to manage the risk of catastrophic loss. However, these insurance policies may not be adequate to cover all losses arising in the event of a catastrophe at one of the Group's plants. Any catastrophes or disruptions or natural disasters relating to the Group's key projects could result in a significant decrease in the project company's revenue or significant reconstruction or remediation costs, beyond what could be recovered through insurance policies, which could have a material adverse effect on the Group.

The Group's projects may not be able to obtain sufficient insurance coverage for the risks associated with their operations

There are inherent risks in operating a power generation project such as natural disasters, fire, earthquakes, explosions, sabotage, acts of terrorism or similar events which, if they occur, can cause significant personal injury or loss of life, severe damage to, and destruction of, property, plant and equipment or contamination of, or damage to, the environment, which may result in an affected project company and/or operations and maintenance provider being named as a defendant in lawsuits asserting claims for substantial damages, environmental clean-up costs, personal injury and fines and/or penalties. There can be no assurance that the industry standard insurance cover that the Group's project companies and O&M services providers currently maintain will be sufficient or effective under all circumstances and against all hazards or liabilities to which the Group, its project companies and/or O&M services providers may be subject. A claim for which the Group, its project companies and/or O&M services providers are either not fully insured or insured at all could have a material adverse effect on the Group.

While the business interruption insurance held by the Group and its project companies and O&M services providers is meant to cover loss of revenues from such interruptions, there is nevertheless a residual exposure in the form of deductible periods that are usually around 60 days and a minimum deductible amount. There can be no assurance that the insurance coverage obtained will be sufficient to cover all losses arising from any or all risks that these entities are exposed to. There is also no assurance that any of the Group, its project companies and/or its O&M services providers will be able to renew their existing insurance cover on commercially reasonable terms, if at all.

In addition, there can be no assurance that the Group's insurance (including that of its project companies and O&M services providers) will be sufficient or effective under all circumstances and against all hazards or liabilities to which the Group may be subject. Due to rising insurance costs and changes in the insurance markets, the Group cannot provide assurance that insurance coverage, specifically cyber insurance and terrorism/war insurance, will continue to be available on terms similar to those presently available to the Group or at all. Any losses not covered by insurance could have a material adverse effect on the Group.

The Group is exposed to political risks in the countries and regions in which it operates

The Group is exposed to geopolitical risks in the countries in which it operates as well as the countries into which the Group intends to expand, which could have an adverse effect on the economy of these countries and thereby the Group's customers and its operations in such regions.

The offtakers of the power produced by the plants developed by the Group's project companies are, in a number of cases, governmental or quasi-governmental entities. Notwithstanding any contractual cost and revenue protections available under the relevant PPAs (including any local or foreign political force majeure), any unexpected major change in the political condition in any of the countries in which the Group has invested or plans to invest (particularly in emerging economies, in which such risks are greater), including a change in government, political instability, nationalisation, major policy shifts or revolution or any negative developments in the existing relationship between the Group or a project company and state-owned offtakers could have a material adverse effect on the Group.

The Group is exposed to risks relating to the environmental regulations in the jurisdictions in which it operates and to changes to those environmental regulations

The Group's operations are subject to environmental laws and regulations in all jurisdictions in which it operates, as well as the requirements of the independent government agencies and development banks that provide financing for many of the Group's projects. Any material breach of any of these requirements by a project company could result in the imposition of fines, liabilities or capital improvements, revocation of licences, suspension of operations, imposition of criminal liability or reputational harm to the Group.

The environmental requirements to which the Group is principally exposed relate to storage, handling, processing, transport and removal of environmentally hazardous and toxic materials. In addition, environmental risks associated with wind power are primarily related to noise emissions and shadow formation. Further, construction of renewable power plants is also associated with environmental risks, including in relation to the land on which the power plants are built and the risk of, for example, oil and diesel spills during construction, which lead to soil contamination. The Group may be held responsible for investigating and decontaminating pollutions and emissions at sites where power plants are built, which would lead to increased project costs and thus a lower gross margin.

The Group is also subject to risks relating to climate changes that affect the ability to harvest energy from wind and solar power. In the longer term, climate changes may result in greater seasonal variations in the availability of wind and solar, respectively, which could affect the willingness to invest in these energy sources and by extension, the Group's business and results of operations. In the shorter term, scientific forecasts on such climate changes in the future, both in terms of timing and outcome, may affect the willingness to invest in wind and solar power which, consequently, could have an adverse effect on the Group.

The Group may be subject to liabilities as a result of violations of health, safety and security standards

The Group and its contractors are subject to applicable health and safety and security regulations in force in the countries in which the Group operates that set various standards for regulating certain aspects of health, safety and security quality and impose civil and criminal penalties and other liabilities for any violations. The use of machinery and high voltage equipment inherent in the Group's business may involve significant health and safety risks.

Potential health, safety and security events that may materially impact the project companies' operations include fires, flooding, explosions, light vehicle incidents, falls from height, personal injuries and fatalities, electrocutions, incidents involving equipment and emissions of harmful gases or chemicals. Fatalities, or serious injury, to employees or site contractors may occur due to these or other factors. Any occurrence of loss of life or serious injury to a project company's employees as a result of any breach of applicable safety legislation may result in a disruption to the project company's operations or cause reputational harm, and significant liability could be imposed on the project company for damages, penalties and/or compensation as a result. Disruption to a project company's operations could come in the form of "Stop Work" orders (or the local equivalent) and, if the project company is in the construction phase, a Stop Work order would expose the project company to delay-related liquidated damages if it were party to a PPA. If the project is operational, the disruption could cause a loss of revenue. Major incidents could also be picked up and reported by the media, thus adversely affecting the Group's reputation.

There is no assurance that all of the Group's project companies will be in compliance with all applicable health, safety and security regulations in force in the countries in which they operate in the future. Should any project company fail to comply with any such regulations, it may be liable for penalties and/or the consequences of default under any contractual obligations requiring it to comply with applicable regulations. In addition, relevant authorities in the countries in which the project companies operate may enforce existing regulations, including health, safety and security laws and regulations, more strictly than they have done in the past and may in the future impose stricter standards, or higher levels of fines and penalties for violations, than those which are in effect at present. Accordingly, the Group is unable to estimate the future financial impact of compliance with, or the cost of a violation of, any applicable regulations by the project companies.

Furthermore, the Group's project companies operate in countries in which health and safety and security laws, regulations and standards and their enforcement are still developing. Increasingly, the project companies' stakeholders expect them to apply stringent, internationally recognised, health, safety and security benchmarks to their operations, which could result in significant new obligations and costs for them.

Failure by a project company to manage its relationships with governments and non-governmental organisations may harm its reputation and operations, which could, in turn, adversely affect its revenue, results of operations and cash flows, potentially in a material manner. In addition, each project company's costs and management time required to comply with internationally recognised standards of social responsibility and sustainability are expected to increase over time.

The occurrence of any of the above factors could have a material adverse effect on the Group.

The Group is exposed to risks relating to licensing and permits and corporate registration requirements such as the failure to renew licences, permits or corporate registration requirements which could result in business disruption or penalties

The Group and its project companies are required to obtain and maintain appropriate licences, permits and regulatory consents in respect of their activities, including corporate registration requirements, environmental permits and licences and approvals for the operation of facilities, construction of new, or modification of existing, facilities or the installation and operation of new equipment required for their businesses. Permits, licences and approvals are generally subject to periodic renewal and challenge from third parties. In addition, most of the licences provide that the relevant company may be subject to financial penalties, or the relevant licence may be suspended or terminated (following a warning), if it fails to comply with the requirements of the relevant licence. Furthermore, the Group operates in regulated industries requiring multiple licences in low transparency jurisdictions, as a result of which the Group may become exposed to bribery and corruption risks in relation to those licensing processes.

When a licence is sought to be renewed or amended, there can be no guarantee that the relevant authority would be prepared to renew the relevant licence or otherwise permit the same scope of work when granting such licence. Furthermore, the relevant authority may choose to impose onerous conditions on the applicant in the course of such renewal (for example, due to a difference in interpretation by the Group and a regulator of the relevant legal requirements and standards or other related matters). Whilst the Group's management believes that its project companies have obtained the appropriate licences for their activities, there can be no guarantee that additional licences may not be required in the future. If a project company is unable to procure the relevant licence or is unable to renew an existing licence on similar terms, it could (to the extent that adequate protection is not otherwise provided under the relevant PPA or ancillary document) materially impact the operation of the projects and, in some limited circumstances, may also lead to a cancellation of the project or closure of the plant. Any such occurrence could have a material adverse effect on the Group.

The Group is subject to legal and contractual requirements to maintain certain levels of localisation with respect to personnel, supplies and materials

Many of the countries in which the Group operates, including the UAE, Saudi Arabia and Indonesia, have laws and regulations which impose requirements on companies to locally source a certain amount of their employees and personnel, supplies, equipment and materials. If the Group fails to comply with these requirements, it may lose certain benefits to its operations or become subject to sanctions by the relevant authorities.

Furthermore, the Group's PPAs may contain certain additional terms, the breach of which may not constitute an event of default but may result in penalties or other adverse consequences. For example, the PPAs for the Group's projects in Saudi Arabia impose certain minimum local content requirements. The failure to comply with such requirements may give the offtaker the right to demand the payment of liquidated damages, which are ultimately supported by a bank guarantee, but this is the offtaker's exclusive remedy.

The tax laws and regulations in countries in which the Group's projects operate could change or become subject to adverse interpretations or inconsistent enforcement

The Group has projects that operate in jurisdictions where taxes are payable which can be substantial and include, amongst others, value added tax, custom duties, profit taxes, payroll-related taxes, property taxes and other taxes. The Group regularly takes positions with regard to the interpretation of tax laws and regulations, but there can be no assurance that that such positions will be realised through recognition by the tax authorities or that such authorities will not penalise the Group for the positions it has taken. Furthermore, tax laws and regulations in some of these countries, including transfer pricing policies with respect to cross border intra-group transactions in which the Group engages, may be subject to the introduction of new tax laws and regulations, frequent change, varying interpretation and inconsistent enforcement.

The implementation of the EU Pillar Two directive and the application of a UAE corporate tax could impact the Group's business, results of operations, financial condition and prospects

Corporate tax, which is applicable to all taxable income obtained by an entity, is currently enacted in some of the Emirates (including Abu Dhabi) through their own decrees and, in practice, is only enforced on foreign companies engaged in upstream petroleum activities and branches of foreign banks. On 31 January 2022, the UAE Ministry of Finance announced the introduction of a corporate income tax on business profits and, on 9 December 2022, Federal Decree-Law No. 47 of 2022 (the **Corporate Income Tax Law**) was published and released.

The Corporate Income Tax Law is effective from the financial years commencing on or after 1 June 2023, and will be applicable across all Emirates (i.e., at a UAE federal level) to all business and commercial activities, except for the following persons (subject to certain conditions): government and government controlled entities persons engaged in the exploitation of UAE natural resources (both extractive and non-extractive), qualifying public benefit entities; charities and public benefit organisations, pension funds or social security funds, and qualifying investment funds. The Corporate Income Tax Law could significantly increase the Group's expenses depending on the applicability of any such tax and it will be applicable at the following rates: 0 per cent. corporate tax rate on taxable income below AED 375,000, as well as qualifying income of a qualifying free zone person; and 9 per cent. corporate tax rate on taxable income exceeding AED 375,000 and on non-qualifying income of a qualifying free zone person. As per the Corporate Income Tax Law, free zone entities could continue to benefit from the existing tax incentives granted by the relevant free zone authorities provided that they are compliant with all regulatory requirements and meet certain conditions, some of which are still to be confirmed through a decision issued by the UAE Federal Cabinet at the suggestion of the Ministry of Finance. Furthermore, the applicability of taxation to large multinationals with consolidated revenues above EUR 750 million (i.e. under the minimum taxation component, known as Pillar Two, of the Organisation for Economic Co-operation and Development's reform of international taxation) and its implication for the Group's revenue is unclear given the information available at this time. As the European Union Council reached a unanimous agreement on 15 December 2022 to implement the EU Minimum Tax Directive (requiring EU member states to transpose the rules into domestic law by 31 December 2024), EU jurisdictions (such as Cyprus, Hungary or the Netherlands) and others, such as the UK, will likely implement Pillar Two rules from 2024 onwards. Moreover, the UAE is a member of the BEPS Inclusive Framework and has signed up to the Statement on a Pillar Two Solution to Address the Tax Challenges Arising from the Digitalization of Economy published on 8 October 2021 by the Organisation for Economic Co-operation and Development.

As such, the Group is monitoring the manner in which countries will implement Pillar Two and how that could impact the Group's business. The impact of any changes as a result of Pillar Two or the Corporate Income Tax Law on the Group's business is being assessed with Masdar's tax advisers. Any of the foregoing could have a material adverse effect on the Group's business, results of operations, financial condition and prospects.

The Group may be adversely affected if it is not able to retain or replace key senior management personnel or other key skilled employees and the Group is exposed to a deterioration in its relationship with its employees

The Group's operating success and its ability to carry out its growth initiatives are dependent on the abilities, skills and experience of its senior management and other key skilled personnel, both in administrative and operational areas. The Group may not be able to retain existing key employees or continue to attract and employ key people who have specific technical or industry expertise, including people in the many international locations in which the Group has operations. This might result in a shortage of trained and qualified personnel. Such shortage of personnel may be a constraint on the Group's ability to retain the resources required to run its operations effectively and, therefore, could have a material adverse effect on the Group.

Furthermore, from time to time, executives and other employees with technical or industry expertise may leave the Group. If the Group fails to appoint qualified and effective successors in a timely manner, this could also have a material adverse effect on the Group.

The Group's assets are concentrated in the solar PV and wind power generation sector and it is exposed to risks related to the development of other electricity-generating technologies and changes in Government policy

Many of the Group's power generation assets use either solar PV or wind power technology. This concentration exposes the Group to any change in public attitude to solar PV or wind farm power generation in particular or renewable energy power generation in general thereby influencing governmental support for such renewable energy sources as a reaction to voter opinion, reliance upon ongoing regulatory support, the reliance of wind or solar PV power generation technology upon certain technological solutions, dominance of a limited number of upstream component providers to the industry and discovery of environmental factors which result in enforced changes to wind or solar PV installations, among others.

The electricity produced from wind and solar power is transported and consumed in the same way as electricity from other energy sources, which means that different energy sources compete with each other. As technology development continues, competing electricity-generating technologies, including those not yet invented today, may develop more favourably than wind and solar power, which may affect the relative competitive advantage of wind and solar power. There is also a risk that the technology that the Group chooses for its wind and solar power will prove to carry risks that are not known today.

In addition, changes in the laws and regulations relating to renewable electricity generation and renewable energy incentives may adversely affect any of the Group's project companies that are impacted by those changes. Many countries have, over time, reduced the amount of incentives offered in connection with renewable generation and other policy changes that could have adverse effects on the renewable energy sector are changes on import tariffs on significant items of renewable energy generation equipment, any adoption of programmes to keep conventional or nuclear power plants operating, thereby reducing the opportunity to replace generating capacity that is being retired from service, or erosion in any existing obligations for electric utilities to buy electricity from renewable projects.

Any of these factors could reduce growth in the renewable energy sector and thereby limit the Group's ability to grow its business as currently anticipated.

The Group is subject to a variety of antitrust laws and similar legislation and legislation relating to unfair competitive practices and similar behaviour in the jurisdictions where it operates

The Group is subject to a variety of antitrust, unfair competitive practices and similar laws and regulations in the jurisdictions where it operates. In some of the markets in which the Group operates, it has market positions that may make future significant greenfield projects or acquisitions more difficult and may limit its ability to expand. In addition, the Group may be subject to allegations of, or further regulatory investigations or proceedings into, unfair competitive practices or similar behaviour. Such allegations, investigations or proceedings (irrespective of merit) may require the devotion of significant management effort, time and financial resources to defending the Group. In the event that such allegations are proven, there may be significant fines, damages awards and other expenses, and the Group's reputation may be harmed, which could have a material adverse effect on the Group.

There is a risk that the Group may not be able to detect money laundering, bribery and other illegal or improper activities fully or on a timely basis, which could expose it to liability and harm its business or reputation

The Group is required to comply with applicable sanctions, anti-money laundering, anti-bribery and anti-terrorism laws and other regulations in the jurisdictions in which it has operations. These laws and regulations require the Group, among other things, to adopt and enforce "know your customer" policies and procedures and to report suspicious and large transactions to the applicable regulatory authorities in different jurisdictions.

Masdar has in place internal controls, systems and procedures in conformity with the relevant sanctions, anti-bribery, anti-money laundering and anti-terrorism laws and believes that its policies and procedures are generally adequate. In addition, it has made available these policies and procedures to its subsidiaries, joint ventures and associates so that they may also comply with them, although such compliance is limited with respect to non-controlled entities and associates. Masdar also has a whistle blowing programme, with regular investigations conducted in response to whistle blowing incidents. However, there is no certainty that such standards will be maintained in the future. To the extent the Group, its employees, subsidiaries, joint ventures or associates fail to fully comply with applicable laws and regulations, the relevant government or international agencies and regulators have the power to impose fines and other penalties, which could harm the Group's reputation and have a material adverse effect on the Group.

The Group and its project companies face the risk of material disputes and possible litigation

Masdar and its project companies have contracted with a number of counterparties, including offtakers and, for projects under construction, EPC contractors. There is generally a risk of disputes arising in relation to any of those agreements such as from delays in achieving commercial operation, liquidated damages, achievement of performance metrics, force majeure claims and additional works undertaken by the EPC contractors.

As at the date of this Base Offering Circular, there are certain material ongoing proceedings filed against or by the Group's project companies. These proceedings are discussed in "*Description of the Group—Litigation*".

The timing and outcome of any litigation proceedings is generally uncertain and lengthy litigation is costly. Any adverse ruling in ongoing litigation proceedings against any of the Group's project companies could result in significant payments being made (which may exceed any provisions established in respect of them) and could have a negative impact on the Group's reputation.

Risks related to the Group conducting a significant amount of its business in developing countries

Much of the Group's business is conducted in countries that are classified by the United Nations as developing countries. The Group has operations and/or development activities in a variety of developing countries. Part of the Group's growth strategy is to selectively expand its business in countries in which the Group already has a presence and other countries, including developing countries, based on an assessment of various factors, including the political, economic and investment stability of the country. Operations in any country, and particularly the operation, financing and development of projects in developing countries, may entail significant risks and uncertainties, including:

- economic, social and political instability, including threats of terrorism, in any particular country or region;
- nascent legal regimes in some developing countries in which the Group operates;
- unwillingness or inability of governments, government agencies, similar organisations or other counterparties to honour their contracts;
- difficulties in hiring, training and retaining qualified personnel;
- an inability to obtain access to fair and equitable political, regulatory, administrative and legal systems;
- corruption, bribery and compliance risk and the risk of fraudulent activity by the Group's employees, subsidiaries, joint ventures or associates (see "*—There is a risk that the Group may not be able to detect money laundering, bribery and other illegal or improper activities fully or on a timely basis, which could expose it to liability and harm its business or reputation*" above); and
- potentially adverse tax consequences of operating in multiple jurisdictions.

Any of these factors, by itself or in combination with others, could have a material adverse effect on the Group.

The Group's ability to exit certain of its projects may be limited pursuant to the terms of its agreements

Many of the Group's PPAs have share retention obligations which must be adhered to. For example, the shareholders' agreement in the Group's PPA for its DEWA III project precludes Masdar from divesting at any time prior to the tenth anniversary of the COD without consent from its co-shareholders. On many other projects, the terms of the senior financing restrict the Group's ability to exit without triggering a mandatory prepayment event or event of default, making the consent of the financing parties necessary. These share transfer restrictions typically step down over time and the Group's ability to largely or fully divest without the consent of other stakeholders is permitted once projects are approximately halfway through their useful life.

In each of the above cases, there is a risk that the Group may not be able to receive consent to exit the relevant projects when it determines that it would be economically advantageous or necessary to do so, which could have a material adverse effect on the Group.

Risks related to potential impairment of the Group's goodwill

The Group's acquisition of Arlington Group Services Ltd. (**Arlington**) resulted in provisional goodwill of AED 164 million being recorded in the 2022 Financial Statements. Arlington is a leading battery energy storage developer in the UK and has three battery storage projects currently under construction. This goodwill is subject to periodic impairment testing in accordance with IFRS, and may be impaired for a number of reasons including the potential obsolescence of the types of battery storage technology used in the projects it is developing. Any such impairment would negatively impact the Group's results of operations in the year in which it is taken.

FACTORS WHICH ARE MATERIAL FOR THE PURPOSE OF ASSESSING THE MARKET RISKS ASSOCIATED WITH NOTES UNDER THE PROGRAMME

Risks related to the structure of a particular issue of Notes

A range of Notes may be issued under the Programme. A number of these Notes may have features which contain particular risks for prospective investors. Set out below is a description of the most common such features:

Risks applicable to all Notes

If the Issuer has the right to redeem any Notes at its option, this may limit the market value of the Notes concerned and an investor may not be able to reinvest the redemption proceeds in a manner which achieves a similar effective return

An optional redemption feature is likely to limit the market value of Notes. During any period when the Issuer may elect to redeem Notes, the market value of those Notes generally will not rise substantially above the price at which they can be redeemed. This also may be true prior to any redemption period.

The Issuer may be expected to redeem Notes when its cost of borrowing is lower than the interest rate on the Notes. At those times, an investor generally would not be able to reinvest the redemption proceeds at an effective interest rate as high as the interest rate on the Notes being redeemed and may only be able to do so at a significantly lower rate. Prospective investors should consider reinvestment risk in light of other investments available at that time.

The Notes may be redeemed prior to their final maturity date for tax reasons

If the Issuer becomes obliged to pay any additional amounts in respect of the Notes as provided or referred to in Condition 8 of the Notes as a result of any change in, or amendment to, the laws or regulations of a Tax Jurisdiction (as defined in Condition 8) or any change in the application or official interpretation of such laws or regulations, which change or amendment becomes effective on or after the date on which agreement is reached to issue the first Tranche of the Notes and such obligation cannot be avoided by the Issuer taking reasonable measures available to it, the Issuer may redeem all but not some only of the outstanding Notes of such Tranche in accordance with Condition 7.2 of the Notes. In such circumstances, an investor may not be able to reinvest the redemption proceeds in a comparable security with a similar rate of return, which may have an adverse effect on the position of such investor. During any period when the Issuer may elect to redeem the Notes, the market value of the Notes generally will not rise substantially above the Early Redemption Amount. Prospective investors should consider reinvestment risk in light of other investments available at that time.

If the Notes include a feature to convert the interest basis from a fixed rate to a floating rate, or vice versa, this may affect the secondary market and the market value of the Notes concerned

Fixed/Floating Rate Notes are Notes which bear interest at a rate that converts from a fixed rate to a floating rate, or from a floating rate to a fixed rate. Such a feature to convert the interest basis, and any conversion of the interest basis, may affect the secondary market in, and the market value of, such Notes as the change of interest basis may result in a lower interest return for Noteholders. Where the Notes convert from a fixed rate to a floating rate, the spread on the Fixed/Floating Rate Notes may be less favourable than the then prevailing spreads on comparable Floating Rate Notes tied to the same reference rate. In addition, the new floating rate at any time may be lower than the rates on other Notes. Where the Notes convert from a floating rate to a fixed rate, the fixed rate may be lower than the then prevailing rates on those Notes and could affect the market value of an investment in the relevant Notes.

Notes which are issued at a substantial discount or premium may experience price volatility in response to changes in market interest rates

The market values of securities issued at a substantial discount (such as Zero Coupon Notes) or premium to their nominal amount tend to fluctuate more in relation to general changes in interest rates than do prices for more conventional interest-bearing securities. Generally, the longer the remaining term of such securities, the greater the price volatility as compared to more conventional interest-bearing securities with comparable maturities. Such volatility could have a material adverse effect on the value of and return on any such Notes.

The regulation and reform of "benchmarks" may adversely affect the value of Notes linked to or referencing such "benchmarks"

Interest rates and indices which are deemed to be "benchmarks", (including the euro interbank offered rate (**EURIBOR**)) are the subject of national and international regulatory guidance and proposals for reform. Some of these reforms are already effective whilst others are still to be implemented. These reforms may cause such benchmarks to perform differently than in the past, to disappear entirely, or have other consequences which cannot be predicted. Any such consequence could have a material adverse effect on any Notes referencing such a benchmark.

Regulation (EU) 2016/1011 (the **EU Benchmarks Regulation**) applies, subject to certain transitional provisions, to the provision of benchmarks, the contribution of input data to a benchmark and the use of a benchmark within the EU. Among other things, it (i) requires benchmark administrators to be authorised or registered (or, if non-EU-based, to be subject to an equivalent regime or otherwise recognised or endorsed) and (ii) prevents certain uses by EU supervised entities of benchmarks of administrators that are not authorised or registered (or, if non-EU based, not deemed equivalent or recognised or endorsed). The UK Benchmarks Regulation among other things, applies to the provision of benchmarks and the use of a benchmark in the UK. Similarly, it prohibits the use in the UK by UK supervised entities of benchmarks of administrators that are not authorised by the FCA or registered on the FCA register (or, if non-UK based, not deemed equivalent or recognised or endorsed).

The EU Benchmarks Regulation and/or the UK Benchmarks Regulation, as applicable, could have a material impact on any Notes linked to, or referencing, a benchmark, in particular, if the methodology or other terms of the benchmark are changed in order to comply with the requirements of the EU Benchmarks Regulation and/or the UK Benchmarks Regulation, as applicable. Such changes could, among other things, have the effect of reducing, increasing or otherwise affecting the volatility of the published rate or level of the relevant benchmark.

More broadly, any of the international or national reforms, or the general increased regulatory scrutiny of benchmarks, could increase the costs and risks of administering or otherwise participating in the setting of a benchmark and complying with any such regulations or requirements.

The euro risk free-rate working group for the euro area has published a set of guiding principles and high level recommendations for fallback provisions in, amongst other things, new euro denominated cash products (including bonds) referencing EURIBOR. The guiding principles indicate, amongst other things, that continuing to reference EURIBOR in relevant contracts (without robust fallback provisions) may increase the risk to the euro area financial system. On 11 May 2021, the euro risk-free rate working group published its recommendations on EURIBOR fallback trigger events and fallback rates.

Such factors may have (without limitation) the following effects on certain benchmarks: (i) discouraging market participants from continuing to administer or contribute to a benchmark; (ii) triggering changes in the rules or methodologies used in the benchmark; and/or (iii) leading to the disappearance of the benchmark. Any of the above changes or any other consequential changes as a result of international or national reforms or other initiatives or investigations, could have a material adverse effect on the value of and return on any Notes linked to, referencing, or otherwise dependent (in whole or in part) upon, a benchmark. On 29 November 2017, the Bank of England and the FCA announced that, from January 2018, its Working Group on Sterling Risk-Free Rates had been mandated with implementing a broad-based transition to the Sterling Overnight Index Average (**SONIA**) across sterling bond, loan and derivative markets, so that SONIA is established as the primary sterling interest rate benchmark by the end of 2021.

On 21 September 2017, the European Central Bank announced that it would be part of a new working group tasked with the identification and adoption of a "risk free overnight rate" which can serve as a basis for an alternative to current benchmarks used in a variety of financial instruments and contracts in the euro area. On 13 September 2018, the working group on Euro risk free rates recommended the new Euro short-term rate (**€STR**) as the new risk free rate for the euro area. The €STR was published for the first time on 2 October 2019. Although EURIBOR has been reformed in order to comply with the terms of the EU Benchmarks Regulation, it remains uncertain as to how long it will continue in its current form, or whether it will be further reformed or replaced with €STR or an alternative benchmark.

The Conditions provide that, where the applicable Pricing Supplement specifies that Condition 5.2(b)(iv)(1) is applicable, there are certain fallback arrangements in the event that an original Reference Rate (as defined in the Conditions) and/or any page on which an original Reference Rate may be published, (or any other successor service) becomes unavailable or a Benchmark Event (as defined in the Conditions) otherwise occurs. Such fallback arrangements include the possibility that the Rate of Interest (or the relevant component part thereof) could be set by reference to a Successor Rate or an Alternative Reference Rate, with the application of an Adjustment Spread (as defined in the Conditions) and may include amendments to the Conditions to ensure the proper operation of the successor or replacement benchmark, all as determined by an Independent Adviser, acting in good faith and following consultation with the Issuer, or the Issuer (acting in good faith and in a commercially reasonable manner), as applicable, and without the requirement for the consent or sanction of Noteholders. An Adjustment Spread, if applied, is the spread (which may be positive, negative or zero) or formula or methodology for calculating a spread, in each case to be applied to the Successor Rate or the Alternative Reference Rate (as the case may be), and is the spread, formula or methodology which (i) in the case of a Successor Rate, is formally recommended or formally provided as an option for parties to adopt, in relation to the replacement of the Reference Rate with the Successor Rate by any Relevant Nominating Body (as defined in the Conditions), or (ii) (if no such recommendation has been made, or in the case of an Alternative Reference Rate) the Independent Adviser (following consultation with the Issuer) determines is customarily applied to the relevant Successor Rate or the Alternative Reference Rate, as the case may be, in international debt capital markets transactions to produce an industry-accepted replacement rate for the original Reference Rate, or (iii) (if the Independent Adviser (following consultation with the Issuer) determines that no such spread, formula or methodology is customarily applied) the Independent Adviser (following consultation with the Issuer) determines and which is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions which reference the original Reference Rate, where such rate has been replaced by the Successor Rate or the Alternative Reference Rate, as the case may be, or (iv) (if the Independent Adviser (following consultation with the Issuer) determines that there is no such industry standard) the Independent Adviser (following consultation with the Issuer) or the Issuer (as applicable) determines (acting in good faith and in a commercially reasonable manner) in their sole discretion to be appropriate. Accordingly, the application of an Adjustment Spread may result in the Notes performing differently (which may include payment of a lower Rate of Interest) than they would do if the original Reference Rate were to continue to apply in its current form. If no Adjustment Spread can be determined, a Successor Rate or Alternative Reference Rate may nonetheless be used to determine the Rate of Interest (or the relevant component part thereof). The use of a Successor Rate or Alternative Reference Rate (including with or without the application of an Adjustment Spread) may still result in any Notes linked to or referencing an original Reference Rate performing differently (which may include payment of a lower Rate of Interest) than they would if the original Reference Rate were to continue to apply in its current form.

If, following the occurrence of a Benchmark Event, no Successor Rate or Alternative Reference Rate is determined, the ultimate fallback for the purposes of the calculation of the Rate of Interest (or the relevant component part thereof) for the relevant immediately following Interest Period may result in the Rate of Interest (or the relevant component part thereof) for the last preceding Interest Period being used. This may result in the effective application of a fixed rate for Floating Rate Notes based on the rate which was last observed on the Relevant Screen Page. Due to the uncertainty concerning the availability of Successor Rates and Alternative Reference Rates, the involvement of an Independent Adviser and the potential for further regulatory developments, there is a risk that the relevant fallback provisions may not operate as intended at the relevant time.

The Conditions provide that, where the applicable Pricing Supplement specifies that Condition 5.2(b)(iv)(2) is applicable, if the Issuer determines that a Benchmark Transition Event and its related Benchmark Replacement Date (each as defined in the Conditions) has occurred, the then-current Benchmark will be replaced by a Benchmark Replacement (determined by the Issuer in accordance with the Conditions) for all purposes relating to the relevant Notes in respect of all determinations on such date and for all determinations on all subsequent dates. The Issuer will have to exercise its discretion to determine (or to elect not to determine) a Benchmark Replacement and, if applicable, a Benchmark Replacement Adjustment, in a situation in which it is presented with a conflict of interest.

Investors should consult their own independent advisers and make their own assessment about the potential risks imposed by the EU Benchmarks Regulation and/or the UK Benchmarks Regulation, as applicable, or any of the international or national reforms and the possible application of the benchmark replacement provisions of Notes in making any investment decision with respect to any Notes linked to or referencing a benchmark.

The market continues to develop in relation to risk free rates (including overnight rates) which are possible reference rates for Floating Rate Notes

Investors should be aware that the market continues to develop in relation to risk free rates, such as the Secured Overnight Financing Rate (**SOFR**), SONIA and €STR, as reference rates in the capital markets for sterling, U.S. dollar or euro bonds, as applicable, and their adoption as alternatives to the relevant interbank offered rates. This relates to the development both in terms of the substance of the calculation and in the development and adoption of market infrastructure for the issuance and trading of bonds referencing such risk-free rates. In addition, market participants and relevant working groups are exploring alternative reference rates based on risk free rates, including term SOFR, SONIA and €STR reference rates (which seek to measure the market's forward expectation of an average SOFR, SONIA and €STR over a designated term).

The continued development of risk free reference rates for the Eurobond markets, as well as the continued development of SOFR, SONIA and €STR based rates and the market infrastructure for adopting such rates, could result in reduced liquidity or increased volatility or could otherwise affect the market price of the Notes.

The substance of the calculation of, and the adoption of market infrastructure for the issuing and trading of Eurobonds referencing, SOFR, SONIA and €STR continues to develop. In particular, investors should be aware that several different SOFR methodologies have been used in notes referencing SOFR issued to date and no assurance can be given that any particular methodology, including the compounding formula in the Conditions of the Notes, will gain widespread market acceptance.

The market or a significant part thereof may adopt an application of risk free rates that differs significantly from that set out in the Conditions and used in relation to Floating Rate Notes that reference a risk free rate issued under this Base Offering Circular.

The development of risk free rates for the Eurobond markets could result in reduced liquidity or increased volatility or could otherwise affect the market price of any Notes that reference a risk free rate issued under the Programme from time to time. In addition, the manner of adoption or application of risk free rates in the Eurobond markets may differ materially compared with the application and adoption of risk free rates in other markets, such as the derivatives and loan markets. Investors should carefully consider how any mismatch between the adoption of such reference rates in the bond, loan and derivatives markets may impact any hedging or other financial arrangements which they may put in place in connection with any acquisition, holding or disposal of Notes referencing such risk free rates.

Risk free rates differ from interbank offered rates in a number of material respects and have a limited history

Risk free rates may differ from interbank offered rates in a number of material respects, including (without limitation) by, in most cases, being backwards looking, calculated on a compounded or weighted average basis and risk free overnight rates, whereas such interbank offered rates are generally expressed on the basis of a forward looking term and include a risk element based on interbank lending. As such, investors should be aware that interbank offered rates and any risk free rates may behave materially differently as interest reference rates for the Notes.

Interest on Notes which reference a backwards looking risk free rate is only capable of being determined immediately prior to or on the relevant Interest Payment Date. It may be difficult for investors in Notes which reference such risk free rates to reliably estimate the amount of interest which will be payable on such Notes and some investors may be unable or unwilling to trade such Notes without changes to their IT systems, both of which could adversely impact the liquidity of such Notes. Further, in contrast to Notes referencing interbank offered rates, if the Notes become due and payable as a result of an Event of Default under Condition 10, the Rate of Interest payable shall be determined on the date the Notes became due and payable and shall not be reset thereafter. In addition, the manner of adoption or application of such risk free rates in the Eurobond markets may differ materially compared with the application and adoption of such risk free rates in other markets, such as the derivatives and loan markets. Investors should carefully consider how any mismatch between the adoption of such risk free rates in the bond, loan and derivatives markets may impact any hedging or other financial arrangements which they may put in place in connection with any acquisition, holding or disposal of any Notes. The use of risk free rates as a reference rate for Eurobonds is nascent, and may be subject to change and development, both in terms of the substance of the calculation and in the development and adoption of market infrastructure for the issuance and trading of bonds referencing such risk free rates.

Notes referencing risk free rates may have no established trading market when issued, and an established trading market may never develop or may not be very liquid. Market terms for debt securities referencing such risk free rates, such as the spread over the index reflected in interest rate provisions, may evolve over time, and trading prices of such Notes may be lower than those of subsequently issued indexed debt securities as a result. Further, if the relevant risk free rates do not prove to be widely used in securities like the Notes, the trading price of such Notes linked to such risk free rates may be lower than those of Notes referencing indices that are more widely used. Investors in such Notes may not be able to sell such Notes at all or may not be able to sell such Notes at prices that will provide them with a yield comparable to similar investments that have a developed secondary market, and may consequently suffer from increased pricing volatility and market risk.

The administrators of SOFR, SONIA or €STR may make changes that could change the value of SOFR, SONIA or €STR or discontinue SOFR, SONIA or €STR

Each of the Federal Reserve, Bank of New York, the Bank of England or the European Central Bank (or their respective successors), as the administrators of SOFR, SONIA or €STR, respectively, may make methodological or other changes that could change the value of SOFR, SONIA or €STR and/or a related index, including changes related to the method by which each of SOFR, SONIA or €STR is calculated, eligibility criteria applicable to the transactions used to calculate SOFR, SONIA or €STR or timing related to the publication of SOFR, SONIA or €STR and/or a related index. In addition, each such administrator may alter, discontinue or suspend calculation or dissemination of SOFR, SONIA or €STR or a related index (in which case a fallback method of determining the interest rate on the Notes will apply). Each administrator has no obligation to consider the interests of Noteholders when calculating, adjusting, converting, revising or discontinuing SOFR, SONIA, €STR or a related index. Any of the foregoing could have a material adverse effect on the value or liquidity of, and return on, any Notes which reference SOFR, SONIA or €STR.

Risks related to Notes generally

Set out below is a description of material risks relating to the Notes generally:

The use of proceeds of the Notes of any Tranche may not meet investor expectations or requirements or be suitable for an investor's investment criteria.

The Issuer has stated that it intends to use an amount equivalent to the net proceeds of each Tranche of Notes (the **equivalent amount**) in accordance with the Green Finance Framework (as defined in "*Use of Proceeds*" below). See "*Use of Proceeds*". The Green Finance Framework is not, nor shall it be deemed to be, incorporated in and/or form part of this Base Offering Circular.

The Issuer will exercise its judgement and sole discretion in determining the businesses and projects that will be financed and/or refinanced by the equivalent amount. If the use of the proceeds of the Notes is a factor in any prospective investor's decision to invest in the Notes, that investor should carefully consider the disclosure in "*Use of Proceeds*" and consult with its legal or other advisers before making an investment in the Notes and must determine for themselves the relevance of such information for the purpose of any investment in such Notes together with any other investigation such investor deems necessary. In particular, no assurance is given by the Issuer, the Arrangers, the Dealers, the Agents or any other person that the use of the equivalent amount for any Eligible Green Projects will satisfy, whether in whole or in part, any present or future investor expectations or requirements as regards any investment criteria or guidelines with which such investor or its investments are required to comply, whether by any present or future applicable law or regulations or by its own by-laws or other governing rules or investment portfolio mandates, in particular with regard to any direct or indirect environmental, sustainability or social impact of any projects or uses, the subject of or related to, any Eligible Green Projects. In addition, the Green Finance Framework may be amended at any time without notice or the consent of Noteholders and none of the Issuer, the Arrangers, the Dealers, the Agents or any other person assumes any obligation or responsibility to release any update or revision to the Green Finance Framework and/or information to reflect events or circumstances since the date of publication of the Green Finance Framework. Neither the Arrangers nor the Dealers shall be responsible for the ongoing monitoring of the use of proceeds in respect of any Notes.

Furthermore, notwithstanding the Issuer's intention stated above, prospective investors should be aware that the Issuer has no contractual obligation to use the equivalent amount as stated in, or to provide the reports described in, "*Use of Proceeds*". Any failure by the Issuer to use the equivalent amount as stated or to provide the reports will not constitute an Event of Default under Condition 10 with respect to the Notes but may affect the value and/or the trading price of the Notes and/or have adverse consequences for certain investors with portfolio mandates to invest in green assets. There is also no direct contractual link between the Notes and any green targets of the Issuer. Therefore, payments of principal and interest and rights to accelerate under the Notes will not depend on sustainability performance.

It should be noted that the definition (legal, regulatory or otherwise) of, or market consensus as to what constitutes or may be classified as, a "green" or equivalently-labelled project or investment that may finance such project is evolving. No assurance can be given that a clear definition, consensus or label will develop over time or that, if it does, any Notes will comply with such definition, market consensus or label. In addition, no assurance can be given by the Issuer, the Arrangers, the Dealers, the Agents or any other person to investors that any Notes will comply with any future standards or requirements regarding any "green" or other equivalently-labelled performance objectives, including Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment (the so called "EU Taxonomy Regulation" including the supplemental delegated regulations related thereto) or Regulation (EU) 2020/852 as it forms part of domestic law in the UK by virtue of the EUWA),and, accordingly, the status of any Notes as being "green" (or equivalent) could be withdrawn at any time.

No assurance or representation is given as to the suitability or reliability for any purpose whatsoever of any opinion, report or certification of any third party (whether or not solicited by the Issuer) which may be made available in connection with the issue of the Notes and in particular with any of the businesses and projects funded with the equivalent amount to fulfil any environmental, sustainability, social and/or other criteria. For the avoidance of doubt, any such opinion, report or certification is not, nor shall be deemed to be, incorporated in and/or form part of this Base Offering Circular. Any such opinion, report or certification is not, nor should it be deemed to be, a recommendation by the Issuer, the Arrangers, the Dealers, the Agents or any other person to buy, sell or hold the Notes. Any such opinion, report or certification is only current as at the date that opinion or certification was initially issued. The criteria and/or considerations that formed the basis of the second party opinion and any other such opinion or certification may change at any time and the second party opinion may be amended, updated, supplemented, replaced and/or withdrawn. Prospective investors must determine for themselves the relevance of any such opinion or certification and/or the information contained therein and/or the provider of such opinion, report or certification for the purpose of any investment in the Notes. The providers of such opinions and certifications are not currently subject to any specific regulatory or other regime or oversight. Investors in the Notes shall have no recourse against the Issuer, the Arrangers, the Dealers, the Agents or the provider of any such opinion, report or certification for the contents of any such opinion, report or certification.

If the Notes are at any time listed or admitted to trading on any dedicated "green", "environmental", "sustainable" or other equivalently labelled segment of any stock exchange or securities market (whether or not regulated), no representation or assurance is given by the Issuer, the Arrangers, the Dealers, the Agents or any other person that such listing or admission satisfies, whether in whole or in part, any present or future investor expectations or requirements as regards any investment criteria or guidelines with which such investor or its investments are required to comply, whether by any present or future applicable law or regulations or by its own bylaws or other governing rules or investment portfolio mandates, in particular with regard to any direct or indirect environmental, sustainability or social impact of any projects or uses, the subject of or related to, any of the businesses and projects funded with the proceeds from any Notes. Furthermore, it should be noted that the criteria for any such listings or admission to trading may vary from one stock exchange or securities market to another. Nor is any representation or assurance given or made by the Issuer, the Arrangers, the Dealers, the Agents or any other person that any such listing or admission to trading will be obtained in respect of any Notes or, if obtained, that any such listing or admission to trading will be maintained during the life of the Notes concerned.

While it is the Issuer's intention to apply the equivalent amount and obtain and publish the relevant reports and opinions in, or substantially in, the manner described in "*Use of Proceeds*", there can be no assurance (whether by the Issuer, the Arrangers, the Dealers, the Agents or any other person) that the Issuer will be able to do this. Nor can there be any assurance that any Eligible Green Projects will be completed within any specified period or at all or with the results or outcome (whether or not related to the environment) as originally expected or anticipated by the Issuer.

Any such event as described in the last sentence of the preceding paragraph or failure by the Issuer to apply the equivalent amount for any Eligible Green Projects or to obtain and publish any such reports and opinions, will not give rise to any claim in contract of a holder of the Notes against the Issuer, any Dealer, the Agents or any other person. The withdrawal of any such report or opinion, or any report, assessment, opinion or certification attesting that the Issuer is not complying in whole or in part with any matters for which that report, assessment, opinion or certification is reporting, assessing, opining or certifying, and/or any Notes no longer being listed or admitted to trading on any stock exchange or securities market, as aforesaid, may have a material adverse effect on the value of the Notes concerned and/or result in adverse consequences for certain investors with portfolio mandates to invest in securities to be used for a particular purpose.

The net proceeds of the issue of any Notes which, from time to time, are not allocated as funding for Eligible Green Projects are intended by the Issuer to be invested in cash, cash equivalents, or similar instruments, including sustainable fixed deposits, in accordance with the Issuer's corporate liquidity policy and excluding investments covered by the exclusions referenced in "*Use of Proceeds*" below. As the Issuer intends to deposit the equivalent amount in its general account, there can be no assurance that the Notes or any proceeds therefrom will not be used to absorb any and all losses of the Issuer, regardless of whether or not such losses stem from green, sustainable or other assets, in the same way as the Issuer's other instruments not classified as Notes which may be called upon to cover all losses on the balance sheet.

The Conditions contain provisions which may permit their modification without the consent of all Noteholders.

The Conditions contain provisions for calling meetings (including by way of conference call or by use of a videoconference platform) of Noteholders to consider and vote upon matters affecting their interests generally, or to pass resolutions in writing or through the use of electronic consents. These provisions permit defined majorities to bind all Noteholders including Noteholders who did not attend and vote at the relevant meeting or, as the case may be, did not sign the written resolution or give their consent electronically, and including those Noteholders who voted in a manner contrary to the majority.

The value of the Notes could be adversely affected by a change in English law or administrative practice.

The Conditions are based on English law in effect as at the date of this Base Offering Circular. No assurance can be given as to the impact of any possible judicial decision or change to English law or administrative practice after the date of this Base Offering Circular and any such change could materially adversely impact the value of any Notes affected by it.

Investors who hold less than the minimum Specified Denomination may be unable to sell their Notes and may be adversely affected if definitive Notes are subsequently required to be issued.

In relation to any issue of Notes which have denominations consisting of a minimum Specified Denomination plus one or more higher integral multiples of another smaller amount, it is possible that such Notes may be traded in amounts in excess of the minimum Specified Denomination that are not integral multiples of such minimum Specified Denomination. In such a case a holder who, as a result of trading such amounts, holds an amount which is less than the minimum Specified Denomination in his account with the relevant clearing system would not be able to sell the remainder of such holding without first purchasing a nominal amount of Notes at or in excess of the minimum Specified Denomination such that its holding amounts to a Specified Denomination. Further, a holder who, as a result of trading such amounts, holds an amount which is less than the minimum Specified Denomination in his account with the relevant clearing system at the relevant time may not receive a definitive Note in respect of such holding (should definitive Notes be printed or issued) and would need to purchase a nominal amount of Notes at or in excess of the minimum Specified Denomination such that its holding amounts to a Specified Denomination.

If such Notes in definitive form are issued, holders should be aware that definitive Notes which have a denomination that is not an integral multiple of the minimum Specified Denomination may be illiquid and difficult to trade.

Investors in the Notes must rely on Euroclear and Clearstream, Luxembourg procedures

Notes issued under the Programme will be represented on issue by one or more Global Notes that may be deposited with a common depositary for Euroclear and Clearstream, Luxembourg (each as defined under "*Form of the Notes*"). Except in the circumstances described in each Global Note, investors will not be entitled to receive Notes in definitive form. Each of Euroclear and Clearstream, Luxembourg and their respective direct and indirect participants will maintain records of the beneficial interests in each Global Note held through it. While the Notes are represented by a Global Note, investors will be able to trade their beneficial interests only through the relevant clearing systems and their respective participants.

While the Notes are represented by Global Notes, the Issuer will discharge its payment obligations under the Notes by making payments through the relevant clearing systems. A holder of a beneficial interest in a Global Note must rely on the procedures of the relevant clearing system and its participants in relation to payments under the Notes. The Issuer shall have no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in any Global Note.

Holders of beneficial interests in a Global Note will not have a direct right to vote in respect of the Notes so represented. Instead, such holders will be permitted to act only to the extent that they are enabled by the relevant clearing system and its participants to appoint appropriate proxies.

Risks relating to enforcement

The Notes, the Agency Agreement, the Deed of Covenant (each as defined in "*Terms and Conditions of the Notes*") and the Programme Agreement (as defined in "*Subscription and Sale*") are governed by English law and the parties to such documents have agreed to refer any unresolved dispute in relation to such documents to arbitration under the Arbitration Rules of the London Court of International Arbitration in London, England (the **LCIA Rules**) with its seat in London or, subject to the exercise of an option to litigate given to certain parties (other than the Issuer), to the courts of England.

The payments under the Notes are dependent upon the Issuer making payments to investors in the manner contemplated under the Notes. If the Issuer fails to do so, it may be necessary for an investor to bring an action against the Issuer to enforce its obligations and/or to claim damages, as appropriate, which may be costly and time-consuming. Furthermore, to the extent that the enforcement of remedies must be pursued in the UAE, it should be borne in mind that there is limited scope for self-help remedies under UAE law and that generally enforcement of remedies in the UAE must be pursued through the courts. Notwithstanding that an arbitral award may be obtained in a London-seated arbitration or that a judgment may be obtained in the English courts, there is no assurance that the Issuer has, or would at the relevant time have, sufficient assets in the UK against which such arbitral award or judgment could be enforced.

Investors may experience difficulty in enforcement of arbitral awards in Abu Dhabi

The New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards 1958 (the **New York Convention**) entered into force in the UAE on 19 November 2006. Accordingly, it is expected that an arbitral award obtained in a London-seated arbitration should be enforceable in Abu Dhabi in accordance with the terms of the New York Convention. In this regard, it should be noted that recognition and enforcement of an arbitral award may be refused by the Abu Dhabi courts on the grounds set out in Article V of the New York Convention. However, there is no established track record to demonstrate how the provisions of the New York Convention will be applied by the Abu Dhabi courts in practice and whether the Abu Dhabi courts will enforce a foreign arbitral award in accordance with the New York Convention (or any other applicable multilateral or bilateral enforcement treaties). This is reinforced by the lack of a system of binding judicial precedent in the UAE and the independent existence of different Emirates within the UAE, some with their own court systems, whose rulings may have no more than persuasive force cross border. Although there are examples of foreign arbitral awards being enforced in the UAE under the New York Convention, there are other cases where the enforcement of foreign arbitral awards have been refused.

Federal Decree Law No. 42 of 2022 regarding the Law of Civil Procedure (the **Civil Procedure Law**) also governs the enforcement of foreign arbitral awards in the UAE. Article 223 of the Civil Procedure Law provides that arbitral awards issued in a foreign state may be enforced in the UAE subject to the conditions provided under Article 222 of the Civil Procedure Law. Article 225 of the Civil Procedure Law provides that the rules on enforcement of foreign arbitral awards shall not prejudice the provisions of treaties for the enforcement of foreign judgments, orders and instruments with foreign states, which, by virtue of the operation of Article 223 of the Civil Procedure Law, should also apply in respect of arbitral awards, and accordingly include the New York Convention. However, there is no established track record to demonstrate how the Abu Dhabi courts will apply the Civil Procedure Law alongside the provisions of such treaties in practice.

In addition, Federal Law No. 6 of 2018 (the **UAE Arbitration Law**) provides certain conditions to the enforcement of domestic arbitral awards in the UAE. There is no established track record to demonstrate how the Abu Dhabi courts will apply the UAE Arbitration Law in practice and there is a risk that, notwithstanding the Civil Procedure Law or the terms of applicable enforcement treaties, the Abu Dhabi courts may also apply such conditions to the enforcement of foreign arbitral awards in the UAE.

Accordingly, there is a risk that an arbitral award obtained in a London-seated arbitration will be refused enforcement by the Abu Dhabi courts.

Investors may experience difficulty in enforcement of foreign judgments in Abu Dhabi

A judgment or order of a foreign court may be enforced in the UAE, subject to the conditions provided under Article 222 of the Civil Procedure Law. However, there is no established track record to demonstrate how the Abu Dhabi courts will apply the Civil Procedure Law in practice. The Abu Dhabi courts are unlikely to enforce an English court judgment without re-examining the merits of the claim.

The Abu Dhabi courts may not observe the choice by the parties of English law as the governing law of the transaction. In the UAE, foreign law is required to be established as a question of fact and the interpretation of English law, by a court in the UAE, may not accord with the interpretation of an English court. In principle, courts in the UAE recognise the choice of foreign law if they are satisfied that an appropriate connection exists between the relevant transaction agreement and the foreign law which has been chosen. They will not, however, honour any provision of foreign law which is contrary to public policy, order or morals in the UAE, or to any mandatory law of, or applicable in, the UAE. In practice, the UAE courts may seek to interpret English law governed documents as if they were governed by UAE law.

A UAE court may consider the lack of mutuality in the unilateral option to litigate in the Notes, the Agency Agreement, the Deed of Covenant and the Programme Agreement as being contrary to public policy in the UAE and, therefore, unenforceable. Moreover, claims may become time-barred or become subject to a counterclaim. This creates further uncertainty with respect to enforcement.

The UAE is a civil law jurisdiction and judicial precedents in Abu Dhabi have no binding effect on subsequent decisions. In addition, there is no formal system of reporting decisions of the Abu Dhabi courts. These factors create greater judicial uncertainty. The enforcement of a foreign judgment or arbitral award may be a lengthy process in the UAE.

The Issuer's waiver of immunity may not be effective under the laws of the UAE

UAE law provides that public or private assets owned by the UAE or any of the Emirates may not be confiscated. Since the Issuer is majority owned and controlled by the Government through TAQA, ADNOC and MIC (each as defined in "*Presentation of Financial and Other Information*", there is a risk that the assets of the Issuer may fall within the ambit of Government assets and as such cannot be attached or executed upon.

The Issuer has provided a waiver of its rights in relation to sovereign immunity. However, there can be no assurance as to whether such waivers of immunity from execution or attachment or other legal process by it under the Agency Agreement, the Deed of Covenant or the Notes are valid and binding under the laws of the UAE and applicable in Abu Dhabi.

Risks related to the market generally

Set out below is a description of material market risks, including liquidity risk, exchange rate risk, interest rate risk and credit risk:

An active secondary market in respect of the Notes may never be established or may be illiquid and this would adversely affect the value at which an investor could sell his Notes.

Notes may have no established trading market when issued, and one may never develop. If a market for the Notes does develop, it may not be very liquid. Therefore, investors may not be able to sell their Notes easily or at prices that will provide them with a yield comparable to similar investments that have a developed secondary market. This is particularly the case for Notes that are especially sensitive to interest rate, currency or market risks, are designed for specific investment objectives, are being issued to a single investor or a limited number of investors, or strategies or have been structured to meet the investment requirements of limited categories of investors. These types of Notes generally would have a more limited secondary market and more price volatility than conventional debt securities.

If an investor holds Notes which are not denominated in the investor's home currency, he will be exposed to movements in exchange rates adversely affecting the value of his holding. In addition, the imposition of exchange controls in relation to any Notes could result in an investor not receiving payments on those Notes.

The Issuer will pay principal and interest on the Notes in the Specified Currency. This presents certain risks relating to currency conversions if an investor's financial activities are denominated principally in a currency or currency unit (the **Investor's Currency**) other than the Specified Currency. These include the risk that exchange rates may significantly change (including changes due to devaluation of the Specified Currency or revaluation of the Investor's Currency) and the risk that authorities with jurisdiction over the Investor's Currency may impose or modify exchange controls. An appreciation in the value of the Investor's Currency relative to the Specified Currency would decrease (1) the Investor's Currency-equivalent yield on the Notes, (2) the Investor's Currency-equivalent value of the principal payable on the Notes and (3) the Investor's Currency-equivalent market value of the Notes.

Government and monetary authorities may impose (as some have done in the past) exchange controls that could adversely affect an applicable exchange rate or the ability of the Issuer to make payments in respect of the Notes. As a result, investors may receive less interest or principal than expected, or no interest or principal.

The value of Fixed Rate Notes may be adversely affected by movements in market interest rates.

Investment in Fixed Rate Notes involves the risk that if market interest rates subsequently increase above the rate paid on the Fixed Rate Notes, this will adversely affect the value of the Fixed Rate Notes.

Credit ratings assigned to the Issuer or any Notes may not reflect all the risks associated with an investment in those Notes.

One or more independent credit rating agencies may assign credit ratings to the Issuer, or the Notes. The ratings may not reflect the potential impact of all risks related to structure, market, additional factors discussed above, and other factors that may affect the value of the Notes. A credit rating is not a recommendation to buy, sell or hold securities and may be revised, suspended or withdrawn by the rating agency at any time.

In general, European regulated investors are restricted under the CRA Regulation from using credit ratings for regulatory purposes in the EEA, unless such ratings are issued by a credit rating agency established in the EEA and registered under the CRA Regulation (and such registration has not been withdrawn or suspended, subject to transitional provisions that apply in certain circumstances). Such general restriction will also apply in the case of credit ratings issued by third country non-EEA credit rating agencies, unless the relevant credit ratings are endorsed by an EEA-registered credit rating agency or the relevant third country rating agency is certified in accordance with the CRA Regulation (and such endorsement action or certification, as the case may be, has not been withdrawn or suspended, subject to transitional provisions that apply in certain circumstances). The list of registered and certified rating agencies published by ESMA on its website in accordance with the CRA Regulation is not conclusive evidence of the status of the relevant rating agency being included in such list, as there may be delays between certain supervisory measures being taken against a relevant rating agency and the publication of the updated ESMA list.

Investors regulated in the UK are subject to similar restrictions under the UK CRA Regulation. As such, UK regulated investors are required to use for UK regulatory purposes ratings issued by a credit rating agency established in the UK and registered under the UK CRA Regulation. In the case of ratings issued by third country non-UK credit rating agencies, third country credit ratings can either be: (a) endorsed by a UK registered credit rating agency; or (b) issued by a third country credit rating agency that is certified in accordance with the UK CRA Regulation. Note this is subject, in each case, to (a) the relevant UK registration, certification or endorsement, as the case may be, not having been withdrawn or suspended, and (b) transitional provisions that apply in certain circumstances.

If the status of the rating agency rating the Notes changes for the purposes of the CRA Regulation or the UK CRA Regulation, relevant regulated investors may no longer be able to use the rating for regulatory purposes in the EEA or the UK, as applicable, and the Notes may have a different regulatory treatment, which may impact the value of the Notes and their liquidity in the secondary market. Certain information with respect to the credit rating agencies and ratings is set out on the cover of this Base Offering Circular.

FORM OF THE NOTES

The Notes of each Series will be in either bearer form, with or without interest coupons attached, or registered form, without interest coupons attached. Bearer Notes will be issued outside the United States in reliance on Regulation S under the Securities Act (**Regulation S**) and Registered Notes will be issued outside the United States in reliance on the exemption from registration provided by Regulation S.

Bearer Notes

Each Tranche of Bearer Notes will be in bearer form and will initially be issued in the form of a temporary global note (a **Temporary Bearer Global Note**) or, if so specified in the applicable Pricing Supplement, a permanent global note (a **Permanent Bearer Global Note** and, together with a Temporary Bearer Global Note, each a **Bearer Global Note**) which, in either case, will be delivered on or prior to the original issue date of the Tranche to a common depositary (the **Common Depositary**) for Euroclear Bank SA/NV (**Euroclear**) and Clearstream Banking S.A. (**Clearstream, Luxembourg**).

Whilst any Bearer Note is represented by a Temporary Bearer Global Note, payments of principal, interest (if any) and any other amount payable in respect of the Notes due prior to the Exchange Date (as defined below) will be made (against presentation of the Temporary Bearer Global Note) only to the extent that certification (in a form to be provided) to the effect that the beneficial owners of interests in the Temporary Bearer Global Note are not U.S. persons or persons who have purchased for resale to any U.S. person, as required by U.S. Treasury regulations, has been received by Euroclear and/or Clearstream, Luxembourg and Euroclear and/or Clearstream, Luxembourg, as applicable, has given a like certification (based on the certifications it has received) to the Principal Paying Agent.

On and after the date (the **Exchange Date**) which is 40 days after a Temporary Bearer Global Note is issued, interests in such Temporary Bearer Global Note will be exchangeable (free of charge) upon a request as described therein either for (i) interests in a Permanent Bearer Global Note of the same Series or (ii) for definitive Bearer Notes of the same Series with, where applicable, interest coupons and talons attached (as indicated in the applicable Pricing Supplement), in each case against certification of beneficial ownership as described above unless such certification has already been given, provided that purchasers in the United States and certain U.S. persons will not be able to receive definitive Bearer Notes. The holder of a Temporary Bearer Global Note will not be entitled to collect any payment of interest, principal or other amount due on or after the Exchange Date unless, upon due certification, exchange of the Temporary Bearer Global Note for an interest in a Permanent Bearer Global Note or for definitive Bearer Notes is improperly withheld or refused.

The option for an issue of Bearer Notes to be represented on issue by a Temporary Bearer Global Note exchangeable for definitive Bearer Notes should not be expressed to be applicable in the applicable Pricing Supplement if the Bearer Notes are issued with a minimum Specified Denomination such as €100,000 (or its equivalent in another currency) plus one or more higher integral multiples of another smaller amount such as €1,000 (or its equivalent in another currency).

Payments of principal, interest (if any) or any other amounts on a Permanent Bearer Global Note will be made through Euroclear and/or Clearstream, Luxembourg (against presentation or surrender (as the case may be) of the Permanent Bearer Global Note) without any requirement for certification.

The applicable Pricing Supplement will specify that a Permanent Bearer Global Note will be exchangeable (free of charge), in whole but not in part, for definitive Bearer Notes with, where applicable, interest coupons and talons attached upon the occurrence of an Exchange Event. For these purposes, **Exchange Event** means that (i) an Event of Default (as defined in Condition 10) has occurred and is continuing, (ii) the Issuer has been notified that both Euroclear and Clearstream, Luxembourg have been closed for business for a continuous period of 14 days (other than by reason of holiday, statutory or otherwise) or have announced an intention permanently to cease business or have in fact done so and no successor clearing system is available or (iii) the Issuer has or will become subject to adverse tax consequences which would not be suffered were the Notes represented by the Permanent Bearer Global Note in definitive form. The Issuer will promptly give notice to

Noteholders in accordance with Condition 14 if an Exchange Event occurs. In the event of the occurrence of an Exchange Event, Euroclear and/or Clearstream, Luxembourg (acting on the instructions of any holder of an interest in such Permanent Bearer Global Note) may give notice to the Principal Paying Agent requesting exchange and, in the event of the occurrence of an Exchange Event as described in (iii) above, the Issuer may also give notice to the Principal Paying Agent requesting exchange. Any such exchange shall occur not later than 45 days after the date of receipt of the first relevant notice by the Principal Paying Agent.

The following legend will appear on all Bearer Notes (other than Temporary Bearer Global Notes) and interest coupons relating to such Notes where TEFRA D is specified in the applicable Pricing Supplement:

"ANY UNITED STATES PERSON WHO HOLDS THIS OBLIGATION WILL BE SUBJECT TO LIMITATIONS UNDER THE UNITED STATES INCOME TAX LAWS, INCLUDING THE LIMITATIONS PROVIDED IN SECTIONS 165(j) AND 1287(a) OF THE INTERNAL REVENUE CODE."

The sections referred to provide that United States holders, with certain exceptions, will not be entitled to deduct any loss on Bearer Notes or interest coupons and will not be entitled to capital gains treatment in respect of any gain on any sale, disposition, redemption or payment of principal in respect of Bearer Notes or interest coupons.

Notes which are represented by a Bearer Global Note will only be transferable in accordance with the rules and procedures for the time being of Euroclear or Clearstream, Luxembourg, as the case may be.

Registered Notes

The Registered Notes of each Tranche will initially be represented by a global note in registered form (a **Registered Global Note**).

Registered Global Notes will be deposited with a common depositary for Euroclear and Clearstream, Luxembourg, and registered in the name of the nominee for the Common Depositary of, Euroclear and Clearstream, Luxembourg, as specified in the applicable Pricing Supplement. Persons holding beneficial interests in Registered Global Notes will be entitled or required, as the case may be, under the circumstances described below, to receive physical delivery of definitive Notes in fully registered form.

Payments of principal, interest and any other amount in respect of the Registered Global Notes will, in the absence of provision to the contrary, be made to the person shown on the Register (as defined in Condition 6.4) as the registered holder of the Registered Global Notes. None of the Issuer, any Paying Agent or the Registrar will have any responsibility or liability for any aspect of the records relating to or payments or deliveries made on account of beneficial ownership interests in the Registered Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Payments of principal, interest or any other amount in respect of the Registered Notes in definitive form will, in the absence of provision to the contrary, be made to the persons shown on the Register on the relevant Record Date (as defined in Condition 6.4) immediately preceding the due date for payment in the manner provided in that Condition.

Interests in a Registered Global Note will be exchangeable (free of charge), in whole but not in part, for definitive Registered Notes without interest coupons or talons attached only upon the occurrence of an Exchange Event. For these purposes, **Exchange Event** means that (i) an Event of Default has occurred and is continuing, (ii) the Issuer has been notified that both Euroclear and Clearstream, Luxembourg have been closed for business for a continuous period of 14 days (other than by reason of holiday, statutory or otherwise) or have announced an intention permanently to cease business or have in fact done so and, in any such case, no successor clearing system is available or (iii) the Issuer has or will become subject to adverse tax consequences which would not be suffered were the Notes represented by the Registered Global Note in definitive form. The Issuer will promptly give notice to Noteholders in accordance with Condition 14 if an Exchange Event occurs. In the event of the occurrence of an Exchange Event, Euroclear and/or Clearstream, Luxembourg or any person acting on their behalf (acting on the instructions of any holder of an interest in such Registered Global Note) may give notice to the Registrar requesting exchange and, in the event of the occurrence of an Exchange Event as described in (iii) above, the Issuer may also give notice to the Registrar requesting exchange. Any such exchange shall occur not later than 10 days after the date of receipt of the first relevant notice by the Registrar.

No beneficial owner of an interest in a Registered Global Note will be able to transfer such interest, except in accordance with the applicable procedures of Euroclear and Clearstream, Luxembourg, in each case to the extent applicable.

General

Pursuant to the Agency Agreement (as defined under "*Terms and Conditions of the Notes*"), the Principal Paying Agent shall arrange that, where a further Tranche of Notes is issued which is intended to form a single Series with an existing Tranche of Notes at a point after the Issue Date of the further Tranche, the Notes of such further Tranche shall be assigned a common code and ISIN which are different from the common code and ISIN assigned to Notes of any other Tranche of the same Series until such time as the Tranches are consolidated and form a single Series, which shall not be prior to the expiry of the distribution compliance period (as defined in Regulation S under the Securities Act) applicable to the Notes of such Tranche.

Any reference herein to Euroclear and/or Clearstream, Luxembourg shall, whenever the context so permits, be deemed to include a reference to any additional or alternative clearing system specified in the applicable Pricing Supplement.

A Note may be accelerated by the holder thereof in certain circumstances described in Condition 10. In such circumstances, where any Note is still represented by a Global Note and the Global Note (or any part thereof) has become due and repayable in accordance with the Conditions of such Notes and payment in full of the amount due has not been made in accordance with the provisions of the Global Note then from 8.00 p.m. (London time) on such day holders of interests in such Global Note credited to their accounts with Euroclear and/or Clearstream, Luxembourg as the case may be, will become entitled to proceed directly against the Issuer on the basis of statements of account provided by Euroclear and/or Clearstream, Luxembourg on and subject to the terms of a Deed of Covenant (as defined under "*Terms and Conditions of the Notes*") dated 17 July 2023 and executed by the Issuer.

The Issuer may agree with any Dealer that Notes may be issued in a form not contemplated by the Conditions of the Notes, in which event, a new Base Offering Circular or a supplement to this Base Offering Circular, if applicable will be made available which will describe the effect of the agreement reached in relation to such Notes.

APPLICABLE PRICING SUPPLEMENT

[PROHIBITION OF SALES TO EEA RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area (**EEA**). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, **MiFID II**); or (ii) a customer within the meaning of Directive (EU) 2016/97 (the **Insurance Distribution Directive**), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 Regulation. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the **PRIIPs Regulation**) for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.]

[PROHIBITION OF SALES TO UK RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom (**UK**). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (**EUWA**); or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (the **FSMA**) and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA. Consequently no key information document required by Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the **UK PRIIPs Regulation**) for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.]

[**MIFID II PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET** – Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in [Directive 2014/65/EU (as amended, **MiFID II**)][MiFID II]; and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. [*Consider any negative target market*]. Any person subsequently offering, selling or recommending the Notes (a **distributor**) should take into consideration the manufacturer['s/s'] target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.]

[UK MIFIR PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET – Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is only eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook , and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the [European Union (Withdrawal) Act 2018/EUWA] (**UK MiFIR**); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. [*Consider any negative target market*]. Any [person subsequently offering, selling or recommending the Notes (a **distributor**)/ a distributor] should take into consideration the manufacturer['s/s'] target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.]

[**Notification under Section 309B(1)(c) of the Securities and Futures Act 2001 (2020 Revised Edition) of Singapore, as modified or amended from time to time (the SFA**) – [*Notice to be included if classification of the Notes is not "prescribed capital markets products", pursuant to Section 309B of the SFA.*]]

[*Date*]

ABU DHABI FUTURE ENERGY COMPANY PJSC – MASDAR

Legal entity identifier (LEI): 213800BBECR1I9FTPZ70

Issue of [Aggregate Nominal Amount of Tranche] [Title of Notes]
under the U.S.$3,000,000,000
Euro Medium Term Note Programme

PART A – CONTRACTUAL TERMS

Terms used herein shall be deemed to be defined as such for the purposes of the Conditions set forth in the Base Offering Circular dated 17 July 2023 [and the supplement[s] to it dated [*date*] [and [*date*]]] (the **Base Offering Circular**). This document constitutes the Pricing Supplement of the Notes described herein and must be read in conjunction with the Base Offering Circular in order to obtain all the relevant information. Copies of the Base Offering Circular and this Pricing Supplement are available for inspection during normal business hours at the specified office of the Principal Paying Agent for the time being in London.

1.	Issuer:		Abu Dhabi Future Energy Company PJSC – Masdar
2.	(a)	Series Number:	[ ]
	(b)	Tranche Number:	[ ]
	(c)	Date on which the Notes will be consolidated and form a single Series:	The Notes will be consolidated and form a single Series with [ ] on [the Issue Date/the date that is 40 days after the Issue Date/exchange of the Temporary Global Note for interests in the Permanent Global Note, as referred to in paragraph [ ] below, which is expected to occur on or about [ ]]/[Not Applicable]
3.	Specified Currency or Currencies:		[ ]
4.	Aggregate Nominal Amount:		
	(a)	Series:	[ ]
	(b)	Tranche:	[ ]
5.	Issue Price:		[ ] per cent. of the Aggregate Nominal Amount [plus accrued interest from [ ]]
6.	(a)	Specified Denominations:	[ ]

	(b)	Calculation Amount (in relation to calculation of interest in global form see Conditions):	[ ]
7.	(a)	Issue Date:	[ ]
	(b)	Interest Commencement Date:	[/Issue Date/Not Applicable]
8.	Maturity Date:		[ ]/[Interest Payment Date falling in or nearest to [ ]]
9.	Interest Basis:		[[ ] per cent. Fixed Rate] [[ ]] +/- [ ] per cent. Floating Rate] [Zero coupon] (see paragraph [14]/[15]/[16]below)
10.	Redemption[/Payment] Basis:		Subject to any purchase and cancellation or early redemption, the Notes will be redeemed on the Maturity Date at [ ] per cent. of their nominal amount
11.	Change of Interest Basis:		[ ][Not Applicable]
12.	Put/Call Options:		[Investor Put] [Change of Control Put] [Issuer Call] [(see paragraph [18]/[19]/[20] below)] [Not Applicable]
13.	(a)	Status of the Notes:	Senior
	(b)	[Date [Board] approval for issuance of Notes obtained:]	[ ]

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

14.	Fixed Rate Note Provisions		[Applicable/Not Applicable]
	(a)	Rate(s) of Interest:	[ ] per cent. per annum payable in arrear on each Interest Payment Date
	(b)	Interest Payment Date(s):	[ ] in each year up to and including the Maturity Date
	(c)	Fixed Coupon Amount(s) for Notes in definitive form (and in relation to Notes in global form see Conditions):	[ ] per Calculation Amount
	(d)	Broken Amount(s) for Notes in definitive form (and in relation to Notes in global form see Conditions):	[[ ] per Calculation Amount, payable on the Interest Payment Date falling [in/on] [ ]][Not Applicable]

	(e)	Day Count Fraction:	[30/360] [Actual/Actual (ICMA)]
	(f)	Determination Date(s):	[[ ] in each year][Not Applicable]
15.	Floating Rate Note Provisions		[Applicable/Not Applicable]
	(a)	Specified Period(s)/Specified Interest Payment Dates:	[ ] [, subject to adjustment in accordance with the Business Day Convention set out in paragraph 15(b) below, not subject to adjustment, as the Business Day Convention in paragraph 15(b) below is specified to be Not Applicable]
	(b)	Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/ Preceding Business Day Convention][Not Applicable]
	(c)	Additional Business Centre(s):	[ ]
	(d)	Manner in which the Rate of Interest and Interest Amount is to be determined:	[Screen Rate Determination not referencing SOFR, SONIA or €STR/Screen Rate Determination referencing SOFR, SONIA or €STR]
	(e)	Party responsible for calculating the Rate of Interest and Interest Amount (if not the Principal Paying Agent):	[ ] (the **Calculation Agent**)
	(f)	Screen Rate Determination not referencing SOFR, SONIA or €STR:	
		• Reference Rate:	[ ] month [EURIBOR/SHIBOR/HIBOR/SIBOR/EIBOR/SAIBOR/BBSW/PRIBOR/CNHHIBOR/TRLIBOR or TRYLIBOR/TIBOR]
		• Interest Determination Date(s):	[ ]
		• Relevant Screen Page:	[ ]
		• Relevant Financial Centre:	[ ]
		• Relevant Time	[ ]
	(g)	Screen Rate Determination referencing SOFR, SONIA or €STR:	
		• Reference Rate:	[SOFR/SONIA/€STR]

•	Interest Determination Date(s):	[[ ]/The date falling [ ] Business Days prior to the first day of each Interest Period/First day of each Interest Period/The [ ][first, second, third etc.] Business Day immediately preceding the Interest Payment Date for each Interest Period (or immediately preceding such earlier date, if any, on which the Notes are due and payable).][*provide details*]/The Interest Payment Date at the end of each Interest Period; provided that the Interest Determination Date with respect to the last Interest Period prior to the Maturity Date or the date fixed for redemption will be the Rate Cut-off Date - *Include this wording for Payment Delay only*]]
•	Calculation Method:	[Weighted Average/Compounded Daily/SOFR Index/SONIA Index]
•	Observation Method:	[Lag/Lock-out/Observation Shift/Payment Delay/Not Applicable]
•	Observation Look-Back Period:	[[ ]/Not Applicable]
•	Effective Interest Payment Date:	[The date falling [ ] Business Days following each Interest Payment Date, provided that the Effective Interest Payment Date with respect to the last Applicable Period will be the Maturity Date or, if the Issuer elects to redeem the Notes before the Maturity Date, the date fixed for redemption - *used for Payment Delay only*]/[Not Applicable]
•	Rate Cut-off Date:	[The date falling [ ] Business Days prior to the Maturity Date or the date fixed for redemption, as applicable – *used for Payment Delay only*]/[Not Applicable]
•	Relevant Number:	[insert number being [two] or greater/Not Applicable]
•	D:	[365/360/ [ ]]
•	Relevant Screen Page:	[ ]
•	Relevant Time:	[ ]
•	Relevant Financial Centre:	[ ]

(h)	Linear Interpolation:	[Not Applicable/Applicable - the Rate of interest for the [long/short] [first/last] Interest Period shall be calculated using Linear Interpolation]
(i)	Benchmark Replacement fallback:	[Condition 5.2(b)(iv)(1) is applicable/Condition 5.2(b)(iv)(2) is applicable]

	(j)	Margin(s):	[+/-] [ ] per cent. per annum
	(k)	Minimum Rate of Interest:	[ ] per cent. per annum
	(l)	Maximum Rate of Interest:	[ ] per cent. per annum
	(m)	Day Count Fraction:	[Actual/Actual (ISDA)][Actual/Actual] [Actual/365 (Fixed)] [Actual/365 (Sterling)] [Actual/360] [30/360][360/360][Bond Basis] [30E/360][Eurobond Basis] [30E/360 (ISDA)]
16.	Zero Coupon Note Provisions		[Applicable/Not Applicable]
	(a)	Accrual Yield:	[ ] per cent. per annum
	(b)	Reference Price:	[ ]
	(c)	Day Count Fraction in relation to Early Redemption Amounts:	[30/360] [Actual/360] [Actual/365]

PROVISIONS RELATING TO REDEMPTION

17.	Notice period for Condition 7.2:		Minimum period: [ ] days Maximum period: [ ] days
18.	Issuer Call:		[Applicable/Not Applicable]
	(a)	Optional Redemption Date(s):	[ ]
	(b)	Optional Redemption Amount:	[[ ] per Calculation Amount]
	(c)	If redeemable in part:	
		(i) Minimum Redemption Amount:	[ ] per Calculation Amount]
		(ii) Maximum Redemption Amount:	[ ] per Calculation Amount]
	(d)	Notice period:	Minimum period: [ ] days Maximum period: [ ] days

19.	Investor Put:	[Applicable/Not Applicable]
	(a) Optional Redemption Date(s):	[ ]
	(b) Optional Redemption Amount:	[ ] per Calculation Amount
	(c) Notice period:	Minimum period: [ ] days Maximum period: [ ] days
20.	Change of Control Put:	[Applicable/Not Applicable]
	(a) Change of Control Redemption Amount:	[ ] per Calculation Amount
	(b) Notice period:	Minimum period: [ ] days Maximum period: [ ] days
21.	Final Redemption Amount:	[ ] per Calculation Amount
22.	Early Redemption Amount payable on redemption for taxation reasons or on event of default:	[ ] per Calculation Amount

GENERAL PROVISIONS APPLICABLE TO THE NOTES

23.	Form of Notes:	[Bearer Notes: [Temporary Global Note exchangeable for a Permanent Global Note which is exchangeable for Definitive Notes upon an Exchange Event] [Temporary Global Note exchangeable for Definitive Notes on and after the Exchange Date] [Permanent Global Note exchangeable for Definitive Notes upon an Exchange Event] [Registered Notes: [Global Note (registered in the name of a nominee for a common depositary for Euroclear and Clearstream, Luxembourg)/]
24.	Additional Financial Centre(s):	[Not Applicable/[ ]]
25.	Talons for future Coupons to be attached to Definitive Notes:	[Yes, as the Notes have more than 27 coupon payments, Talons may be required if, on exchange into definitive form, more than 27 coupon payments are still to be made/No]

THIRD PARTY INFORMATION

[[*Relevant third party information*] has been extracted from [*specify source*]. The Issuer confirms that such information has been accurately reproduced and that, so far as it is aware and is able to ascertain from information published by [*specify source*], no facts have been omitted which would render the reproduced information inaccurate or misleading.]

Signed on behalf of **Abu Dhabi Future Energy Company PJSC – Masdar**:

By:

Duly authorised

PART B – OTHER INFORMATION

1. LISTING AND ADMISSION TO TRADING

(i)	Listing and Admission to trading	[Application has been made by the Issuer (or on its behalf) for the Notes to be admitted to trading on the London Stock Exchange plc's International Securities Market with effect from [ ].] [Application is expected to be made by the Issuer (or on its behalf) for the Notes to be admitted to trading on the London Stock Exchange plc's International Securities Market with effect from [ ].]
(ii)	Estimate of total expenses related to admission to trading:	[ ]

2. RATINGS

Ratings:	[The Notes to be issued [[have been]/[are expected to be]] rated]/[The following ratings reflect ratings assigned to Notes of this type issued under the Programme generally]: [[ ] by [Fitch] [[ ] by [Moody's] [Each of [Fitch] and [Moody's] is established in the United Kingdom and is registered under Regulation (EC) No. 1060/2009 as it forms part of domestic law by virtue of the [EUWA/European Union (Withdrawal) Act 2018].

3. INTERESTS OF NATURAL AND LEGAL PERSONS INVOLVED IN THE ISSUE

[Save for any fees payable to the [Managers/Dealers], so far as the Issuer is aware, no person involved in the issue of the Notes has an interest material to the offer. The [Managers/Dealers] and their affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may perform other services for, the Issuer and its affiliates in the ordinary course of business.]

4. REASONS FOR THE OFFER AND ESTIMATED NET PROCEEDS

(i)	Reasons for the offer:	[See ["Use of Proceeds"] in the Base Offering Circular]
(ii)	Estimated net proceeds:	[ ]

5. YIELD (*Fixed Rate Notes only*)

Indication of yield:	[ ]

		The yield is calculated at the Issue Date on the basis of the Issue Price. It is not an indication of future yield.

6. OPERATIONAL INFORMATION

(i)	ISIN:	[ ]
(ii)	Common Code:	[ ]
(iii)	CFI:	[See/[[*include code*], as updated, as set out on] the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN/Not Applicable/Not Available]
(iv)	FISN	[See/[[*include code*], as updated, as set out on] the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN/Not Applicable/Not Available]
(v)	Any clearing system(s) other than Euroclear and Clearstream, Luxembourg and the relevant identification number(s):	[Not Applicable/*give name(s) and number(s)*]
(vi)	Delivery:	Delivery [against/free of] payment
(vii)	Names and addresses of additional Paying Agent(s) (if any):	[ ]

7. DISTRIBUTION

(i)	Method of distribution:	[Syndicated/Non-syndicated]
(ii)	If syndicated, names of Managers:	[Not Applicable/]
(iii)	Stabilisation Manager(s) (if any):	[Not Applicable/]
(iv)	If non-syndicated, name of relevant Dealer:	[Not Applicable/]
(v)	U.S. Selling Restrictions:	[Reg. S Compliance Category 2; TEFRA C/TEFRA D/TEFRA not applicable]
(vi)	Prohibition of Sales to EEA Retail Investors:	[Applicable/Not Applicable]
(vii)	Prohibition of Sales to UK Retail Investors:	[Applicable/Not Applicable]

TERMS AND CONDITIONS OF THE NOTES

The following are the Terms and Conditions of the Notes which will be incorporated by reference into each Global Note (as defined below) and each definitive Note, in the latter case only if permitted by the relevant stock exchange or other relevant authority (if any) and agreed by the Issuer and the relevant Dealer at the time of issue but, if not so permitted and agreed, such definitive Note will have endorsed thereon or attached thereto such Terms and Conditions. The applicable Pricing Supplement (or the relevant provisions thereof) will be endorsed upon, or attached to, each Global Note and definitive Note. Reference should be made to "Applicable Pricing Supplement" for a description of the content of the Pricing Supplement which will specify which of such terms are to apply in relation to the relevant Notes.

This Note is one of a Series (as defined below) of Notes issued by Abu Dhabi Future Energy Company PJSC – Masdar (the **Issuer**) pursuant to the Agency Agreement (as defined below).

References herein to the **Notes** shall be references to the Notes of this Series and shall mean:

(a) in relation to any Notes represented by a global Note (a **Global Note**), units of each Specified Denomination in the Specified Currency;

(b) any Global Note;

(c) any definitive Notes in bearer form (**Bearer Notes**) issued in exchange for a Global Note in bearer form; and

(d) any definitive Notes in registered form (**Registered Notes**) (whether or not issued in exchange for a Global Note in registered form).

The Notes and the Coupons (as defined below) have the benefit of an Agency Agreement (such Agency Agreement as amended and/or supplemented and/or restated from time to time, the **Agency Agreement**) dated 17 July 2023 and made between the Issuer, Citibank N.A., London Branch as issuing and principal paying agent and agent bank (the **Principal Paying Agent**, which expression shall include any successor principal paying agent) and the other paying agents named therein (together with the Principal Paying Agent, the **Paying Agents**, which expression shall include any additional or successor paying agents) and Citibank Europe plc as registrar (the **Registrar**, which expression shall include any successor registrar) and a transfer agent and the other transfer agents named therein (together with the Registrar, the **Transfer Agents**, which expression shall include any additional or successor transfer agents). The Principal Paying Agent, the Paying Agents and other Transfer Agents are together referred to as the **Agents**.

The pricing supplement for this Note (or the relevant provisions thereof) are set out in Part A of the Pricing Supplement attached to or endorsed on this Note which supplement these Terms and Conditions (the **Conditions**). References to the **applicable Pricing Supplement** are, unless otherwise stated, to Part A of the Pricing Supplement (or the relevant provisions thereof) attached to or endorsed on this Note.

Interest bearing definitive Bearer Notes have interest coupons (**Coupons**) and, in the case of Bearer Notes which, when issued in definitive form, have more than 27 interest payments remaining, talons for further Coupons (**Talons**) attached on issue. Any reference herein to Coupons or coupons shall, unless the context otherwise requires, be deemed to include a reference to Talons or talons. Registered Notes and Global Notes do not have Coupons or Talons attached on issue.

Any reference to **Noteholders** or **holders** in relation to any Notes shall mean (in the case of Bearer Notes) the holders of the Notes and (in the case of Registered Notes) the persons in whose name the Notes are registered and shall, in relation to any Notes represented by a Global Note, be construed as provided below. Any reference herein to **Couponholders** shall mean the holders of the Coupons and shall, unless the context otherwise requires, include the holders of the Talons.

As used herein, **Tranche** means Notes which are identical in all respects (including as to listing and admission to trading) and **Series** means a Tranche of Notes together with any further Tranche or Tranches of Notes which (a) are expressed to be consolidated and form a single series and (b) have the same terms and conditions or terms and conditions which are the same in all respects save for the amount and date of the first payment of interest thereon and the date from which interest starts to accrue.

The Noteholders and the Couponholders are entitled to the benefit of the Deed of Covenant (such Deed of Covenant as modified and/or supplemented and/or restated from time to time, the **Deed of Covenant**) dated 17 July 2023 and made by the Issuer. The original of the Deed of Covenant is held by the common depositary for Euroclear and Clearstream, Luxembourg (each as defined below).

Copies of the Agency Agreement and the Deed of Covenant are available for inspection during normal business hours at the specified office of the Principal Paying Agent for the time being in London. Copies of the applicable Pricing Supplement will be available for viewing during normal business hours at the specified office of the Principal Paying Agent for the time being in London. If the Notes are to be admitted to trading on the London Stock Exchange plc's International Securities Market the applicable Pricing Supplement will be published on the website of the London Stock Exchange plc through a regulatory information service or published in any other manner permitted by the International Securities Market Rulebook effective as of 1 January 2021 (as may be modified and/or supplemented and/or restated from time to time). The Noteholders and the Couponholders are deemed to have notice of, and are entitled to the benefit of, all the provisions of the Agency Agreement, the Deed of Covenant and the applicable Pricing Supplement which are applicable to them. The statements in the Conditions include summaries of, and are subject to, the detailed provisions of the Agency Agreement.

Words and expressions defined in the Agency Agreement or used in the applicable Pricing Supplement shall have the same meanings where used in the Conditions unless the context otherwise requires or unless otherwise stated and provided that, in the event of inconsistency between the Agency Agreement and the applicable Pricing Supplement, the applicable Pricing Supplement will prevail.

In the Conditions, **euro** means the currency introduced at the start of the third stage of European economic and monetary union pursuant to the Treaty on the Functioning of the European Union, as amended.

1. FORM, DENOMINATION AND TITLE

The Notes are in bearer form or in registered form as specified in the applicable Pricing Supplement and, in the case of definitive Notes, serially numbered, in the currency (the **Specified Currency**) and the denominations (the **Specified Denomination(s)**) specified in the applicable Pricing Supplement. Notes of one Specified Denomination may not be exchanged for Notes of another Specified Denomination and Bearer Notes may not be exchanged for Registered Notes and *vice versa*.

This Note may be a Fixed Rate Note, a Floating Rate Note or a Zero Coupon Note, or a combination of any of the foregoing, depending upon the Interest Basis shown in the applicable Pricing Supplement.

Definitive Bearer Notes are issued with Coupons attached, unless they are Zero Coupon Notes in which case references to Coupons and Couponholders in the Conditions are not applicable.

Subject as set out below, title to the Bearer Notes and Coupons will pass by delivery and title to the Registered Notes will pass upon registration of transfers in accordance with the provisions of the Agency Agreement. The Issuer and any Agent will (except as otherwise required by law) deem and treat the bearer of any Bearer Note or Coupon and the registered holder of any Registered Note as the absolute owner thereof (whether or not overdue and notwithstanding any notice of ownership or writing thereon or notice of any previous loss or theft thereof) for all purposes but, in the case of any Global Note, without prejudice to the provisions set out in the next succeeding paragraph.

For so long as any of the Notes is represented by a Global Note held on behalf of Euroclear Bank SA/NV (**Euroclear**) and/or Clearstream Banking S.A. (**Clearstream, Luxembourg**), each person (other than Euroclear or Clearstream, Luxembourg) who is for the time being shown in the records of Euroclear or of Clearstream, Luxembourg as the holder of a particular nominal amount of such Notes (in which regard any certificate or other document issued by Euroclear or Clearstream, Luxembourg as to the nominal amount of such Notes standing to the account of any person shall be conclusive and binding for all purposes save in the case of manifest error) shall be treated by the Issuer and the Agents as the holder of such nominal amount of such Notes for all purposes other than with respect to the payment of principal or interest on such nominal amount of such Notes, for which purpose the bearer of the relevant Bearer Global Note or the registered holder of the relevant Registered Global Note shall be treated by the Issuer and any Agent as the holder of such nominal amount of such Notes in accordance with and subject to the terms of the relevant Global Note and the expressions **Noteholder** and **holder of Notes** and related expressions shall be construed accordingly.

Notes which are represented by a Global Note will be transferable only in accordance with the rules and procedures for the time being of Euroclear and Clearstream, Luxembourg, as the case may be. References to Euroclear and/or Clearstream, Luxembourg shall, whenever the context so permits, be deemed to include a reference to any additional or alternative clearing system specified in Part B of the applicable Pricing Supplement.

2. TRANSFERS OF REGISTERED NOTES

2.1 Transfers of interests in Registered Global Notes

Transfers of beneficial interests in Registered Global Notes will be effected by Euroclear or Clearstream, Luxembourg, as the case may be, and, in turn, by other participants and, if appropriate, indirect participants in such clearing systems acting on behalf of transferors and transferees of such interests. A beneficial interest in a Registered Global Note will, subject to compliance with all applicable legal and regulatory restrictions, be transferable for Notes in definitive form or for a beneficial interest in another Registered Global Note of the same series only in the authorised denominations set out in the applicable Pricing Supplement and only in accordance with the rules and operating procedures for the time being of Euroclear or Clearstream, Luxembourg, as the case may be, and in accordance with the terms and conditions specified in the Agency Agreement.

2.2 Transfers of Registered Notes in definitive form

Subject as provided in paragraph 2.3 below, upon the terms and subject to the conditions set forth in the Agency Agreement, a Registered Note in definitive form may be transferred in whole or in part (in the authorised denominations set out in the applicable Pricing Supplement). In order to effect any such transfer (a) the holder or holders must (i) surrender the Registered Note for registration of the transfer of the Registered Note (or the relevant part of the Registered Note) at the specified office of any Transfer Agent, with the form of transfer thereon duly executed by the holder or holders thereof or his or their attorney or attorneys duly authorised in writing and (ii) complete and deposit such other certifications as may be required by the relevant Transfer Agent and (b) the relevant Transfer Agent must, after due and careful enquiry, be satisfied with the documents of title and the identity of the person making the request. Any such transfer will be subject to such reasonable regulations as the Issuer and the Registrar may from time to time prescribe (the initial such regulations being set out in Schedule 7 to the Agency Agreement). Subject as provided above, the relevant Transfer Agent will, within three business days (being for this purpose a day on which banks are open for business in the city where the specified office of the relevant Transfer Agent is located) of the request (or such longer period as may be required to comply with any applicable fiscal or other laws or regulations), authenticate and deliver, or procure the authentication and delivery of, at its specified office to the transferee or (at the risk of the transferee) send by uninsured mail, to such address as the transferee may request, a new Registered Note in definitive form of a like aggregate nominal amount to the

Registered Note (or the relevant part of the Registered Note) transferred. In the case of the transfer of part only of a Registered Note in definitive form, a new Registered Note in definitive form in respect of the balance of the Registered Note not transferred will be so authenticated and delivered or (at the risk of the transferor) sent to the transferor.

2.3 Registration of transfer upon partial redemption

In the event of a partial redemption of Notes under Condition 7, the Issuer shall not be required to register the transfer of any Registered Note, or part of a Registered Note, called for partial redemption.

2.4 Costs of registration

Noteholders will not be required to bear the costs and expenses of effecting any registration of transfer as provided above, except for any costs or expenses of delivery other than by regular uninsured mail and except that the Issuer may require the payment of a sum sufficient to cover any stamp duty, tax or other governmental charge that may be imposed in relation to the registration.

3. STATUS OF THE NOTES

The Notes and any relative Coupons are direct, unconditional, unsubordinated and (subject to the provisions of Condition 4) unsecured obligations of the Issuer and rank *pari passu* among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations (other than subordinated obligations, if any) of the Issuer, from time to time outstanding.

4. NEGATIVE PLEDGE

So long as any Note remains outstanding (as defined in the Agency Agreement), the Issuer will not and will ensure that none of its Subsidiaries will create, or have outstanding, any mortgage, charge, lien, pledge or other security interest (each a **Security Interest**), other than a Permitted Security Interest, upon the whole or any part of its present or future undertaking, assets or revenues to secure any Relevant Indebtedness, or any guarantee or indemnity in respect of any Relevant Indebtedness, without at the same time or prior thereto according to the Notes the same security as is created or subsisting to secure any such Relevant Indebtedness, guarantee or indemnity or such other security as shall be approved by an Extraordinary Resolution (as defined in the Agency Agreement) of the Noteholders.

For the purposes of these Conditions:

Joint Venture Company means an entity which is, at any particular time, jointly controlled (whether directly or indirectly) by the Issuer and any other person or persons. For the purposes of this definition, an entity shall be considered as being "jointly controlled" by the Issuer and such other person or persons if it is accounted for as a jointly controlled entity in the Relevant Accounts;

Non-recourse Project Financing means any financing of all or part of the costs of the acquisition, construction or development of any project, provided that (i) any Security Interest given by the Issuer or the relevant Subsidiary, as the case may be, is limited solely to assets of the project, (ii) the person providing such financing expressly agrees to limit its recourse to the project financed and the revenues derived from such project as the principal source of repayment for the moneys advanced and (iii) save for any standby equity (or equivalent) arrangement, there is no other recourse to the Issuer or the relevant Subsidiary, as the case may be, in respect of any default by any person under the financing;

Permitted Security Interest means:

(a) any Security Interest existing on the date on which agreement is reached to issue the first Tranche of the Notes;

(b) any Security Interest securing Relevant Indebtedness of a person existing at the time that such person is merged into, or consolidated with or becomes a Subsidiary of, the Issuer or the relevant Subsidiary, as the case may be, provided that such Security Interest was not created in contemplation of such merger or consolidation, or person becoming a Subsidiary of the Issuer or the relevant Subsidiary, as the case may be, and does not extend to any other assets or property of the Issuer or the relevant Subsidiary, as the case may be;

(c) any Security Interest existing on any property or assets prior to the acquisition thereof by the Issuer or the relevant Subsidiary, as the case may be, and not created in contemplation of such acquisition; or

(d) any renewal of or substitution for any Security Interest permitted by any of paragraphs (a) to (c) (inclusive) of this definition, provided that with respect to any such Security Interest the nominal amount secured has not increased and the Security Interest has not been extended to any additional assets (other than the proceeds of such assets);

Relevant Accounts means, at any time, the most recently available consolidated audited financial statements of the Issuer, prepared in accordance with Relevant GAAP;

Relevant GAAP means International Financial Reporting Standards, or such other international financial reporting standards as may be adopted, from time to time by the Issuer;

Relevant Indebtedness means any indebtedness (including any Sukuk Obligation), other than indebtedness incurred in connection with a Non-recourse Project Financing or a Securitisation, which is in the form of, or represented or evidenced by, bonds, notes, debentures, trust certificates, loan stock or other securities which for the time being are, or are intended to be or are capable of being, quoted, listed, dealt in or traded on any stock exchange, over-the-counter or other securities market;

Securitisation means any securitisation of existing or future assets and/or revenues, provided that (i) any Security Interest given by the Issuer or the relevant Subsidiary, as the case may be, in connection therewith is limited solely to the assets and/or revenues which are the subject of the securitisation; (ii) each person participating in such securitisation expressly agrees to limit its recourse to the assets and/or revenues so securitised as the principal source of repayment for the money advanced or payment of any other liability; and (iii) there is no other recourse to the Issuer or the relevant Subsidiary, as the case may be, in respect of any default by any person under the securitisation;

Subsidiary in relation to any person (the **first person**) means, at any particular time, any person other than a Joint Venture Company (the **second person**):

(a) which is then directly or indirectly controlled by the first person; or

(b) more than 50 per cent. of whose issued equity share capital (or equivalent) is then beneficially owned by the first person; or

(c) whose financial statements at any time are required by law or in accordance with generally accepted accounting principles to be fully consolidated with those of the first person.

For the second person to be **controlled** by the first person means that the first person (whether directly or indirectly and whether by the ownership of share capital, the possession of voting power, contract, trust or otherwise) has the power to appoint and/or remove all or the majority of the members of the board of directors or other governing body of that second person or otherwise controls, or has the power to control, the affairs and policies of that second person; and

Sukuk Obligation means any undertaking or other obligation to pay any money given in connection with the issue of trust certificates or other instruments intended to be issued in compliance with the principles of *Shari'a*, whether or not in return for consideration of any kind.

5. INTEREST

5.1 Interest on Fixed Rate Notes

Each Fixed Rate Note bears interest from (and including) the Interest Commencement Date at the rate(s) per annum equal to the Rate(s) of Interest. Interest will be payable in arrear on the Interest Payment Date(s) in each year up to (and including) the Maturity Date.

If the Notes are in definitive form, except as provided in the applicable Pricing Supplement, the amount of interest payable on each Interest Payment Date in respect of the Fixed Interest Period ending on (but excluding) such date will amount to the Fixed Coupon Amount. Payments of interest on any Interest Payment Date will, if so specified in the applicable Pricing Supplement, amount to the Broken Amount so specified.

As used in the Conditions, **Fixed Interest Period** means the period from (and including) an Interest Payment Date (or the Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date.

Except in the case of Notes in definitive form where an applicable Fixed Coupon Amount or Broken Amount is specified in the applicable Pricing Supplement, interest shall be calculated in respect of any period by applying the Rate of Interest to:

(a) in the case of Fixed Rate Notes which are (i) represented by a Global Note or (ii) Registered Notes in definitive form, the aggregate outstanding nominal amount of (A) the Fixed Rate Notes represented by such Global Note or (B) such Registered Notes; or

(b) in the case of Fixed Rate Notes which are Bearer Notes in definitive form, the Calculation Amount;

and, in each case, multiplying such sum by the applicable Day Count Fraction.

The resultant figure (including after application of any Fixed Coupon Amount or Broken Amount, as applicable, to the aggregate outstanding nominal amount of Fixed Rates Notes which are Registered Notes in definitive form or the Calculation Amount in the case of Fixed Rate Notes which are Bearer Notes in definitive form) shall be rounded to the nearest sub-unit of the relevant Specified Currency, half of any such sub-unit being rounded upwards or otherwise in accordance with applicable market convention.

Where the Specified Denomination of a Fixed Rate Note which is a Bearer Note in definitive form is a multiple of the Calculation Amount, the amount of interest payable in respect of such Fixed Rate Note shall be the product of the amount (determined in the manner provided above) for the Calculation Amount and the amount by which the Calculation Amount is multiplied to reach the Specified Denomination, without any further rounding.

Day Count Fraction means, in respect of the calculation of an amount of interest, in accordance with this Condition 5.1:

(i) if "Actual/Actual (ICMA)" is specified in the applicable Pricing Supplement:

(A) in the case of Notes where the number of days in the relevant period from (and including) the most recent Interest Payment Date (or, if none, the Interest

Commencement Date) to (but excluding) the relevant payment date (the **Accrual Period**) is equal to or shorter than the Determination Period during which the Accrual Period ends, the number of days in such Accrual Period divided by the product of (1) the number of days in such Determination Period and (2) the number of Determination Dates (as specified in the applicable Pricing Supplement) that would occur in one calendar year; or

(B) in the case of Notes where the Accrual Period is longer than the Determination Period during which the Accrual Period ends, the sum of:

(1) the number of days in such Accrual Period falling in the Determination Period in which the Accrual Period begins divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates that would occur in one calendar year; and

(2) the number of days in such Accrual Period falling in the next Determination Period divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates that would occur in one calendar year; and

(ii) if "30/360" is specified in the applicable Pricing Supplement, the number of days in the period from (and including) the most recent Interest Payment Date (or, if none, the Interest Commencement Date) to (but excluding) the relevant payment date (such number of days being calculated on the basis of a year of 360 days with 12 30-day months) divided by 360.

For the purposes of these Conditions:

Determination Period means each period from (and including) a Determination Date to (but excluding) the next Determination Date (including, where either the Interest Commencement Date or the final Interest Payment Date is not a Determination Date, the period commencing on the first Determination Date prior to, and ending on the first Determination Date falling after, such date); and

sub-unit means, with respect to any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, with respect to euro, one cent.

5.2 Interest on Floating Rate Notes

(a) Interest Payment Dates

Each Floating Rate Note bears interest from (and including) the Interest Commencement Date and such interest will be payable in arrear on either:

(i) the Specified Interest Payment Date(s) in each year specified in the applicable Pricing Supplement; or

(ii) if no Specified Interest Payment Date(s) is/are specified in the applicable Pricing Supplement, each date (each such date, together with each Specified Interest Payment Date, an **Interest Payment Date**) which falls the number of months or other period specified as the Specified Period in the applicable Pricing Supplement after the preceding Interest Payment Date or, in the case of the first Interest Payment Date, after the Interest Commencement Date.

Such interest will be payable in respect of each Interest Period. In these Conditions, **Interest Period** means the period from (and including) an Interest Payment Date (or the Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date or the relevant payment date if the Notes become payable on a date other than an Interest Payment Date.

If a Business Day Convention is specified in the applicable Pricing Supplement and (x) if there is no numerically corresponding day in the calendar month in which an Interest Payment Date should occur or (y) if any Interest Payment Date would otherwise fall on a day which is not a Business Day, then, if the Business Day Convention specified is:

(A) in any case where Specified Periods are specified in accordance with Condition 5.2(a)(ii) above, the Floating Rate Convention, such Interest Payment Date (a) in the case of (x) above, shall be the last day that is a Business Day in the relevant month and the provisions of (ii) below shall apply *mutatis mutandis* or (b) in the case of (y) above, shall be postponed to the next day which is a Business Day unless it would thereby fall into the next calendar month, in which event (i) such Interest Payment Date shall be brought forward to the immediately preceding Business Day and (ii) each subsequent Interest Payment Date shall be the last Business Day in the month which falls the Specified Period after the preceding applicable Interest Payment Date occurred; or

(B) the Following Business Day Convention, such Interest Payment Date shall be postponed to the next day which is a Business Day; or

(C) the Modified Following Business Day Convention, such Interest Payment Date shall be postponed to the next day which is a Business Day unless it would thereby fall into the next calendar month, in which event such Interest Payment Date shall be brought forward to the immediately preceding Business Day save in respect of Floating Rate Notes for which SOFR is specified as the Reference Rate in the applicable Pricing Supplement, for which such Interest Payment Date will not be postponed and interest on that payment will not accrue during the period from and after the scheduled final Interest Payment Date; or

(D) the Preceding Business Day Convention, such Interest Payment Date shall be brought forward to the immediately preceding Business Day.

For the purposes of these Conditions, **Business Day** means:

(a) a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in London and each Additional Business Centre (other than T2 System) specified in the applicable Pricing Supplement;

(b) if T2 System is specified as an Additional Business Centre in the applicable Pricing Supplement, a day on which the Trans-European Automated Real-Time Gross Settlement Express Transfer (T2) System (the **T2 System**) is open; and

(c) either (1) in relation to any sum payable in a Specified Currency other than euro, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in the principal financial centre of the country of the relevant Specified Currency (which if the Specified Currency is Australian dollars or New Zealand dollars shall be Sydney and Auckland, respectively) or (2) in relation to any sum payable in euro, a day on which the T2 System is open.

(b) Rate of Interest

The Rate of Interest payable from time to time in respect of Floating Rate Notes will be determined in the manner specified in the applicable Pricing Supplement.

(i) *Screen Rate Determination for Floating Rate Notes not referencing SOFR, SONIA or €STR*

(i) Where Screen Rate Determination not referencing SOFR, SONIA or €STR is specified in the applicable Pricing Supplement for Notes not referencing SOFR, SONIA or €STR as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period will, subject as provided below, be either:

(a) the offered quotation; or

(b) the arithmetic mean (rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards) of the offered quotations,

(expressed as a percentage rate per annum) for the Reference Rate which appears or appear, as the case may be, on the Relevant Screen Page (or such replacement page on that service which displays the information) as at the Relevant Time on the Interest Determination Date in question plus or minus (as indicated in the applicable Pricing Supplement) the Margin (if any), all as determined by the Principal Paying Agent or the Calculation Agent, as applicable. If five or more of such offered quotations are available on the Relevant Screen Page, the highest (or, if there is more than one such highest quotation, one only of such quotations) and the lowest (or, if there is more than one such lowest quotation, one only of such quotations) shall be disregarded by the Principal Paying Agent or the Calculation Agent, as applicable, for the purpose of determining the arithmetic mean (rounded as provided above) of such offered quotations.

(ii) If the Relevant Screen Page is not available or if, in the case of (a) above, no offered quotation appears or, in the case of (b) above, fewer than three offered quotations appear, in each case as at the Relevant Time, the Issuer (or a third party appointed by the Issuer), shall request each of the Reference Banks to provide it with its offered quotation (expressed as a percentage rate per annum) for the Reference Rate at approximately the Relevant Time on the Interest Determination Date in question, and the Issuer shall notify such quotations to the Principal Paying Agent. If two or more of the Reference Banks provide the Issuer (or a third party appointed by the Issuer) with offered quotations, the Rate of Interest for the Interest Period shall be the arithmetic mean (rounded if necessary to the fifth decimal place with 0.000005 being rounded upwards) of the offered quotations plus or minus (as appropriate) the Margin (if any), all as determined by the Principal Paying Agent.

(iii) If on any Interest Determination Date one only or none of the Reference Banks provides the Issuer (or a third party appointed by the Issuer) with an offered quotation as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate per annum which the Principal Paying Agent determines as being the arithmetic mean (rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards) of the rates, as communicated to (and at the request of) the Issuer (or a third party appointed by the Issuer) by the Reference Banks or any two or more of them, at which such banks were offered, at approximately the Relevant Time on the relevant Interest Determination Date, deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate by leading banks in the applicable market of the Reference Rate plus or minus (as appropriate) the Margin (if any) or, if fewer than two of the Reference Banks provide the Issuer (or a third party appointed by the Issuer) with offered rates, the offered rate for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, or the arithmetic mean (rounded as provided above) of the offered rates for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, at which, at approximately the Relevant Time on the relevant Interest Determination Date, any one or more banks (which bank or banks is or are in the opinion of the Issuer suitable for the purpose) informs the Principal Paying Agent it is quoting to leading banks in the applicable market of the Reference Rate plus or minus (as appropriate) the Margin (if any), provided that, if the Rate of Interest cannot be determined in accordance with the foregoing provisions of this paragraph but without prejudice to Condition 5.2(b)(iv), the Rate of Interest shall be determined as at the last preceding Interest Determination Date (though substituting, where a different Margin or Maximum Rate of Interest or Minimum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to the relevant Interest Period in place of the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to that last preceding Interest Period).

If the Rate of Interest cannot be determined because of the occurrence of a Benchmark Event (or, if applicable, a Benchmark Transition Event and its related Benchmark Replacement Date), the Rate of Interest shall be calculated in accordance with the terms of Condition 5.2(b)(iv).

For the purposes of these Conditions:

Reference Banks means the principal office of four major banks selected by the Issuer in the inter-bank market of the Relevant Financial Centre;

Reference Rate means one of the following benchmark rates (as specified in the applicable Pricing Supplement) in respect of the currency and period specified in the applicable Pricing Supplement:

(a) Euro-zone interbank offered rate (**EURIBOR**);

(b) Shanghai interbank offered rate (**SHIBOR**);

(c) Hong Kong interbank offered rate (**HIBOR**);

(d) Singapore interbank offered rate (**SIBOR**);

(e) Emirates interbank offered rate (**EIBOR**);

(f) Saudi Arabia interbank offered rate (**SAIBOR**);

(g) Australia Bank Bill Swap (**BBSW**);

(h) Prague interbank offered rate (**PRIBOR**);

(i) CNH Hong Kong interbank offered rate (**CNH HIBOR**);

(j) Turkish Lira interbank offered rate (**TRLIBOR** or **TRYLIBOR**);

(k) Tokyo interbank offered rate (**TIBOR**);

(l) SOFR;

(m) SONIA; and

(n) €STR;

Relevant Financial Centre shall mean (i) Brussels, in the case of a determination of EURIBOR; (ii) Tokyo, in the case of a determination of TIBOR; or (iii) Hong Kong, in the case of a determination of HIBOR, as specified in the applicable Pricing Supplement, or such other financial centre as specified in the applicable Pricing Supplement; and

Relevant Time shall mean (i) in the case of EURIBOR, 11.00 a.m.; (ii) in the case of TIBOR, 11.00 a.m.; or (iii) in the case of HIBOR, 11.00 a.m., in each case in the Relevant Financial Centre, or such other time as specified in the applicable Pricing Supplement.

Unless otherwise stated in the applicable Pricing Supplement the Minimum Rate of Interest shall be deemed to be zero.

(ii) *Screen Rate Determination for Floating Rate Notes referencing SOFR, SONIA or €STR (other than where in the applicable Pricing Supplement the Reference Rate is specified as being SONIA and the Calculation Method is specified as being "SONIA Index")*

Where Screen Rate Determination referencing SOFR, SONIA or €STR is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined and the Reference Rate specified in the applicable Pricing Supplement is SOFR, SONIA or €STR (other than where the Calculation Method is specified as being "SONIA Index"):

(i) Where the Calculation Method in respect of the relevant Series of Floating Rate Notes is specified in the applicable Pricing Supplement as being "Compounded Daily", the Rate of Interest for each Interest Period will, subject as provided below, be the Compounded Daily Reference Rate plus or minus (as indicated in the applicable Pricing Supplement) the Margin, all as determined by the Principal Paying Agent or the Calculation Agent, as applicable, where:

Compounded Daily Reference Rate means, with respect to an Interest Period, the rate of return of a daily compound interest investment in the Specified Currency (with the applicable Reference Rate (as indicated in the applicable Pricing Supplement and further provided for below) as the reference rate for the calculation of interest) and will be calculated by the Principal Paying Agent or the Calculation Agent, as applicable, on the Interest Determination Date, as follows, and the resulting percentage will be rounded, if necessary, to the fifth decimal place, with 0.000005 being rounded upwards:

$$\left[\prod_{i=1}^{d_o}\left(1+\frac{r_{i-pBD} \times n_i}{D}\right)-1\right] \times \frac{D}{d}$$

where:

Applicable Period means,

(a) where **Lag**, **Lock-out** or **Payment Delay** is specified as the Observation Method in the applicable Pricing Supplement, the relevant Interest Period; and

(b) where **Observation Shift** is specified as the Observation Method in the applicable Pricing Supplement, the Observation Period relating to such Interest Period;

Business Day or **BD**, in this Condition 5.2(b)(ii) means (i) where "SOFR" is specified as the Reference Rate, a U.S. Government Securities Business Day, (ii) where

"SONIA" is specified as the Reference Rate in the applicable Pricing Supplement, a London Business Day or (iii) where "€STR" is specified as the Reference Rate in the applicable Pricing Supplement, a day on which the T2 System is open for settlement of payments in euro;

D is the number specified in the applicable Pricing Supplement;

d means, for the relevant Applicable Period, the number of calendar days in such Applicable Period;

d_o means, for the relevant Applicable Period, the number of Business Days in such Applicable Period;

Effective Interest Payment Date means any date or dates specified as such in the applicable Pricing Supplement;

€STR means, in respect of any Business Day, a reference rate equal to the daily euro short-term rate for such Business Day as provided by the European Central Bank, as administrator of such rate (or any successor administrator of such rate), on the European Central Bank's Website, in each case, on or before 9:00 a.m., (Central European Time) on the Business Day immediately following such Business Day;

European Central Bank's Website means the website of the European Central Bank currently at http://www.ecb.europa.eu, or any successor website officially designated by the European Central Bank;

i means, for the relevant Applicable Period, a series of whole numbers from one to d_o, each representing the relevant Business Day in chronological order from, and including, the first Business Day in such Applicable Period;

Lock-out Period means the period from, and including, the day following the Interest Determination Date to, but excluding, the corresponding Interest Payment Date;

n_i, for any Business Day "i" in the Applicable Period, means the number of calendar days from and including such Business Day "i" up to but excluding the following Business Day;

New York Fed's Website means the website of the Federal Reserve Bank of New York currently at http://www.newyorkfed.org, or any successor website of the Federal Reserve Bank of New York;

Observation Period means, in respect of an Interest Period, the period from and including the date falling "p" Business Days prior to the first day of the relevant Interest Period and ending on, but excluding, the date which is "p" Business Days prior to the Interest Payment Date for such Interest Period (or the date falling "p" Business Days prior to such earlier date, if any, on which the Notes become due and payable);

p means, for any Interest Period:

(a) where "Lag" is specified as the Observation Method in the applicable Pricing Supplement, the number of Business Days included in the Observation Look-back Period specified in the applicable Pricing Supplement (or, if no such number is specified five Business Days);

(b) where "Lock-out" or "Payment Delay" is specified as the Observation Method in the applicable Pricing Supplement, zero; or

(c) where "Observation Shift" or "SOFR Index" is specified as the Observation Method in the applicable Pricing Supplement, the number of Business Days included in the Observation Look-back Period specified in the applicable Pricing Supplement (which shall not be less than five Business Days without the consent of the Principal Paying Agent);

r means:

(a) where in the applicable Pricing Supplement "SONIA" is specified as the Reference Rate and either "Lag" or "Observation Shift" is specified as the Observation Method, in respect of any Business Day, the SONIA rate in respect of such Business Day;

(b) where in the applicable Pricing Supplement "SOFR" is specified as the Reference Rate and either "Lag" or "Observation Shift" is specified as the Observation Method, in respect of any Business Day, the SOFR in respect of such Business Day;

(c) where in the applicable Pricing Supplement "€STR" is specified as the Reference Rate and either "Lag" or "Observation Shift" is specified as the Observation Method, in respect of any Business Day, the €STR in respect of such Business Day;

(d) where in the applicable Pricing Supplement "SONIA" is specified as the Reference Rate and "Lock-out" is specified as the Observation Method:

    (i) in respect of any Business Day "i" that is a Reference Day, the SONIA rate in respect of the Business Day immediately preceding such Reference Day, and

    (ii) in respect of any Business Day "i" that is not a Reference Day (being a Business Day in the Lock-out Period), the SONIA rate in respect of the Business Day immediately preceding the last Reference Day of the relevant Interest Period (such last Reference Day coinciding with the Interest Determination Date);

(e) where in the applicable Pricing Supplement "SOFR" is specified as the Reference Rate and "Lock-out" is specified as the Observation Method:

    (i) in respect of any Business Day "i" that is a Reference Day, the SOFR in respect of the Business Day immediately preceding such Reference Day, and

    (ii) in respect of any Business Day "i" that is not a Reference Day (being a Business Day in the Lock-out Period), the SOFR in respect of the Business Day immediately preceding the last Reference Day of the relevant Interest Period (such last Reference Day coinciding with the Interest Determination Date);

(f) where in the applicable Pricing Supplement "€STR" is specified as the Reference Rate and "Lock-out" is specified as the Observation Method:

(i) in respect of any Business Day "i" that is a Reference Day, the €STR in respect of the Business Day immediately preceding such Reference Day, and

(ii) in respect of any Business Day "i" that is not a Reference Day (being a Business Day in the Lock-out Period), the €STR in respect of the Business Day immediately preceding the last Reference Day of the relevant Interest Period (such last Reference Day coinciding with the Interest Determination Date);

(g) where in the applicable Pricing Supplement "SONIA" is specified as the Reference Rate and "Payment Delay" is specified as the Observation Method, in respect of any Business Day, the SONIA rate in respect of such Business Day, provided however that, in the case of the last Interest Period, in respect of each Business Day in the period from (and including) the Rate Cut-off Date to (but excluding) the Maturity Date or the date fixed for redemption, as applicable, "r" shall be the SONIA rate in respect of the Rate Cut-off Date;

(h) where in the applicable Pricing Supplement "SOFR" is specified as the Reference Rate and "Payment Delay" is specified as the Observation Method, in respect of any Business Day, the SOFR in respect of such Business Day, provided however that, in the case of the last Interest Period, in respect of each Business Day in the period from (and including) the Rate Cut-off Date to (but excluding) the Maturity Date or the date fixed for redemption, as applicable, "r" shall be the SOFR in respect of the Rate Cut-off Date; and

(i) where in the applicable Pricing Supplement "€STR" is specified as the Reference Rate and "Payment Delay" is specified as the Observation Method, in respect of any Business Day, the €STR in respect of such Business Day, provided however that, in the case of the last Interest Period, in respect of each Business Day in the period from (and including) the Rate Cut-off Date to (but excluding) the Maturity Date or the date fixed for redemption, as applicable, "r" shall be the €STR in respect of the Rate Cut-off Date;

Rate Cut-off Date has the meaning given in the applicable Pricing Supplement;

Reference Day means each Business Day in the relevant Interest Period, other than any Business Day in the Lock-out Period;

$\mathbf{r_{i\text{-}pBD}}$ means the applicable Reference Rate as set out in the definition of "r" above for, (i) where "Lag" is specified as the Observation Method in the applicable Pricing Supplement, the Business Day (being a Business Day falling in the relevant Observation Period) falling "p" Business Days prior to the relevant Business Day "i" or, (ii) otherwise, the relevant Business Day "i";

SOFR means, in respect of any Business Day, a reference rate equal to the daily Secured Overnight Financing Rate as provided by the Federal Reserve Bank of New York, as the administrator of such rate (or any successor administrator of such rate) on the New York Fed's Website, in each case on or about 5:00 p.m. (New York City Time) on the Business Day immediately following such Business Day (the **SOFR Determination Time**);

SONIA means, in respect of any Business Day, a reference rate equal to the daily Sterling Overnight Index Average rate for such Business Day as provided by the administrator of SONIA to authorised distributors and as then published on the

Relevant Screen Page or, if the Relevant Screen Page is unavailable, as otherwise published by such authorised distributors in each case on the Business Day immediately following such Business Day; and

U.S. Government Securities Business Day means any day except for a Saturday, Sunday or a day on which the Securities Industry and Financial Markets Association (or any successor thereto) recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

(ii) Where the Calculation Method in respect of the relevant Series of Floating Rate Notes is specified in the applicable Pricing Supplement as being "Weighted Average", the Rate of Interest for each Interest Period will, subject to as provided below, be the Weighted Average Reference Rate (as defined below) plus or minus (as indicated in the applicable Pricing Supplement) the Margin and will be calculated by the Principal Paying Agent or the Calculation Agent, as applicable, on the Interest Determination Date and the resulting percentage will be rounded, if necessary, to the fifth decimal place, with 0.000005 being rounded upwards, where:

Lock-out Period has the meaning set out in paragraph (i) above;

Observation Period has the meaning set out in paragraph (i) above;

Reference Day has the meaning set out in paragraph (i) above;

Weighted Average Reference Rate means:

(a) where "Lag" is specified as the Observation Method in the applicable Pricing Supplement, the arithmetic mean of the Reference Rate in effect for each calendar day during the relevant Observation Period, calculated by multiplying each relevant Reference Rate by the number of calendar days such rate is in effect, determining the sum of such products and dividing such sum by the number of calendar days in the relevant Observation Period. For these purposes the Reference Rate in effect for any calendar day which is not a Business Day shall be deemed to be the Reference Rate in effect for the Business Day immediately preceding such calendar day; and

(b) where "Lock-out" is specified as the Observation Method in the applicable Pricing Supplement, the arithmetic mean of the Reference Rate in effect for each calendar day during the relevant Interest Period, calculated by multiplying each relevant Reference Rate by the number of days such rate is in effect, determining the sum of such products and dividing such sum by the number of calendar days in the relevant Interest Period, provided however that for any calendar day of such Interest Period falling in the Lock-out Period, the relevant Reference Rate for each day during that Lock-out Period will be deemed to be the Reference Rate in effect for the Reference Day immediately preceding the first day of such Lock-out Period. For these purposes the Reference Rate in effect for any calendar day which is not a Business Day shall, subject to the proviso above, be deemed to be the Reference Rate in effect for the Business Day immediately preceding such calendar day.

(iii) Where the Calculation Method in respect of the relevant Series of Floating Rate Notes is specified in the applicable Pricing Supplement as being "SOFR Index", the Rate of Interest for each Interest Period will, subject as provided below, be Compounded

SOFR (as defined below) plus or minus (as indicated in the applicable Pricing Supplement) the Margin and will be calculated by the Principal Paying Agent or the Calculation Agent, as applicable, on the Interest Determination Date and the resulting percentage will be rounded, if necessary, to the fifth decimal place, with 0.000005 being rounded upwards, where:

Compounded SOFR means:

$$\left(\frac{SOFR\ Index_{End}}{SOFR\ Index_{Start}}-1\right)\times\left(\frac{360}{d_c}\right)$$

where "d_c" is the number of calendar days from (and including) SOFR $Index_{Start}$ to (but excluding) SOFR $Index_{End}$ (the number of calendar days in the relevant Observation Period);

SOFR Averages shall mean the computation bearing the same name as published on the New York Fed's Website;

SOFR Index with respect to any U.S. Government Securities Business Day, means:

(a) the SOFR Index value as published by the Federal Reserve Bank of New York, as the administrator of such rate (or any successor administrator of such rate) as such index appears on the New York Fed's Website at 5.00 p.m. (New York City time) on such U.S. Government Securities Business Day (the **SOFR Determination Time**); or

(b) if a SOFR Index value does not so appear as specified in paragraph (i) above at the SOFR Determination Time, then:

  (i) if a Benchmark Transition Event and its related Benchmark Replacement Date have not occurred with respect to the then-current Benchmark, Compounded SOFR shall be the SOFR Index Unavailable value; or

  (ii) if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to the then-current Benchmark, Compounded SOFR shall be the rate determined pursuant to Condition 5.2(b)(iv);

SOFR $Index_{End}$ is the SOFR Index value for the day which is "p" U.S. Government Securities Business Days preceding the Interest Payment Date relating to such Interest Period;

SOFR $Index_{Start}$ is the SOFR Index value for the day which is "p" U.S. Government Securities Business Days preceding the first date of the relevant Interest Period;

SOFR Index Unavailable means if a SOFR $Index_{Start}$ or SOFR $Index_{End}$ is not published on the associated Interest Determination Date and a Benchmark Transition Event and its related Benchmark Replacement Date have not occurred with respect to the then-current Benchmark, Compounded SOFR means, for the relevant Interest Period for which such index is not available, the rate of return on a daily compounded interest investment calculated in accordance with the formula for SOFR Averages, and definitions required for such formula, published on the New York Fed's Website at https://www.newyorkfed.org/markets/treasury-repo-reference-ratesinformation;

For the purposes of this provision, references in the SOFR Averages compounding formula and related definitions to "calculation period" shall be replaced with "Observation Period" and the words "that is, 30-, 90-, or 180- calendar days" shall be removed. If the daily SOFR does not so appear for any day, "i" in the Observation Period, SOFR for such day "i" shall be SOFR published in respect of the first preceding U.S. Government Securities Business Day for which SOFR was published on the New York Fed's Website.

(iv) Where "SONIA" is specified as the Reference Rate in the applicable Pricing Supplement, if, in respect of any Business Day, SONIA (as defined in paragraph (i) above) is not available on the Relevant Screen Page or has not otherwise been published by the relevant authorised distributors, such Reference Rate shall be:

(A) (i) the Bank of England's Bank Rate (the **Bank Rate**) prevailing at close of business on the relevant Business Day; plus (ii) the mean of the spread of SONIA to the Bank Rate over the previous five days on which SONIA has been published, excluding the highest spread (or, if there is more than one highest spread, one only of those highest spreads) and lowest spread (or, if there is more than one lowest spread, one only of those lowest spreads) to the Bank Rate; or

(B) subject to Condition 5.2(b)(iv), if such Bank Rate is not available, the SONIA rate published on the Relevant Screen Page (or otherwise published by the relevant authorised distributors) for the first preceding Business Day on which the SONIA rate was published on the Relevant Screen Page (or otherwise published by the relevant authorised distributors),

and in each case, "r" shall be interpreted accordingly.

(v) Where "SOFR" is specified as the Reference Rate in the applicable Pricing Supplement, if, in respect of any Business Day, SOFR (as defined in paragraph (i) above), is not available, subject to Condition 5.2(b)(iv), such Reference Rate shall be the SOFR for the first preceding Business Day on which the SOFR was published on the New York Fed's Website (as defined in paragraph (i) above) and "r" shall be interpreted accordingly;

(vi) Where "€STR" is specified as the Reference Rate in the applicable Pricing Supplement, if, in respect of any Business Day, €STR (as defined in paragraph (i) above), is not available, subject to Condition 5.2(b)(iv), such Reference Rate shall be the €STR for the first preceding Business Day on which €STR was published on the European Central Bank's Website (as defined in paragraph (i) above) and "r" shall be interpreted accordingly; and

(vii) In the event that the Rate of Interest cannot be determined in accordance with the foregoing provisions, but without prejudice to Condition 5.2(b)(iv), the Rate of Interest shall be that determined (i) as at the last preceding Interest Determination Date (though substituting, where a different Margin or Maximum Rate of Interest or Minimum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to the relevant Interest Period, in place of the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to that last preceding Interest Period) or (ii) if there is no such preceding Interest Determination Date, the initial Rate of Interest which would have been applicable to such Series of Notes for the first Interest Period had the Notes been in issue for a period equal in duration to the scheduled first Interest Period but ending on (and excluding) the Interest Commencement Date (but applying the Margin and any Maximum Rate of Interest or Minimum Rate of Interest applicable to the first Interest Period).

If the relevant Series of Notes become due and payable in accordance with Condition 7 or Condition 10, the final Interest Determination Date shall, notwithstanding any Interest Determination Date specified in the applicable Pricing Supplement, be deemed to be the date on which such Notes became due and payable and the Rate of Interest on such Notes shall, for so long as any such Note remains outstanding, be that determined on such date.

(viii) For the purposes of this Condition 5.2(b)(ii):

If "Payment Delay" is specified in the applicable Pricing Supplement as being applicable, all references in these Conditions to interest on the Notes being payable on an Interest Payment Date shall be read as references to interest on the Notes being payable on an Effective Interest Payment Date instead.

(iii) *Screen Rate Determination for Floating Rate Notes where in the applicable Pricing Supplement the Reference Rate is specified as being SONIA and the relevant Calculation Method is specified as being "SONIA Index"*

Where Screen Rate Determination Referencing SOFR, SONIA or €STR is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Reference Rate specified in the applicable Pricing Supplement is SONIA, and the Calculation Method specified in the applicable Pricing Supplement is "SONIA Index", the Rate of Interest for each Interest Period will, subject as provided below, be the Compounded Daily SONIA Rate (as defined below) plus or minus (as specified in the applicable Pricing Supplement) the Margin (if any), all as determined and calculated by the Principal Paying Agent.

Compounded Daily SONIA Rate means, with respect to an Interest Period, as determined by reference to the screen rate or index for compounded daily SONIA administered by the administrator of the SONIA reference rate that is published or displayed by such administrator or other information service from time to time at the relevant time on the relevant Interest Determination Date, as further specified in the applicable Pricing Supplement (the **SONIA Compounded Index**) and in accordance with the following formula:

Compounded Daily SONIA Rate =

$$\left(\frac{SONIA\ CompoundedIndex_{End}}{SONIA\ CompoundedIndex_{Start}} - 1\right) \times \frac{365}{d}$$

and the resulting percentage will be rounded, if necessary, to the fifth decimal place, with 0.000005 being rounded upwards, where:

d is the number of calendar days from (and including) the day in relation to which SONIA Compounded IndexStart is determined to (but excluding) the day in relation to which SONIA Compounded IndexEnd is determined;

Relevant Number is as specified in the applicable Pricing Supplement (or, if no such number is specified, five);

SONIA Compounded Index$_{Start}$ means, with respect to an Interest Period, the SONIA Compounded Index determined in relation to the day falling the Relevant Number of London Banking Days prior to the first day of the relevant Interest Period; and

SONIA Compounded Index$_{End}$ means, with respect to an Interest Period, the SONIA Compounded Index determined in relation to the day falling the Relevant Number of London Banking Days prior to (A) the Interest Payment Date for such Interest Period, or (B) such other date on which the relevant payment of interest falls due (but which by its definition or the operation of the relevant provisions is excluded from such Interest Period).

(i) In the event that the Rate of Interest cannot be determined in accordance with the foregoing provisions (unless the Principal Paying Agent or the Calculation Agent, as applicable, has been notified of any Successor Rate or Alternative Reference Rate (and any related Adjustment Spread and/or Benchmark Amendments) pursuant to Condition 5.2(b)(iv), if applicable), the Rate of Interest shall be determined in accordance with Condition 5.2(b)(ii)(iv).

(ii) If the Notes become due and payable in accordance with Condition 10, the final Rate of Interest shall be calculated for the Interest Period from (and including) the most recent Interest Payment Date (or, if none, the Interest Commencement Date) to (but excluding) the date on which the Notes become so due and payable, and such Rate of Interest shall continue to apply to the Notes for so long as interest continues to accrue thereon as provided in Condition 5.3.

(iv) *Benchmark Replacement*

(1) *Independent Adviser*

Notwithstanding the other provisions of this Condition 5.2(b)(iv)(1), but subject, in the case of Notes linked to SONIA, to Condition 5.2(b)(ii)(iv)(A) or 5.2(b)(iii), as applicable, failing precedence if the Issuer, following consultation with the Principal Paying Agent or the Calculation Agent, as applicable, determines that a Benchmark Event has occurred in relation to the relevant Reference Rate specified in the applicable Pricing Supplement when any Rate of Interest (or the relevant component part thereof) applicable to the Notes for any Interest Period remains to be determined by such Reference Rate, then the following provisions shall apply (other than where in the applicable Pricing Supplement "Condition 5.2(b)(iv)(2) is applicable" is specified as the Benchmark Replacement fallback):

(A) the Issuer shall use its reasonable endeavours to appoint, as soon as reasonably practicable, an Independent Adviser to determine no later than five Business Days prior to the relevant Interest Determination Date relating to the next succeeding Interest Period (the **IA Determination Cut-Off Date**), a Successor Rate or, alternatively, if there is no Successor Rate, an Alternative Reference Rate and, in either case and if applicable, an Adjustment Spread for the purposes of determining the Rate of Interest (or the relevant component part thereof) applicable to the Notes;

(B) if (A) the Issuer is unable to appoint an Independent Adviser; or (B) the Independent Adviser appointed by the Issuer fails to determine a Successor Rate or, failing which, an Alternative Reference Rate and/or, in either case, an Adjustment Spread in accordance with this Condition 5.2(b)(iv)(1) prior to the relevant IA Determination Cut-Off Date, then the Issuer (acting in good faith and in a commercially reasonable manner) may elect to determine the Successor Rate or, failing which, an Alternative Reference Rate (as applicable) and/or, in either case, an Adjustment Spread itself for the purposes of determining the Rate of Interest (or the relevant component part thereof) applicable to the Notes or, if applicable, any Benchmark Amendments, to ensure the proper operation of such Successor Rate or Alternative Reference Rate and/or (in either case) the applicable Adjustment Spread (with the relevant provisions in this Condition 5.2(b)(iv)(1) applying *mutatis mutandis*) to allow such determinations to be made by the Issuer without consultation with the Independent Adviser;

(C) if a Successor Rate or, failing which, an Alternative Reference Rate (as applicable) is determined in accordance with the preceding provisions, such Successor Rate or, failing which, Alternative Reference Rate (as applicable) shall be the Reference Rate for each of the future Interest Periods in respect of such Notes (subject to the subsequent operation of, and to adjustment as provided in, this Condition 5.2(b)(iv)(1);

(D) the Adjustment Spread (or the formula or methodology for determining the Adjustment Spread), shall be applied to the Successor Rate or the Alternative Reference Rate (as the case may be), provided however, that if the Independent Adviser (following consultation with the Issuer), or the Issuer (acting in good faith and in a commercially reasonable manner), fails to determine the Adjustment Spread in accordance with this Condition 5.2(b)(iv)(1) prior to the relevant Interest Determination Date, then the Successor Rate or Alternative Reference Rate, as determined in accordance with this Condition 5.2(b)(iv)(1), will apply without an Adjustment Spread;

(E) if any Successor Rate, Alternative Reference Rate or Adjustment Spread is determined in accordance with this Condition 5.2(b)(iv)(1) and the Independent Adviser (following consultation with the Issuer) or the Issuer (acting in good faith and in a commercially reasonable manner), as applicable, determines: (A) that amendments to the Conditions (including, without limitation, amendments to the definitions of Day Count Fraction, Business Day, Business Day Convention, Interest Determination Date or Relevant Screen Page) are necessary to ensure the proper operation of such Successor Rate, Alternative Reference Rate and/or Adjustment Spread (such amendments, the Benchmark Amendments); and (B) the terms of the Benchmark Amendments, then, at the direction and expense of the Issuer and subject to delivery of a notice in accordance with Condition 5.2(b)(iv)(1)(F), (x) the Issuer shall vary these Conditions to give effect to such Benchmark Amendments with effect from the date specified in such notice; and (y) the Agents shall (at the Issuer's expense), without any requirement for the consent or sanction of the Noteholders, be obliged to concur with the Issuer in effecting such Benchmark Amendments.

For the avoidance of doubt, no Agent shall be liable to the Noteholders or any other person for so acting or relying on such notice, irrespective of whether any such modification is or may be materially prejudicial to the interests of any such Noteholder or person;

(F) the Issuer shall promptly, following the determination of any Successor Rate or Alternative Reference Rate (as applicable) and the specific terms of any Benchmark Amendments, give notice to the Agents (or the Calculation Agent, if applicable) and, in accordance with Condition 14, the Noteholders confirming: (A) that a Benchmark Event has occurred; (B) the Successor Rate or Alternative Reference Rate (as applicable); (C) any applicable Adjustment Spread; and (D) the specific terms of the Benchmark Amendments (if any), in each case as determined in accordance with the provisions of this Condition 5.2(b)(iv)(1);

(G) if, following the occurrence of a Benchmark Event and in relation to the determination of the Rate of Interest (or the relevant component thereof) on the immediately following Interest Determination Date, no Successor Rate or Alternative Reference Rate (as applicable) is determined pursuant to this provision, then the Rate of Interest (or the relevant component part thereof) shall be determined as at the last preceding Interest Determination Date (though substituting, where a different Margin or Maximum Rate of Interest or Minimum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to the relevant Interest Period, in place of the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to that last preceding Interest Period). For the avoidance of doubt, this Condition 5.2(b)(iv)(1)(G) shall apply to the relevant immediately following Interest Period only and any subsequent Interest Periods are subject to the subsequent operation of and to adjustment as provided in, this Condition 5.2(b)(iv)(1); and

(H) the Independent Adviser appointed pursuant to this Condition 5.2(b)(iv)(1) shall act and make all determinations pursuant to this Condition 5.2(b)(iv)(1) in good faith and the Independent Adviser shall act as an expert. In the absence of bad faith, wilful default or fraud, neither the Independent Adviser nor the Issuer shall have any liability whatsoever to the Principal Paying Agent or the Calculation Agent, as applicable, the Paying Agents or the Noteholders in connection with any determination made by it or, in the case of the Independent Adviser, for any advice given to the Issuer in connection with any determination made by the Issuer pursuant to this Condition 5.2(b)(iv)(1).

For the purposes of this Condition 5.2(b)(iv)(1):

Adjustment Spread means either (a) a spread (which may be positive, negative or zero), or (b) a formula or methodology for calculating a spread, in each case to be applied to the Successor Rate or the Alternative Reference Rate (as the case may be) and is the spread, formula or methodology which

(a) in the case of a Successor Rate, is formally recommended, or formally provided as an option for parties to adopt, in relation to the replacement of the relevant Reference Rate with the Successor Rate by any Relevant Nominating Body; or

(b) (if no such recommendation has been made, or in the case of an Alternative Reference Rate) the Independent Adviser (following consultation with the Issuer) determines is customarily applied to the relevant Successor Rate or the Alternative Reference Rate (as the case may be) in international debt capital markets transactions to produce an industry-accepted replacement rate for the relevant Reference Rate; or

(c) (if the Independent Adviser (following consultation with the Issuer) determines that no such spread, formula or methodology is customarily applied) the Independent Adviser (following consultation with the Issuer) determines is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions which reference the relevant Reference Rate, where such rate has been replaced by the Successor Rate or the Alternative Reference Rate (as the case may be); or

(d) (if the Independent Adviser (following consultation with the Issuer) determines that there is no such industry standard) the Independent Adviser (following consultation with the Issuer) or the Issuer (as applicable) determines (acting in good faith and in a commercially reasonable manner) in their sole discretion to be appropriate;

Alternative Reference Rate means an alternative benchmark or screen rate which the Independent Adviser (following consultation with the Issuer) determines, in accordance with this Condition 5.2(b)(iv)(1), is customarily applied in international debt capital markets transactions for the purposes of determining rates of interest (or the relevant component part thereof) in the same Specified Currency as the Notes and of a comparable duration to the relevant Interest Period or, if the Independent Adviser or the Issuer (as applicable) determines that there is no such rate, such other rate as the Independent Adviser or the Issuer (as applicable) determines in their sole discretion is most comparable to the relevant Reference Rate;

Benchmark Event means: (i) the relevant Reference Rate ceasing to be published as a result of such benchmark ceasing to be calculated or administered or ceasing to exist for at least five Business Days; or (ii) a public statement by the administrator of the relevant Reference Rate that it has ceased or that it will cease, by a specified future date, publishing the relevant Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue publication of the relevant Reference Rate); or (iii) a public statement by the supervisor of the administrator of the relevant Reference Rate, that the relevant Reference Rate has been or will, by a specified future date, be permanently or indefinitely discontinued; or (iv) a public statement by the supervisor of the administrator of the relevant Reference Rate as a consequence of which, by a specified future date, the relevant Reference Rate will be prohibited from being used either generally, or in respect of the Notes; or (v) a public statement by the supervisor of the administrator of the relevant Reference Rate that, in the view of such supervisor, such Reference Rate is or will be (or is or will be deemed by such supervisor to be) by a specified future date, no longer representative of an underlying market or (vi) it has become unlawful for the Issuer, the Principal Paying Agent or the Calculation Agent, as applicable, or any other Paying Agent to calculate any payments due to be made to any Noteholder using the relevant Reference Rate, provided that, where the relevant Benchmark Event is a public statement within sub-paragraphs (ii), (iii), (iv) and (v) above and the relevant specified future date in the public statement is more than six months after the date of that public statement, the Benchmark Event shall not be deemed to occur until the date falling six months prior to such specified future date;

Financial Stability Board means the organisation established by the Group of Twenty (G20) in April 2009;

Independent Adviser means an independent financial institution of international repute or an independent adviser with appropriate expertise appointed by the Issuer at the Issuer's expense;

Relevant Nominating Body means, in respect of a Reference Rate: (i) the central bank for the currency to which the Reference Rate relates, or any central bank or other supervisory authority which is responsible for supervising the administrator of the Reference Rate; or (ii) any working group or committee sponsored by, chaired or co-chaired by or constituted at the request of: (A) the central bank for the currency to which the Reference Rate relates; (B) any central bank or other supervisory authority which is responsible for supervising the administrator of the Reference Rate; (C) a group of the aforementioned central banks or other supervisory authorities; or (D) the Financial Stability Board or any part thereof; and

Successor Rate means the rate that the Independent Adviser (in consultation with the Issuer) or the Issuer, as applicable, determines is a successor to or replacement of the relevant Reference Rate which is formally recommended by any Relevant Nominating Body.

(2) *ARRC*

This Condition 5.2(b)(iv)(2) shall apply, in the case of Notes for which the Specified Currency specified in the applicable Pricing Supplement is U.S. dollars and the Reference Rate specified in the applicable Pricing Supplement is SOFR, if in the applicable Pricing Supplement "Condition 5.2(b)(iv)(2) is applicable" is specified as the Benchmark Replacement fallback.

If the Issuer determines on or prior to the relevant Reference Time that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to the then current Benchmark, the Benchmark Replacement will replace the then-current Benchmark for all purposes relating to the Notes in respect of all determinations on such date and for all determinations on all subsequent dates. In connection with the implementation of a Benchmark Replacement, the Issuer shall have the right to make Benchmark Replacement Conforming Changes from time to time, without any requirement for the consent or approval of Noteholders.

Any determination, decision or election that may be made by the Issuer pursuant to this Condition 5.2(b)(iv)(2), including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection:

(i) will be conclusive and binding absent manifest error;

(ii) will be made in the sole discretion of the Issuer (acting in good faith and in commercially reasonable manner); and

(iii) notwithstanding anything to the contrary in the documentation relating to the Notes, shall become effective without consent from the holders of the Notes or any other party.

The Issuer shall promptly, following the determination of any Benchmark Replacement Benchmark Replacement Adjustment and the specific terms of any Benchmark Replacement Conforming Changes, give notice to the Agents and, in accordance with Condition 14, the Noteholders. Such notice shall be irrevocable and shall specify the effective date on which such changes take effect. No later than notifying the Noteholders of the same, the Issuer shall deliver to the Principal Paying Agent a certificate signed by two authorised signatories of the Issuer:

(A) confirming (x) that a Benchmark Transition Event has occurred, (y) the relevant Benchmark Replacement and, (z) where applicable, any Benchmark Replacement Adjustment and/or the specific terms of any relevant Benchmark Replacement Conforming Changes, in each case as determined in accordance with the provisions of this Condition 5.2(b)(iv)(2); and

(B) certifying that the relevant Benchmark Replacement Conforming Changes are necessary to ensure the proper operation of such Benchmark Replacement and/or Benchmark Replacement Adjustment.

Such certificate shall be made available for inspection by the Noteholders during normal business hours at the specified office of the Principal Paying Agent.

For the purpose of this Condition 5.2(b)(iv)(2):

Benchmark means, initially, SOFR; provided that if the Issuer determines on or prior to the Reference Time that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to SOFR or the then-current Benchmark, then **Benchmark** shall mean the applicable Benchmark Replacement;

Benchmark Replacement means the first alternative set forth in the order below that can be determined by the Issuer as of the Benchmark Replacement Date:

(a) the sum of: (i) the alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark and (ii) the Benchmark Replacement Adjustment;

(b) the sum of: (i) the ISDA Fallback Rate and (ii) the Benchmark Replacement Adjustment; or

(c) the sum of: (i) the alternate rate of interest that has been selected by the Issuer as the replacement for the then-current Benchmark giving due consideration to any industry-accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollar-denominated floating rate notes at such time and (ii) the Benchmark Replacement Adjustment;

Benchmark Replacement Adjustment means the first alternative set forth in the order below that can be determined by the Issuer as of the Benchmark Replacement Date:

(a) the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement;

(b) if the applicable Unadjusted Benchmark Replacement is equivalent to the ISDA Fallback Rate, the ISDA Fallback Adjustment; or

(c) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the Issuer giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated floating rate notes at such time;

Benchmark Replacement Conforming Changes means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the timing and frequency of determining rates and making payments of interest, rounding of amounts or tenors, and other administrative matters) that the Issuer decides may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if the Issuer decides that adoption of any portion of such market practice is not administratively feasible or if the Issuer determines that no market practice for use of the Benchmark Replacement exists, in such other manner as the Issuer determines is reasonably necessary);

Benchmark Replacement Date means the earliest to occur of the following events with respect to the then-current Benchmark:

(a) in the case of paragraph (a) or (b) of the definition of "Benchmark Transition Event", the later of (i) the date of the public statement or publication of information referenced therein and (ii) the date on which the administrator of the Benchmark permanently or indefinitely ceases to provide the Benchmark; or

(b) in the case of paragraph (c) of the definition of "Benchmark Transition Event", the date of the public statement or publication of information referenced therein.

(c) For the avoidance of doubt, if the event that gives rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination;

Benchmark Transition Event means the occurrence of one or more of the following events with respect to the then-current Benchmark:

(a) a public statement or publication of information by or on behalf of the administrator of the Benchmark announcing that such administrator has ceased or will cease to provide the Benchmark, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark; or

(b) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark, the central bank for the currency of the Benchmark, an insolvency official with jurisdiction over the administrator for the Benchmark, a resolution authority with jurisdiction over the administrator for the Benchmark or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark, which states that the administrator of the Benchmark has ceased or will cease to provide the Benchmark permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark; or

(c) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark announcing that the Benchmark is no longer representative;

ISDA Fallback Adjustment means the spread adjustment (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to the Benchmark for the applicable tenor;

ISDA Fallback Rate means the rate that would apply for derivatives transactions referencing the ISDA Definitions to be effective upon the occurrence of an index cessation date with respect to the Benchmark for the applicable tenor excluding the applicable ISDA Fallback Adjustment;

Reference Time with respect to any determination of the Benchmark means (i) if the Benchmark is SOFR, the SOFR Determination Time, and (ii) if the Benchmark is not SOFR, the time determined by the Issuer after giving effect to the Benchmark Replacement Conforming Changes;

Relevant Governmental Body means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto; and

Unadjusted Benchmark Replacement means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

(c) Minimum Rate of Interest and/or Maximum Rate of Interest

If the applicable Pricing Supplement specifies a Minimum Rate of Interest for any Interest Period, then, in the event that the Rate of Interest in respect of such Interest Period determined in accordance with the provisions of paragraph (b) above is less than such Minimum Rate of Interest, the Rate of Interest for such Interest Period shall be such Minimum Rate of Interest.

If the applicable Pricing Supplement specifies a Maximum Rate of Interest for any Interest Period, then, in the event that the Rate of Interest in respect of such Interest Period determined in accordance with the provisions of paragraph (b) above is greater than such Maximum Rate of Interest, the Rate of Interest for such Interest Period shall be such Maximum Rate of Interest.

(d) Determination of Rate of Interest and calculation of Interest Amounts

The Principal Paying Agent or the Calculation Agent, as applicable, will at or as soon as practicable after each time at which the Rate of Interest is to be determined, determine the Rate of Interest for the relevant Interest Period.

The Principal Paying Agent or the Calculation Agent, as applicable, will calculate the amount of interest (the **Interest Amount**) payable on the Floating Rate Notes for the relevant Interest Period by applying the Rate of Interest to:

(i) in the case of Floating Rate Notes which are (i) represented by a Global Note or (ii) Registered Notes in definitive form, the aggregate outstanding nominal amount of (A) the Notes represented by such Global Note or (B) such Registered Notes; or

(ii) in the case of Floating Rate Notes which are Bearer Notes in definitive form, the Calculation Amount;

and, in each case, multiplying such sum by the applicable Day Count Fraction, and rounding the resultant figure to the nearest sub-unit of the relevant Specified Currency, half of any such sub-unit being rounded upwards or otherwise in accordance with applicable market convention. Where the Specified Denomination of a Floating Rate Note which is a Bearer Note in definitive form is a multiple of the Calculation Amount, the Interest Amount payable in respect of such Note shall be the product of the amount (determined in the manner provided above) for the Calculation Amount and the amount by which the Calculation Amount is multiplied to reach the Specified Denomination without any further rounding.

Day Count Fraction means, in respect of the calculation of an amount of interest in accordance with this Condition 5.2:

(i) if "Actual/Actual (ISDA)" or "Actual/Actual" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365 (or, if any portion of that Interest Period falls in a leap year, the sum of (I) the actual number of days in that portion of the Interest Period falling in a leap year divided by 366 and (II) the actual number of days in that portion of the Interest Period falling in a non-leap year divided by 365);

(ii) if "Actual/365 (Fixed)" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365;

(iii) if "Actual/365 (Sterling)" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365 or, in the case of an Interest Payment Date falling in a leap year, 366;

(iv) if "Actual/360" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 360;

(v) if "30/360", "360/360" or "Bond Basis" is specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y_2 - Y_1)] + [30 \times (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

Y_1 is the year, expressed as a number, in which the first day of the Interest Period falls;

Y_2 is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

M_1 is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

M_2 is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

D_1 is the first calendar day, expressed as a number, of the Interest Period, unless such number is 31, in which case D1 will be 30; and

D_2 is the calendar day, expressed as a number, immediately following the last day included in the Interest Period, unless such number would be 31 and D1 is greater than 29, in which case D2 will be 30;

(vi) if "30E/360" or "Eurobond Basis" is specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y_2 - Y_1)] + [30 \times (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

Y_1 is the year, expressed as a number, in which the first day of the Interest Period falls;

Y_2 is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

M_1 is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

M_2 is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

D_1 is the first calendar day, expressed as a number, of the Interest Period, unless such number would be 31, in which case D1 will be 30; and

D_2 is the calendar day, expressed as a number, immediately following the last day included in the Interest Period, unless such number would be 31, in which case D2 will be 30;

(vii) if "30E/360 (ISDA)" is specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y_2 - Y_1)] + [30 \times (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

Y_1 is the year, expressed as a number, in which the first day of the Interest Period falls;

Y_2 is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

M_1 is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

M_2 is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

D_1 is the first calendar day, expressed as a number, of the Interest Period, unless (i) that day is the last day of February or (ii) such number would be 31, in which case D1 will be 30; and

D_2 is the calendar day, expressed as a number, immediately following the last day included in the Interest Period, unless (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31, in which case D2 will be 30

(e) Linear Interpolation

Where Linear Interpolation is specified as applicable in respect of an Interest Period in the applicable Pricing Supplement, the Rate of Interest for such Interest Period shall be calculated by the Principal Paying Agent or the Calculation Agent, as applicable, by straight line linear interpolation by reference to two rates based on the relevant Reference Rate, one of which shall be determined as if the Designated Maturity were the period of time for which rates are available next shorter than the length of the relevant Interest Period and the other of which shall be determined as if the Designated Maturity were the period of time for which rates are available next longer than the length of the relevant Interest Period provided however that if there is no rate available for a period of time next shorter or, as the case may be, next longer, then the Principal Paying Agent or the Calculation Agent, as applicable, shall determine such rate at such time and by reference to such sources as it determines appropriate.

Designated Maturity means, in relation to Screen Rate Determination, the period of time designated in the Reference Rate.

(f) Notification of Rate of Interest and Interest Amounts

The Principal Paying Agent or the Calculation Agent, as applicable, will cause the Rate of Interest and each Interest Amount for each Interest Period and the relevant Interest Payment Date to be notified to the Issuer and any stock exchange on which the relevant Floating Rate Notes are for the time being listed and notice thereof to be published in accordance with Condition 14 as soon as possible after their determination but in no event later than the fourth London Business Day thereafter. Each Interest Amount and Interest Payment Date so notified may subsequently be amended (or appropriate alternative arrangements made by way of adjustment) without prior notice in the event of an extension or shortening of the Interest Period. Any such amendment will promptly be notified to each stock exchange on which the relevant Floating Rate Notes are for the time being listed and to the Noteholders in accordance with Condition 14. For the purposes of these Conditions, the expression **London Business Day** means a day (other than a Saturday or a Sunday) on which banks and foreign exchange markets are open for general business in London.

(g) Certificates to be final

All certificates, communications, opinions, determinations, calculations, quotations and decisions given, expressed, made or obtained for the purposes of the provisions of this Condition 5.2 by the Principal Paying Agent or the Calculation Agent, as applicable, shall (in the absence of wilful default, bad faith or manifest error) be binding on the Issuer, the Principal Paying Agent, the other Agents and all Noteholders and Couponholders and (in the absence of wilful default or bad faith) no liability to the Issuer, the Noteholders or the Couponholders shall attach to the Principal Paying Agent or the Calculation Agent, as applicable, in connection with the exercise or non-exercise by it of its powers, duties and discretions pursuant to such provisions.

5.3 Accrual of interest

Each Note (or in the case of the redemption of part only of a Note, that part only of such Note) will cease to bear interest (if any) from the due date for its redemption unless payment of principal is improperly withheld or refused. In such event, interest will continue to accrue until whichever is the earlier of:

(a) the date on which all amounts due in respect of such Note have been paid; and

(b) five days after the date on which the full amount of the moneys payable in respect of such Note has been received by the Principal Paying Agent or the Registrar, as the case may be, and notice to that effect has been given to the Noteholders in accordance with Condition 14.

6. PAYMENTS

6.1 Method of payment

Subject as provided below:

(a) payments in a Specified Currency other than euro will be made by credit or transfer to an account in the relevant Specified Currency maintained by the payee with a bank in the principal financial centre of the country of such Specified Currency (which, if the Specified Currency is Australian dollars or New Zealand dollars, shall be Sydney and Auckland, respectively); and

(b) payments will be made in euro by credit or transfer to a euro account (or any other account to which euro may be credited or transferred) specified by the payee.

Payments will be subject in all cases to (i) any fiscal or other laws and regulations applicable thereto in the place of payment or other laws and regulations to which the Issuer or its Agents are subject, but without prejudice to the provisions of Condition 8 and (ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the U.S. Internal Revenue Code of 1986 (the **Code**) or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or any law implementing an intergovernmental approach thereto.

No commission or expenses shall be charged to the Noteholders or Couponholders in respect of such payments.

6.2 Presentation of definitive Bearer Notes and Coupons

Payments of principal in respect of definitive Bearer Notes will (subject as provided below) be made in the manner provided in Condition 6.1 above only against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of definitive Bearer Notes, and payments of interest in respect of definitive Bearer Notes will (subject as provided below) be made as aforesaid only against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of Coupons, in each case at the specified office of any Paying Agent outside the United States (which expression, as used herein, means the United States of America (including the States and the District of Columbia and its possessions)).

Fixed Rate Notes in definitive bearer form (other than Long Maturity Notes (as defined below)) should be presented for payment together with all unmatured Coupons appertaining thereto (which expression shall for this purpose include Coupons falling to be issued on exchange of matured Talons), failing which the amount of any missing unmatured Coupon (or, in the case of payment not being made in full, the same proportion of the amount of such missing unmatured Coupon as the sum so paid bears to the sum due) will be deducted from the sum due for payment. Each amount of principal so deducted will be paid in the manner mentioned above against surrender of the relative missing Coupon at any time before the expiry of 10 years after the Relevant Date (as defined in Condition 8) in respect of such principal (whether or not such Coupon would otherwise have become void under Condition 9) or, if later, five years from the date on which such Coupon would otherwise have become due, but in no event thereafter.

Upon any Fixed Rate Note in definitive bearer form becoming due and repayable prior to its Maturity Date, all unmatured Talons (if any) appertaining thereto will become void and no further Coupons will be issued in respect thereof.

Upon the date on which any Floating Rate Note or Long Maturity Note in definitive bearer form becomes due and repayable, unmatured Coupons and Talons (if any) relating thereto (whether or not attached) shall become void and no payment or, as the case may be, exchange for further Coupons shall be made in respect thereof. A **Long Maturity Note** is a Fixed Rate Note (other than a Fixed Rate Note which on issue had a Talon attached) whose nominal amount on issue is less than the aggregate interest payable thereon provided that such Note shall cease to be a Long Maturity Note on the Interest Payment Date on which the aggregate amount of interest remaining to be paid after that date is less than the nominal amount of such Note.

If the due date for redemption of any definitive Bearer Note is not an Interest Payment Date, interest (if any) accrued in respect of such Note from (and including) the preceding Interest Payment Date or, as the case may be, the Interest Commencement Date shall be payable only against surrender of the relevant definitive Bearer Note.

6.3 Payments in respect of Bearer Global Notes

Payments of principal and interest (if any) in respect of Notes represented by any Global Note in bearer form will (subject as provided below) be made in the manner specified above in relation to Bearer Notes or otherwise in the manner specified in the relevant Global Note against presentation or surrender, as the case may be, of such Global Note at the specified office of any Paying Agent outside the United States. A record of each payment made, distinguishing between any payment of principal and any payment of interest, will be made on such Global Note by the Paying Agent to which it was presented.

6.4 Payments in respect of Registered Notes

Payments of principal in respect of each Registered Note (whether or not in global form) will be made against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of the Registered Note at the specified office of the Registrar or any of the Paying Agents. Such payments will be made by transfer to the Designated Account (as defined below) of the holder (or the first named of joint holders) of the Registered Note appearing in the register of holders of the Registered Notes maintained by the Registrar (the **Register**) (i) where in global form, at the close of the business day (being for this purpose a day on which Euroclear and Clearstream, Luxembourg are open for business) before the relevant due date, and (ii) where in definitive form, at the close of business on the third business day (being for this purpose a day on which banks are open for business in the city where the specified office of the Registrar is located) before the relevant due date. For these purposes, **Designated Account** means the account (which, in the case of a payment in Japanese yen to a non-resident of Japan, shall be a non-resident account) maintained by a holder with a Designated Bank and identified as such in the Register and **Designated Bank** means (in the case of payment in a Specified Currency other than euro) a bank in the principal financial centre of the country of such Specified Currency (which, if the Specified Currency is Australian dollars or New Zealand dollars, shall be Sydney and Auckland, respectively) and (in the case of a payment in euro) any bank which processes payments in euro.

Payments of interest in respect of each Registered Note (whether or not in global form) will be made by transfer on the due date to the Designated Account of the holder (or the first named of joint holders) of the Registered Note appearing in the Register (i) where in global form, at the close of the business day (being for this purpose a day on which Euroclear and Clearstream, Luxembourg are open for business) before the relevant due date, and (ii) where in definitive form, at the close of business on the fifteenth day (whether or not such fifteenth day is a business day) before the relevant due date (the **Record Date**). Payment of the interest due in respect of each Registered Note on redemption will be made in the same manner as payment of the nominal amount of such Registered Note.

No commissions or expenses shall be charged to the holders by the Registrar in respect of any payments of principal or interest in respect of Registered Notes.

None of the Issuer or the Agents will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the Registered Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

6.5 General provisions applicable to payments

The holder of a Global Note shall be the only person entitled to receive payments in respect of Notes represented by such Global Note and the Issuer will be discharged by payment to, or to the order of, the holder of such Global Note in respect of each amount so paid. Each of the persons shown in the records of Euroclear or Clearstream, Luxembourg as the beneficial holder of a particular nominal amount of Notes represented by such Global Note must look solely to Euroclear or Clearstream, Luxembourg, as the case may be, for his share of each payment so made by the Issuer to, or to the order of, the holder of such Global Note.

Notwithstanding the foregoing provisions of this Condition 6, if any amount of principal and/or interest in respect of Bearer Notes is payable in U.S. dollars, such U.S. dollar payments of principal and/or interest in respect of such Notes will be made at the specified office of a Paying Agent in the United States if:

(a) the Issuer has appointed Paying Agents with specified offices outside the United States with the reasonable expectation that such Paying Agents would be able to make payment in U.S. dollars at such specified offices outside the United States of the full amount of principal and interest on the Bearer Notes in the manner provided above when due;

(b) payment of the full amount of such principal and interest at all such specified offices outside the United States is illegal or effectively precluded by exchange controls or other similar restrictions on the full payment or receipt of principal and interest in U.S. dollars; and

(c) such payment is then permitted under United States law without involving, in the opinion of the Issuer, adverse tax consequences to the Issuer.

6.6 Payment Day

If the date for payment of any amount in respect of any Note or Coupon is not a Payment Day, the holder thereof shall not be entitled to payment until the next following Payment Day in the relevant place and shall not be entitled to further interest or other payment in respect of such delay. For these purposes, **Payment Day** means any day which (subject to Condition 9) is:

(a) a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits):

    (i) in the case of Notes in definitive form only, in the relevant place of presentation; and

    (ii) in each Additional Financial Centre (other than T2 System) specified in the applicable Pricing Supplement;

(b) if T2 System is specified as an Additional Financial Centre in the applicable Pricing Supplement, a day on which the T2 System is open; and

(c) either (1) in relation to any sum payable in a Specified Currency other than euro, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in the principal financial centre of the country of the relevant Specified Currency (which if the Specified Currency is Australian dollars or New Zealand dollars shall be Sydney and Auckland, respectively) or (2) in relation to any sum payable in euro, a day on which the T2 System is open.

6.7 Interpretation of principal and interest

Any reference in the Conditions to principal in respect of the Notes shall be deemed to include, as applicable:

(a) any additional amounts which may be payable with respect to principal under Condition 8;

(b) the Final Redemption Amount of the Notes;

(c) the Early Redemption Amount of the Notes;

(d) the Optional Redemption Amount(s) (if any) of the Notes; and

(e) any premium and any other amounts (other than interest) which may be payable by the Issuer under or in respect of the Notes.

Any reference in the Conditions to interest in respect of the Notes shall be deemed to include, as applicable, any additional amounts which may be payable with respect to interest under Condition 8.

7. REDEMPTION AND PURCHASE

7.1 Redemption at maturity

Unless previously redeemed or purchased and cancelled as specified below, each Note will be redeemed by the Issuer at its Final Redemption Amount specified in the applicable Pricing Supplement in the relevant Specified Currency on the Maturity Date specified in the applicable Pricing Supplement.

7.2 Redemption for tax reasons

Subject to Condition 7.5, the Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time (if this Note is not a Floating Rate Note) or on any Interest Payment Date (if this Note is a Floating Rate Note), on giving not less than the minimum period nor more than the maximum period of notice specified in the applicable Pricing Supplement to the Principal Paying Agent and, in accordance with Condition 14, the Noteholders (which notice shall be irrevocable), if:

(a) on the occasion of the next payment due under the Notes, the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 8 as a result of any change in, or amendment to, the laws or regulations of a Tax Jurisdiction (as defined in Condition 8) or any change in the application or official interpretation of such laws or regulations, which change or amendment becomes effective on or after the date on which agreement is reached to issue the first Tranche of the Notes; and

(b) such obligation cannot be avoided by the Issuer taking reasonable measures available to it,

provided that no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which the Issuer would be obliged to pay such additional amounts were a payment in respect of the Notes then due.

Prior to the publication of any notice of redemption pursuant to this Condition 7.2, the Issuer shall deliver to the Principal Paying Agent to make available at its specified office to the Noteholders (i) a certificate signed by two Directors of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred and (ii) an opinion of independent legal advisers of recognised standing to the effect that the Issuer has or will become obliged to pay such additional amounts as a result of such change or amendment.

Notes redeemed pursuant to this Condition 7.2 will be redeemed at their Early Redemption Amount referred to in Condition 7.5 below together (if appropriate) with interest accrued to (but excluding) the date of redemption.

7.3 Redemption at the option of the Issuer (Issuer Call)

If Issuer Call is specified as being applicable in the applicable Pricing Supplement, the Issuer may, having given not less than the minimum period nor more than the maximum period of notice specified in the applicable Pricing Supplement to the Noteholders in accordance with Condition 14 (which notice shall be irrevocable and shall specify the date fixed for redemption), redeem all or some only of the Notes then outstanding on any Optional Redemption Date and at the Optional Redemption Amount(s) specified in the applicable Pricing Supplement together, if appropriate, with interest accrued to (but excluding) the relevant Optional Redemption Date. Any such redemption must be of a nominal amount not less than the Minimum Redemption Amount and not more than the Maximum Redemption Amount, in each case as may be specified in the applicable Pricing Supplement.

In the case of a partial redemption of Notes, the Notes to be redeemed (**Redeemed Notes**) will (i) in the case of Redeemed Notes represented by definitive Notes, be selected individually by lot, not more than 30 days prior to the date fixed for redemption and (ii) in the case of Redeemed Notes represented by a Global Note, be selected in accordance with the rules of Euroclear and/or Clearstream, Luxembourg,. In the case of Redeemed Notes represented by definitive Notes, a list of the serial numbers of such Redeemed Notes will be published in accordance with Condition 14 not less than 15 days prior to the date fixed for redemption.

7.4 Redemption at the option of the Noteholders (Investor Put)

(i) If Investor Put is specified as being applicable in the applicable Pricing Supplement, upon the holder of any Note giving to the Issuer in accordance with Condition 14 not less than the minimum period nor more than the maximum period of notice specified in the applicable Pricing Supplement, the Issuer will, upon the expiry of such notice, redeem such Note on the Optional Redemption Date and at the Optional Redemption Amount together, if appropriate, with interest accrued to (but excluding) the Optional Redemption Date.

(ii) If Change of Control Put is specified in the applicable Pricing Supplement and a Change of Control Event occurs, the Issuer will, upon the holder of any Note giving notice within the Change of Control Put Period to the Issuer in accordance with Condition 14 (unless prior to the giving of the relevant Change of Control Notice (as defined below) the Issuer has given notice of redemption under Condition 7.2 or 7.3), redeem or, at the Issuer's option, purchase (or procure the purchase of) such Note on the Change of Control Put Date at the Change of Control Redemption Amount together (if applicable) with interest accrued to but excluding the Change of Control Put Date.

Promptly upon the Issuer becoming aware that a Change of Control Event has occurred, the Issuer shall give notice (a Change of Control Notice) to the Noteholders in accordance with Condition 14 to that effect.

If 75 per cent. or more in nominal amount of the Notes then outstanding have been redeemed or, as the case may be, purchased, pursuant to this Condition 7.4(ii), the Issuer may, on giving not less than the minimum period nor more than the maximum period of notice as specified in the applicable Pricing Supplement to the Noteholders in accordance with Condition 14 (such notice to be given within 30 days of the Change of Control Put Date), redeem or, at the Issuer's option, purchase (or procure the purchase of) all but not some only of the remaining outstanding Notes at their Change of Control Redemption Amount together (if applicable) with interest accrued to but excluding the date fixed for redemption or purchase, as the case may be.

(iii) To exercise the right to require redemption of this Note the holder of this Note must, if this Note is in definitive form and held outside Euroclear and Clearstream, Luxembourg, deliver, at the specified office of any Paying Agent (in the case of Bearer Notes) or the Registrar (in the case of Registered Notes) at any time during normal business hours of such Paying Agent or, as the case may be, the Registrar falling within the notice period, a duly completed and signed notice of exercise in the form (for the time being current) obtainable from any specified office of any Paying Agent or, as the case may be, the Registrar (a **Put Notice**) and in which the holder must specify a bank account to which payment is to be made under this Condition 7.4 and, in the case of Registered Notes, the nominal amount thereof to be redeemed and, if less than the full nominal amount of the Registered Notes so surrendered is to be redeemed, an address to which a new Registered Note in respect of the balance of such Registered Notes is to be sent subject to and in accordance with the provisions of Condition 2.2. If this Note is in definitive bearer form, the Put Notice must be accompanied by this Note or evidence satisfactory to the Paying Agent concerned that this Note will, following delivery of the Put Notice, be held to its order or under its control.

If this Note is represented by a Global Note or is in definitive form and held through Euroclear or Clearstream, Luxembourg, to exercise the right to require redemption of this Note the holder of this Note must, within the notice period, give notice to the Principal Paying Agent of such exercise in accordance with the standard procedures of Euroclear and Clearstream, Luxembourg (which may include notice being given on his instruction by Euroclear, Clearstream, Luxembourg or any common depositary, as the case may be for them to the Principal Paying Agent by electronic means) in a form acceptable to Euroclear and Clearstream, Luxembourg from time to time.

Any Put Notice or other notice given in accordance with the standard procedures of Euroclear and Clearstream, Luxembourg by a holder of any Note pursuant to this Condition 7.4 shall be irrevocable except where, prior to the due date of redemption, an Event of Default has occurred and is continuing, in which event such holder, at its option, may elect by notice to the Issuer to withdraw the notice given pursuant to this Condition 7.4 and instead to declare such Note forthwith due and payable pursuant to Condition 10.

(iv) For the purpose of the Conditions:

a **Change of Control Event** shall occur each time the Emirate of Abu Dhabi, including, without limitation, any agency of its government or any entity controlled by it, ceases to own and control (directly or indirectly) more than 50 per cent. of the economic and voting rights in respect of the Issuer;

Change of Control Put Date shall be the tenth day after the expiry of the Change of Control Put Period provided that, if such day is not a day on which banks are open for general business in both London and the principal financial centre of the Specified Currency the Change of Control Put Date shall be the next following day on which banks are open for general business in both London and the principal financial centre of the Specified Currency;

Change of Control Put Period shall be period of 30 days commencing on the date that a Change of Control Notice is given; and

Change of Control Redemption Amount shall mean, in relation to each Note to be redeemed or purchased pursuant to the Change of Control Put Option, an amount equal to the nominal amount of such Note or such other amount as may be specified in the applicable Pricing Supplement.

7.5 Early Redemption Amounts

For the purpose of Condition 7.2 above and Condition 10:

(a) each Note (other than a Zero Coupon Note) will be redeemed at its Early Redemption Amount; and

(b) each Zero Coupon Note will be redeemed at its Early Redemption Amount calculated in accordance with the following formula:

Early Redemption Amount = RP x $(1 + AY)^y$

where:

RP means the Reference Price;

AY means the Accrual Yield expressed as a decimal; and

y is the Day Count Fraction specified in the applicable Pricing Supplement which will be either (i) 30/360 (in which case the numerator will be equal to the number of days (calculated on the basis of a 360-day year consisting of 12 months of 30 days each) from (and including) the Issue Date of the first Tranche of the Notes to (but excluding) the date fixed for redemption or (as the case may be) the date upon which such Note becomes due and repayable and the denominator will be 360) or (ii) Actual/360 (in which case the numerator will be equal to the -actual number of days from (and including) the Issue Date of the first Tranche of the Notes to (but excluding) the date fixed for redemption or (as the case may be) the date upon which such Note becomes due and repayable and the denominator will be 360) or (iii) Actual/365 (in which case the numerator will be equal to the actual number of days from (and including) the Issue Date of the first Tranche of the Notes to (but excluding) the date fixed for redemption or (as the case may be) the date upon which such Note becomes due and repayable and the denominator will be 365).

7.6 Purchases

The Issuer or any Subsidiary of the Issuer may at any time purchase Notes (provided that, in the case of definitive Bearer Notes, all unmatured Coupons and Talons appertaining thereto are purchased therewith) at any price in the open market or otherwise. Such Notes may be held, reissued, resold or, at the option of the Issuer, surrendered to any Paying Agent and/or the Registrar for cancellation.

7.7 Cancellation

All Notes which are redeemed will forthwith be cancelled (together with all unmatured Coupons and Talons attached thereto or surrendered therewith at the time of redemption). All Notes so cancelled and any Notes purchased and cancelled pursuant to Condition 7.6 above (together with all unmatured Coupons and Talons cancelled therewith) shall be forwarded to the Principal Paying Agent and cannot be reissued or resold.

7.8 Late payment on Zero Coupon Notes

If the amount payable in respect of any Zero Coupon Note upon redemption of such Zero Coupon Note pursuant to Condition 7.1, 7.2, 7.3 or 7.4 above or upon its becoming due and repayable as provided in Condition 10 is improperly withheld or refused, the amount due and repayable in respect of such Zero Coupon Note shall be the amount calculated as provided in Condition 7.5(b) above as though the references therein to the date fixed for the redemption or the date upon which such Zero Coupon Note becomes due and payable were replaced by references to the date which is the earlier of:

(a) the date on which all amounts due in respect of such Zero Coupon Note have been paid; and

(b) five days after the date on which the full amount of the moneys payable in respect of such Zero Coupon Notes has been received by the Principal Paying Agent or the Registrar and notice to that effect has been given to the Noteholders in accordance with Condition 14.

8. TAXATION

All payments of principal and interest in respect of the Notes and Coupons by or on behalf of the Issuer will be made without withholding or deduction for or on account of any present or future taxes or duties of whatever nature imposed or levied by or on behalf of any Tax Jurisdiction unless such withholding or deduction is required by law. In such event, the Issuer will pay such additional amounts as shall be necessary in order that the net amounts received by the holders of the Notes or Coupons after such withholding or deduction shall equal the respective amounts of principal and interest which would otherwise have been receivable in respect of the Notes or Coupons, as the case may be, in the absence of such withholding or deduction; except that no such additional amounts shall be payable with respect to any Note or Coupon:

(a) the holder of which is liable for such taxes or duties in respect of such Note or Coupon by reason of his having some connection with a Tax Jurisdiction other than the mere holding of such Note or Coupon; or

(b) presented for payment more than 30 days after the Relevant Date (as defined below) except to the extent that the holder thereof would have been entitled to an additional amount on presenting the same for payment on such thirtieth day assuming that day to have been a Payment Day (as defined in Condition 6.6).

Notwithstanding any other provision of the Conditions, in no event will the Issuer be required to pay any additional amounts in respect of the Notes and Coupons for, or on account of, any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the Code or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, or any official interpretations thereof, or any law implementing an intergovernmental approach thereto.

As used herein:

(i) **Tax Jurisdiction** means United Arab Emirates or any Emirate therein or any political subdivision or any authority thereof or therein having power to tax or any other jurisdiction or any political subdivision or any authority thereof or therein having power to tax to which payments made by the Issuer of principal and interest on the Notes become generally subject; and

(ii) the **Relevant Date** means the date on which such payment first becomes due, except that, if the full amount of the moneys payable has not been duly received by the Principal Paying Agent or the Registrar, as the case may be, on or prior to such due date, it means the date on which, the full amount of such moneys having been so received, notice to that effect is duly given to the Noteholders in accordance with Condition 14.

9. PRESCRIPTION

The Notes (whether in bearer or registered form) and Coupons will become void unless claims in respect of principal and/or interest are made within a period of 10 years (in the case of principal) and five years (in the case of interest) after the Relevant Date (as defined in Condition 8) therefor.

There shall not be included in any Coupon sheet issued on exchange of a Talon any Coupon the claim for payment in respect of which would be void pursuant to this Condition 9 or Condition 6.2 or any Talon which would be void pursuant to Condition 6.2.

10. EVENTS OF DEFAULT

10.1 Events of Default

If any one or more of the following events (each an **Event of Default**) shall occur and be continuing:

(a) the Issuer fails to pay the principal of, or any interest on, any of the Notes when due and such failure continues for a period of seven Business Days in the case of principal and 14 Business Days in the case of interest; or

(b) the Issuer defaults in performance or observance of or compliance with any of its other obligations or undertakings in respect of the Notes and either such default is not capable of remedy or such default (if capable of remedy) is not remedied within 45 days after written notice of such default shall have been given to the Issuer by any Noteholder; or

(c) (i) the holders of any Indebtedness of the Issuer accelerate such Indebtedness or declare such Indebtedness to be due and payable or required to be prepaid (other than by a regularly scheduled required prepayment or pursuant to an option granted to the holders by the terms of such Indebtedness), prior to the stated maturity thereof as a result of an event of default (however described) or (ii) the Issuer fails to pay in full any principal of, or interest on, any of its Indebtedness when due (after expiration of any applicable grace period) or any guarantee of any Indebtedness of others given by the Issuer shall not be honoured when due and called upon; provided that the aggregate amount of the relevant Indebtedness or guarantee in respect of which one or more of the events mentioned above in this Condition 10.1(c) shall have occurred equals or exceeds U.S.$50,000,000 (or its equivalent in any other currency or currencies); or

(d) the Issuer is adjudicated or found bankrupt or insolvent or any order is made by any competent court or resolution passed for the winding up or dissolution of the Issuer, save in connection with a Permitted Reorganisation; or

(e) proceedings are initiated against the Issuer under any applicable liquidation, insolvency, composition, reorganisation or other similar laws, or an application is made (or documents filed with a court) for the appointment of an administrative or other receiver, manager, administrator, liquidator or other similar official (and such proceedings are not being actively contested in good faith by the Issuer), or an administrative or other receiver, manager, administrator, liquidator or other similar official is appointed, in relation to the Issuer or, as the case may be, in relation to all or substantially all of the undertaking or assets of the Issuer and in any such case (other than the appointment of an administrator) is not discharged within 60 days; or

(f) the Issuer initiates or consents to judicial proceedings relating to itself under any applicable liquidation, insolvency, composition, reorganisation or other similar laws or enters into any composition or other similar arrangement with its creditors generally save, in all cases, in connection with a Permitted Reorganisation; or

(g) any event occurs which under the laws of the United Arab Emirates or any Emirate therein has an analogous effect to any of the events referred to in paragraphs (d) to (f) (inclusive) above; or

(h) any Security Interest, present or future, created or assumed by the Issuer and securing an amount which equals or exceeds U.S.$50,000,000 (or its equivalent in any other currency or currencies) becomes enforceable and any step is taken to enforce the Security Interest (including the taking of possession or the appointment of a receiver, manager or other similar person, but excluding the issue of any notification to the Issuer that such Security Interest has become enforceable) unless the full amount of the debt which is secured by the relevant Security Interest is discharged within 60 days of the first date on which a step is taken to enforce the relevant Security Interest; or

(i) (i) the validity of the Notes is contested by the Issuer; or (ii) the Issuer shall deny any of its obligations under the Notes; or (iii) as a result of any change in, or amendment to, the laws or regulations in the United Arab Emirates or any Emirate therein, which change or amendment takes place after the date on which agreement is reached to issue the first Tranche of the Notes, (A) it becomes unlawful for the Issuer to perform or comply with any of its payment or other material obligations under or in respect of the Notes or the Agency Agreement or (B) any of such obligations becomes unenforceable or invalid,

then any holder of a Note may, by written notice to the Issuer at the specified office of the Principal Paying Agent, effective upon the date of receipt thereof by the Principal Paying Agent, declare any Note held by it to be forthwith due and payable whereupon the same shall become forthwith due and payable at its Early Redemption Amount, together with accrued interest (if any) to the date of repayment, without presentment, demand, protest or other notice of any kind.

10.2 Definitions

For the purposes of the Conditions:

Indebtedness means all obligations (including any Sukuk Obligation), and guarantees or indemnities in respect of obligations, for moneys borrowed or raised (whether or not evidenced by bonds, debentures, notes, trust certificates or other similar instruments); and

Permitted Reorganisation means any amalgamation, consolidation, restructuring, demerger, merger, reorganisation, reconstruction, composition or other similar arrangement: (i) on a solvent basis; and/or (ii) on terms previously approved by an Extraordinary Resolution.

11. REPLACEMENT OF NOTES, COUPONS AND TALONS

Should any Note, Coupon or Talon be lost, stolen, mutilated, defaced or destroyed, it may be replaced at the specified office of the Principal Paying Agent (in the case of Bearer Notes or Coupons) or the Registrar (in the case of Registered Notes) upon payment by the claimant of such costs and expenses as may be incurred in connection therewith and on such terms as to evidence and indemnity as the Issuer may reasonably require. Mutilated or defaced Notes, Coupons or Talons must be surrendered before replacements will be issued.

12. AGENTS

The initial Agents are set out above. If any additional Paying Agents are appointed in connection with any Series, the names of such Paying Agents will be specified in Part B of the applicable Pricing Supplement.

The Issuer is entitled to vary or terminate the appointment of any Agent and/or appoint additional or other Agents and/or approve any change in the specified office through which any Agent acts, provided that:

(a) there will at all times be a Principal Paying Agent and a Registrar;

(b) so long as the Notes are listed on any stock exchange or admitted to listing by any other relevant authority, there will at all times be a Paying Agent (in the case of Bearer Notes) and a Transfer Agent (other than the Registrar) (in the case of Registered Notes) with a specified office in such place as may be required by the rules and regulations of the relevant stock exchange or other relevant authority; and

(c) there will at all times be a Paying Agent in a jurisdiction other than the jurisdiction in which the Issuer is incorporated.

In addition, the Issuer shall forthwith appoint a Paying Agent having a specified office in New York City in the circumstances described in Condition 6.5. Notice of any variation, termination, appointment or change in Paying Agents will be given to the Noteholders promptly by the Issuer in accordance with Condition 14.

In acting under the Agency Agreement, the Agents act solely as agents of the Issuer and do not assume any obligation to, or relationship of agency or trust with, any Noteholder or Couponholder. The Agency Agreement contains provisions permitting any entity into which any Agent is merged or converted or with which it is consolidated or to which it transfers all or substantially all of its assets to become the successor agent.

13. EXCHANGE OF TALONS

On and after the Interest Payment Date on which the final Coupon comprised in any Coupon sheet matures, the Talon (if any) forming part of such Coupon sheet may be surrendered at the specified office of any Paying Agent in exchange for a further Coupon sheet including (if such further Coupon sheet does not include Coupons to (and including) the final date for the payment of interest due in respect of the Note to which it appertains) a further Talon, subject to the provisions of Condition 9.

14. NOTICES

All notices regarding the Bearer Notes will be deemed to be validly given if published in a leading English language daily newspaper of general circulation in London. It is expected that any such publication in a newspaper will be made in the *Financial Times* in London. The Issuer shall also ensure that notices are duly published in a manner which complies with the rules of any stock exchange or other relevant authority on which the Bearer Notes are for the time being listed or by which they have been admitted to trading including publication on the website of the relevant stock exchange or relevant authority if required by those rules. Any such notice will be deemed to have been given on the date of the first publication or, where required to be published in more than one newspaper, on the date of the first publication in all required newspapers.

All notices regarding the Registered Notes will be deemed to be validly given if sent by first class mail or (if posted to an address overseas) by airmail to the holders (or the first named of joint holders) at their respective addresses recorded in the Register and will be deemed to have been given on the fourth day after mailing and, in addition, for so long as any Registered Notes are listed on a stock exchange or are admitted to trading by another relevant authority and the rules of that stock exchange or relevant authority so require, such notice will be published on the website of the relevant stock exchange or relevant authority and/or in a daily newspaper of general circulation in the place or places required by those rules.

Until such time as any definitive Notes are issued, there may, so long as any Global Notes representing the Notes are held in their entirety on behalf of Euroclear and/or Clearstream, Luxembourg, be substituted for such publication in such newspaper(s) or such websites or such mailing the delivery of the relevant notice to Euroclear and/or Clearstream, Luxembourg for communication by them to the holders of the Notes and, in addition, for so long as any Notes are listed on a stock exchange or are admitted to trading by another relevant authority and the rules of that stock exchange or relevant authority so require, such notice will be published on the website of the relevant stock exchange or relevant authority and/or in a daily newspaper of general circulation in the place or places required by those rules. Any such notice shall be deemed to have been given to the holders of the Notes on the day after the day on which the said notice was given to Euroclear and/or Clearstream, Luxembourg.

Notices to be given by any Noteholder shall be in writing and given by lodging the same, together (in the case of any Note in definitive form) with the relative Note or Notes, with the Principal Paying Agent (in the case of Bearer Notes) or the Registrar (in the case of Registered Notes). Whilst any of the Notes are represented by a Global Note, such notice may be given by any holder of a Note to the Principal Paying Agent or the Registrar through Euroclear and/or Clearstream, Luxembourg, as the case may be, in such manner as the Principal Paying Agent, the Registrar and Euroclear and/or Clearstream, Luxembourg, as the case may be, may approve for this purpose.

15. MEETINGS OF NOTEHOLDERS AND MODIFICATION

The Agency Agreement contains provisions for convening meetings (including by way of conference call or by use of a videoconference platform) of the Noteholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution of a modification of the Notes, the Coupons or any of the provisions of the Agency Agreement. Such a meeting may be convened by the Issuer and shall be convened by the Issuer if required in writing by Noteholders holding not less than five per cent. in nominal amount of the Notes for the time being remaining outstanding. The quorum at any such meeting for passing an Extraordinary Resolution is one or more persons holding or representing not less than 50 per cent. in nominal amount of the Notes for the time being outstanding, or at any adjourned meeting one or more persons being or representing Noteholders whatever the nominal amount of the Notes so held or represented, except that at any meeting the business of which includes the modification of certain provisions of the Notes or the Coupons (including modifying the date of maturity of the Notes or any date for payment of interest thereon, reducing or cancelling the amount of principal or the rate of interest payable in respect of the Notes, altering the currency of payment of the Notes or the Coupons or amending the Deed of Covenant in certain respects), the quorum shall be one or more persons holding or representing not less than two-thirds in nominal amount of the Notes for the time being outstanding, or at any adjourned such meeting one or more persons holding or representing not less than one-third in nominal amount of the Notes for the time being outstanding. The Agency Agreement provides that (i) a resolution passed at a meeting duly convened and held in accordance with the Agency Agreement by a majority consisting of not less than three-fourths of the votes cast on such resolution, (ii) a resolution in writing signed by or on behalf of the holders of not less than three-fourths in nominal amount of the Notes for the time being outstanding or (iii) consent given by way of electronic consents through the relevant clearing system(s) (in a form satisfactory to the Principal Paying Agent) by or on behalf of the holders of not less than three-fourths in nominal amount of the Notes for the time being outstanding, shall, in each case, be effective as an Extraordinary Resolution of the Noteholders. An Extraordinary Resolution passed by the Noteholders will be binding on all the Noteholders, whether or not they are present at any meeting, and whether or not they voted on the resolution, and on all Couponholders.

The Principal Paying Agent and the Issuer may agree, without the consent of the Noteholders or Couponholders, to:

(a) any modification (except such modifications in respect of which an increased quorum is required as mentioned above) of the Notes, the Coupons, the Deed of Covenant or the Agency Agreement which is not prejudicial to the interests of the Noteholders; or

(b) any modification of the Notes, the Coupons, the Deed of Covenant or the Agency Agreement which is of a formal, minor or technical nature or is made to correct a manifest.

Any such modification shall be binding on the Noteholders and the Couponholders and any such modification shall be notified to the Noteholders in accordance with Condition 14 as soon as practicable thereafter.

16. FURTHER ISSUES

The Issuer shall be at liberty from time to time without the consent of the Noteholders or the Couponholders to create and issue further notes having terms and conditions the same as the Notes or the same in all respects save for the amount and date of the first payment of interest thereon and the date from which interest starts to accrue and so that the same shall be consolidated and form a single Series with the outstanding Notes.

17. CONTRACTS (RIGHTS OF THIRD PARTIES) ACT 1999

No person shall have any right to enforce any term or condition of this Note under the Contracts (Rights of Third Parties) Act 1999, but this does not affect any right or remedy of any person which exists or is available apart from that Act.

18. GOVERNING LAW AND DISPUTE RESOLUTION

18.1 Governing law

The Agency Agreement, the Deed of Covenant, the Notes and the Coupons and any non-contractual obligations arising out of or in connection with the Agency Agreement, the Deed of Covenant the Notes and the Coupons are governed by, and construed in accordance with, English law.

18.2 Agreement to arbitrate with option to litigate

(a) Subject to Condition 18.2(b) below, any dispute, claim, difference or controversy arising out of, relating to or having any connection with the Notes (including any dispute as to their existence, validity, interpretation, performance, breach or termination or the consequences of their nullity and any dispute relating to any non-contractual obligations arising out of or in connection with them) (a **Dispute**) shall be referred to and finally resolved by arbitration under the Arbitration Rules of the London Court of International Arbitration (**LCIA**) (the **Rules**), which Rules (as amended from time to time) are incorporated by reference into this Condition 18.2. For these purposes:

(i) the seat of arbitration shall be London;

(ii) there shall be three arbitrators, each of whom shall be disinterested in the arbitration, shall have no connection with any party thereto and shall be an attorney experienced in international securities transactions. The claimant(s), irrespective of number, shall nominate jointly one arbitrator; the respondent(s), irrespective of number, shall nominate jointly the second arbitrator, and a third arbitrator (who shall act as presiding arbitrator) shall be nominated by the arbitrators nominated by or on behalf of the claimant(s) and respondent(s) or, in the absence of agreement on the third arbitrator within 30 days of the date of nomination of the later of the two party-nominated arbitrators to be nominated, the third arbitrator shall be chosen by the LCIA Court (as defined in the Rules); and

(iii) the language of the arbitration shall be English.

(b) Notwithstanding Condition 18.2(a) above, any Noteholder may, in the alternative, and at its sole discretion, by notice in writing to the Issuer:

(i) within 28 days of service of a Request for Arbitration (as defined in the Rules); or

(ii) in the event no arbitration is commenced, require that a Dispute be heard by a court of law. If any Noteholder gives such notice, the Dispute to which such notice refers shall be determined in accordance with Condition 18.2(c) and, subject as provided below, any arbitration commenced under Condition 18.2(a) in respect of that Dispute will be terminated. Each person who gives such notice and the recipient of that notice will bear its own costs in relation to the terminated arbitration.

If any notice to terminate is given after service of any Request for Arbitration in respect of any Dispute, the relevant Noteholder must also promptly give notice to the LCIA Court and to any Tribunal (each as defined in the Rules) already appointed in relation to the Dispute that such Dispute will be settled by the courts. Upon receipt of such notice by the LCIA Court, the arbitration and any appointment of any arbitrator in relation to such Dispute will immediately terminate. Any such arbitrator will be deemed to be *functus officio*. The termination is without prejudice to:

(i) the validity of any act done or order made by that arbitrator or by the court in support of that arbitration before his appointment is terminated;

(ii) his entitlement to be paid his proper fees and disbursements; and

(iii) the date when any claim or defence was raised for the purpose of applying any limitation bar or any similar rule or provision.

(c) In the event that a notice pursuant to Condition 18.2(b) is issued, the following provisions shall apply:

(i) subject to Condition 18.2(c)(iii) below, the courts of England shall have exclusive jurisdiction to settle any Dispute and the Issuer submits to the exclusive jurisdiction of such courts;

(ii) the Issuer agrees that the courts of England are the most appropriate and convenient courts to settle any Dispute and, accordingly, that it will not argue to the contrary; and

(iii) this Condition 18.2(c) is for the benefit of the Noteholders only. As a result, and notwithstanding paragraph (i) above, any Noteholder may take proceedings relating to a Dispute (**Proceedings**) in any other courts with jurisdiction. To the extent allowed by law, the Noteholders may take concurrent Proceedings in any number of jurisdictions.

18.3 Appointment of Process Agent

The Issuer has appointed Masdar Energy UK Limited at its registered office at 1 Bartholomew Lane, London, England, EC2N 2AX as its agent for service of process in England and agrees that, in the event of Masdar Energy UK Limited ceasing so to act or ceasing to be registered in England, it will appoint another person as its agent for service of process in England in respect of any Proceedings or Dispute. Nothing in this Condition 18.3 shall affect the right to serve process in any other manner permitted by law.

18.4 Waiver of immunity

To the extent that the Issuer may in any jurisdiction claim sovereign or other immunity from jurisdiction or execution and any similar defence and to the extent that such immunity (whether or not claimed) may be attributed in any such jurisdiction to the Issuer, the Issuer irrevocably and unconditionally waives with respect to the Notes any right to claim such immunity to the full extent permitted by the laws of such jurisdiction and irrevocably and unconditionally consents to the giving of any relief or the issue of any process, including, without limitation, the making, enforcement or execution against any property whatsoever (irrespective of its use or intended use) of any order or judgement made or given in connection with any Proceedings or Disputes.

18.5 Other documents

The Issuer has in the Agency Agreement and the Deed of Covenant made provision for arbitration and appointed an agent for service of process in terms substantially similar to those set out above.

USE OF PROCEEDS

An amount equivalent to the net proceeds of each Tranche of Notes (the **equivalent amount**) will be applied by the Issuer in accordance with the Issuer's Green Finance Framework published on its website (https://masdar.ae/-/media/corporate/archive/masdar_green-finance_2023.pdf) (as amended, supplemented, restated and/or otherwise updated on such website from time to time, the **Green Finance Framework**), which includes the financing and/or refinancing of Eligible Green Projects (as defined in the Green Finance Framework). Eligible Green Projects may include new or existing projects under development or projects in operation from the following project categories:

- ***renewable energy generation*** in the form of solar PV, solar CSP and wind power projects as well as power transmission and distribution network infrastructure devoted to directly connecting solar PV, solar CSP and wind power generation plants to the transmission grid; and

- ***energy efficiency*** in the form of dedicated connections to solar and/or wind power generation plants that store electricity and return it at a later time (aiming at promoting the development of renewable energies and/or replacing peak electricity produced by less environmentally friendly units),

each as further described in section 2.1 "*Use of Proceeds—Eligible green projects*" in the Green Finance Framework. The Issuer will seek, on a best-efforts basis, to reach full allocation of the equivalent amount in respect of each Tranche within two years following the Issue Date of the Tranche. Pending full allocation, the equivalent amount will be temporarily invested in accordance with the Issuer's corporate liquidity policy (and the exclusionary criteria below), in cash, cash equivalents, or similar instruments, including sustainable fixed deposits. Unallocated proceeds will not affect the environmental commitments of the Green Finance Framework.

In the case of a full or partial disposal of an Eligible Green Project, the disposal proceeds will be reallocated to another Eligible Green Project to the extent required to ensure that the value of projects in the Green Finance Register (as defined below) is at least equal to the value of the Notes outstanding. If a project is no longer considered to meet the eligibility criteria set out in the Green Finance Framework, the Issuer will use its best efforts to substitute the project as soon as an appropriate substitution option has been identified, and in any event within 24 months. Equivalent amounts can also be used to refinance: (i) existing projects and expenditures, in accordance with the eligibility criteria set out in the Green Finance Framework, with a lookback period of up to 24 months prior to the Issue Date of the relevant Tranche; and (ii) any existing Notes (or other debt incurred under the Green Finance Framework), provided the underlying assets to which that debt relates are still included in the Green Finance Register.

The Issuer intends to exclude equivalent amounts from being applied towards any projects associated with: (i) landfill operations and any incineration of any unsorted waste assets including industrial and non-conventional waste (chemicals, nuclear, toxic waste); (ii) the acquisition, development, operation and maintenance of new and/or existing fossil fuel-based electricity generation capacity or heating systems (including, but not limited to, coal, oil or natural gas-powered assets) and fossil fuel related activities, including transportation of fossil fuel as well as underlying investments in research and development; (iii) nuclear power generation and related infrastructures, including distribution assets; (iv) heat or power facilities with life-cycle greenhouse gas emissions intensity above 100gCO2e/kWh; and (v) certain other projects on a case-by-case basis if any material issues exist that run counter to the Issuer's environmental, social and governance (**ESG**) strategy at a project level.

The Issuer maintains a register of Eligible Green Projects (the **Green Finance Register**) which contains the following minimum information:

- Tranche details: (i) net proceeds; (ii) currency; (iii) issue date; (iv) maturity date; (v) coupon; and (vi) ISIN number; and

- allocation of Tranche proceeds to Eligible Green Projects: (i) project category and sub-category; (ii) project description; (iii) project capacity; (iv) project location; (v) Issuer's ownership percentage; (vi) the portion of the equivalent amount allocated; and (vii) the amount of any unallocated equivalent amount.

The Issuer's Sustainability, Strategy and Investment Committee (the **SSIC**) is responsible for ensuring that the Issuer's overall investment process and guidelines remain fit for purpose and that investments are in line with the Issuer's strategy and shareholder-approved business plan. The SSIC also has overall responsibility for the Green Finance Register. Potential Eligible Green Projects are identified by the Issuer's ESG and Structured Finance teams. These projects are then recommended to the SSIC for inclusion in the Green Finance Register. The SSIC comprises senior executives from the Issuer's shareholders including the CEO of its largest shareholder, TAQA, who chairs the SSIC.

The Green Finance Framework is intended to be aligned with the Green Bond Principles published by the International Capital Markets Association from time to time, which as at the date of this Base Offering Circular are the Green Bond Principles 2021 (https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/) (the **GBP**). Moody's Investors Service has been appointed to assess and confirm the compliance of the Issuer's Green Finance Framework with the GBP and to issue a second-party opinion in respect thereof. This opinion has been published on the Issuer's website referred to above.

The Issuer intends to publish annually on its website referred to above an allocation report relating to equivalent amounts and (subject to the availability of suitable information and data) an impact report relating to equivalent amounts allocated to the financing and/or refinancing of Eligible Green Projects. Ernst & Young LLP will provide annual assurance on both the allocation report and the impact report.

None of the Green Finance Framework, the GBP, the reports referred to above or the contents of the Issuer's website are incorporated in and/or form part of this Base Offering Circular. See also "*Risk Factors—Factors which are material for the purpose of assessing the market risks associated with Notes under the Programme—Risks related to Notes generally— The use of proceeds of the Notes of any Tranche may not meet investor expectations or requirements or be suitable for an investor's investment criteria*".

SELECTED FINANCIAL INFORMATION

The following information has been extracted from, and should be read in conjunction with, and is qualified in its entirety by reference to, the Financial Statements and should also be read in conjunction with "Financial review". All financial information in this section as at 31 December in, and for, 2020 is restated information derived from the 2021 Financial Statements, see "Presentation of financial and other information".

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

The table below shows the Group's consolidated statement of financial position as at 31 December in each of 2022, 2021 and 2020. The consolidated statement of financial position as at 31 December 2020 (i) includes assets and liabilities attributable to the SRE business that was agreed to be sold during 2020 and are shown as assets held for sale and liabilities directly associated with assets held for sale as at 31 December 2021 and (ii) is restated as discussed in note 29 to the 2021 Financial Statements.

	As at 31 December		
	2022	**2021**	**2020**
		(*AED thousand*)	
ASSETS			
Non-current assets			
Property, plant and equipment	1,415,001	1,346,934	1,650,300
Right-of-use assets	279,131	301,809	327,080
Investment properties	—	—	2,569,836
Intangible assets and goodwill[(1)]	212,568	45,177	49,832
Investment in equity-accounted investees	3,691,838	1,134,759	877,149
Other non-current financial assets	21,961	243,272	259,820
Finance lease receivables	47,957	—	262,263
Loans to related parties	236,808	207,440	249,356
Derivative financial assets	403,212	46,036	—
Deferred tax assets	107,993	146,112	149,735
Contract assets[(2)]	297,061	278,099	51,801
	6,713,530	**3,749,638**	**6,447,172**
Current assets			
Finance lease receivables	4,244	—	54,779
Loan to related parties	293,268	245,536	189,388
Due from related parties	94,236	173,102	133,094
Trade and other receivables	1,069,794	411,460	529,896
Contract assets	27,211	1,927	0
Inventories	87	87	413,981[(3)]
Cash and cash equivalents	3,150,649	716,497	1,229,254
Assets held for sale	—	4,094,229[(4)]	—
	4,639,489	**5,642,838**	**2,550,392**
Total assets	**11,353,019**	**9,392,476**	**8,997,564**
EQUITY AND LIABILITIES			
Equity			
Share capital	8,000,000	8,000,000	8,000,000
Contributed equity loan	1,083,683	—	—
Shareholder's account	—	(1,680,060)	(1,680,060)
Reserves	452,436	(170,405)	(394,483)
Accumulated losses	(3,016,830)	(1,165,842)	(1,538,162)
	6,519,289	**4,983,693**	**4,387,295**

Non-controlling interest	(383)	—	—
Total equity	**6,518,906**	**4,983,693**	**4,387,295**
Non-current liabilities			
Bank borrowings	1,780,411	1,980,392	1,886,717
Lease liabilities	274,404	302,500	322,305
Derivative financial liability	—	—	70,193
Other non-current liabilities	176,869	112,885	950,379
Deferred tax liabilities	256,075	231,685	173,924
	2,487,759	**2,627,462**	**3,403,518**
Current liabilities			
Due to related parties	41,103	32,579	287,795
Bank borrowings	688,205	125,336	244,382
Lease liabilities	25,487	16,803	17,061
Trade and other payables	1,591,559	428,289	657,513
Liabilities directly associated with assets held for sale	—	1,178,314[4]	—
	2,346,354	**1,781,321**	**1,206,751**
Total liabilities	**4,834,113**	**4,408,783**	**4,610,269**
Total liabilities and equity	**11,353,019**	**9,392,476**	**8,997,564**

Notes:
(1) This line item was referred to as "Intangible assets" in the 2021 Financial Statements.
(2) This line item was referred to as "Trade and other receivables" in the 2021 Financial Statements.
(3) These inventories principally relate to the SRE business.
(4) See table below.

The table below shows a summary breakdown of the Group's assets held for sale and liabilities directly associated with those assets as at 31 December 2021.

	As at 31 December 2021
	(*AED thousand*)
Assets	
Property, plant and equipment	188,920
Investment properties	2,783,442
Finance lease receivables	392,836
Inventories	377,665
Trade and other receivables	226,977
Cash and cash equivalents	87,842
Due from related parties	27,130
Other assets[1]	9,417
Total assets	**4,094,229**
Liabilities	
Trade and other payables	461,583
Other liabilities[2]	716,731
Total liabilities	**1,178,314**

Notes:
(1) This line item is the sum of intangibles, investment in equity accounted investees and non-current trade receivables.
(2) This line item is the sum of due to related parties and trade and other payables.

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

The table below shows the Group's consolidated statement of profit or loss and other comprehensive income for each of 2022, 2021 and 2020. In the 2021 Financial Statements, "profit from operating activities" was shown as a separate line item. The presentation of the consolidated statement of other comprehensive income changed in 2022 to no longer show this line item. In the table below, the presentation for 2020 has been adjusted for consistency. The consolidated statement of profit or loss and other comprehensive income for 2020 has also been adjusted to show the SRE business as discontinued operations and is restated as discussed in note 29 to the 2021 Financial Statements.

	2022	2021	2020
		(*AED thousand*)	
Continuing operations			
Revenue from contracts with customer	621,393	716,514	373,920
Cost of sales	(285,593)	(471,864)	(204,516)
Gross profit	**335,800**	**244,650**	**169,404**
Income from government grants	57,568	30,052	55,253
Other income	450,392	261,311	525,473
Research and development expenses	(2,921)	(3,414)	(3,546)
Project expenses	(144,460)	(76,017)	(46,032)
General and administrative expenses	(393,544)	(283,765)	(242,236)
Change in fair value of financial assets carried at fair value through profit or loss	30,372	24,871	(11,972)
Share of results of equity-accounted investees, net	58,667	58,736	152
Gain on derivatives, net	155,984	16,099	1,437
(Provision for)/reversal of expected credit losses on trade and finance lease receivables	(883)	1,262	—
Reversal of/(provision for) expected credit losses on loans to related parties, net	38,524	13,950	(11,777)
Finance income	42,130	48,127	41,333
Finance expense	(120,478)	(106,109)	(69,507)
Profit before income tax from continuing operations	**507,151**	**229,753**	**407,982**
Income tax	(47,621)	(49,041)	(11,836)
Profit after income tax from continuing operations	**459,530**	**180,712**	**396,146**
Profit after income tax from discontinued operations	80,811	269,793	51,017
Profit for the year	**540,341**	**450,505**	**447,163**
Attributable to:			
Equity holders of the parent[(1)]	540,724	—	—
Non-controlling interest[(1)]	(383)	—	—
	540,341	**450,505**	**447,163**
Other comprehensive income/(loss)			
Items that are or may be reclassified subsequently to profit or loss			
Share of movement in hedging reserves of equity-accounted investees	460,773	119,913	(98,087)
Recycle of hedging reserve on disposal	—	—	58,853
Other movement in hedging reserve, net	151,532	82,504	(44,480)
	612,305	**202,417**	**(83,714)**
Foreign currency translation differences for foreign operations	(43,536)	(23,389)	(46,671)
Other comprehensive income/(loss) for the year, net of income tax	**568,769**	**179,028**	**(130,385)**

Total comprehensive income for the year	**1,109,110**	**629,533**	**316,778**

Note:

(1) There was no minority interest until 2022. Accordingly, profit for the year attributable to equity holders of the parent and profit for the year attributable to non-controlling interest were each shown as zero for 2021 in the 2022 Financial Statements because all the profit for the year is attributable to equity holders of the parent, and neither profit for the year attributable to equity holders of the parent nor profit for the year attributable to non-controlling interest appears in the 2021 Financial Statements for the same reason.

CONSOLIDATED STATEMENT OF CASH FLOWS

The table below summarises the Group's consolidated statement of cash flows for each of 2022, 2021 and 2020.

	2022	2021	2020
		(*AED thousand*)	
Operating cash flows before changes in working capital	429,391	268,256	240,737
Working capital adjustments	284,422	(631,428)	(1,287,650)
Income tax and employees' end of service benefit paid	(12,407)	(4,305)	(3,264)
Net cash generated from/(used in) operating activities	701,406	(367,477)[(1)]	(1,050,177)
Net cash (used in)/generated from investing activities	(408,310)	57,170[(2)]	624,837
Net cash generated from/(used in) financing activities	2,172,388	(105,869)	1,234,867
Net increase/(decrease) in cash and cash equivalents	2,465,484	(416,176)	809,527
Cash and cash equivalents at 1 January	716,497	1,229,254	413,554
Effect of movements in exchange rates on cash held	(31,332)	(8,738)	6,173
Cash and cash equivalents at 31 December	3,150,649	804,340	1,229,254
Discontinued operations cash and bank balance at 31 December	—	(87,843)	—
Cash and cash equivalents at 31 December[(3)]	3,150,649	716,497	1,229,254

Notes:

(1) This figure is derived from the comparative information for 2021 in the 2022 Financial Statements. In the 2021 Financial Statements, this figure was negative AED 242,238 thousand, reflecting the fact that in the 2022 Financial Statements an amount of AED 125,239 thousand was included as dividend income whereas the same amount had been included in investing activities under dividends received from equity accounted investees in the 2021 Financial Statements. For the same reason the same difference featured in the operating cash flows before changes in working capital.

(2) This figure is derived from the comparative information for 2021 in the 2022 Financial Statements. In the 2021 Financial Statements, this figure was negative AED 68,069 thousand, reflecting the fact that in the 2021 Financial Statements an amount of AED 125,239 thousand had been included in investing activities under dividends received from equity accounted investees whereas in the 2022 Financial Statements the same amount was included in operating activities as dividend income.

(3) Excludes cash held in fixed deposits shown as restricted cash for 2022 in Note 13 to the 2022 Financial Statements.

SELECTED RATIOS

The table below shows selected ratios for the Group as at, and for the years ended, 31 December in each of 2022, 2021 and 2020, save where otherwise stated.

	As at/years ended 31 December		
	2022	**2021**	**2020**
	(*AED million, except where otherwise stated*)		
Masdar operating cash inflow[(1)]	1,030	562	1,970
Masdar operating expenditure[(2)]	(538)	(360)	(288)
Masdar operating cash flow (MOCF)	**492**	**202**	**1,682**
Recourse debt as at 1 January[(3)]	843	871	255
Unrestricted cash as at 1 January[(4)]	(380)	(967)	(261)
Net debt[(5)]	**463**	**(96)**	**(6)**
Net debt/MOCF[(6)]	0.94x	—	—

Notes:

(1) Masdar operating cash inflow comprises the sum of (i) material distributions from its project companies (including dividends and principal and interest paid on shareholder loans made by Masdar); (ii) technical and other management fees and development revenues including from special projects; (iii) cash generated by monetisation activities including project refinancings and/or disposals of Masdar's investments; (iv) net proceeds of financial risk management activities including pre-hedging; and (v) net proceeds of carbon credit sales. See "*Financial review—Liquidity and capital resources—Cash*" for a table showing the breakdown of these amounts.

(2) Masdar operating expenditure comprises the sum of (i) general and administrative expenses and (ii) project expenses, each as stated in the consolidated statement of comprehensive income.

(3) Recourse debt comprises the total amount of recourse corporate borrowing as at 1 January in the relevant year and its composition is shown in the table below.

(4) Unrestricted cash represents the total amount of cash that is available for Masdar to use as at 1 January in the relevant year

(5) Net debt comprises the difference between recourse debt and discretionary cash.

(6) Net debt/MOCF ratio is not shown where net debt is negative.

Recourse debt

The table below shows the breakdown of the debt outstanding with recourse to Masdar as at 31 December in each of 2022, 2021 and 2020.

	As at 31 December		
	2022	**2021**	**2020**
		(*AED million*)[(1)]	
Corporate guarantee -Dumat Al Jandal equity bridge loan (**EBL**)	255	255	255
Corporate guarantee -Nur Navoi EBL	312	312	312
Corporate guarantee -Al Dhafra EBL	171	171	171
Corporate guarantee -Jeddah South EBL	104	104	—
U.S. dollar revolving credit facility	37	—	132
AED revolving credit facility	55	—	—
Bridge-to-bond facilities	533	—	—
Total	**1,467**	**843**	**871**

Note:

(1) The figures in this table have been rounded to the nearest million, with AED 500,000 being rounded up and AED 499,000 being rounded down.

FINANCIAL REVIEW

The following discussion and analysis should be read in conjunction with the information set out in "Presentation of financial and other information", "Selected financial information" and the Financial Statements.

The discussion of the Group's financial condition and results of operations is based upon the Financial Statements which have been prepared in accordance with IFRS. This discussion contains forward-looking statements that involve risks and uncertainties. The Group's actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed below and elsewhere in this Base Offering Circular, particularly under the headings "Cautionary statement regarding forward-looking statements" and "Risk factors".

See "Presentation of financial and other information" for a discussion of the source of the numbers presented in this section and certain other relevant information.

OVERVIEW

The Group is a global leader in renewable energy and is on track to become one of the largest companies of its kind in the world. Over the past 17 years, it has pioneered commercially viable solutions in clean energy and clean technology in the UAE and internationally. The Group is a leading developer and operator of utility-scale renewable energy projects with a presence in over 40 countries and has a generation portfolio that covers solar, wind, waste-to-energy, geothermal and energy storage, and other interests in operations and management, efficiency and electric mobility projects.

As at 31 March 2023, the Group had ownership interests (including through its interest in the Infinity platform described below) in 34 operational utility-scale renewable energy generation projects, comprising 13 solar power projects with a gross generation capacity of 2,093 MW, 20 wind power projects with a gross generation capacity of 3,590 MW and, through its 15 per cent. investment in Pertamina Geothermal, geothermal-focused projects with a gross generation capacity of 1,877 MW. These projects are located in the United States, Egypt, South Africa, the UK, Jordan, Indonesia, Poland, the UAE, Montenegro, Senegal, Saudi Arabia, Serbia and Uzbekistan.

In addition to its operational projects, the Group had ownership interests in 13 utility-scale renewable energy generation projects under construction as at 31 March 2023, comprising seven solar power projects with a gross generation capacity of 3,157 MW, three energy storage projects with a gross generation capacity of 75 MW, one wind power project with a gross generation capacity of 500 MW and two waste-to-energy power projects with a gross generation capacity of 59 MW. These projects are located in Uzbekistan, the UK, the UAE, Australia, Azerbaijan, Indonesia and Saudi Arabia.

The Group also has ownership interests in four committed utility-scale solar power generation projects (which are projects which have reached their final investment decision (**FID**) and are progressing towards financial close) with a gross generation capacity of 1,350 MW. These projects are located in Uzbekistan, Armenia, Morocco and Saudi Arabia.

The total gross generation capacity of the Group's operational, under construction and committed utility-scale renewable energy generation projects was 12,701 MW and its proportionate share of the capacity of those projects was 5,441 MW as at 31 March 2023.

The Group has a 49 per cent. shareholding in the Infinity platform, which comprises a portfolio of four operational utility-scale solar power projects located in Egypt, with a total generation capacity of 203 MW. In addition, the Infinity platform acquired 100 per cent. of Lekela Power B.V. (**Lekela**) in March 2023, which is a developer, owner and operator of renewable assets, with an operating presence in South Africa, Senegal and Egypt. Lekela comprises a portfolio of seven operational utility-scale wind projects with a total installed capacity of 1,035 MW, of which the Group's proportionate share is 336 MW. The acquisition of Lekela makes

Infinity one of the largest renewable energy companies in Africa. The Infinity platform plans to develop, install and operate power generation projects with a gross capacity of between 2,000 MW and 4,000 MW by 2025 with the goal of becoming the leading renewable energy developer, investor and operator in Africa in terms of gross capacity. The Infinity platform's strategy is to grow exponentially in key markets to help develop and realise the significant potential for solar, wind and other renewable energy projects across Africa.

The Group has a pipeline of opportunities at various stages of development with a gross generation capacity exceeding 20 GW (including the planned Infinity platform projects mentioned above), where exclusive development rights have been secured and/or development expenditure has been allocated and the opportunities are moving towards a FID. These opportunities are located in the UAE (including projects that fall under Abu Dhabi's renewable independent power producer programme), Angola, Australia, Azerbaijan, Egypt, Ethiopia, Georgia, Greece, Indonesia, Iraq, Kazakhstan, Kyrgizstan, Poland, Serbia, Spain, Tanzania, Turkmenistan, Uganda, the UK and Zambia.

The Group's strategy is to grow to 100 GW of gross capacity through a combination of acquisitions and greenfield developments by 2030, by making majority control investments in large capacity and bankable markets, without compromising on returns.

PRINCIPAL FACTORS AFFECTING RESULTS OF OPERATIONS

The following is a discussion of the principal factors that have affected, or are expected to affect, the Group's results of operations.

Structure of the Group

The Group's operating projects as at 31 December 2022 are managed by project companies which are either joint ventures or associates and are therefore accounted for as equity-accounted investees, except for the Nur Navoi project company which is consolidated in the Financial Statements and the London Array project (which is a consolidated unincorporated joint operation). Therefore, the Group's revenue, cost of sales and gross profit (amongst other line items which impact profitability) in each of 2022, 2021 and 2020 were driven predominantly by its two consolidated operating projects. The Group has additional consolidated project companies which are managing projects under construction, as discussed under "*—Factors affecting the Group's revenue*" below.

The table below identifies the Group's operational and under construction utility-scale projects as at 31 December 2022, together with details of the size of each project, the Group's effective ownership in the project company, and how the project company is consolidated and the accounting methodology used by it.

Project	**Project size (*MW*)**	**Group's effective shareholding in the project company (*%*)**	**Project company consolidation method**	**Accounting methodology**
Operational projects				
Baynouna............................	200	70	Equity accounted	IFRS
Coyote [(1)]............................	243	50	Equity accounted	US GAAP
Las Majadas[(1)].....................	273	50	Equity accounted	US GAAP
Desert Harvest 1[(2)]..............	114	50	Equity accounted	US GAAP
Desert Harvest 2[(2)]..............	100	50	Equity accounted	US GAAP
Maverick[(2)]..........................	173	50	Equity accounted	US GAAP
Maverick 4[(2)].......................	136	50	Equity accounted	US GAAP
DEWA III...........................	800	24	Equity accounted	IFRS
Dudgeon	402	35	Equity accounted	UK GAAP
Dumat Al Jandal.................	400	34.3	Equity accounted	IFRS
Gallery Grajewo	14	50	Equity accounted	IFRS
Gallery Mlawa....................	37	50	Equity accounted	IFRS
Hywind...............................	30	25	Equity accounted	UK GAAP
Krnovo Wind......................	72	49	Equity accounted	IFRS
London Array	630	20	Consolidated	UK GAAP
Nur Navoi	100	100	Consolidated	IFRIC 12
Rocksprings........................	149	50	Equity accounted	US GAAP
Shams	100	51	Equity accounted	IFRS
Sterling Wind	30	50	Equity accounted	US GAAP
Tafila Wind	117	50	Equity accounted	IFRS
Tesla Wind	158	60	Equity accounted	IFRS
Infinity platform[(3)]..............	212	49	Equity accounted	IFRS
Under construction projects				
Al Dhafrah..........................	1,580	20	Equity accounted	IFRS
Arlington projects[(4)]............	75	90	Full consolidation	IFRS
Cirata	150	49	Equity accounted	IFRS
East Rockingham................	29	36.67	Equity accounted	IFRS
Garadagh	230	100	Consolidated	IFRIC 12
Jeddah South	300	35.7	Equity accounted	IFRS
Jizzakh...............................	220	100	Consolidated	IFRIC 12
Samarkand..........................	220	100	Consolidated	IFRIC 12
Sharjah WTE	30	50	Equity accounted	IFRS
Sherabad.............................	457	100	Consolidated	IFRIC 12
Zarafshan............................	500	100	Consolidated	IFRIC 12

Notes:

(1) These projects are held through the same equity-accounted investee.

(2) These projects are held through the same equity-accounted investee.

(3) The equity-accounted investee in respect of the Infinity platform held varying interests in four utility-scale solar PV projects as at 31 December 2022, so Masdar's share in each Infinity platform project does not always equal 49 per cent. Since 31 December 2022, the equity-accounted investee in respect of the Infinity platform has acquired varying interests in a further seven wind projects with a total capacity of 1,035 MW, see "*Description of the Group—The Group's projects—Committed projects—The Infinity platform*".

(4) Comprises three battery storage projects under construction held through the same subsidiary.

(5) Since 31 December 2022, the Group has acquired (i) a 50 per cent. shareholding in the 128 MW Big Beau Solar project which is equity accounted and (ii) a 15 per cent. shareholding in Pertamina Geothermal Energy Tbk which is being equity

accounted as the contractual arrangements provide the Group with significant influence and the Group has also secured the Guzar project in Uzbekistan (a 300 MW solar PV plus 75 MW battery storage) and is the first-ranked bidder on the DEWA VI project in the UAE (a 1,800 MW solar PV project), see "—*Recent developments* " below. In addition, the Sharjah WTE project became operational on 1 May 2023.

Factors affecting the Group's revenue

The Group generates revenue principally from the sale of the electricity generated by its two consolidated projects engaged in renewable energy generation, the London Array project and the Nur Navoi project. This revenue is classified as (i) renewable power generation revenue and (ii) concession revenue.

The Group, through its subsidiary Masdar UK Energy Limited, has an offtake agreement with E.ON UK plc in respect of its 20 per cent. share of the electrical output of the London Array project. Under the PPA, which expires in November 2025, E.ON UK plc purchases the electricity produced at wholesale market prices subject to a floor. In addition, the project is accredited under the UK's renewable obligation certificate (**ROC**) regime, and accordingly the project company also generates revenue from the sale of two ROCs per MWh of production for the first 20 years of operation, until March 2033. ROC revenue is stable and inflation-linked. As a result, the Group's renewable power generation revenue is primarily driven by (i) changes in market prices for electricity in the United Kingdom and (ii) changes in the volume of electricity produced by the London Array project.

The Group's service concession revenue (and its related service concession cost of sales) increased significantly in 2021 compared to 2020. This reflected the fact that the Group's revenue and cost of sales recognition in relation to the construction services performed under this contract is based on the stage of completion of the work performed. Construction on the Nur Navoi project commenced in late 2020 and completed in December 2021. The Group's service concession revenue (and its related service concession cost of sales) decreased significantly in 2022 following the completion of construction, with the concession revenue recorded principally representing the contractually agreed fixed capacity charge in respect of the Nur Navoi project.

The Group has five consolidated project companies which are currently managing the Garadagh project, the Jizzakh project, the Samarkand project, the Sherabad project and the Zarafshan project, each of which is currently under construction. Each of these projects is being accounted for as a service concession and, as a result, the Group anticipates that it will record significant amounts of concession revenue (and related service concession cost of sales) in 2023 and 2024. Each project is currently expected to achieve its COD in 2025.

Changes in the Group's other income

The Group's other income comprises gains made on disposals of equity-accounted investees, dividend income from a joint venture and income from a range of other sources.

In 2022, the Group's other income was impacted by the receipt of dividends amounting to AED 85 million from the Dudgeon project company which were recognised in other income as the amount of the dividend was in excess of the carrying amount of the Dudgeon project company. In addition, in 2022 the Group recorded interest rate pre-hedge gains of AED 317 million from projects in Azerbaijan, Uzbekistan and the United States which were included in its other income.

In 2021, the Group's other income was impacted by (i) the receipt of dividends amounting to AED 125 million from the Dudgeon project company which were recognised in other income as the amount of the dividend was in excess of the carrying amount of the Dudgeon project company and (ii) the transfer of its shareholding in a subsidiary in exchange for a 49 per cent. shareholding in the Infinity platform which generated a gain of AED 28 million which was recorded in other income.

In 2020, the Group's other income was impacted by (i) the sale of its 40 per cent. shareholding in a Spanish equity-accounted investee for cash consideration which generated a gain on the sale of AED 312 million which was recorded in other income and (ii) the receipt of dividends amounting to AED 168 million from the

Dudgeon project company which were recognised in other income as the amount of the dividend was in excess of the carrying amount of the Dudgeon project company.

Interest rate pre-hedging

On a number of greenfield projects, the Group is exposed to interest rate risk between the signing of the PPA for the project, when the tariff is fixed, and financial close under the project's non-recourse financing. This period of exposure is usually around three to nine months. Examples of such projects include the Nur Navoi project, the Zarafshan project, the Jizzakh project, the Samarkand project and the Sherabad project. On other projects, such as the DEWA III project, the Jeddah South project and the Dumat Al Jandal project, the offtaker bears this risk between bid submission and financial close by recalibrating the tariff for the prevailing interest rate at financial close.

On those projects where there is an exposure to interest rates prior to financial close, Masdar usually enters into interest rate swaps when the project has a high probability of progressing, usually defined as the date of signing of the PPA. The notional profile of the interest rate swaps entered into matches the long-term nature of the underlying non-recourse project financing to be raised, with the inclusion of a mandatory break set at the expected date of financial close of the relevant project. When financial close on a project is achieved, the interest rate pre-hedge for that project is closed out, and based on the valuation of the pre-hedge at that time Masdar will either make a payment to (if rates have fallen), or receive a payment from (if rates have risen), the bank counterparty to the pre-hedge.

Masdar introduced a programme of pre-hedging in 2021, placing interest rate swaps using the International Swaps and Derivatives Association's contract forms with a panel of banks on a competitive basis and, as at 31 December 2022, had received payments totalling AED 327 million due to a rising interest rate environment over this period.

The table below shows the valuations of Masdar's pre-hedges as at 31 March 2023, 31 December 2022 and 31 December 2021, with a breakdown showing the valuation of each trade by project.

Project	**31 March 2023**	**31 December 2022**	**31 December 2021**
		(*AED million*)	
Garadagh	28	30	2
Jizzakh	13	21	—
Samarkand	14	21	—
Sherabad	52	74	—
Bukhara	(3)	—	—
Zarafshan	—	—	1
Other[1]	—	—	15
Pre-hedge valuation	**104**	**146**	**18**

Note:

(1) This pre-hedge relates to the temporarily on-hold back leverage financing in respect of the Group's acquired US assets, including the Blue Palm projects.

Changes in the Group's equity-accounted investees

As at 31 March 2023, the Group had 32 operational and five under construction projects which are equity accounted, although in some cases a single equity-accounted investee may hold interests in more than one project (for example, the Blue Palm projects and the Infinity platform). The Group records its proportionate share of the aggregate profit or loss generated by its equity-accounted investees under the line item "Share of results of equity-accounted investees, net" in its consolidated income statement.

A variety of factors affect the profitability of a renewable energy project company. These include (i) the amount of revenue it generates, which in turn depends on its tariff arrangement which, in most cases, is structured such that revenue is expected to exceed the project company's costs by a margin intended to allow for debt service and to provide the owners of the plant with an agreed rate of return on their investment; (ii) the expenses it incurs which are not covered by its tariff arrangement; and (iii) its financing arrangements. The Group's equity-accounted project companies are paid for the energy they actually produce which means that fluctuations in production also impact profitability. Further, differences in accounting treatment affect profitability, such as whether a project company adopts service concession accounting (IFRIC 12) or fixed asset accounting.

The table below summarises the development of the Group's operational utility-scale projects undertaken by equity-accounted investees as at 31 December in each of 2022, 2021, 2020 and 2019. This excludes projects that have since been divested and the 11 utility-scale projects held by the Infinity platform.

As at 31 December	**No. of operational projects**	**Gross contracted power capacity (*MW*)**	**Net contracted power capacity (*MW*)**
2019................................	9	1,688	603
2020................................	15	3,211	1,197
2021................................	19	3,955	1,619
2022................................	21	4,406	1,840

In 2019, the Group acquired a 17.3 per cent. interest in Hero Future Energies Global Limited (**HFE**), which was later increased to a 20.65 per cent. interest. HFE operated a portfolio of renewable electricity generation projects in India and made significant losses in each year since it was acquired and the Group's proportionate share of these losses significantly offset its proportionate share of the profits recorded by all of its other material equity-accounted investees in the 2021 Financial Statements. On 21 September 2022, the Group entered into an agreement to dispose of its investment in HFE, which closed on 10 March 2023.

RECENT DEVELOPMENTS

Acquisition of a stake in PT Pertamina Geothermal Energy Tbk (PGE)

On 23 February 2023, the Group acquired a 15 per cent. shareholding in PGE by participating in its initial public offering, through Masdar Indonesia Solar Holdings RSC Limited. The majority of PGE's shares remain held by PT Pertamina Power Indonesia (69.01 per cent.), 5.99 per cent. is held by PT Pertamina Pedeve Indonesia and the remaining 10 per cent. is publicly listed. PGE is a green energy company that currently contributes 82 per cent. of installed geothermal energy capacity in Indonesia.

Acquisition of Lekela by IPH

On 20 March 2023, Infinity Power Holdings B.V. (**IPH**), the Group's joint venture with Infinity Energy, completed the acquisition of the entire shareholding of Lekela Power B.V. (**Lekela**), an Africa-based wind power platform which currently operates projects with a total installed capacity of 1,035 MW in South Africa, Egypt and Senegal. The transaction makes IPH one of Africa's largest renewables-only power generation companies.

Acquisition of Big Beau

On 31 March 2023, the Group completed the acquisition of its 50 per cent. shareholding in the Big Beau project, located in California.

Award of Guzar

On 24 May 2023, following a competitive tender process, the Ministry of Energy of Uzbekistan awarded the Group the development of a 300 MW solar PV project with 75 MW of battery storage in the Guzar district, Kashkadarya region, Uzbekistan. This award marks the sixth project which the Group has secured in Uzbekistan and the project is currently targeted to reach its COD in 2025.

First-ranked bidder on DEWA VI

On 7 June 2023, Dubai Electricity and Water Company PJSC (**DEWA**) announced the Group as having submitted the lowest tariff to build the sixth phase of Mohammed Bin Rashid Al Maktoum Solar Park, in Dubai. The 1,800 MW solar PV project will be built in three phases. The Group has previously developed the DEWA III project, which became fully operational in April 2020.

Termination of agreement to purchase a shareholding in the Milligan wind project

The Group entered into an agreement with an EDF group company to acquire a 50 per cent. shareholding in the 300 MW Milligan wind project in the United States in July 2020. The Group terminated its commitment to complete this purchase on 27 June 2023 as certain conditions precedent had not been achieved by the agreed long-stop date.

SIGNIFICANT ACCOUNTING POLICIES

The Financial Statements have been prepared in accordance with IFRS. For a discussion of the significant accounting policies applied by the Group generally, see note 3 to the 2022 Financial Statements.

CRITICAL ACCOUNTING JUDGEMENTS AND ESTIMATES

In preparing the Group's financial statements, management is required to make certain estimates, judgements and assumptions. These affect the reported amounts of the Group's assets and liabilities, including disclosure of contingent assets and liabilities, at the date of the financial statements as well as the reported amounts of its revenues and expenses during the periods presented. Management bases its estimates and assumptions on historical experience and other factors that it believes to be reasonable at the time the estimates and assumptions are made and evaluates the estimates and assumptions on an ongoing basis. However, future events and their effects cannot be predicted with certainty and the determination of appropriate estimates and assumptions requires the use of judgement. Actual outcomes may differ from any estimates or assumptions made and such differences may be material to the financial statements. For a discussion of the most significant accounting estimates, judgements and assumptions made in the preparation of the Group's financial statements, see note 4 to the 2022 Financial Statements, which identifies the following critical judgements and key sources of estimation uncertainty:

Critical judgements in applying accounting policies

- ***Satisfaction of performance obligations***: the Group is required to assess each of its contracts with customers to determine whether performance obligations are satisfied over time or at a point in time in order to determine the appropriate method for recognising revenue.

- ***Classification of investees as joint ventures***: joint control is assessed on the basis that decisions about relevant activities are taken jointly with other venturers.

- ***Common control of the shareholder***: acquisitions of entities/businesses which are under the common control of the shareholder are recorded at fair value at the date of transfer. In the case of disposals of entities/businesses, a gain or loss (including reclassification of amounts previously recognised in other comprehensive income) to the extent of fair value is recognised in profit or loss. Any transfer of a business under common control without consideration is debited to equity at carrying amounts of net assets.

- ***Project expenses***: project expenses comprise expenses incurred on screening, feasibility studies and pre-development phases of various projects undertaken by the Group. Judgement is required in determining when these should be capitalised or whether an impairment should be recorded against the relevant project.

- ***Business combinations***: the Group undertakes investments in renewable energy related projects at various stages of development. Judgement is applied to determine whether the investments, particularly for projects at an early stage, amount to business combinations in accordance with IFRS 3: *Business combinations*, or purchases of particular assets or other entitlements.

Key sources of estimation uncertainty

- ***Impairment and non-collectability of financial assets***: IFRS 9 requires management to make significant estimates in the calculation of expected credit losses.

- ***Impairment losses on investment in equity-accounted investees***: The Group determines whether it is necessary to recognise any additional impairment loss on the carrying value of the investment in equity accounted investees by comparing its estimated recoverable amount based on the higher of value in use or fair value less costs to sell with its carrying amount.

- ***Useful lives of property, plant and equipment and intangible assets***: Management estimates the residual values and estimated useful lives of property, plant and equipment and intangible assets at the end of each annual reporting period.

- ***Decommissioning liability***: The provision for decommissioning costs is based on estimates of current legal and constructive requirements, technology, price levels and expected plans for remediation.

- ***Deferred taxes***: The Group operates in a number of tax jurisdictions and is, therefore, required to estimate its income taxes (including its deferred taxes) in each of these tax jurisdictions in preparing its consolidated financial statements.

- ***Leases – Estimating the incremental borrowing rate***: The Group cannot readily determine the interest rate implicit in its leases and therefore estimates its incremental borrowing rate to measure lease liabilities.

RESULTS OF OPERATIONS

Revenue

The table below shows the breakdown of the Group's total revenue by classification and by geographic source in each of 2022, 2021 and 2020.

	2022	**2021**	**2020**
		(*AED thousand*)	
Classification			
Renewable power generation	482,592	415,401	325,124
Concession revenue	73,141	288,299	26,756
of which:			
Revenue from construction	60,799	286,764	26,756
Revenue from operation	12,342	1,535	—
Special projects..	58,090	8,608	9,219
Development fee income	3,466	2,658	12,821
Revenue from contracts with customers	**617,289**	**714,966**	**373,920**
Finance lease and rental income	4,104	1,548	—
Total revenue	**621,393**	**716,514**	**373,920**
Geographic source of revenue from contracts with customers			
United Kingdom	481,797	415,401	324,877

UAE	60,395	9,718	19,049
Uzbekistan	74,292	289,847	26,756
Saudi Arabia	805	—	3,238
Revenue from contracts with customers	**617,289**	**714,966**	**373,920**
Other revenue	4,104	1,548	—
Total revenue	**621,393**	**716,514**	**373,920**

The Group's total revenue amounted to AED 621 million in 2022 compared to AED 717 million in 2021 and AED 374 million in 2020. The Group's revenue is principally derived from its two consolidated entities that operate completed projects.

2022 and 2021 compared

The decrease of AED 95 million, or 13.3 per cent., in total revenue in 2022 compared to 2021 principally reflected a decrease of AED 215 million, or 74.6 per cent., in concession revenue. This decrease was offset by an increase of AED 67 million, or 16.2 per cent., in revenue from renewable power generation and an increase of AED 49 million, or 574.8 per cent., in special projects revenue.

The increase in revenue from renewable power generation principally reflected higher merchant power prices in the UK in 2022 compared to 2021. The increase in special projects revenue, which comprises project management income for the oversight of government-funded projects both domestic and international, was principally due to the successful delivery of Abu Dhabi government-sponsored projects in the UAE and overseas.

The decrease in concession revenue principally reflected a decrease in IFRIC 12 concession revenue recognised after the Nur Navoi project concluded construction during 2021, partly offset by IFRIC 12 concession revenue on other projects which commenced construction in 2022. The Group did not record any concession revenue from the construction aspect of the Nur Navoi project in 2022 and the concession revenue from operation recognised reflected the contractually agreed fixed capacity charge in respect of the Nur Navoi project in both 2021 (for the period during which the project was operational) and 2022.

2021 and 2020 compared

The increase of AED 343 million, or 91.6 per cent., in total revenue in 2021 compared to 2020 principally reflected an increase of AED 262 million, or 977.5 per cent., in concession revenue and an increase of AED 90 million, or 27.8 per cent., in revenue from renewable power generation.

The increase in concession revenue principally reflected the fact that the Group's wholly owned Nur Navoi project in Uzbekistan undertook construction works which incurred significant capital expenditures during 2021. The Nur Navoi project constitutes a service concession for accounting purposes and the significant increase in revenue in 2021 reflects the significant progress made on construction in that year compared to the limited progress in 2020, due to the fact that construction on the project started at the end of 2020.

The increase in renewable power generation revenue principally reflected higher volumes of generated power due to more favourable wind conditions in 2021.

Cost of sales

The Group's cost of sales principally comprises its service concession cost of sales (related to the Nur Navoi project), depreciation (principally relating to the two plants operated by consolidated entities), operation and maintenance charges in relation to the plants operated by its consolidated entities and depreciation charged on its right of use assets, being London Array project infrastructure that the project company constructed, sold and leased back in accordance with applicable UK regulations.

The table below shows the breakdown of the Group's cost of sales in each of 2022, 2021 and 2020.

	2022	2021	2020
		(*AED thousand*)	
Service concession cost of sales.............	64,178	282,651	26,491
of which:			
Construction......................................	*59,607*	*281,141*	*26,491*
Operation...	*4,571*	*1,510*	—
Depreciation	84,108	89,051	87,092
Operation and maintenance	75,787	71,066	57,656
Right of use asset depreciation................	19,952	22,272	20,703
Others	41,568	6,824	12,574
Total cost of sales..................................	**285,593**	**471,864**	**204,516**

The Group's total cost of sales amounted to AED 286 million in 2022 compared to AED 472 million in 2021 and AED 205 million in 2020.

2022 and 2021 compared

The decrease of AED 186 million, or 39.5 per cent., in total cost of sales in 2022 compared to 2021 principally reflected:

- a decrease of AED 218 million, or 77.3 per cent., in service concession cost of sales, which principally reflected the decrease in concession revenue recorded on the Nur Navoi project in Uzbekistan; and
- an increase of AED 35 million, or 509.1 per cent., in others, which principally comprises the cost of sales of Source Trading Company Limited (**STC**), see "*Description of the Group—Other operations—Source Trading Company Limited*".

2021 and 2020 compared

The increase of AED 267 million, or 130.7 per cent., in total cost of sales in 2021 compared to 2020 principally reflected:

- an increase of AED 256 million, or 967.0 per cent., in service concession cost of sales, reflecting the cost of the construction progress made on the Nur Navoi project; and
- an increase of AED 13 million, or 23.3 per cent., in operation and maintenance costs on the London Array project.

Gross profit

Reflecting the above factors, the Group's gross profit was AED 336 million in 2022 compared to AED 245 million in 2021 and AED 169 million in 2020, an increase of AED 91 million, or 37.3 per cent., in 2022 compared to 2021 and an increase of AED 75 million, or 44.4 per cent., in 2021 compared to 2020.

The Group's gross profit margins (calculated as its gross profit divided by its revenue) were 54.0 per cent. in 2022, 34.1 per cent. in 2021 and 45.3 per cent. in 2020. The increase in gross profit margin in 2022 is the result of a higher proportion of total revenue coming from the London Array project where revenue growth has not been matched by a corresponding increase in cost of sales, resulting in significantly higher margins. The decrease in 2021 compared to 2020 reflected the increase in service concession revenue and of cost of sales in relation to the Nur Navoi project, the gross profit margin in relation to which was 2.48 per cent. in 2021 when the project was largely under construction. The gross profit margin for the Nur Navoi project was 22.36 per cent. for 2022 after it became operational.

Other income

The Group's other income (including its net income from government grants) amounted to AED 450 million in 2022, AED 264 million in 2021 and AED 545 million in 2020.

The increase of AED 187 million, or 70.7 per cent., in the Group's other income (including its net income from government grants) in 2022 compared to 2021, principally reflected pre-hedge gains related to projects in Azerbaijan, Uzbekistan and the United States, partly offset by lower dividend income from the Dudgeon project company and the absence of any gain on disposal of investment in a jointly controlled entity in 2022, see "*—Principal factors affecting results of operations—Changes in the Group's other income*" above.

The decrease of AED 282 million, or 51.6 per cent., in the Group's other income (including its net income from government grants) in 2021 compared to 2020 principally reflected a significant gain on the disposal of a subsidiary in 2020 and lower dividends received from the Dudgeon project company in 2021, offset by higher miscellaneous other income in 2021, see "*—Principal factors affecting results of operations—Changes in the Group's other income*" above.

Project expenses

The Group's project expenses amounted to AED 144 million in 2022, AED 76 million in 2021 and AED 46 million in 2020.

The increase of AED 68 million, or 90.0 per cent., in project expenses in 2022 compared to 2021 principally reflected an increase in the number of projects under development.

The increase of AED 30 million, or 65.1 per cent., in project expenses in 2021 compared to 2020 also reflected an increase in development activities.

General and administrative expenses

The Group's general and administrative expenses amounted to AED 394 million in 2022, AED 284 million in 2021 and AED 242 million in 2020.

The increase of AED 110 million, or 38.7 per cent., in general and administrative expenses in 2022 compared to 2021 was driven by an increase of AED 58 million in other general and administrative expenses, which principally reflected non-recurring expenses incurred in connection with the change in the Group's ownership and office and travel expenses related to the Group’s operations in the United States, Azerbaijan, Uzbekistan, Indonesia and Morocco, and an increase of AED 52 million, or 214.0 per cent., in advertising, publicity and events, which was due to both reduced marketing during the COVID-19 pandemic and non-recurring expenses incurred in connection with the change in the Group's ownership.

The increase of AED 42 million, or 17.1 per cent., in general and administrative expenses in 2021 compared to 2020 was driven by higher staff costs due to a higher number of employees to cater to growing business needs, including expansion into new countries, and an increase in bonus provision and staff allowances.

Change in fair value of financial assets carried at fair value through profit or loss (FVTPL)

In 2022, the Group recorded an AED 30 million gain in fair value of FVTPL financial assets which reflected an AED 122 million share of profit from its unquoted investment in the Zouk Charging Infrastructure Investment Fund (the **Skyfall Fund**) which invests in electric vehicle charging infrastructure, offset by negative changes in fair value of HFE (AED 68 million) and the Skyfall Fund (AED 23 million). The Skyfall Fund is fair valued on the basis of its net asset value.

In 2021, the Group recorded an AED 25 million gain in fair value of FVTPL financial assets which comprised the gains recorded on irredeemable compulsory convertible preference shares (CCPS) in HFE (the sale of which was agreed in 2022 and completed in 2023) and the Skyfall Fund. The CCPS were fair valued on the basis of discounted cash flows.

In 2020, the Group recorded an AED 12 million loss in fair value of FVTPL financial assets with both the CCPS and the Skyfall Fund recording losses in fair value.

Share of results of equity accounted investees, net

The Group's share of the results of its equity-accounted investees, net amounted to AED 59 million in 2022, AED 59 million in 2021 and AED 0.2 million in 2020.

The Group's equity-accounted investees principally comprise its project companies (or companies that own interests in its project companies) that are not accounted as subsidiaries. Of these equity-accounted investees, 12 were considered to be material in the 2022 Financial Statements and four were considered to be material in the 2021 Financial Statements, with materiality being based solely on the carrying amount of the relevant investee. In addition, the Group's 20.65 per cent. investment in HFE was equity accounted as an associate in each of 2021 and 2020 and HFE was considered to be a material equity-accounted investee in the 2021 Financial Statements.

In the 2022 Financial Statements, the Group's share of the profit or loss of its equity-accounted investees amounted to a share of profit of AED 59 million in each of 2022 and 2021. In the 2021 Financial Statements, the Group's share of the profit or loss of its equity-accounted investees (including HFE) amounted to a share of profit of AED 59 million in 2021 and AED 0.2 million in 2020 (reflecting the fact that its share of the profit equaled its share of the loss in its equity-accounted investees in that year). In 2021, the Group's share of the loss of HFE was AED 60 million compared to AED 59 million in 2020, an increase in share of loss of AED 1 million, or 1.7 per cent.

Movements in the profit or loss of the Group's equity-accounted project companies that operate solar or wind power plants typically reflect variations in weather that impact their production of electricity from period to period as well as various other significant factors including accounting policies and the stage in a project's lifecycle (for example, under construction or operational).

Gain on derivatives, net

The Group's gain on derivatives, net amounted to AED 156 million in 2022, AED 16 million in 2021 and AED 1 million in 2020. The Group's project companies enter into interest rate swaps to hedge their borrowings, and Masdar enters into short-term interest rate swaps (pre-hedges) to mitigate interest rate exposure between the time that the PPA is signed and the financial close of non-recourse financing in relation to certain greenfield projects. The changes in gain on derivatives, net reflect movements in interest rates over each period which impact the fair valuation of the derivatives entered into by consolidated project companies and the pre-hedge derivatives entered into by Masdar.

Reversal of/(provision for) expected credit losses on loans to related parties, net

The Group's reversal of or provision for expected credit losses on loans to related parties, net amounted to a reversal of AED 39 million in 2022, a reversal of AED 14 million in 2021 and a provision of AED 12 million in 2020. These loans are made to equity-accounted project companies.

In 2022, the Group recorded a provision of AED 9 million and a reversal of provision of AED 48 million in respect of its loans to related parties.

In 2021, the Group recorded a provision of AED 3 million and a reversal of provision of AED 16 million.

In 2020, the Group recorded a provision of AED 21 million and a reversal of provision of AED 9 million.

The net reversals in each year reflect improvements in credit profiles and scheduled repayments received from certain related parties.

Finance income and finance expense

The Group's finance income comprises the interest income received on loans made by it and on receivables (including bank balances). The Group's interest expense comprises its interest expense on borrowings, bank charges, interest on lease liabilities and its net foreign exchange gain or loss.

The table below shows the breakdown of the Group's finance income and finance expense in each of 2022, 2021 and 2020.

	2022	**2021**	**2020**
		(*AED thousand*)	
Finance income			
Interest income on loans and receivables (including bank balances)........................	42,130	48,127	41,333
Finance expense			
Interest expense on borrowings...............	(58,021)	(52,601)	(45,251)
Bank charges	(8,783)	(9,485)	(28,783)
Interest on lease liabilities	(13,327)	(14,468)	(13,836)
Net foreign exchange (loss)/gain.............	(40,347)	(29,555)	18,363
	(120,478)	**(106,109)**	**(69,507)**
Net finance expense	**(78,348)**	**(57,982)**	**(28,174)**

The Group's net finance expense was AED 78 million in 2022, AED 58 million in 2021 and AED 28 million in 2020.

2022 and 2021 compared

The AED 20 million, or 35.1 per cent., increase in net finance expense in 2022 compared to 2021 principally reflected:

- an AED 11 million, or 36.5 per cent., increase in net foreign exchange loss, which was principally driven by movements in the dirham/pound sterling exchange rate;

- an AED 6 million, or 12.5 per cent., decrease in finance income, which was due to less interest earned on fixed term deposit balances; and

- an AED 5 million, or 10.3 per cent., increase in interest expense on borrowings, which was driven by higher levels of borrowing.

2021 and 2020 compared

The AED 30 million increase in net finance expense in 2021 compared to 2020 principally reflected:

- a negative change of AED 48 million in net foreign exchange loss or gain from a net gain of AED 18 million in 2020 to a net loss of AED 30 million in 2021, which was principally driven by movements in the pound sterling/dirham exchange rate in respect of the London Array project; and

- an AED 7 million, or 16.2 per cent., increase in interest expense on borrowings, which was principally driven by an increase in consolidated borrowings in respect of the Nur Navoi project.

These factors were offset to an extent by AED 19 million, or 67.0 per cent., lower bank charges and similar costs in 2021 compared to 2020 due to the expensing of deferred financing costs and unwinding of a decommissioning liability discount, both in respect of the London Array project and an AED 7 million, or 16.4 per cent., increase in finance income which principally reflected interest on a related party loan in relation to the London Array project in order to facilitate distributions following the refinancing in 2020.

Profit before income tax

Reflecting the above factors, the Group's profit before income tax was AED 507 million in 2022 compared to AED 230 million in 2021 and AED 408 million in 2020, an increase of AED 277 million, or 120.7 per cent., in 2022 compared to 2021 and a decrease of AED 178 million, or 43.7 per cent., in 2021 compared to 2020.

Income tax

The Group's income tax charge was AED 48 million in 2022, AED 49 million in 2021 and AED 12 million in 2020. Masdar operates in the UAE and is not subject to corporate income tax. The Group's net income tax expense in each of 2022, 2021 and 2020 arises as a result of income taxes associated with consolidated entities that operate in the United Kingdom and Uzbekistan. The Group's deferred tax assets and liabilities are derived from its UK subsidiary. Deferred tax assets primarily relate to taxable losses and the deferred tax liability relates to the capital allowances.

Profit after income tax from continuing operations

Reflecting the above factors, the Group's profit after income tax from continuing operations was AED 460 million in 2022 compared to AED 181 million in 2021 and AED 396 million in 2020, an increase of AED 279 million, or 154.3 per cent., in 2022 compared to 2021 and a decrease of AED 215 million, or 54.4 per cent., in 2021 compared to 2020.

Profit after income tax from discontinued operations

The Group's profit after income tax from discontinued operations was AED 81 million in 2022 compared to AED 270 million in 2021 and AED 51 million in 2020.

In each of 2022, 2021 and 2020, the Group's sustainable real estate business was classified as discontinued operations. See note 29.1.1 to the 2021 Financial Statements for further information on the results of operations, cash flows and assets and liabilities of this business.

In addition, in 2020 Masdar City Cooling Company Limited was classified as a discontinued operation following an agreement to sell this business in 2019. The sale was completed in November 2020. See note 29.1.2 to the 2021 Financial Statements for further information on the results of operations and assets and liabilities of this business.

Profit for the year

Reflecting the above factors and in particular the disposal of the sustainable real estate business in December 2022, the Group's profit for the year was AED 540 million in 2022 compared to AED 451 million in 2021 and AED 447 million in 2020, an increase of AED 90 million, or 19.9 per cent., in 2022 compared to 2021 and an increase of AED 3 million, or 0.7 per cent., in 2021 compared to 2020.

Other comprehensive income / (loss) for the year, net of income tax

The Group's other comprehensive income or loss for the year, net of income tax, relates to movements in its and its equity-accounted investees hedging reserves and foreign currency translation differences for foreign operations. These factors together generated other comprehensive income of AED 569 million in 2022, other comprehensive income of AED 179 million in 2021 and other comprehensive loss of AED 130 million in 2020.

Total comprehensive income for the year

Reflecting the above factors, the Group's total comprehensive income for the year was AED 1,109 million in 2022 compared to AED 630 million in 2021 and AED 317 million in 2020, an increase of AED 480 million, or 76.2 per cent., in 2022 compared to 2021 and an increase of AED 313 million, or 98.7 per cent., in 2021 compared to 2020.

LIQUIDITY AND CAPITAL RESOURCES

Overview

The Group's principal cash requirements are to meet its operating and development expenditures, to fund its investments in new projects through consolidated entities and equity-accounted investees and to pay principal and interest on its corporate borrowings.

The Group funds these cash requirements principally through capital contributions from its shareholders, cash distributions from its subsidiary, joint operation and equity-accounted investees, capital recycling, refinancing proceeds, finance income received, and the proceeds of corporate borrowings. Funding to meet the capital expenditures of the Group's new greenfield projects is sourced from non-recourse debt financing and equity infusions in the form of share capital and shareholder loans.

The Group has incurred indebtedness both at Masdar and at its consolidated subsidiary, joint operation and equity-accounted investees for the funding of a significant portion of its project companies' capital expenditures, with the latter principally in the form of non-recourse project financing. The Group's non-recourse project financing indebtedness typically contains covenants, including debt service cover ratio covenants, which prevent or restrict distributions to Masdar unless the terms of the covenants are met. As a result, the availability of Group operating cash flow to Masdar may be limited.

Cash

As at 31 December 2022, the Group had total cash of AED 3,168 million. This comprised a combination of cash for special projects, cash held for the Zayed Sustainability Prize and IRENA, cash held for the payment of consideration under acquisition agreements (including the Big Beau project and to proportionately fund its share of the acquisition of Lekela by IPH), cash at consolidated project companies earmarked to meet capital expenditure commitments, and unrestricted cash either in accounts held by Masdar or at its various consolidated holding companies.

The table below shows a breakdown of the Group's total cash, including cash which is shown as restricted cash in note 13 to each of the Financial Statements, as at 31 December in each of 2022, 2021 and 2020.

	As at 31 December		
	2022	**2021**	**2020**
		(*AED million*)	
Restricted cash			
Special projects	414	316	177
Zayed Sustainability Prize	73	29	44
IRENA[(1)]	37	34	30
Held for acquisitions	1,646	—	—
Source Trading Company Limited[(2)]	475	22	6
Masdar City[(3)]	—	51	31
Other restricted cash	281	49	143

Unrestricted cash			
Unrestricted cash held in Group current accounts and short-term fixed deposits[(4)]......	242	380	967
Total..	**3,168**	**880**	**1,397**

Notes:

(1) Masdar manages funds on behalf of the UAE Liason Office to IRENA.

(2) A wholly-owned subsidiary which may, from time to time, purchase equipment for projects and then on-sell it to the contractors, with the balance as at 31 December 2022 representing cash held for the purchase of wind turbines for the Al Dhafrah Wind programme, see "*Description of the Group—Other operations—Al Dhafrah Wind programme*".

(3) Masdar City represents the sustainable real estate business that was split out of Masdar before shares in Masdar were sold to ADNOC and TAQA.

(4) As at 31 December 2021, Masdar held two fixed deposits of AED 35 million and AED 18 million with maturity dates in March 2022 and May 2022, respectively. These fixed deposits are used to generate additional interest income and are generally only placed for cash in relation to special projects and the Zayed Sustainability Prize. No such deposits were outstanding at either 31 December 2020 or 31 December 2022.

In 2022, the Group's consolidated and equity-accounted project companies, and Masdar itself, generated material cash inflows of AED 1,030 million, comprising distributions (including dividends, shareholder loan interest and repayments, development fees, recovery of development costs, and proceeds from strategic divestments, project refinancings and the sale of carbon credits) in pounds sterling, euro and U.S. dollars.

The table below shows a breakdown of material cash inflows (being those in excess of U.S.1 million) below for each of 2022, 2021, and 2020.

	2022	**2021**	**2020**
		(*AED million*)	
UK offshore wind projects	279	181	1,215
Zouk Charging Infrastructure Fund[(1)].....	107	38	47
Tesla Wind project company..................	110	28	-
Shams project company..........................	52	69	13
Tafila Wind project company.................	5	16	9
DEWA III project company	61	—	—
Jeddah South project company...............	—	18	—
Nur Navoi project company	—	72	—
Cirata project company...........................	—	29	—
Dumat al Jandal project company	—	—	11
Al Dhafra project company	—	—	19
Torresol exit proceeds	—	—	599
Source Trading Company	—	30	—
Pre-hedge close-out proceeds.................	317	10	—
Carbon credit sales	19	52	15
Special projects fee income	80	19	42
Total..	**1,030**	**562**	**1,970**

Note:

(1) See "*Description of the Group—Other operations—Skyfall*".

In 2022, Masdar returned AED 387 million to MIC when it was still the sole shareholder. In 2021, Masdar returned AED 352 million to MIC and, in 2020, Masdar returned AED 1,042 million to MIC. The significant return in 2020 was principally funded with the proceeds of the refinancing of the London Array project.

From 1 January 2020 to 31 December 2022, Masdar made cash calls to its shareholder in order to fund the consideration payable under acquisition agreements in respect of (i) Lekela (AED 1,084 million) and Arlington (AED 78 million). Masdar did not make any other cash calls to its shareholder during this period.

In the three months to 31 March 2023, Masdar received cash call proceeds from its shareholders for the acquisition of its stake in Pertamina Goethermal in the amount of AED 1,359 million and an additional AED 239 million to complete the acquisition of Lekela.

Liquidity management

The Group's approach to managing its liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to its reputation. The Group aims to ensure that it has sufficient cash and liquid assets on demand to meet its expected operational expenses.

The Group generally employs a flexible funding strategy which allows it to deploy capital in a timely and efficient manner depending on certain variables, including, among other things, the investment being financed, the state of the financing markets, relevant macroeconomic conditions and the execution timing of other transactions being undertaken by the Group.

Masdar had two committed revolving credit facilities for general corporate and liquidity purposes, of U.S.$100 million and AED 92.5 million as at 31 December 2022, of which U.S.$10 million and AED 55 million, respectively, was drawn at that date. In addition, non-recourse project finance lending across the Group's portfolio was approximately U.S.$5.1 billion in total as at 31 December 2022, of which the Group's share was approximately U.S.$2.2 billion.

In mid-2022, Masdar entered into a U.S.$250 million credit facility on a 'Bridge-to-Bond' basis with a tenor of 12 months extendible for two periods of six months each, the proceeds of which are being used to meet its equity commitments on recently closed greenfield projects. As at 31 December 2022, U.S.$145 million of this facility had been utilised. The establishment of the Programme is intended to provide an additional source of diversification in relation to the Group's financing and the proceeds of issuances will be used to repay any bridge-to-bond facilities then outstanding.

Masdar anticipates that the Group's investments and overheads will continue to be met by a combination of cash distributions generated from the portfolio, capital contributions from its shareholders (if required), additional non-recourse project finance debt and, where appropriate, capital recycling through select and targeted asset monetisations.

Subject to the approval of Masdar's Board, Masdar may, from time to time, pay dividends to its shareholders.

Cash flow

The table below summarises the Group's consolidated statement of cash flows for each of 2022, 2021 and 2020.

	2022	**2021**	**2020**
		(*AED thousand*)	
Operating cash flows before changes in working capital	429,391	268,256	240,737
Working capital adjustments	284,422	(631,428)	(1,287,650)
Income tax and employees' end of service benefit paid	(12,407)	(4,305)	(3,264)
Net cash generated from/(used in) operating activities	701,406	**(367,477)**[(1)]	**(1,050,177)**
Net cash (used in)/generated from investing activities	(408,310)	57,170[(2)]	624,837
Net cash generated from/(used in) financing activities	2,172,388	(105,869)	1,234,867
Net increase/(decrease) in cash and cash equivalents	**2,465,484**	**(416,176)**	**809,527**
Cash and cash equivalents at 1 January	716,497	1,229,254	413,554
Effect of movement in exchange rates on cash held	(31,332)	(8,738)	6,173
Cash and cash equivalents at 31 December	3,150,649	804,340	1,229,254

Discontinued operations cash and bank balance at 31 December	—	(87,843)	—
Cash and cash equivalents at 31 December(3)	3,150,649	716,497	1,229,254

Notes:

(1) This figure is derived from the comparative information for 2021 in the 2022 Financial Statements. In the 2021 Financial Statements, this figure was negative AED 242,238 thousand, reflecting the fact that in the 2022 Financial Statements an amount of AED 125,239 thousand was included as dividend income whereas the same amount had been included in investing activities under dividends received from equity accounted investees in the 2021 Financial Statements. For the same reason the same difference featured in the operating cash flows before changes in working capital.

(2) This figure is derived from the comparative information for 2021 in the 2022 Financial Statements. In the 2021 Financial Statements, this figure was negative AED 68,069 thousand, reflecting the fact that in the 2021 Financial Statements an amount of AED 125,239 thousand had been included in investing activities under dividends received from equity accounted investees whereas in the 2022 Financial Statements the same amount was included in operating activities as dividend income.

(3) Excludes cash shown as restricted cash for 2022 in Note 13 to the 2022 Financial Statements.

Cash flows from operating activities before changes in working capital

The Group's operating cash flow before changes in working capital was AED 429 million in 2022, AED 268 million in 2021 and AED 241 million in 2020. This comprises the Group's profit before tax for the year (including its profit before tax from discontinued operations) adjusted to reflect non-cash items. The principal adjustments in each year under review relate to gain on disposal of investment in a joint venture (in 2020), gain on derivatives, net (in 2022), depreciation, finance expense, dividend income, changes in fair value of investment properties related to the SRE business (in 2021 and 2020) and share of results of equity-accounted investees, net (in 2022 and 2021).

The AED 161 million, or 60.1 per cent., increase in 2022 compared to 2021 principally reflected (i) an increase in profit before tax of AED 88 million in 2022 compared to 2021, (ii) a negative adjustment of AED 107 million relating to a gain in fair value of investment properties in 2021 compared to no similar adjustment in 2022 (as the SRE business was split out in 2022), (iii) the adjustment for finance expense in 2022 was AED 58 million higher than in 2021, (iv) in 2022, the negative adjustment for dividend income was AED 40 million lower than in 2021 (using the number for 2021 in the 2022 Financial Statements), and (v) there was a negative adjustment of AED 28 million in 2021 related to a gain on disposal of a subsidiary compared to no similar adjustment in 2021. These non-cash adjustments which had a positive effect in 2022 compared to 2021 were offset principally by a negative adjustment for gain on derivatives, net that was AED 140 million higher in 2022 compared to 2021.

The AED 28 million, or 11.4 per cent., increase in 2021 compared to 2020 principally reflected (i) an increase in profit before tax of AED 41 million in 2021 compared to 2020, (ii) a negative adjustment of AED 312 million in 2020 relating to a gain on disposal of an investment in a joint venture compared to no adjustment in 2021 and (iii) a negative adjustment for dividend income that was AED 42 million lower in 2021 (using the number for 2021 in the 2022 Financial Statements) than in 2020. These non-cash adjustments which had a positive effect in 2021 compared to 2020 were offset principally by (i) a negative adjustment of AED 107 million in relation to change in the fair value of investment properties in 2021 compared to a positive adjustment of AED 84 million in 2020 (which, in each case, related to the SRE business), and (ii) a negative adjustment of AED 59 million in relation to share of results of equity accounted investees, net in 2021 compared to a positive adjustment of AED 3 million in 2020.

Changes in working capital

Changes in working capital relate to trade and other receivables, trade and other payables, finance lease receivables (in 2021 and 2020), changes in amounts due to / from related parties and inventories (in 2020). The Group's net changes in working capital were AED 284 million positive in 2022, AED 631 million negative in 2021 and AED 1,288 million negative in 2020.

The AED 916 million movement from a negative change in 2021 to a positive change in 2022 principally reflects:

- an AED positive movement of AED 981 million in trade and other payables, principally as a result of significant grant funds received from the Abu Dhabi government for the development of special projects including Al Dhafrah Wind;

- an AED 263 million positive movement in relation to amounts due to related parties, reflecting amounts due to the Group from Masdar's sole shareholder prior to its sale of shares to TAQA and ADNOC which were settled at the closing of that sale; and

- an AED 146 million positive movement in relation to amounts due from related parties.

These positive adjustments were partly offset by an AED 525 million negative movement in trade and other receivables, principally in relation to the payment of advances for consolidated projects under construction, including the Zarafshan project, plus receivables recorded for development fees and proceeds from the sale of HFE.

The AED 656 million reduction in negative change from 2020 to 2021 principally reflects:

- an AED 533 million positive movement in relation to amounts due to related parties, reflecting the refinancing of Masdar Energy UK Limited (the vehicle through which the Group participates in the London Array project) as part of which £230 million was ultimately transferred to the Group's shareholder;

- a positive movement of AED 135 million in relation to change in inventories;

- a positive movement of AED 123 million in relation to amounts due from related parties reflecting the settlement of a related party balance in 2021; and

- a positive movement of AED 103 million in relation to trade and other payables reflecting a net increase in project activity in 2021.

These positive adjustments were partly offset by a negative movement of AED 204 million in relation to trade and other receivables, which principally reflected service concession receivables in relation to Nur Navoi.

In 2022, the Group's net cash generated from operating activities after changes in working capital and adjustments for income tax paid and employees' end of service benefits was AED 701 million compared to net cash used of AED 367 million in 2021 and AED 1,050 million in 2020.

Cash flows from investing activities

The Group's net cash used in investing activities in 2022 was AED 408 million compared to net cash generated from investing activities in 2021 of AED 57 million and net cash generated from investing activities in 2020 of AED 625 million.

In 2022, the principal investing cash outflows were AED 314 million relating to the purchase of property, plant and equipment (mostly capital work in progress in relation to the consolidated new projects under construction), AED 311 million relating to investment in equity-accounted investments (principally the contribution of new equity to existing equity-accounted investees, including in relation to the Infinity platform, the East Rockingham project, Dudgeon Extension Limited and the DEWA III project, the latter being the repayment of an equity bridge loan originally provided by Mubadala), AED 44 million in relation to the acquisition of a subsidiary net of cash acquired and AED 33 million in loans given to related parties net of loans repaid by related parties. The principal investing cash inflow in 2022 was AED 185 million in dividends received from equity-accounted investees (principally the Shams, Tafila Wind, Dudgeon and Hywind project companies).

In 2021, the principal investing cash outflows were AED 294 million relating to investments in equity-accounted investees (principally the contribution of new equity to existing equity-accounted investees, including in relation to the Infinity platform, Dudgeon Extension Limited and the East Rockingham project), and AED 59 million in additions to investment property and inventory (which related to the SRE business). The principal investing cash inflows in 2021 were AED 115 million from the disposal of a subsidiary as part of the Group's investment in the Infinity platform, AED 214 million (using the figure in the 2022 Financial Statements) in dividends received from equity-accounted investees (principally the Shams, Tafila Wind, Dudgeon and Hywind project companies) and AED 24 million in repayment of related party loans net of new loans given to related parties.

In 2020, the principal investing cash inflows were AED 677 million in proceeds from the disposal of the Group's interest in Torresol, a joint venture, and AED 201 million in dividends received from equity-accounted investees (principally the Shams, Tafila Wind, Dudgeon and Hywind project companies). The principal investing cash outflows in 2020 were AED 154 million relating to investments in equity-accounted investees (principally the contribution of new equity to existing equity-accounted investees, including Dudgeon Extension Limited and in relation to the two Gallery projects in Poland and the Infinity platform), AED 101 million in investment in FVTPL financial assets (being CCPS and units in a fund) and AED 81 million in loans given to related parties net of loans repaid by related parties.

Cash flows from financing activities

The Group's net cash generated from financing activities in 2022 was AED 2,172 million compared to net cash used in financing activities in 2021 of AED 106 million and net cash generated from financing activities in 2020 of AED 1,235 million.

The Group's financing activities comprise borrowing and the repayment of borrowings, the payment of finance expense, the repayment of lease liabilities and, in 2022, movements in funds from shareholders.

In 2022, the Group (i) borrowed a net AED 547 million (which principally reflected its bridge-to-bond facility), (ii) received an equity loan of AED 1,084 million from its shareholders, (iii) recorded an AED 689 million inflow from its shareholder which reflected the transactions associated with the reorganisation of the Group prior to the investment by TAQA and ADNOC, (iv) paid finance expense of AED 119 million and (v) repaid lease liabilities of AED 28 million.

In 2021, the Group made a net repayment of borrowings in the amount of AED 12 million, repaid lease liabilities in the amount of AED 32 million and paid finance expense of AED 62 million.

In 2020, the Group's consolidated borrowings increased by a net AED 1,339 million which principally related to the refinancing of its London Array project, and the Group repaid lease liabilities in the amount of AED 29 million and paid finance expense of AED 75 million.

Borrowings

As at 31 December 2022, the Group's borrowings amounted to AED 2,469 million and comprised three loans borrowed at subsidiary level (London Array project financing, Nur Navoi project financing, and Nur Navoi equity bridge loan), plus two revolving credit facilities and a bridge-to-bond facility for which Masdar is the borrower. As at the same date, Masdar had unutilised amounts under its committed facilities amounting to AED 754 million.

The table below shows the Group's borrowings as at 31 December in each of 2022, 2021 and 2020.

	As at 31 December		
	2022	**2021**	**2020**
		(*AED thousand*)	
Bank loan 1	1,444,150	1,735,356	1,865,308

Bank loan 2	532,658	—	—
Revolving credit facility 1	36,734	—	132,128
Revolving credit facility 2	55,000	—	—
Bank loan 3	218,074	218,074	133,663
Bank loan 4	182,000	152,297	—
	2,468,616	**2,105,727**	**2,131,099**

Bank loan 1

Bank loan 1 relates to the Group's stake in the London Array project, which was refinanced in 2020. The borrower is Masdar Energy UK Limited, which holds the Group's 20 per cent. shareholding in the project company, and the loan comprises a £395 million floating rate secured loan with a maturity date of December 2032. Security is provided over all or substantially all of the borrower's assets and over shares in and shareholder loans made to the borrower and the amount of Masdar Energy UK Limited's net equity pledged as at 31 December 2022 was AED 451 million. The covenants control (among other things) incurring financial indebtedness, granting loans, giving guarantees and granting security, acquiring and disposing of assets, entering into material agreements (and in particular related party agreements) and amending or terminating material project documents. The loan is repayable in 26 semi-annual instalments starting in March 2020. The loan bears interest at an underlying reference rate (SONIA) plus a margin which increases in 2025.

The borrower has entered into an interest rate swap for the full value and tenure of the loan. The swap is designated as a hedge and has been determined as effective and so changes in fair value amounting to AED 136 million, AED 72 million and AED 37 million were recognised in other comprehensive income in each of 2022, 2021 and 2020, respectively. The fair value of the swap recognised amounted to an asset of AED 238 million as at 31 December 2022, an asset of AED 42 million as at 31 December 2021 and a liability of AED 70 million as at 31 December 2020 and the notional principal amount of the swap was AED 1,470 million as at 31 December 2022.

Bank loan 2

Masdar has entered into a short-term bridge-to-bond term loan facility. The facility is unsecured, bears a rate of interest equal to an underlying reference rate (SOFR) plus a margin and has an initial maturity date of 8 August 2023, with options to extend by up to 12 months to 8 August 2024. The facility is repayable from the net proceeds of any debt capital markets issuance prior to its maturity date. U.S.$105 million was unutilised as at 31 December 2022.

Revolving credit facility 1

This revolving credit facility is in the amount of U.S.$100 million and has 13 lenders with Masdar as the borrower. The facility is unsecured, bears a rate of interest equal to an underlying reference rate (SOFR) plus a margin plus a credit adjustment spread (**CAS**) which varies based on the term of each drawing, and has an expiration date of 9 December 2026. U.S.$90 million was unutilised as at 31 December 2022.

Revolving credit facility 2

This revolving credit facility is in the amount of AED 92.5 million and has one lender with Masdar as the borrower. The facility is unsecured, bears a rate of interest equal to an underlying reference rate (EIBOR) plus a margin, and has an expiration date of 9 December 2026. AED 37.5 million was unutilised as at 31 December 2022.

Bank loan 3

Bank loan 3 comprises a U.S.$59 million equity bridge loan facility from the European Bank for Reconstruction and Development (**EBRD**) obtained in 2020 for the Nur Navoi project. The facility is unsecured, bears a rate of interest equal to an underlying reference rate (LIBOR) plus a margin, is fully repayable in a single instalment on 9 December 2026.

The borrower has entered into an interest rate swap for the full value and tenure of the loan. The swap is designated as a hedge and has been determined as effective and so changes in fair value amounting to AED 27 million and AED 3 million were recognised in other comprehensive income in each of 2022 and 2021, respectively. The fair value of the swap recognised amounted to an asset of AED 30 million as at 31 December 2022 and an asset of AED 3 million as at 31 December 2021 and the notional principal amount of the swap was AED 220 million as at 31 December 2022.

Both the loan and the swap are supported by a corporate guarantee from Masdar.

Bank loan 4

In 2021, the Nur Navoi project company drew U.S.$41 million under U.S.$53 million senior, non-recourse debt facilities. These facilities are repayable in semi-annual instalments from June 2022 to December 2040 and comprise (i) floating rate loans totalling U.S.$44.5 million with a rate of interest of LIBOR plus a margin and (ii) a fixed rate loan of U.S.$8 million.

The lenders are the Asian Development Bank (**ADB**) and the International Financial Corporation (**IFC**). There is a comprehensive security package at the Nur Navoi project company level and share pledges have also been provided over the shares in the Nur Navoi project company and the entity through which Masdar holds almost all of its shareholding in the Nur Navoi project company. The covenants control (among other things) incurring financial indebtedness, granting loans, acquiring and disposing of assets, entering into material contracts and amending or assigning/transferring material project documents.

The borrower has entered into an interest rate swap for the full value and tenure of the loan. The swap is designated as a hedge and has been determined as effective and so changes in fair value amounting to AED 29 million and AED 3 million were recognised in other comprehensive income in 2022 and 2021, respectively. The fair value of the swap recognised amounted to an asset of AED 32 million as at 31 December 2022 and an asset of AED 3 million as at 31 December 2021 and the notional principal amount of the swap was AED 128 million as at 31 December 2022.

Additional undrawn loans as at 31 December 2022

In 2022, the Zarafshan project company, a wholly-owned subsidiary, secured U.S.$277 million (AED 1,016 million) senior, non-recourse debt facilities from the ADB, the EBRD, the IFC, Japan International Cooperation Agency (**JICA**) and two commercial banks. The facilities are repayable in semi-annual instalments from March 2026 to August 2042. As at 31 December 2022 the facilities were undrawn.

The borrower has entered into an interest rate swap for the full value and tenure of the loan. The swap is designated as a hedge and has been determined as effective and so changes in fair value amounting to AED 43 million were recognised in other comprehensive income in 2022. The fair value of the swap recognised amounted to an asset of AED 43 million as at 31 December 2022 and the notional principal amount of the swap was AED nil.

In 2022, the Garadagh project company, a wholly-owned subsidiary, secured U.S.$108 million (AED 398 million) senior debt facilities from the ADB, the EBRD, the JICA and Abu Dhabi Fund for Development. The facilities are repayable in semi-annual instalments from August 2024 to July 2042. As at 31 December 2022 the facilities were undrawn.

The borrower has entered into an interest rate swap for the full value and tenure of the loan. The swap is designated as a hedge and has been determined as effective and so changes in fair value amounting to AED 0 million were recognised in other comprehensive income in 2022. The fair value of the swap recognised amounted to an asset of AED 0.4 million as at 31 December 2022 and the notional principal amount of the swap was AED nil.

The Group's total undrawn amount under committed financing facilities was AED 2,521 million as at 31 December 2022.

Maturity profile of the Group's borrowings

The table below shows the consolidated agreed-upon instalment schedule to the Group's outstanding borrowings as at 31 December 2022.

	As at 31 December 2022	
	(*AED thousand*)	(*per cent.*)
Within one year	810,335	29.5
Between 1 and 2 years	166,954	6.1
Between 2 and 5 years	764,870	27.9
More than 5 years	1,002,960	36.5
	2,745,119[(1)]	**100.0**

Note:

(1) This amount differs from the total borrowing figure as at 31 December 2022 stated in the table above because this table is based on full utilisation of all available facilities (with the exception of the undrawn facilities for the Zarafshan and Garadagh projects) whereas the table above shows only the drawn amounts as at 31 December 2022.

The majority of the Group's operational and under construction projects are operated by joint ventures which are equity accounted by the Group. As a result, the borrowings entered into by these entities are not consolidated by the Group.

Commitments and contingencies

Commitments

As at 31 December 2022, the Group had capital commitments of AED 926 million, together with a commitment to invest AED 114 million in FVTPL financial assets, an AED 37 million share in the commitments of its equity-accounted investees and an AED 2 million share in the commitments of its joint operations. These commitments reflect amounts which the Group is legally committed to spend, with all of the expenditure expected to be incurred in the year ending 31 December 2023.

As at 31 December 2022, the Group also had operating commitments amounting to AED 12 million repayable within one year.

Contingencies

As at 31 December 2022, the Group has issued corporate guarantees which benefit lenders in respect of U.S.$-denominated equity bridge loan facilities amounting to AED 531 million for the purposes of funding its equity commitments on the Dumat Al Jandal, Al Dhafrah and Jeddah South projects. In addition, the Group has issued a corporate guarantee for the benefit of the lender in respect of an equity bridge loan to its Nur Navoi project for the amount of AED 312 million The Group has also issued corporate guarantees amounting to AED 2,315 million in respect of various projects as at 31 December 2022, which includes guarantees of certain subsidiaries' obligations to make payments under sale and purchase agreements in the context of acquisitions to be made by the Group.

In addition, as at 31 December 2022, the Group has procured bank guarantees and letters of credit under a number of uncommitted trade finance facilities amounting to AED 1,204 million for various projects. These are typically bid bonds and performance bonds which step down or fall away over time as and when certain project development milestones are reached, but also include instruments of a more permanent nature including (i) standby letters of credit in lieu of cash-funded reserve accounts held by consolidated and equity-accounted project companies and (ii) bank guarantees to various beneficiaries which can be liquidated due to performance failures by project companies (for example, the failure of a project company to suitably decommission a plant at the end of its useful life).

RELATED PARTY TRANSACTIONS

Masdar's principal related parties are the Abu Dhabi government and its departments and entities owned by it, Masdar's associated companies, joint ventures, shareholders, directors and key management, management entities engaged by Masdar, and entities controlled, jointly controlled or significantly influenced by any of these parties.

The Group's related parties balances include loans to related parties (principally equity-accounted project companies), amounts due from related parties (including equity-accounted project companies), amounts due to related parties (principally Masdar's direct and indirect shareholders), its cash and bank balances with banks controlled by the Abu Dhabi government and project advances.

In 2022, Masdar paid AED 39 million in salaries and other benefits to its key management personnel.

Further information on the Group's related party transactions in 2022, 2021 and 2020 is set out in note 12 to each of the Financial Statements.

DISCLOSURES ABOUT FINANCIAL INSTRUMENTS

Masdar's Board of Directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The Board of Directors has established a risk management committee, which is responsible for developing and monitoring the Group's risk management policies and reports regularly to the Board of Directors.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls and to monitor risks and adherence to limits. These policies and the Group's risk management systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to maintain a disciplined and constructive control environment in which all employees understand their roles and obligations.

The audit committee established by the Board of Directors oversees how management monitors compliance with the Group's risk management policies and procedures, and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. This committee is assisted in its oversight role by Masdar's internal audit department, which undertakes both regular and ad hoc reviews of risk management controls and procedures and reports the results to the audit committee.

The Group's financial instruments comprise the following assets and liabilities:

- financial assets not carried at fair value which amounted to AED 4,575 million as at 31 December 2022; and

- financial liabilities not carried at fair value which amounted to AED 3,324 million as at 31 December 2022.

Currency risk

Currency risk is the risk that the Group is exposed to currency fluctuations on its transactions that are denominated in a currency other than the respective functional currencies of Group entities. Whilst the Group has significant exposure to the US dollar, management does not believe that there is significant exposure to movements in the rate of exchange between the dirham and the U.S. dollar as this rate has been pegged since 1980. See, however, "*Risk factors—Factors that may affect the Issuer's ability to fulfil its obligations under Notes issued under the Programme—The operations of the Group could be adversely affected by currency movements and could further be impacted by changes in existing and new exchange rate controls and/or restrictions on transfer to foreign investors of proceeds from their investment*". In addition, management does not believe that the Group has a significant exposure to any other currency risk.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's variable rate borrowings.

If interest rates had been 100 basis points higher or lower and all other variables were held constant, the Group's profit for 2022 would have decreased or increased respectively by AED 7 million reflecting the impact on the Group's variable rate instruments and its other comprehensive income net of tax would have decreased or increased respectively by AED 18 million reflecting the impact on its interest rate swaps in respect of its total bank borrowings of AED 2,469 million. For floating rate liabilities, the analysis assumes the amount of the liability outstanding at 31 December 2022 was outstanding for the whole year. A 100 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents the Group's assessment of the reasonably possible change in interest rates.

The Group designates its interest rate swaps as cash flow hedging instruments under a fair value hedge accounting model. As a result, a change in interest rates is booked in other comprehensive income and does not affect profit or loss.

Credit risk

Credit risk is the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. Credit risk arises principally from the Group's trade and other receivables and cash and bank balances, but is also present in due from related parties, loans to related parties and finance lease receivables.

The Group's policy is to deal only with creditworthy counterparties. The Group attempts to control credit risk by monitoring credit exposures and continually assessing the creditworthiness of third parties. Balances with banks are assessed to have low credit risk of default since these banks are highly regulated by the central banks in the country of operation. As at 31 December 2022, 99.1 per cent. of the balances were held with banks which had a long-term issuer default rating of at least A from Fitch.

As at 31 December 2022, the Group assessed its maximum exposure to credit risk at AED 5,624 million. This principally related to cash and bank balances (AED 3,151 million as at 31 December 2022), trade and other receivables (AED 1,070 million as at 31 December 2022) which are discussed in note 13 to the 2022 Financial Statements, loans to related parties (AED 530 million as at 31 December 2022), derivative financial assets (AED 403 million as at 31 December 2022) and contract assets (AED 324 million as at 31 December 2022).

The Group has a fully impaired receivable for AED 356 million from WinWindOY. During 2022 and as part of liquidation proceedings in relation to a creditor of WinWindOY, the Group agreed to receive U.S.$1.35 million in full and final settlement of all debts owed to Masdar by this creditor, which has not yet been paid. This is an historical matter dating back to 2008.

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group ensures that it has sufficient cash and liquid assets on demand to meet its expected operational expenses; this excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters. The Group maintains adequate amount of its cash resources in bank and in short-term deposits.

The table below shows the Group's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The table is based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows and excludes the impact of netting arrangements. To the extent that interest flows are floating rate, the undiscounted amount is derived from interest rate curves at the end of the reporting period.

	As at 31 December 2022					
	Within one year	**One to two years**	**Two to five years**	**More than five years**	**Total**	**Carrying amount**
	(*AED thousand*)					
Bank borrowings	810,335	166,954	764,870	1,002,960	2,745,119	2,468,616
Due to related parties..........	41,103	—	—	—	41,103	41,103
Other non-current liabilities	—	—	—	141,994	141,994	141,994
Trade and other payables.....	1,280,756	—	—	—	1,280,756	1,591,559
Lease liabilities...................	38,243	36,486	85,955	230,491	391,175	299,891
	2,170,437	**203,440**	**850,825**	**1,375,445**	**4,600,147**	**4,543,163**

For further information of the Group's financial instruments, see note 31 to the 2022 Financial Statements.

DESCRIPTION OF THE GROUP

OVERVIEW

The Group is a global leader in renewable energy and is on track to become one of the largest companies of its kind in the world. Over the past 17 years, it has pioneered commercially viable solutions in clean energy and clean technology in the UAE and internationally. The Group is a leading developer and operator of utility-scale renewable energy projects with a presence in over 40 countries and has a generation portfolio that covers solar, wind, waste-to-energy, geothermal and energy storage, and other interests in operations and management, efficiency and electric mobility projects.

As at 31 March 2023, the Group had ownership interests (including through its interest in the Infinity platform described below) in 34 operational utility-scale renewable energy generation projects, comprising 13 solar power projects with a gross generation capacity of 2,093 MW, 20 wind power projects with a gross generation capacity of 3,590 MW and, through its 15 per cent. investment in Pertamina Geothermal, geothermal-focused projects with a gross generation capacity of 1,877 MW. These projects are located in the United States, Egypt, South Africa, the UK, Jordan, Indonesia, Poland, the UAE, Montenegro, Senegal, Saudi Arabia, Serbia and Uzbekistan.

In addition to its operational projects, the Group had ownership interests in 13 utility-scale renewable energy generation projects under construction as at 31 March 2023, comprising seven solar power projects with a gross generation capacity of 3,157 MW, three energy storage projects with a gross generation capacity of 75 MW, one wind power project with a gross generation capacity of 500 MW and two waste-to-energy power projects with a gross generation capacity of 59 MW. These projects are located in Uzbekistan, the UK, the UAE, Australia, Azerbaijan, Indonesia and Saudi Arabia.

The Group also has ownership interests in four committed utility scale-solar power generation projects with a gross generation capacity of 1,350 MW. These projects are located in Uzbekistan, Armenia, Morocco and Saudi Arabia.

The total gross generation capacity of the Group's operational, under construction and committed utility-scale renewable energy generation projects was 12,701 MW and its proportionate share of the capacity of those projects was 5,441 MW as at the same date.

The Group has a 49 per cent. shareholding in the Infinity platform, which comprises a portfolio of four operational utility-scale solar power projects located in Egypt, with a total generation capacity of 203 MW. In addition, the Infinity platform acquired 100 per cent. of Lekela in March 2023, which is a developer, owner and operator of renewable assets, with an operating presence in South Africa, Senegal and Egypt. Lekela comprises a portfolio of seven operational utility-scale wind projects with a total installed capacity of 1,035 MW, of which the Group's proportionate share is 336 MW. The acquisition of Lekela makes Infinity one of the largest renewable energy companies in Africa. The Infinity platform plans to develop, install and operate power generation projects with a gross capacity of between 2,000 MW and 4,000 MW by 2025 with the goal of becoming the leading renewable energy developer, investor and operator in Africa in terms of gross capacity. The Infinity platform's strategy is to grow exponentially in key markets to help develop and realise the significant potential for solar, wind and other renewable energy projects across Africa.

The Group has a pipeline of opportunities at various stages of development with a gross generation capacity exceeding 20 GW (including the planned Infinity platform projects mentioned above), where exclusive development rights have been secured and/or development expenditure has been allocated and the opportunities are moving towards a FID. These opportunities are located in the UAE (including projects that fall under Abu Dhabi's renewable independent power producer programme), Angola, Australia, Azerbaijan, Egypt, Ethiopia, Georgia, Greece, Indonesia, Iraq, Kazakhstan, Kyrgizstan, Poland, Serbia, Spain, Tanzania, Turkmenistan, Uganda, the UK and Zambia.

The Group's strategy is to grow to 100 GW of gross capacity through a combination of acquisitions and greenfield developments by 2030, by making majority control investments in large capacity and bankable markets, without compromising on returns.

As at 31 December 2022, the Group had total assets of AED 11,353 million and recorded a profit for the year of AED 540 million.

HISTORY

Masdar was incorporated by an Emiri decree in 2007 with Mamoura Diversified Global Holding PJSC (**Mubadala**), which is now wholly owned by Mubadala Investment Company PJSC (**MIC**), as its sole shareholder. Masdar was incorporated to leverage and build on the UAE's expertise and leadership in the global energy sector, while supporting the diversification of both its economy and energy sources for the benefit of future generations.

Under the leadership of His Excellency Dr Sultan Ahmed Al Jaber, Masdar's founding CEO and now chairman, Masdar has played an important and evolving role in advancing renewable energy, climate action, and sustainability, both domestically and internationally. In particular, in 2013 Masdar inaugurated the world's largest concentrated solar plant at the time, Shams 1. Masdar was also involved in the development of one of the world's largest offshore wind farms, the London Array project, which was inaugurated in 2013. Masdar has been at the forefront of innovation, participating in pioneering projects such as Hywind in Scotland, the world's first floating offshore wind farm, which was launched in 2017 and the renewable energy desalination pilot programme in Ghantoot, which tested the viability of using renewable energy to power seawater desalination.

In November 2021, the MIC board of directors approved the disposal of 67 per cent. of its 100 per cent. shareholding in Masdar to TAQA and ADNOC. A sale and purchase agreement (the **SPA**) was entered into in June 2022 and the sale was completed in December 2022. As part of the SPA, the parties agreed that Masdar would be reorganised in the period prior to completion. This reorganisation principally involved the transfer of Masdar's sustainable real estate business, which managed the development of, and the sale and leasing of plots and certain properties in, Masdar City in Abu Dhabi, to MIC, and the transfer to Masdar of a portfolio of renewable energy assets in the United States, prior to completion of the sale.

In December 2022, the sale was completed with TAQA acquiring a 43 per cent. shareholding in Masdar and ADNOC acquiring a 24 per cent. shareholding in Masdar. In addition, a new joint venture was established in which Masdar holds 55.82 per cent. of the share capital, ADNOC holds 29.60 per cent. of the share capital and Mubadala holds 14.58 per cent. of the share capital. This joint venture will aim to develop and invest in strategic green hydrogen projects with an aim to produce up to 1 million tonnes of green hydrogen per annum by 2030, see "*Other operations—Green hydrogen*" below. It is focused on meeting green hydrogen demand both domestically and internationally by targeting key segments, which include aviation, ammonia, steel, maritime, power, refining and heavy-duty transportation. The new shareholders in Masdar add additional extensive experience in renewable energy, as well as expertise in green hydrogen and infrastructure, global trading capabilities and logistics.

Masdar has received multiple awards throughout its history including:

- The IJ Global Awards Asia-Pacific Renewables Deal of the Year – Wind and the Project Finance International Awards Central Asian Deal of the Year award, in each case for its Zarafshan project in 2022;

- the IJ Global Awards MENA Renewables Solar Deal of the Year and the Middle East Solar Industry Association Utility Scale Project of the Year awards, in each case for its Al Dhafrah project in 2021;

- the IJ Global Awards APAC Renewables Solar – Frontier Market Deal of the Year award for its Nur Navoi project in 2021;

- the IJ Global Awards Europe Refinancing Renewables Offshore Wind Deal of the Year award for its London Array project in 2021;

- the Asian Power Awards Solar Power Project of Year (Indonesia) award and the Asia-Pacific Solar Deal of the Year award, in each case for its Cirata project in 2021;

- the Project Finance International Awards ESG Platform Deal of the Year – Middle East and Africa award for its Jeddah South project in 2020; and

- the Project Finance International Awards Renewable Energy Deal of the Year – Middle East and Africa award for its Dumat Al Jandal project in 2019.

STRATEGY

With its new shareholders, the Group aims to spearhead the UAE's Net Zero by 2050 strategic initiative and cement the UAE's role as a global leader in the green hydrogen economy. The Group is one of the largest clean energy companies of its kind and is well-positioned to lead the industry on a global scale.

The Group's vision is to make Abu Dhabi the world's reference for knowledge and collaboration in the advancement of renewable energy, clean technologies and sustainable development and its mission is to help maintain the UAE's leadership in the global energy sector, while supporting the diversification of both its economy and energy sources for the benefit of future generations. Masdar invests and deploys capital globally across multiple renewable energy technologies and is experienced in originating opportunities, establishing new partnerships in key geographies to execute investments, raising third-party non-recourse debt, bringing projects into operation, and maintaining projects throughout their lifecycle. As a pure-play renewable energy company, Masdar invests to generate long-term financial returns while making a positive, lasting environmental and social impact.

The Group's strategy to achieve its mission is to grow to 100 GW of gross renewable energy capacity and one million tonnes per annum of green hydrogen production capacity through a combination of acquisitions and greenfield developments by 2030, principally by making majority control investments in large capacity markets, without compromising on returns. The Group aims to remain diversified across geographies and technologies, while continuing to be a first mover in implementing commercially viable new technology advancements and products, for example floating offshore wind and floating solar PV. The Group's core markets will continue to include the MENA region, Europe, North America, Central Asia, Asia-Pacific and sub-Saharan Africa, and it aims to manage its portfolio to ensure that the Group remains weighted towards investments located in investment grade countries.

The Group's three strategic priorities in 2023 are to:

- gear up to accelerate the pace of growth while maximising shareholder value and mitigating risk to ensure that the Group continues to make sound investments;

- ensure that it has the right capabilities to deliver, including in terms of (i) expertise across engineering, technology, project management and commercial functions (both in Masdar's head office in the UAE and also selectively in the regions and countries where the Group operates), (ii) capacity to pursue projects that ensure conservation of the environment, respect for the local community and compliance with governance best practices; and

- seek new opportunities, with existing partners or new ones, pursuing investment models that deliver growth at the right value and have risk characteristics aligned with the Group's investment mandate.

The Group's primary focus remains on onshore and offshore wind and solar power, in particular, PV but also CSP. The Group will also continue to invest in waste-to-energy, battery storage and geothermal power and is closely monitoring and actively developing projects in hydroelectric and green hydrogen.

The execution of its strategy will require a significant deployment of capital by Masdar's shareholders on behalf of the Abu Dhabi government, efficient governance to enable quick decision-making and a sharp focus on hiring the right human capital across the Group's global footprint.

STRENGTHS

Masdar believes that the Group's key strengths are:

It has strong and experienced shareholders, who are all wholly or majority owned by the Abu Dhabi government

Masdar's shareholders are:

- TAQA, which holds 43 per cent. of Masdar's share capital and is 90.3 per cent. indirectly owned by the Abu Dhabi government through Abu Dhabi Developmental Holding Company PJSC (**ADQ**). Established in 2005, TAQA is a diversified utilities and energy group headquartered in Abu Dhabi and listed on the Abu Dhabi Securities Exchange (**ADX**). TAQA has significant investments in power and water generation, transmission and distribution assets, as well as upstream and midstream oil and gas operations. TAQA's assets are located in the UAE as well as Canada, Ghana, India, Iraq, Morocco, The Netherlands, Oman, Saudi Arabia, the UK and the United States;

- MIC, which founded Masdar and holds 33 per cent. of Masdar's share capital. MIC is wholly owned by the Abu Dhabi government and is a sovereign investor that manages a diverse portfolio of assets and investments in the UAE and abroad to generate sustainable financial returns for its shareholder. MIC invests and partners at the leading edge of global growth and innovation to create opportunities for future generations. It is a U.S.$284 billion business that spans six continents with interests across multiple sectors and asset classes. Headquartered in Abu Dhabi, MIC also has offices in London, Moscow, New York and Beijing; and

- ADNOC, which holds 24 per cent. of Masdar's share capital and is wholly owned by the Abu Dhabi government. Founded in 1971, ADNOC is a leading diversified energy group. ADNOC's network of fully-integrated businesses operate across the energy value chain, helping ADNOC to responsibly meet the demands of an ever-changing energy market. As one of the least carbon intensive producers in the world, ADNOC continues to take significant steps to make today's energy cleaner while simultaneously investing in the clean energies of tomorrow to strengthen its position as a reliable and responsible global energy provider.

Masdar was created in 2007 to act as the Abu Dhabi government's vehicle for investment in renewable energy and sustainable development in the emirate and internationally, and is a core part of the emirate's efforts to diversify its economy away from hydrocarbons, a project known as Vision 2030. The government of Abu Dhabi indirectly owns 95.71 per cent. of Masdar's share capital, and the Group benefits significantly from the strong support of the Abu Dhabi government. The Abu Dhabi government has in the past provided significant financial support to Masdar through MIC, which contributed AED 15 billion of equity in Masdar between 2006 and 2020, while it was Masdar's sole shareholder and before the sustainable real estate business was separated.

In addition, the Abu Dhabi government provides Masdar with access to attractive investment projects within the UAE, and the Abu Dhabi government's international strategic relationships have also helped Masdar gain access to bilateral utility-scale development projects and investment opportunities.

It has a geographically and technologically diversified portfolio of renewable energy generation assets with a significant portion of high-quality, long-term contracted assets and a strong visible growth pipeline

As at 31 March 2023, the Group's utility-scale operating, under construction and committed projects comprised 51 assets in 17 countries across five continents. This portfolio is significantly contracted and is characterised by a number of cash flow visibility enhancing features, including:

- ***price and volume protections***: protect against demand risk and changes in laws and regulations;
- ***zero fuel commodity risk***: given the renewable nature of the Group's generation projects;
- ***limited foreign exchange risk***: in the case of its non-merchant offtake arrangements, the payments are typically U.S. dollar denominated or contain foreign exchange rate fluctuation adjustment features; and
- ***creditworthy offtake counterparties***: in the case of its non-merchant offtake arrangements, typically government related offtakers (with a number of them having sovereign guarantees backing their payment obligations) and/or predominantly investment grade purchasers of the project's electricity generation capacity.

The Group's utility-scale portfolio is also diversified across:

- ***type of asset***: solar power plants (24, of which 23 are photovoltaic (**PV**) and one is concentrated solar power (**CSP**)), wind power plants (21, of which three are offshore and 18 are onshore), energy storage facilities (three), waste-to-energy plants (two) and a number of geothermal-focused plants (through Masdar's shareholding in Pertamina Geothermal) (by number of assets as at 31 March 2023);
- ***operating mix***: operational (59.5 per cent.), under construction (29.8 per cent.) and committed (10.6 per cent.) (by gross project capacity as at 31 March 2023); and
- ***geography***: the UAE (19.8 per cent.), Indonesia (16.0 per cent.), Uzbekistan (13.8 per cent.), the United States (10.9 per cent.), Saudi Arabia (9.4 per cent.) and the UK (9.0 per cent.), and 11 other countries comprising the remaining 21.2 per cent. (by gross project capacity as at 31 March 2023).

This diversification reduces the Group's exposure to any one type of asset, technology or geography. In relation to its wind power projects, the Group has also diversified its exposure to the limited group of manufacturers of wind turbines. See also "*Risk factors—Factors that may affect the Issuer's ability to fulfil its obligations under Notes issued under the Programme—*T*he Group's projects may be exposed to operational risks causing the assets to fail to perform in line with expectations*".

The table below shows the number of turbines, original equipment manufacturer and turbine capacity at each of the Group’s wind projects as at 31 December 2023.

Project	**Number of turbines**	**OEM**	**Turbine capacity (*MW*)**
Rocksprings	53	General Electric	2.3
	16	General Electric	1.72
Sterling Wind	13	General Electric	2.3
Coyote	60	Siemens Gamesa(1)	4.0
Las Majadas	125	Vestas	2.2
Dudgeon	67	Siemens Wind(1)	6.0
London Array	175	Siemens Wind	3.6
Hywind	5	Siemens Wind	6.0
Tafila Wind	38	Vestas	3.0
Gallery Grajewo	7	Vestas	2.125
Gallery Mlawa	17	Vestas	2.125
Krnovo Wind	26	General Electric	2.75

Project	Number of turbines	OEM	Turbine capacity (*MW*)
Dumat Al Jandal	99	Vestas	4.2
Tesla Wind	57	General Electric	2.75
Lakela – Noupoort	35	Siemens Wind	2.346
Lakela – Loerisfontein	61	Siemens Wind	2.346
Lakela – Khobab	61	Siemens Wind	2.346
Lakela – Kangnas	61	Siemens Wind	2.346
Lakela – Perdekraal East	48	Siemens Wind	2.346
Lakela – Taiba N'Daiye	46	Vestas	3.45
Lakela – West Bakr	96	Siemens Gamesa	2.625
	1,166		

Note:

(1) Siemens Gamesa was formed in 2017 by the merger of Gamesa (a Spanish subsidiary of Siemens Energy that was acquired in 2004) and Siemens Wind (a division of Siemens Energy incorporating the business of the Danish company, Bonus Energy A/S, which was also acquired by Siemens Energy in 2004).

In addition, most projects within the Group's operational and development pipeline benefit from support schemes that provide earnings stability and insulation from wholesale power price volatility, such as fixed price contracts and renewable obligation certificates or other green payment incentives.

In addition, as at 31 March 2023, the average remaining life of the Group's operational asset portfolio was relatively high, with 74.1 per cent. of assets by gross capacity having reached their COD (or equivalent) in the last five years and the balance within the last six- to 11-years, with the average operational life of utility-scale renewable projects typically being in the 25- to 30-year range.

The Group's existing under construction and committed projects are expected to increase its total gross power generation capacity from 7,561 MW as at 31 March 2023 to 12,701 MW when completed and brought into operation.

In addition to its immediate pipeline of under construction and committed projects, the Group has a pipeline of opportunities at various stages of development with a gross generation capacity exceeding 20 GW (including the planned Infinity platform projects mentioned earlier), where exclusive development rights have been secured and/or development expenditure has been allocated and the opportunities are moving towards a FID. These opportunities are located in the UAE (including projects that fall under Abu Dhabi's renewable independent power producer programme), Angola, Australia, Azerbaijan, Egypt, Ethiopia, Georgia, Greece, Indonesia, Iraq, Kazakhstan, Kyrgizstan, Poland, Serbia, Spain, Tanzania, Turkmenistan, Uganda, the UK and Zambia.

It has a significant track record as a developer and owner of renewable generation assets

Masdar is the UAE's clean energy champion and one of the largest companies of its kind in the world, advancing the development and deployment of renewable energy and green hydrogen technologies to address global sustainability challenges.

The Group has a proven track record in greenfield renewable energy project development, consistently winning bids and demonstrating strong development capabilities across technologies and project types. Since 2014, the Group has participated in 25 bids and been successful in 11 of them.

The Group has also pioneered new technologies, for example it was a sponsor in the Hywind offshore floating wind power generation project, the first of its kind in the world. This project was coupled with a battery energy storage system of 1.3 MWh, named Batwind, relying on the electricity produced by the Hywind offshore wind farm. Using sophisticated data-analysis algorithms, Batwind determines when to store and release electricity, stacking different operational modes, with the aim of increasing the economic value of the battery and maximising the revenue achievable. The Group also co-invested in Torresol Energy in Spain, which included the world's first utility-scale CSP plant that combined a central tower receiver system with molten salts as the heat transfer fluid and as energy storage, enabling electricity supply on a 24/7 basis. The Group sold its interest in Torresol Energy in 2020. Further, the Group launched Shams in 2013, the first CSP plant in the Middle East, developed the MENA region's first carbon capture utilisation and storage project in 2016 and, in May 2023, its Sharjah WTE project, the first commercial-scale waste-to-energy plant of its kind in the Middle East, achieved its COD.

The non-recourse nature of almost all of its debt and its disciplined approach to providing financial support to its investee companies

Masdar's only holding company debt, as at 31 December 2022, was AED 55 million drawn under its AED 92.5 million revolving credit facility, U.S.$ 10 million drawn under its U.S.$100 million revolving credit facility and U.S.$145 million drawn under a U.S.$250 million short-term 'bridge-to-bond' facility. As at 31 December 2022, the Group's proportional share of non-recourse project finance loan facilities across its portfolio was approximately AED 8.1 billion.

On a legacy basis, Masdar has also provided guarantees to support equity bridge loans and associated interest rate hedging from corporate banks for certain development projects, to enhance returns by delaying the cash equity contributions. These guarantees amounted to U.S.$229.4 million against equity bridge loans outstanding as at 31 December 2022 of U.S.$188.3 million.

See also "*Risk factors—Factors that may affect the Issuer's ability to fulfil its obligations under Notes issued under the Programme—The Group is exposed to risks relating to the repayment of its debt, the availability of debt financing and the requirement to make additional equity investments*".

It has a seasoned management team of industry professionals

The Group's senior management team comprises nine individuals with nearly 200 years' combined experience in diverse fields, with five members having significant experience in energy, utilities and renewables and the remaining members having experience in auditing, financial management, strategy, risk management, commercial negotiation and business development. The Group's senior management team has more than 100 years' combined experience at the Group.

The chairman of Masdar's Board of Directors was the CEO of Masdar from its inception until March 2014. Masdar's Board of Directors includes four representatives nominated by TAQA (including the Chairman of TAQA, the Group CEO and Managing Director of TAQA and the Group CEO and Managing Director of ADNOC who is also the Minister of Industry and Advanced Technology for the UAE), and two representatives each nominated by ADNOC and MIC.

PLANNING AND INVESTMENT PROCESS

The Group's investments in relation to its utility-scale renewable energy power projects include:

- the development of new power projects, either as the sole shareholder (for example its 100 per cent. interest in all of its operational, under construction and committed projects in Uzbekistan), as a controlling or jointly controlling shareholder in partnership with other investors (for example its 20 per cent. interest in the London Array project) or as a non-controlling shareholder (for example its 25 per cent. interest in the Hywind project);

- investing in existing projects, which may be pre-operational or operational, where the investment may be the acquisition of control or joint control (for example, its acquisition of a 50 per cent. interest in the Blue Palm projects in the United States) or a non-controlling interest in the project company (for example its acquisition of a 15 per cent. interest in Pertamina Geothermal in 2023); and

- the acquisition of control or joint control in a company which itself owns interests in a portfolio of renewable energy power projects (for example, its 49 per cent. interest in the Infinity platform).

The Group's planning and investment process is set out in its Investment Strategy approved by the Board and in a rolling business plan and annual budget which is reviewed monthly against actual results. The business plan comprises (i) the cash flow forecast; (ii) income statement and balance sheet projections; (iii) capacity growth targets; (iv) funding sources and uses; (v) corporate and non-recourse borrowing plans; (vi) anticipated operating and development expenses; and (vii) the manpower plan, all of which are prepared under the guidance of the CFO, with the business plan being endorsed by the Sustainability, Strategy and Investment committee and then presented to the Board for approval. The annual budget includes estimates of the total cost of the commitments (including committed investments), expenditure and financing requirements of the Group for the relevant year.

Masdar expects that its future investment expenditure will be funded by significant capital contributions from its shareholders, operating cash flow in the form of distributions from its portfolio of projects, non-recourse project financings, corporate borrowing in connection with its Green Finance Framework and asset monetisations where appropriate. Masdar may also from time to time receive funding for specific projects from the Abu Dhabi government.

Masdar's Sustainability, Strategy and Investment committee typically meets on a weekly basis and considers endorsement or approval (according to Masdar’s Delegation of Authority) of all new projects and investments proposed by the business before they are submitted to the Board for approval (to the extent required), in line with Masdar's Delegation of Authority. Once a proposed investment has been accepted for consideration, there are six stages through which it passes in the course of its lifecycle: (i) pre-appraisal, (ii) appraisal, (iii) selection, (iv) execution, (v) operation/hold, and (vi) exit/decommissioning. If the Group is developing a greenfield project, then the Business Development and Investment business unit will originate (stages (i) to (iii) above) and execute by bringing the project into operation (stage (iv) above), at which point responsibility for the remaining stages of the project's lifecycle will be handed over to the Asset Management and Technical Services business unit, see "—*Group business units*" below.

Masdar operates on a commercial basis and its investments are subject to strict criteria including target returns which depend on technology, geography, stage of lifecycle, degree of leverage and external market factors. Masdar has withdrawn from investments which have not met financial targets, including Masdar PV GmbH, a thin-film solar manufacturer in Germany that was wound down in 2014, and its sale of its investment in Hero Future Energy in 2022.

FUNDING PRINCIPLES

The Group generally employs a flexible funding strategy which allows it to deploy capital in a timely and efficient manner depending on certain variables, including, among other things, the investment being financed, the state of the financing markets, relevant macroeconomic conditions and the execution timing of other transactions being undertaken by the Group.

The Group requires funding at two levels:

- First, funds are raised by Masdar itself which are then used to finance the acquisition of new investments and provide funds to subsidiaries and joint ventures either in the form of equity contributions or debt. The sources of financing available to Masdar to date have been equity contributions, including subordinated interest-free loans without repayment requirements (although they may be repaid at the option of the Masdar) from its shareholders, distributions from project companies, external bank financings and selective asset monetisations and, following the establishment of the Programme, Masdar expects to raise financing through debt securities issued in the international capital markets.

- Second, funds are raised at an individual Group entity level to finance the entity's development and operation. At this level, the sources of funds have been equity and debt contributions from Masdar (and, where relevant, its joint venture partners) and third-party external bank financing. The use of leverage in relation to a particular project or investment is considered at various stages of the investment process, on a case-by-case basis, based upon the projected returns to investors, the cash flow profile of the project or investment concerned, the availability of financing on attractive terms and other factors which the Group may consider appropriate. Where possible, the Group seeks to ensure that project-specific financing is advanced on a non-recourse basis. Masdar's general policy is not to provide guarantees of project-specific funding, but it may typically provide capped guarantees or undertakings on greenfield development projects which can be accelerated to meet potential cost overruns, i.e. standby equity, but these guarantees are usually capped at 0.5 per cent. to 3 per cent. of forecast project costs. To the extent that third-party debt funding is not available on acceptable terms, Masdar will re-evaluate the viability of a project or an investment and may, amongst other things, defer execution and completion, modify scope, obtain equity funding or other alternative funding arrangements including from the Abu Dhabi government, or in certain circumstances provide temporary bridge financing itself.

GROUP BUSINESS UNITS

The Group has three business units:

- **Business Development and Investment**, which oversees the Group's local and global business and project origination, development and acquisition activities of utility-scale clean energy projects, including both greenfield and brownfield projects, see "*—Planning and investment process*" above and "*—The Group's projects*" below. This business unit, through a separate team focused on delivery, bids and supply chain, also oversees the Group's participation in global renewable energy independent power producer competitive bids in the open market and the delivery of its utility-scale renewable energy projects around the world once those projects have reached financial close, while managing the Group's procurement activities in goods and services;

- **Asset Management and Technical Services**, which oversees and manages the Group's operational renewable energy assets and is responsible for assessing, testing and piloting emerging technologies, while also providing technical expertise and engineering support internally, see "*—Asset Management and Technical Services*" below; and

- **Energy Services**, which is responsible for providing full turnkey supply- and demand-side energy management solutions to clients through energy performance contracts. It specialises in PV (ground mounted, rooftop, car park and other solutions); small wind farms; solar-powered water treatment and other applications; energy efficiency enhancements and retrofits; and provides O&M services through Masdar Specialized Technical Services Company LLC (**MSTS**), see "*—Other operations—Energy Services*" and "*—Other operations —MSTS*" below.

Following the change in ownership and the Group's ambitious new growth objectives, changes to the existing organisational structure are being considered in order to better orient the business towards meeting those objectives. While the structure is expected to remain broadly the same, the Group is likely to introduce the role of a Chief Investment Officer and make some decentralisation changes including (i) splitting the Business Development and Investment team into geographic teams for the Americas, Asia-Pacific and EMEA covering all sectors except offshore wind, which will be covered by a dedicated global offshore wind team based in London, and (ii) the establishment of a centralised mergers and acquisitions execution team.

THE GROUP'S PROJECTS

The Group's business principally comprises investing in utility-scale renewable energy projects around the world. Excluding the Infinity platform, as at 31 March 2023, it had investments in nine operational, seven under construction and four committed utility-scale solar power projects, 13 operational and one under construction utility-scale wind power projects, three under construction utility scale energy storage projects, two under construction utility-scale waste-to-energy projects and, through its minority investment in Pertamina Geothermal, 13 operational geothermal-focused energy projects (some of which are operated and some are contracted). Together, these projects have a gross generation capacity of 11,464 MW.

In addition, the Group's investments in the Infinity platform mean that it has indirect interests in a further four utility-scale solar power projects in Egypt and, through the Infinity platform's recent acquisition of Lekela, seven utility-scale wind power projects located in South Africa, Senegal and Egypt. Together, these projects have a gross capacity of 1,237 MW.

In November 2021, the Group acquired a 47.5 per cent. shareholding in a company focused on commercial and industrial offtake in Indonesia, with the remaining 52.5 per cent. owned by Indonesian energy group PT Mitrabara Adiperdana Tbk. The joint venture, which was renamed Solar Radiance, had one operational asset of 1.75 MW as at 31 March 2023.

Operational projects

The table below provides an overview of each of the Group's 23 operational utility-scale projects (excluding the projects in the Infinity platform which are described separately below the table) as at 31 March 2023.

Project	Location	Type of project	Contracted power capacity (MW)	Group's direct and indirect ownership interest (%)	Commercial operation date (COD)	Offtake arrangement[(1)]	Approximate remaining offtake contract life[(2)]
Rocksprings	USA	Onshore wind	149	50[(3)]	11 September 2017	Merchant	9 years
Sterling Wind	USA	Onshore wind	30	50[(3)]	13 August 2017	Merchant	9 years
Maverick 1	USA	PV	173	50[(3)]	10 December 2020	Merchant	13 years
Maverick 4	USA	PV	136	50[(3)]	10 December 2020	Merchant	13 years
Desert Harvest 1	USA	PV	114	50[(3)]	10 December 2020	Merchant	18 years
Desert Harvest 2	USA	PV	100	50[(3)]	10 December 2020	Merchant	23 years and 10 years (for the energy hedge arrangements)
Coyote	USA	Onshore wind	243	50[(3)]	31 March 2021	Merchant	10 years
Las Majadas	USA	Onshore wind	273	50[(3)]	26 February 2021	Merchant	10 years
Big Beau Solar	USA	PV	168	50%[(3)]	28 January 2022 (solar PV plant) and 12 December 2022 (battery storage)	Merchant	10 years
Dudgeon	UK	Offshore wind	402	35	Final Wind Turbine Generator (**WTG**) for phase 1 installed on 1 April 2017, for phase 2 installed on 1 August 2017 and for phase 3 installed on 15 October 2017	CFD	9 years (phase 1 and 2) and 10 years (for phase 3)
London Array	UK	Offshore wind	630	20	Final WTG installed on 13 December 2012.	ROC and Merchant	2 years
Hywind	UK	Floating offshore wind	30	25	10 September 2017, being the first date that electrical output was delivered to the connection point	ROC and merchant	14 years
Pertamina Geothermal	Indonesia	Geothermal-focused	1,877[(4)]	15	Minority investment in entity involved in multiple projects in different capacities, see below.		
Shams	UAE	CSP	100	51	5 September 2013	PPA	15 years
DEWA III	UAE	PV	800	24	5 May 2018 (Phase A); 18 August 2019 (Phase B) and 1 April 2020 (Phase C)	PPA	20 years (Phase A); 21 years (Phase B) and 22 years (Phase C)
Baynouna	Jordan	PV	200	70	1 December 2020	PPA	18 years
Tafila Wind	Jordan	Onshore wind	117	50	16 September 2015	PPA	12 years
Gallery Grajewo	Poland	Onshore wind	14	50	1 April 2022	PPA and merchant	7 years
Gallery Mlawa	Poland	Onshore wind	37	50	1 April 2022	PPA and merchant	7 years
Krnovo Wind	Montenegro	Onshore wind	72	49	2 November 2017	PPA and merchant	7 years
Dumat Al Jandal	Saudi Arabia	Onshore wind	400	34.3	1 July 2022	PPA	19 years
Tesla Wind	Serbia	Onshore wind	158	60	15 October 2019	PPA and merchant	9 years
Nur Navoi	Uzbekistan	PV	100	100	10 December 2021	PPA	24 years
			6,323				

Notes:

(1) PPA means that the project benefits from a power purchase agreement for all or part of the power that it generates. Merchant means that the project sells all or part of its power in the relevant energy market and not pursuant to a PPA. CFD means contract for differences and is explained in the description of the relevant project below the table. ROC means renewable obligation certificates, see the description of the relevant project below the table.

(2) Rounded to the nearest whole year as at 31 March 2023.

(3) 50% of the Class B Membership interests in the project company, which have distribution preference over the Class B Membership interests held by the project sponsor, but are subject to the distribution preference and special distribution/allocation percentages owed to the Class A Member (i.e. the tax equity investor) for a defined period.

(4) 672 MW of this amount represents projects undertaken by the entity in which Masdar has invested and 1,205 MW represents projects undertaken by third parties on resources to which the entity in which Masdar is invested has ownership rights and in respect of which it receives royalties.

United States projects

The Group has nine operational projects in the United States: Rocksprings; Sterling Wind; four solar projects (Maverick 1, Maverick 4, Desert Harvest 1, Desert Harvest 2), two wind projects (Coyote and Las Majadas) (together known as the **Blue Palm projects**); and Big Beau Solar.

Rocksprings

The Group acquired its 50 per cent. shareholding in the Rocksprings project in May 2019. The project achieved its COD on 11 September 2017. The Rocksprings project is a 149 MW wind power generation facility in Val Verde County, Texas.

There is one offtake agreement for the Rocksprings project which lasts for 15 years from the COD and under it the buyer purchases a defined proportion of the energy produced at an agreed fixed price. Damages are payable for failure to reach certain availability (capped at a maximum amount over the term of the project). The buyer has an investment grade rating.

The ownership of the Rocksprings project is structured between Class A and Class B membership interests. The Group's 50 per cent. equity participation in the Rocksprings project comprises a 50 per cent. share of the Class B membership interests. The Class B members benefit from a higher share of distributions made by the project company, which share increases after a defined date and the Group benefits from a preferred distribution between Class B members until that distribution reaches a defined return. In return, the Class A member receives almost all of the tax benefits from the structure.

Different aspects of the Rocksprings project benefit from different O&M agreements which have different terms.

The Rocksprings project was restructured in early 2022 and, as a result, its liquidity improved. The Rocksprings project company is involved in litigation, see "—*Litigation*" below.

Sterling Wind

The Group acquired its 50 per cent. shareholding in the Sterling Wind project in May 2019. The project achieved its COD on 13 August 2017. The Sterling Wind project is a 30 MW wind power generation facility located in Lea County, New Mexico.

The offtake agreement for the Sterling Wind project lasts for 15 years from the COD and under it the buyer purchases all the energy produced by the facility at an agreed fixed price (with capped damages payable by the project company if certain energy levels are not provided). The buyer has an investment grade rating.

The ownership of the Sterling Wind project is structured between Class A and Class B membership interests. The Group's 50 per cent. equity participation in the Sterling Wind project comprises a 50 per cent. share of the Class B membership interests. The Class B members benefit from a higher share of distributions made by the project company, which share increases after a defined date and the Group benefits from a preferred distribution between Class B members until that distribution reaches a defined return. In return, the Class A member receives almost all of the tax benefits from the structure.

Different aspects of the Sterling Wind project benefit from different O&M agreements which have different terms.

Blue Palm projects

The Group entered into an agreement to acquire its 50 per cent. shareholding in the Blue Palm projects in July 2020 while the projects were still under construction. The acquisitions of the Group's shareholdings in the six projects closed at various times between December 2020 and November 2021.

Each of the four Blue Palm solar projects achieved its COD on 10 December 2020, except that Desert Harvest 2 achieved its COD for the battery storage portion of the project in November 2021. The two Blue Palm wind projects achieved their COD on 26 February 2021 (Las Majadas) and 31 March 2021 (Coyote), respectively.

Each of the four Blue Palm solar projects has a different offtaker while the two Blue Palm wind projects have the same offtaker. All of the offtakers have investment grade ratings. The offtake arrangements operate as follows:

- for Maverick 1, the offtake agreement continues for 15 years from the COD (expiring at the end of the month following the month in which COD was achieved). For Maverick 4, the offtake agreement expires on the 15th anniversary of the COD. Under each agreement, the buyer purchases all energy produced by the facility up to 125 MW and 100 MW, respectively, at an agreed fixed price (with specified damages payable by project company if certain defined energy levels are not provided);

- for Desert Harvest 1, the offtake agreement continues for 20 years from the COD. Under the agreement, the buyer purchases 80 MW guaranteed capacity from the facility at an agreed fixed price (with specified damages payable by the project company if certain defined energy levels are not provided);

- for Desert Harvest 2, there are two offtake agreements. The first offtake agreement is a defined quantity energy hedge for 12 years starting from 1 January 2021. The second offtake agreement continues for 25 years from the COD and is, in effect, an agreement to purchase renewable energy and associated environmental attributes related to 70MW of energy produced from the facility with the buyer paying a fixed amount above market rate for the energy. In addition, the project has energy hedging arrangements which continue until 3 December 2032 and provide (i) for the project company to provide power to the hedge counterparty at a fixed price in specified monthly amounts and (ii) that any failure to deliver requires the project company to pay uncapped damages based on the difference between the replacement price for energy and the contract price. The project company also operates a merchant 35 MW/140 MWh battery energy storage system; and

- for Coyote and Las Majadas, the offtake arrangements are structured through hedging arrangements which continue until 3 December 2032 and provide (i) for the project company to provide power to the hedge counterparty at a fixed price in specified monthly amounts and (ii) that any failure to deliver requires the project company to pay uncapped damages based on the difference between the replacement price for energy and the contract price.

The ownership of all of the Blue Palm projects is structured between Class A and Class B membership interests. The Group's 50 per cent. equity participation in the Blue Palm projects comprises a 50 per cent. share of the Class B membership interests. The Class B members benefit from a higher share of distributions made by the project company, which share increases materially after a defined date. In return, the Class A member receives almost all of the tax benefits from the structure.

All of the Blue Palm projects have the same operator and the O&M agreement for each project is on substantially the same terms and lasts for a period of 35 years from the COD (in the case of the solar assets) and for a period of 20 years from the COD (in the case of the wind assets), with annual extensions at the end of the term subject to either party electing to terminate the agreement. There is a separate shorter O&M agreement for the Desert Harvest 2 battery storage portion.

Big Beau Solar

The Group entered into an agreement to acquire its 50 per cent. shareholding in the Big Beau Solar project in July 2020. The acquisition of the Big Beau Solar shareholding closed in March 2023. The project achieved its COD on 28 January 2022 (in the case of the solar PV plant) and on 12 December 2022 (in the case of the battery storage portion). The Big Beau Solar project is a 128 MW solar PV power generation project and a 40 MW/160 MWh battery storage project located in Kern County, California.

The ownership of Big Beau Solar project (other than the battery storage portion) is structured between Class A and Class B membership interests. The Group's 50 per cent. equity participation in the Big Beau Solar project comprises a 50 per cent. share of the Class B membership interests. The Class B members benefit from a majority of the distributions made by the project company. In return, the Class A member receives almost all of the tax benefits from the structure.

The Big Beau Solar sponsor offtake arrangements continue for 10 years from 28 December 2022. The arrangements include the energy produced by the facility, the environmental attributes, resource adequacy and all battery revenues at agreed fixed prices (with specified uncapped damages payable by the project company if certain availability levels are not reached). The buyer is a subsidiary of the Class B holding company. Consequently, the project is fully merchant from a Class B standpoint.

The O&M agreement for the Big Beau Solar project lasts for a period of 35 years from December 2020, with annual extensions at the end of the term subject to either party electing to terminate the agreement. There is a separate shorter O&M agreement for the battery storage portion.

UK projects

The Group is involved in three operational wind projects in the UK, two offshore wind projects (Dudgeon and London Array) and one floating offshore wind project (Hywind).

Dudgeon

The Group was one of the initial sponsors of the Dudgeon project, which is a 402 MW wind project off the North Norfolk coast, and is one of three shareholders in the project company. The Dudgeon project has been operational since 2017.

There are six offtake agreements for the project with two offtakers each being party to one offtake agreement for each of the three phases of the project. The Equinor ASA (previously Statoil ASA) PPAs account for 70 per cent. of the offtake during each phase and the Statkraft Markets GmbH (**Statkraft**) PPAs account for 30 per cent. of the offtake during each phase. Each PPA runs for a term of 15 years in respect of the relevant phase, which commenced in April 2017, August 2017 and October 2017, respectively. The terms of each PPA are consistent with one another. The project company entered into three contracts for differences with the UK government, each with a duration for each of 15 years. Under these contracts, the project will either make or receive payments based on the difference between the strike price agreed in the contracts for differences and the actual market price. If the actual market price is below the strike price, the UK government pays the project the difference and if the actual market price is above the strike price, the project pays the difference to the UK government.

The Group owns 35 per cent. of the project company with an Equinor group company holding 35 per cent. and a third company holding 30 per cent. The operations and maintenance activities for the Dudgeon project are principally performed by an Equinor group company with a Siemens group company providing operations and maintenance services to the wind turbine generators.

London Array

The Group was one of the initial sponsors of the London Array project, which is a 630 MW wind project off the north Kent coast, and is one of four participants in the project, which is structured as an unincorporated joint venture. The final wind turbine for the London Array project was installed on 13 December 2012.

The London Array project benefits from a supportive incentive regime with an allocation of two renewable obligation certificates (**ROC**s) per MWh produced for the first 20 years of operation, which is favourable compared to more recent ROC offshore wind projects. The ROC revenues are stable and inflation-linked. The Group is party to an offtake agreement entered into in December 2012 with E.ON UK plc in respect of its proportion of the electrical output and associated ROC benefits under the project. The PPA expires on 1 November 2025. The PPA includes an indexed floor price mechanism on the wholesale power price. After the expiry of the PPA, the Group will continue to benefit from electricity revenue derived from merchant market sales and the associated renewables benefits until March 2033.

The Group owns 20 per cent. of the project company with an EON group company holding 30 per cent. and two other companies holding 25 per cent. each. The operations and maintenance activities for the London Array project were principally performed by a Siemens group company until February 2023 and are now being performed by an RWE group company.

Hywind

The Group was one of the initial sponsors of the Hywind project, which is a 30 MW floating wind project off the coast of Aberdeenshire in Scotland, and is one of two shareholders in the project company. The Hywind project began operating in September 2017.

The offtaker for the Hywind project is Equinor ASA. Under the PPA, the project company sells the electrical output generated by the project and associated renewables benefits, with electricity payments being calculated monthly in accordance with the output and benefits conferred based upon a reference price that is subject to adjustment under the PPA. The PPA lasts for 20 years from 10 September 2017, being the first date that electrical output was delivered to the connection point.

The Group owns 25 per cent. of the project company with an Equinor group company holding 75 per cent. The operations and maintenance activities for the Hywind project are principally performed by an Equinor group company with a Siemens group company providing operations and maintenance services to the wind turbine generators.

The 1.3 MWh Batwind battery stores excess electricity generated from the project. Batwind is owned by the same shareholders that hold the Hywind project company. Batwind was officially launched on 27 June 2018. Using sophisticated data-analysis algorithms, Batwind determines when to store and release electricity with the aim of increasing the economic value of the battery. The algorithms, which rely on multiple data sources, including weather forecasts, market prices, maintenance schedules, consumption patterns and grid services, effectively teach the battery how to best stack different operational modes together so the utility and revenue is maximised. This smart energy system is located at an onshore substation in Peterhead, Scotland.

Indonesia projects

The Group is involved in geothermal-focused projects in Indonesia through its minority investment in Pertamina Geothermal Energy (**PGE**) and through a recently formed joint venture, Solar Radiance, which is discussed above.

Pertamina Geothermal

In February 2023, Masdar acquired a 15 per cent. shareholding in Pertamina Geothermal Energy Tbk (**PGE**) as part of PGE's initial public offering. PGE was established in 2006 and, after its IPO, is 75 per cent. owned by Pertamina, Indonesia's largest oil and gas and energy company, which is wholly owned by the Indonesian government.

PGE has rights to 13 geothermal working areas, with a total installed capacity of 1,877 MW, of which 672 MW are operated by PGE and 1,205 MW are operated by contractors who pay royalties to PGE.

UAE projects

The Group has two operational solar projects in the UAE (Shams and DEWA III).

Shams

The Group was one of the initial sponsors of the Shams project, which is a 100 MW CSP plant in the Western Region of the Emirate of Abu Dhabi, and is the majority shareholder in the project company. The Shams project achieved its COD on 5 September 2013.

The offtake agreement is with Abu Dhabi Water and Electricity Company (now Emirates Water and Electricity Company) and is valid for a period of 25 years from the COD. Tariffs are paid on a take-or-pay basis, subject to typical exceptions. The tariff comprises (i) an electrical energy payment, (ii) supplemental payments (payable in the event of a deemed net electric energy period) and (iii) a fuel allocation payment. Part of the tariff is paid by the Abu Dhabi government in the form of a green payment.

The Group owns 51 per cent. of the project company with Inarah Holding RSC Limited holding 29 per cent. and Total Solar SAS holding 20 per cent. The operations and maintenance activities for the Shams project are managed, administered and performed by the project company.

DEWA III

The Group was one of the initial sponsors of the DEWA III project, which is an 800 MW solar PV plant in the Emirate of Dubai, and is one of three shareholders in the project company. The DEWA III project achieved its CODs on 5 May 2018 (for the first phase), 18 August 2019 (for the second phase) and 1 April 2020 (for the third phase).

The offtake agreement is with DEWA and lasts for 25 years for each phase from the COD for that phase. The tariff is an energy charge comprising a fixed component and a variable component, subject to indexation.

The Group owns 24 per cent. of the project company with a DEWA subsidiary holding 60 per cent. and an EDF group company holding 16 per cent. The long-term operations and maintenance activities for the DEWA III project are managed, administered and performed by Energize O&M Company LLC, a company in which MSTS (a wholly owned subsidiary of the Group) has a 60 per cent. shareholding and an EDF group company has a 40 per cent. shareholding.

Jordan projects

The Group is involved in two operational projects in Jordan, one solar project (Baynouna) and one wind project (Tafila Wind).

Baynouna

The Group was one of the initial sponsors of the Baynouna project, which is a 200 MW solar PV plant located near Tilal Al Rukban, and is the majority shareholder in the project company. The Baynouna project achieved its COD on 1 December 2020.

The offtake agreement is with the National Electric Power Company (**NEPCO**) and lasts for 20 years from the COD. The tariff is fixed throughout the term of the agreement and adjusted for fluctuations in the foreign exchange rate between the U.S. dollar and the Jordanian dinar.

The Group owns 70 per cent. of the project company, with a private Finnish company managing the other 30 per cent. through a fund. The O&M agreement has been entered into with MSTS for the remaining term of the PPA pending the issue of the notice to proceed.

Tafila Wind

The Group was one of the initial sponsors of the Tafila Wind project, which is a 117 MW wind project located near Tafila, and is one of two shareholders in the project company. The Tafila Wind project achieved its COD on 16 September 2015.

The offtake agreement is with NEPCO and lasts for 20 years from the COD. The tariff is fixed throughout the term of the agreement and adjusted for fluctuations in the foreign exchange rate between the U.S. dollar and the Jordanian dinar.

The Group owns 50 per cent. of the project company with a Luxembourg company holding the other 50 per cent. The O&M activities for the Tafila Wind project are provided by Vestas Middle East S.L.U.

Poland projects

The Group is involved in two operational wind projects in Poland (Gallery Grajewo and Gallery Mlawa).

Gallery Grajewo and Gallery Mlawa

Gallery Grajewo is a 14 MW wind farm located in Grajewo County in north-eastern Poland. Gallery Mlawa is a 37 MW wind farm located in Mlawa County in east-central Poland. In 2020, the Group acquired a 50 per cent. shareholding in both Gallery project companies from the same seller, which also holds the remaining 50 per cent. shareholding in each Gallery project.

The Gallery Grajewo project achieved its COD on 1 April 2022 and the Gallery Mlawa project achieved its COD on 1 April 2022.

Each Gallery project benefits from a statutory guaranteed tariff per MWh for up to 333,900 MWh (in the case of Gallery Grajewo) and 861,900 MWh (in the case of Gallery Mlawa) in any calendar year. These tariffs apply for a period of 15 years starting from the COD (but in no event extending beyond 30 June 2039). Each Gallery project will be subject to merchant risk thereafter.

Both Gallery project companies are entitled to (i) sell electrical energy on the energy market and (ii) recover any negative difference between the electrical energy sale price and the guaranteed tariff from a settlements manager (which is a wholly state-owned entity).

The Gallery Grajewo project company has entered into two PPAs with Statkraft for 6 MW and for 8 MW, respectively and both are valid until 31 December 2031. The Gallery Mlawa project company has also entered into a PPA with Statkraft which is valid until 31 December 2031. Tariffs are paid under these PPAs from the COD until expiry of the term on a take-or-pay basis, subject to typical exceptions.

The operations and maintenance activities for both Gallery projects are provided by Vestas Poland sp. z o.o. for a term of 25 years after taking over the final wind generator on each project.

Montenegro project

Krnovo Wind

The Group acquired a 49 per cent. shareholding in the Krnovo Wind project company in 2018. The Krnovo Wind project is a 72 MW wind farm located in the centre of Montenegro. The Krnovo Wind project achieved its COD on 2 November 2017.

The offtake agreement is with Crnogorskog Operatora Tržišta Električne Energije (**COTEE**), the Montenegrin market operator, and . is valid for a period of 12 years from the anniversary of the COD. There is a contractually guaranteed tariff, which is adjusted for inflation and is payable by COTEE on a take-or-pay basis, subject to certain exceptions, until expiry of the term.

The Group owns 49 per cent. of the project company with a French company holding the remaining 51 per cent. through a Montenegrin holding company. The operations and maintenance activities for the Krnovo Wind project are provided by a GE group company.

Saudi Arabia project

Dumat Al Jandal

The Group was one of the initial sponsors of the Dumat Al Jandal project, which is a 400 MW wind project located in the Al Jouf Region, and is one of three shareholders in the project company. The Dumat Al Jandal project achieved its COD on 1 July 2022.

The offtake agreement is with Saudi Power Procurement Company (**SPPC**) and lasts for 20 years from the COD. The tariff comprises a fixed capital cost component and a fixed O&M cost recovery component, each adjusted or partially adjusted for foreign exchange rate movements and each adjusted for inflation.

The Group owns 34.3 per cent. of the project company with an EDF group company and a local partner (NESMA Company) holding the remaining 35.7 per cent. and 30 per cent., respectively. The operations and maintenance activities for the Dumat Al Jandal project are provided by Dumat Wind Contracting Company LLC.

The construction of the Dumat Al Jandal project was significantly delayed and this has resulted in a number of delay-related claims as follows:

PPA-related claim

The project company submitted a claim to SPPC in December 2022. The Group believes that, in principle, SPPC is aligned with the project company's claim and SPPC has requested additional documentation to justify the amounts claimed. In addition, SPPC has agreed to pay the project company any cost incurred due to custom duties. Supporting documentation relating to this claim has been shared with SPPC.

EPC contractors-related claims

There are two claims from construction contractors that are still to be resolved:

The EPC contractor has submitted claims to the project company with a combined value of U.S.$3.2 million. These include weather-related delays, crane dismantling and erection costs, performance bond costs, vessel demurrage costs, late payment costs, power curve test costs, met mast panel costs, robbery at site costs, delay in grid readiness and warehouse costs. The project company is considering these claims.

The high voltage contractor for all aspects of the plant excluding the wind turbines and related elements has submitted claims to the project company with a combined value of U.S.$11.2 million. These include medium voltage cable costs, ancillary equipment costs, overhead line retesting costs, additional cable tray costs, costs incurred due to other contractors and costs relating to COVID 19 and changes in law. The project company is considering these claims which are expected to be balanced out with the liability for delay liquidated damages, the cap for which has been reached.

Certain of the claims described above may also be subject to counter claims by the project company.

O&M-related claim

The O&M related claims are based on the fact that the service and availability contractor is of the view that the O&M period has not yet started. The implication of this is that the contractor expects to be paid for the interim O&M period by the operator (Dumat Wind Contracting Company LLC). The operator does not agree with this position and is currently in discussion with the service and availability contractor.

Serbia project

Tesla Wind

The Group was one of the initial sponsors of the Tesla Wind project, which is a 158 MW wind farm located to the north east of Belgrade, and is the majority shareholder in the project company. The Tesla Wind project achieved its COD on 15 October 2019.

The offtake agreement is with PE Elektroprivreda Srbije (**EPS**) and lasts for 12 years from 11 October 2019, being the date that the project company achieved 'privileged power producer status' under Serbian law. The PPA was entered for the entire power output of the project during the term of the agreement. The PPA includes an incentive period of 12 years starting from the first meter reading. During this period, EPS compensates the project company for produced power through the applicable feed-in-tariff. EPS is also responsible for, and bears the costs of, balancing for the full term of the offtake agreement. The initial purchase price under the offtake agreement is adjusted annually for Eurozone inflation. Following the expiry of the PPA on 30 November 2031, the Group expects that the project company will sell the power produced in the merchant market.

The Group owns 60 per cent. of the project company with a Dutch company holding 30 per cent. and a German company holding 10 per cent. The operations and maintenance activities for the wind turbines are provided by a GE group company. The balance of plant operation and maintenance is provided by MSTS.

Uzbekistan project

Nur Navoi

The Group is the sole sponsor of the Nur Navoi project, which is a 100 MW solar PV plant located in the Navoi region of Uzbekistan. The Nur Navoi project achieved its COD on 10 December 2021.

The offtake agreement is with JSC "National Electric Grid of Uzbekistan" (**JSC NEGU**) and lasts for 25 years from the COD. The tariff is a fixed energy charge payable by JSC NEGU for (i) all energy generated prior to the COD and (ii) the contracted capacity of the plant from the COD.

The Group owns 100 per cent. of the project company. The long-term operations and maintenance activities for the Nur Navoi project are managed, administered and performed by MSTS as the O&M contractor for the term of the project.

The Infinity platform

In 2020, the Group entered into a joint venture with Infinity Energy S.A.E. (**Infinity**) to build a partnership in renewable energy power generation in Africa and the Levant. The Group has a 49 per cent. shareholding in the joint venture company.

The Infinity platform consists of four operational utility-scale solar projects in Egypt, which vary in capacity between 32 MW and 60 MW, and three non-utility-scale projects in Egypt which have capacities ranging between 1 MW and 6 MW.

Each of the Infinity utility-scale projects was developed pursuant to Egypt's feed-in-tariff programme (the **FiT Programme**). Under the FiT Programme, the Egyptian government committed to purchase the electricity produced from renewable energy facilities under 25-year power purchase agreements for solar PV facilities. The applicable tariffs under the FiT Programme are fixed for the full term for solar projects with (i) (in the case of the second round projects (MMID, IBPSE and Phoenix)) 30 per cent. paid at a fixed Egyptian pound/U.S. dollar exchange rate and 70 per cent. paid at the U.S. dollar exchange rate at the time the payment is due; and (ii) (in the case of first round project (Infinity 50)) 15 per cent. paid at a fixed Egyptian pound/U.S. dollar exchange rate and 85 per cent. paid at the U.S. dollar exchange rate at the time the payment is due.

Infinity is in advanced negotiations with the Egyptian authorities on a 200 MW wind farm project in the area of Ras Ghareb along the Gulf of Suez and is expecting to sign a 20-year PPA at a fixed tariff in the second half of 2023. This project is expected to achieve its COD in mid-2025. Through Infinity, the Group has direct and indirect ownership of 51 per cent. of the project company.

The table below provides details of all of the Infinity projects (including three non-utility-scale projects), all of which are solar PV projects:

Project	Infinity project ownership (%)	Masdar share (%)	Nameplate capacity (MW)	COD
Infinity INF 1	99.93	49.00	1(1)	18 October 2016
Infinity INF 3	99.98	49.00	3(1)	18 April 2019
Infinity MMID	69.98	34.00	32	4 February 2019
Infinity IBPSE	69.90	35.00	55	8 April 2019
Infinity Phoenix	73.48	29.00	55	6 May 2019
Infinity INF 50	100.00	49.00	60	23 February 2018
Infinity Sharm El Sheikh	100.00	49.00	6(1)	5 November 2022
			212	

Note:

(1) Reflecting their size, these projects are classified as sub-utility scale and therefore have not been included in the calculation of the Group's utility-scale projects elsewhere in this document.

In addition, the Infinity platform acquired 100 per cent. of Lekela in March 2023, which is a developer, owner and operator of renewable assets, with an operating presence in South Africa, Senegal and Egypt. The acquisition of Lekela makes Infinity one of the largest renewable energy companies in Africa.

Lekela has a total installed capacity of 1,035 MW. Lekela has a portfolio of seven operational utility-scale wind projects, five located in South Africa, one located in Senegal and one located in Egypt. Lekela is also currently progressing a 190 MW (150 MW wind and 40 MW battery storage) project in Senegal. This project does not yet have a PPA executed.

The table below provides details of the Lekela projects, all of which are wind projects:

Project	Infinity project ownership (%)	Masdar share (%)	Nameplate capacity (MW)	COD
Khobab (South Africa)	40	20	143	December 2017
Loeriesfontein 2 (South Africa)	40	20	143	December 2017
Noupoort (South Africa)	40	20	82	July 2016
Kangnas (South Africa)	55	27	143	November 2020
Perdekraal East (South Africa)	55	27	113	October 2020
West Bakr (Egypt)	100	49	252	November 2021
Taiba N'Daiye (Senegal)	92	45	159	July 2021
			1,035	

Projects under construction

The table below provides an overview of each of the Group's 13 projects under construction as at 31 March 2023.

Project	Location	Type of project	Contracted power capacity (MW)	Group's direct and indirect ownership interest (%)	Anticipated commercial operation date (COD)	Offtake arrangement
Arlington Birmingham	UK	Energy storage	20	90	2023	To be determined
Arlington Welkin Road	UK	Energy storage	20	90	2024	To be determined
Arlington Royle Barn Road	UK	Energy storage	35	90	2024	To be determined
Al Dhafrah	UAE	PV	1,580	20	2023	PPA
Sharjah WTE	UAE	Waste-to-energy	30	50	2023	PPA
East Rockingham	Australia	Waste-to-energy	29	37	2023	PPA
Garadagh	Azerbaijan	PV	230	100	2024	PPA
Cirata	Indonesia	Floating PV	150	49	2023	PPA
Jeddah South	Saudi Arabia	PV	300	36	2023	PPA
Jizzakh	Uzbekistan	PV	220	100	2025	PPA
Samarkand	Uzbekistan	PV	220	100	2025	PPA
Sherabad	Uzbekistan	PV	457	100	2026	PPA
Zarafshan	Uzbekistan	Onshore wind	500	100	2025	PPA
			3,791			

Uzbekistan projects

Jizzakh

The Group owns 100 per cent. of the project company for the Jizzakh project, which is a 220 MW solar PV power project in the Jizzakh region of Uzbekistan, and is expected and is expected to achieve its COD in 2025.

A PPA has been entered into with JSC NEGU and is valid for 30 years from the COD. The tariff comprises a plant only energy charge and a project interconnection facility charge.

An interim O&M agreement will be entered with the EPC contractor covering a defect liability period of two years. Thereafter, MSTS will take over for the remaining term of the PPA.

Samarkand

The Group owns 100 per cent. of the project company for the Samarkand project, which is a 220 MW solar PV power project in the Samarkand region of Uzbekistan, and is expected to achieve its COD in 2025.

A PPA has been entered into with JSC NEGU and is valid for 30 years from the COD. The tariff comprises a plant only energy charge and a project interconnection facility charge.

An interim O&M agreement will be entered with the EPC contractor covering a defect liability period of two years. Thereafter, MSTS will take over for the remaining term of the PPA.

Sherabad

The Group owns 100 per cent. of the project company for the Sherabad project, which is a 457 MW solar PV power project in the Surkhandarya region of Uzbekistan, and is expected to achieve its COD in 2026.

A PPA has been entered into with JSC NEGU and is valid for 30 years from the COD. The tariff is a fixed total energy charge.

An interim O&M agreement will be entered with the EPC contractor covering a defect liability period of two years. Thereafter, MSTS will take over for the remaining term of the PPA.

Zarafshan

The Group owns 100 per cent. of the project company for the Zarafshan project, which is a 500 MW wind power project in the Navoi Region of Uzbekistan, and is expected to achieve its COD in 2025.

A PPA has been entered into with JSC NEGU and is valid for of 25 years from the COD. The tariff is a fixed energy charge for (i) all energy generated prior to the COD and (ii) the contracted capacity of the plant from the COD.

An interim O&M agreement has been entered with the EPC contractor covering a defect liability period of two years. Thereafter, MSTS will take over for the remaining term of the PPA. A long term service agreement has also been entered into with the EPC contractor.

UK projects

Arlington Birmingham, Arlington Welkin Road and Arlington Royle Barn Road

Masdar acquired Arlington, a leading battery energy storage developer in the UK, in October 2022. Battery energy storage systems are devices that enable energy from renewable generation sources to be stored and then released when customers most need the power.

Each of these projects is an energy storage project being developed by Arlington. The projects, which are located in the Midlands in England (in the case of Birmingham Road) and in the north of England (in the case of the other two projects) have a combined energy storage capacity of 75 MW and are expected to achieve their CODs between June 2023 and March 2024.

The Group has a 90 per cent. shareholding in each project with the Arlington founders holding the remaining 10 per cent. Each of these projects will supply a mix of ancillary services to the National Grid as well as merchant participation (which is under procurement) and each project has a life of approximately 40 years with capital expenditure expected to be required between the 12th and 15th year of operation to refresh the batteries, subject to usage of the cells.

UAE projects

Al Dhafrah

The Al Dhafrah project is a 1,580 MW solar PV plant located in Al Dhafrah in the Emirate of Abu Dhabi and is expected to achieve its COD in 2023. The Group has a 20 per cent. shareholding in the project company. The remaining shares in the project company are held by the developer and another UAE company.

A PPA has been entered into with EWEC and is valid for a period of 30 years from the anniversary of the COD. Tariffs will be paid from the COD until expiry of the term on a take-or-pay basis, subject to typical exceptions. The tariff comprises an electrical energy payment and a deemed electrical energy payment calculated in accordance with the PPA.

The EPC Contract for the project provides for initial two-year O&M services to be provided by the contractor from the date on which the provisional acceptance certificate is issued (currently expected to be 30 June 2023).

Sharjah WTE

The Sharjah WTE project is a joint venture between the Group and Sharjah Environment Company LLC (**Bee'ah**) and is a 30 MW multi-fuel conventional waste-to-energy plant in the Emirate of Sharjah and is expected to achieve its COD in 2023. The Group has a 50 per cent. shareholding in the project company with Bee'ah holding the remaining 50 per cent.

The offtake agreement is with Sharjah Electricity and Water Company PJSC (SEWA) and lasts for 25 years from the COD. Tariffs are paid on a take-or-pay basis, subject to typical exceptions. The tariff comprises a net electrical energy payment and a deemed energy payment calculated in accordance with the PPA.

The project company has entered into an O&M agreement with an operations joint venture formed by Veolia, Masdar and Bee'ah to operate and maintain the facility. The facility achieved its COD on 1 May 2023.

Australian project

East Rockingham

The East Rockingham project is a 29 MW waste-to-energy and materials recovery facility located near Perth and is expected to achieve its COD in late 2023 or early 2024. The Group has a 37 per cent. shareholding in the project company. The remaining shares in the project company are held through a trust structure, ultimately by a Spanish company (10 per cent.), a Dutch company (40 per cent.) and a Swiss company (10 per cent.).

The project company has entered into a PPA with Talison Lithium Australia Pty Ltd (**Talison**) for the supply of electricity generated by the project to Talison's lithium mineral mine adjacent to the project. The contracted capacity is 12.5 MWh per trading interval (which may be extended under the PPA in respect of uncommitted additional capacity) and the PPA is scheduled to expire on 31 December 2030. Tariffs will be paid from the COD plus one month until 31 December 2030 (with a right of first refusal on uncontracted additional generation). The contract has a bundled rate, take-or-pay PPA for the sale and purchase of all electricity produced up to a defined energy quantity. Payment of the bundled rate will also entitle the buyer to receive from the seller 25 MW of capacity credits and 90 per cent. of the large-scale generation certificates created in respect of the facility.

The project company has also entered into an O&M agreement with EROC Energy Pty Limited to operate and maintain the facility.

The construction of the East Rockingham project was negatively impacted by the COVID19 pandemic and the East Rockingham project company is in discussions with various counterparties relating to the financial consequences of the delay.

Azerbaijan project

Garadagh

The Group owns 100 per cent. of the project company for the Garadagh project, which is a 230 MW solar PV plant that covers an area of 550 hectares near Gobustan and the Alat settlement in Azerbaijan, and is expected to achieve its COD in 2024.

The offtake agreement is with Azerenerji OJSC and lasts for 23 years from the COD. Tariffs will be paid from the COD until expiry of the term on a take-or-pay basis, subject to typical exceptions. The tariff comprises an electrical energy payment and a deemed electrical energy payment calculated in accordance with the PPA.

The O&M agreement has been entered into with MSTS for 25 years. The term of the O&M agreement complies with all applicable international standards of non-recourse finance O&M risk allocation and all back-to-back and pass-through principles related to the project company obligations in the PPA.

Indonesia project

Cirata

The Group is one of the initial project sponsors of the Cirata project, which is a 150 MW floating solar PV power plant project to be located in the West Java province in Indonesia, and is expected to achieve its COD in 2023. The Group owns a 49 per cent. interest in the project company, with the remaining 51 per cent. held by an Indonesian company.

A PPA has been entered into with PT PLN (**Persero**) which expires on the 25th anniversary of the COD, subject to extension (with the total term limited to 30 years). Tariffs will be paid from the COD until expiry of the term on a take-or-pay basis, subject to typical exceptions. The tariff comprises an electrical energy payment and a deemed electrical energy payment calculated in accordance with the PPA.

Two short-term O&M agreements have been entered into in relation to the onshore and offshore aspects of the project, respectively.

Persero granted an extension of 303 days on the basis of force majeure events relating to a shortage of materials and a lack of local manufacturing capacity needed to satisfy local content requirements claimed by the project company, As a result, the anticipated COD under the PPA has been amended to September 2023.

Saudi Arabia project

Jeddah South

The Group was one of the initial sponsors of the Jeddah South project, which is a 300 MW solar PV plant located near Jeddah, and is the majority shareholder in the project company. This project is expected to achieve its COD in 2023. The Group owns 36 per cent. of the project company with an EDF group company holding 34 per cent. and a Saudi Arabian company holding the remaining 30 per cent.

The offtake agreement is with SPPC and lasts for 25 years from the COD. The tariff comprises a fixed capital cost component and a fixed O&M cost recovery component, each adjusted or partially adjusted for foreign exchange rate movements and each adjusted for inflation.

An O&M Agreement for the initial two-year period has been entered into and is being performed by the EPC contractor. An O&M agreement for the remaining term of the PPA has been entered into.

Committed projects

The table below provides details of the Group's four committed projects as at 31 March 2023.

Project name	Location	Group ownership (%)	Technology	Gross capacity (MW)	Offtake arrangement(s)
AYG-1[(1)]	Armenia	85	PV	200	PPA
Noor Midelt[(2)]	Morocco	30	PV	400	PPA
Amaala[(2)]	Saudi Arabia	38	PV	500	PPA
Bukhara[(3)]	Uzbekistan	100	PV	250	PPA
				1,350	

Notes:

(1) This project has been awarded and the PPA has been signed with the project company.

(2) This project has been awarded.

(3) This project has been awarded and the PPA has been signed with Masdar. The PPA is in the process of being novated to the project company.

The Group has four committed projects, one each in Armenia, Morocco, Saudi Arabia and Uzbekistan. All of the projects are solar PV projects. The largest project is a 500 MW solar project in Saudi Arabia and the smallest project is a 200 MW solar project in Armenia. Together, the projects total 1,350 MW, of which the Group's proportionate share is 730 MW. All of the projects will have a PPA. The Group currently has a 100 per cent. ownership interest in one of the projects, and interests ranging between 30 per cent. and 85 per cent. for the remaining three committed projects.

OTHER OPERATIONS

Energy Services

Masdar's Energy Services business unit:

- offers energy efficiency and performance contracting services to clients, where the cost of implementing energy conservation measures is outweighed by the resulting savings and full turnkey solutions through solar power agreements where the distributed renewable energy projects (being projects where energy is generated from sources near the point of use instead of centralised generation sources from power plants) are financed by Masdar for the client in return for a long-term contract (referred to below as the **ESCO business**); and

- manages the delivery of a number of distributed renewable energy projects funded by the Abu Dhabi government around the world. Upon construction completion, the project is handed over to the relevant local government entity.

ESCO business

In 2020, Masdar signed a shareholder agreement with EDF in relation to a joint venture named Emerge Limited (**Emerge**), which is 51 per cent. owned by Masdar and 49 per cent. owned by Emerge. Emerge now owns and carries on the ESCO business.

The ESCO business comprises 12 projects, two of which are operational, six are under construction and four are committed. The ESCO business' operational projects are:

- a 2.98 MW solar PV power plant (the **ADAC Project**) installed on top of the existing carports at Abu Dhabi International Airport Midfield Terminal Carpark for Abu Dhabi Airports Company PJSC, which has agreed to purchase all of the output of the ADAC Project for a 25-year term; and

- a 7 MW solar PV power plant (the **Miral Project**) installed at Warner Brothers theme park on Yas Island, Abu Dhabi for Miral Asset Management LLC, which has agreed to purchase all of the output of the Miral Project for a 30-year term.

The Group's six ESCO projects under construction range in size from 1.0 MW to 8.2 MW and are all located within the premises of businesses based in Abu Dhabi. In four of the projects, the owners of the premises have agreed to purchase the electricity generated over a 25-year period and, in the remaining two, the agreed term is 30 years.

The Group's four committed ESCO projects range in size from 1.0 MW to 6.0 MW and are all located within the premises of businesses based in the UAE. In three of the projects, the owners of the premises have agreed to purchase the electricity generated over a 25-year period and, in the remaining project, the agreed term is 30 years.

Abu Dhabi government distributed renewable energy projects

The Energy Services business unit currently delivers renewable energy projects in 16 Caribbean island nations and Yemen. The projects comprise rooftop solar PV, ground mounted solar PV, solar carports and hybrid systems. The construction of these projects was financed by the Abu Dhabi government as part of its UAE Caribbean Renewable Energy Fund and other aid programmes. Upon construction completion, the projects are handed over to the relevant local government entities.

MSTS

MSTS was established in 2017 as a wholly-owned subsidiary and is the Group's O&M services business. MSTS provides O&M services to four operational utility scale Group projects (three solar and one wind, located in the UAE (DEWA III), Jordan (Baynouna), Serbia (Tesla) and Uzbekistan (Nur Navoi)) and is, or is expected to be, contracted to supply O&M services to four utility-scale projects under construction (the Garadagh solar project in Azerbaijan and the Jizzakh, Sherabad and Samarkand solar projects in Uzebekistan) as at 31 March 2023. MSTS generates revenue from O&M contract fees, however, in the case of MSTS projects in which the Group has a 100 per cent. interest (being Nur Navoi and the four projects under construction), any revenue generated by MSTS is, or will be, eliminated on consolidation. MSTS also provides O&M services to the Al Dhafrah Wind programme, as described below.

Asset Management and Technical Services

Asset Management and Technical Services is engaged in a number of collaboration projects in relation to new technology initiatives. These include:

- Batwind, which is a 1 MWh battery storage pilot project connected to the Hywind floating wind farm in Scotland and aims to analyse different value drivers of battery energy storage systems connected to renewable power plants. These drivers include reduction of balancing cost, increased power market value and delivery of system services;

- Solar Hub/PV test centre, which involves outdoor performance testing of PV modules, focusing on energy yield, soiling analysis, evaluation of coatings, evaluation of cleaning apparatus, temperature co-efficient determination, light-induced degradation and long-term outdoor exposure;

- electric energy storage research hub, which involves performance testing and demonstration of electric energy storage systems, optimisation of system sizing and implementation for remote or stand-alone hybrid renewable energy and energy storage systems and evaluating the economic benefits and operation strategies of hybrid renewable energy and energy storage systems; and

- renewable energy water desalination programme, which includes the development and demonstration of advanced and innovative seawater desalination technologies, including reverse osmosis, forward osmosis, membrane distillation and liquid ionic membrane separation. Five pilot plants were operated in Ghantoot, with a combined water production of 1,500 cubic metres per day. The final report was issued in January 2018 and Masdar is currently exploring with its partners a few commercial opportunities on a smaller scale to deploy these technologies.

Source Trading Company Limited

STC was established by the Group as a wholly owned subsidiary of Masdar to maximise value (both technically and commercially) for renewable energy and clean technology products. STC purchases renewable energy products such as PV modules, wind turbines and inverters, directly from their manufacturers, with a focus on driving efficiency and higher technical standards. Typically, STC purchases these products for specific projects of the Group (both local and international) and on-sells them to the relevant EPC contractor at a premium. As at 31 March 2023, STC had been involved in the Nur Navoi, Garadagh, Jizzakh, Samarkand and Sherabad projects as well as the Al Dhafrah Wind programme described below.

Al Dhafrah Wind programme

Masdar is overseeing the Abu Dhabi wind programme, which is a non-commercial special project with capital costs of approximately U.S.$171 million (all of which are being funded by the Abu Dhabi government) to erect 23 grid-connected, 4.5 MW wind turbines across four project sites in Abu Dhabi with total capacity of 103.5 MW. This project completed on 19 June 2023.

Masdar, through MSTS, will perform O&M across the four project sites for a period of 12 years. The project is owned by Al Dhafrah Sole Proprietorship, a wholly owned subsidiary of Masdar located in the Masdar City freezone.

The table below provides summary information about the Al Dhafrah Wind programme.

Project site	**Number of wind turbines**	**MW capacity**
Sir Bani Yas	10	45
Delma	6	27
Sila..............................	6	27
Al Hala[(1)]	1	4.5
	23	**103.5**

Note:
(1) Includes a 14 MW solar PV plant.

Green hydrogen

Green hydrogen is mainly hydrogen produced from water electrolysis powered by renewable electricity. The resulting energy carrier can be used in the form of hydrogen or converted to other derivatives for industry, power or transportation, supporting the decarbonisation of hard-to-abate sectors such as heavy industry, long-haul freight, shipping and aviation.

According to H.E. Sharif Salim Al Olama, the UAE Undersecretary for Energy and Petroleum Affairs at the Ministry of Energy and Infrastructure, global green hydrogen demand is expected to reach around 30 million tonnes per annum (**mtpa**) by 2030, continuing to grow exponentially to 610 mtpa by 2050.

The Group's green hydrogen business aims to produce up to 1 million tonnes of green hydrogen per annum by 2030. It is focused on meeting green hydrogen demand both domestically and internationally by targeting key segments, which include aviation, ammonia, steel, maritime, power, refining and heavy-duty transportation. To achieve this, Group's green hydrogen business is developing and investing in strategic projects and building scalable platforms in key markets. This will support global decarbonisation efforts while advancing the UAE's net-zero journey and creating significant value for Abu Dhabi by diversifying the economy through the development of a local green hydrogen industry.

The Group has publicly announced the following green hydrogen project agreements:

- in partnership with Siemens Energy, TotalEnergies, Marubeni Corporation, the Abu Dhabi Department of Energy, Etihad Airways, Lufthansa Group and Khalifa University, Masdar is leading the development of a demonstration project for the production of green hydrogen and sustainable aviation fuels;

- Masdar, BP plc (**BP**) and ADNOC have formed a UK-UAE new energy partnership that includes (i) an agreement between Masdar, BP and ADNOC, along with Etihad and Tadweer, to explore the production of sustainable aviation fuels in the UAE using solar-to-green hydrogen and waste gasification and (ii) an agreement by Masdar to acquire a stake in BP's proposed green hydrogen project, HyGreen Teesside, which is to produce 80 MW electrical input of hydrogen at start-up in 2026, increasing to up to 500 MW electrical input of hydrogen by 2030;

- Masdar and ENGIE have formed a U.S.$5 billion strategic alliance to help drive the UAE's green hydrogen economy. The first action taken under this alliance's umbrella is a collaboration with Fertiglobe to explore the development of a green hydrogen facility with a capacity of up to 200 MW to supply Fertiglobe's ammonia production plants at Ruwais;

- Masdar, Hassan Allam Utilities and Infinity Power signed agreements with the General Authority for Suez Canal Economic Zone, the New and Renewable Energy Authority, the Egyptian Electricity Transmission Company and The Sovereign Fund of Egypt related to the development of 4,000 MW of green hydrogen plant capacity by 2030 in Egypt, with one plant located in the Suez Canal Economic Zone and a second on the Mediterranean Sea; and

- Masdar is developing a 2,000 MW capacity integrated offshore wind and green hydrogen project in Azerbaijan, as part of a 4,000 MW project agreement between Masdar and the Ministry of Energy of the Republic of Azerbaijan.

Skyfall

Masdar was the cornerstone LP investor in the Skyfall Fund with a commitment of £35 million. The Skyfall Fund raised a total of £420 million, half of which came from the UK government directly, to invest in public electric vehicle charging infrastructure in the UK. The Skyfall Fund's first investment was in Instavolt, a rapid public charging site developer and operator with smaller investments to date in three additional ventures. The Skyfall Fund has approximately five years left to run before it has to fully divest and return investor capital. As at 31 March 2023, the Skyfall Fund has drawn down £12.6 million out of Masdar's £35 million commitment. A portion of this was invested in Instavolt which the Fund sold to EQT, a European private equity firm, in February 2022 resulting in an AED 122 million distribution to the Group. The Group also received a net distribution from its investment in the Skyfall Fund of AED 37 million in 2021.

RISK MANAGEMENT

The Group operates in a fast-changing environment that gives rise to risks across its value chain. The Group is also exposed to indirect risks that emanate from other businesses and entities that are linked to the Group's line of business.

Masdar recognises that risk management is an integral aspect of effective management practices and corporate governance as it assists decision making and enhances sustainability and accountability. Accordingly, it is committed to implementing risk management best practices across its business by means of adopting sound enterprise risk management (**ERM**) principles. This commitment has been formalised in an ERM policy, which has been endorsed by Masdar's management.

There is a robust and dynamic risk management framework to continuously identify, communicate, manage and mitigate risks. The ERM framework, which is embedded into the operational and strategic processes, seeks to effectively and successfully address the main risks inherent in the Group's business and activities. The risks are identified and managed at each level of the organisation (from projects up to corporate) with the appropriate level of granularity. They are reported on a regular basis to the appropriate management level and ultimately to the Board's Audit Risk and Compliance Committee, the committee of the Board mandated to oversee risk management. Risks and mitigation actions are reviewed on a regular basis to ensure that risk management is a continuous and iterative process.

A portfolio management department is responsible for the ERM process and its implementation across the organisation, including the projects and other legal entities in which Masdar is a shareholder. Risk management is headed by an executive director, who reports to the CEO. The Board Audit Risk and Compliance Committee oversees and reviews the risk assessment processes that inform the Board's decision making and advises the Board on the Group's current risk exposures and future risk strategy. The Board aims to ensure adequate allocation of responsibility and accountability for risk management activities across the Group, while overseeing the overall risk management process and risk profile of the Group.

In accordance with the risk management framework, specific responsibilities, tools and guidance have been developed in order to systematically assess, mitigate and monitor risks in the development, construction and operation stages of the Group's projects to more effectively manage the relevant risks. The Group also seeks to mitigate potential risks in relation to its projects using back-to-back contractual arrangements that distribute project risks to the counterparties best suited to manage them.

INFORMATION AND COMMUNICATION TECHNOLOGY

Masdar's Information and Communications Technology division offers three main technology services to the Group in line with UAE national standards and IT best practices to ensure seamless corporate technological operations and support. These services are:

- **Project delivery**: This service focuses on the evaluation and execution of IT projects. Tasks involve allocating necessary resources through budgeting for new initiatives, strategising for upcoming projects, selecting vendor partners, managing proofs of concept for potential projects, overseeing the completion of new projects from start to finish, and handling change requests for existing projects. This service also provides consultancy services to core business units in relation to technology and innovation.

- **Service delivery**: This service includes help desk and service desk support with first-line assistance for common requests and basic IT issues from users, second-line help for more complex and time-consuming issues, and third-line teams specialising in security, server and network support. Systems operation and support, emphasising the upkeep and support of business applications, is also part of this service, which also provides support services to agreed and selected international offices.

- **Security and governance**: This service is centred on IT security and includes reviewing and creating security policies and processes, monitoring security operations and performance, managing security projects for a secure digital environment and contributing to other projects requiring security consultation and expertise.

QUALITY, HEALTH AND SAFETY

Health and safety is a major priority for the Group, which has robust workplace safety policies in place that apply to all employees and contractors. Regular audits are conducted, and both internal and external training programmes are run to ensure that the awareness and competencies of all relevant personnel are up to date.

Masdar has created quality, health, safety and environment (**QHSE**) champions and a committee involving members of the senior management and employees from all departments and divisions. This provides an opportunity for people from across Masdar to be involved in the development, implementation and evaluation of its health and safety system. Masdar also holds regular meetings where QHSE performance, key findings and key focus areas are discussed.

Masdar conducts regular inspections and emergency drills and also "lessons learnt sessions" afterwards to discuss the key outcomes and learnings from these important practical activities.

ENVIRONMENT, SOCIAL AND GOVERNANCE

Corporate level

The Group is committed to sustainability and making a positive impact on the environment and the communities where it has projects. This commitment is also highlighted in the way the Group delivers knowledge and industry platforms to stimulate further growth in the wider renewable energy and clean-tech industry, creating new long-term revenue streams for the UAE.

Environment

Masdar was the region's first large-scale sustainability and renewable energy initiative. Since its inception, the Group has spent 17 years pioneering world-class clean energy projects that support the global energy transition and net-zero objectives, and promote environmentally friendly approaches across real estate, construction, and urban development. Masdar City itself is one of the world's most sustainable urban communities – a low-carbon development that is pioneering the UAE's ambitions to achieve net-zero by 2050. Masdar City was divested in late 2022 to MIC prior to its sale of a significant shareholding in Masdar to TAQA and ADNOC.

The table below illustrates the Group's environmental contributions from its generation projects in each of 2022, 2021 and 2020.

	2022	**2021**	**2020**
Indicative clean source generation[1] (*GWh*).........	57,000	N/R	N/R
Actual clean source generation[2] (*GWh*).............	18,000	15,000	11,000
Indicative abated CO^2 (*million tons*)...................	30	N/R	N/R
Actual abated CO^2 (*million tons*).........................	10.0	7.5	6.5

Notes:
(1) Indicative generation from clean sources, being projects in operation, under construction and committed.
(2) Approximate generation from the Group's operational assets owned or committed to acquire as at 31 December in the relevant year. Annualised based on November data in 2020.
(3) Indicative CO^2 abated by the Group's total production capacity from projects in operation, under construction and committed.
(4) Approximate CO^2 actually abated from the Group's operational projects owned or committed to acquire as at 31 December in each year. Annualised based on November data in 2020.

N/R means not reported.

Social

The Group engages with the communities where it operates through important strategic platforms, and its interactions with employees, suppliers, customers and other stakeholders reflect the Group's commitment to collaboration, partnership and creating shared value. The Group seeks to uphold the highest standards in HSE practices and performance, and supports a diverse and inclusive workforce, while being committed to initiating and supporting community-driven projects. See also "*Management and employees—Employees*".

Governance

Good governance is integral to the way Masdar carries out its day-to-day operations, with multiple layers of oversight in place to ensure a robust risk management landscape, from committees through to discussion forums. There are strict and important guidelines in place for all Masdar employees to follow, with regular and ongoing checks made throughout the organisation to ensure that fundamental principles are followed, adhered to and practised across all levels. Masdar's governance function includes:

- its internal audit department, which brings a systematic and disciplined approach to evaluating risks and ensures (i) that risk management is appropriately identified and managed, and employees' actions are in compliance with policies, standards, procedures, the code of ethics, and applicable laws and regulations and (ii) compliance with any significant legislative and regulatory issues impacting Masdar;

- its commitment to responsible sourcing, which directly references the requirement for all suppliers to adhere to five core principles, namely: (i) zero use of child, forced or involuntary labour in any form and compliance with all relevant local and national laws and regulations regarding the same, (ii) employment practices, benefits, health and safety and anti-discrimination, (iii) occupational health and safety and the provision of health-related benefits to employees, (iv) land and water management, waste and recycling, the handling and disposal of toxic substances, discharges and emissions, noise, transportation of products, and waste and (v) bribery, corruption and prohibited business practices; and

- embedded ethical practices, through a robust ethics and compliance programme, reflecting the specific challenges encountered in the countries and industries in which the Group operates.

Across all of its operations and suppliers, Masdar undertakes all necessary action to ensure that there is no forced or compulsory labour in the Group's operations or across its supply chains. This includes extensive due diligence as well as contractual protections and, where considered appropriate, third-party inspections during production.

Project level

Masdar has a dedicated ESG team which is responsible for the implementation of environmental and social (**E&S**) practices and procedures on each project that the Group develops or acquires, throughout its lifecycle, in compliance with international and host country regulatory standards and best practices. In relation to each project, this ESG team:

- ensures that E&S risks, constraints and opportunities are considered during screening and origination;

- selects and oversees environmental and social impact assessment (**ESIA**) consultants and works closely with them to ensure that the E&S permitting process is robust and efficient and that the commitments outlined in the ESIA are aligned with good international industry practice;

- streamlines compliance with all relevant international standards and guidelines, supports lenders' E&S due diligence processes, and leads the development of the environmental and social action plan (**ESAP**) and its implementation until the project-level E&S team is onboarded;

- leads the preparation of the environmental and social management system (**ESMS**) in line with the Group's requirements and project-specific compliance obligations;

- defines the scope of the E&S team based on specific challenges and compliance requirements, leads the personnel selection process, and trains the team to ensure a full understanding of corporate and project-specific ESG requirements; and

- provides support to the E&S team and undertakes regular audits to ensure successful implementation of the ESAP and ongoing compliance with the ESMS.

The Group's projects must meet onerous E&S requirements, including, the Equator Principles, IFC Performance Standards (**IFC PS**) and IFC General Environmental Health and Safety Guidelines. Among other matters, these E&S requirements typically oblige the Group's projects to develop and implement:

- an ESIA, which includes the development of a commitments register and an environmental and social management and monitoring plan;

- an ESMS in accordance with the general requirements of IFC PS1 and the objectives of ISO14001;

- an environmental and social management plan covering both construction and operations consistent with the project ESIA, the IFC PS and national requirements. This usually consists of a suite of sub-plans, including but not limited to: waste management; pollution prevention; water management; hazardous materials; biodiversity management; emergency response; community health, safety and security; road safety and traffic; worker accommodation; influx management; cultural heritage (including chance finds); environmental monitoring; stakeholder engagement (including grievance management); and contractor management;

- an occupational health and safety management system aligned with OHSAS18001 / ISO 45001 and of a scale appropriate to the project; and

- a biodiversity management plan which demonstrates no net loss of natural habitat and associated species, with appropriate mitigation measures.

INSURANCE

The Group maintains the types and amounts of insurance coverage at its projects that it believes are appropriate for the business and consistent with customary industry practices in the jurisdictions in which it operates. The Group's insurance policies at its projects generally cover employee-related accidents and injuries, property damage and machinery breakdown, business interruption as a result of physical damage to assets and legal liability to third parties deriving from its activities, including certain environmental liabilities. The Group also maintains coverage in respect of directors' and officers' liability.

The Group's has leading risk identification, insurance strategy compliance practices, coverage, and programme management practices in the global industrial power sector. The Group also has experienced insurance professionals and advisers who continually monitor the risks to which the business is exposed and ensure that effective coverage is procured in line with the relevant legal and regulatory requirements of the countries in which the Group operates. The insurance programme the Group has procured for construction and property risks is predicated on replacement or reinstatement values and maximum loss estimates for high value assets. Delay in start-up and business interruption coverage is typically insured for debt service and fixed operating costs at a minimum and in line with the requirements under the Group's PPAs and financing agreements. As such, the Group's projects have comprehensive insurance coverage. The values and sums insured at risk are reviewed and amended as necessary supported by professional valuation reports every three to five years to ensure appropriate coverage to reflect the insured exposure.

A comprehensive review of all project agreements is undertaken to ensure that the risk is allocated to the right party and suitable insurance obligations are agreed in the form of insurance annexures in each of these agreements. The comprehensive insurance programmes during both construction and operational periods of each of the projects are developed from the above process of contract reviews and insurance obligations agreed together with the local and international insurance/reinsurance practices and statutory regulations in each of the territories in which the Group operates. During each stage such as pre-bid, pre-financial close/notice to proceed, construction period and operational period, the risk and insurance activities are carefully reviewed, monitored and adjusted to suit the requirements of all insured parties. Given that its projects are typically financed on a limited or non-recourse basis, the Group's insurance programmes are always arranged on a principal-controlled basis to meet its lenders' requirements.

LITIGATION

Rockspring project

The Rocksprings project company is involved in a number of lawsuits as follows:

Property tax disputes

On 18 May 2022, the Rocksprings project company lost a jury trial in the Val Verde County district court relating to a claim by the Chief Appraiser of the Val Verde County Appraisal District challenging the Val Verde County Appraisal Review Board's valuation of the Rocksprings project for the 2018 tax year. There are similar lawsuits in relation to the 2019 and 2020 tax years. The Rocksprings project company appealed the decision and continues to pay the undisputed amount until the appeal is settled in order to avoid penalties and late fee charges. The court date for the appeal is set for July 2024, but could be heard before that time.

Winter Storm Uri

In February 2021, the Rocksprings project's power generation assets, especially its wind turbines, suffered physical damage and/or generation impairment because of heavy icing following the extreme weather events that occurred in Texas during Winter Storm Uri in February 2021. This resulted in temporary reduced power generation output, power generation disruption and various legal claims against the Rocksprings project company discussed below.

The Rocksprings project company elected to receive some of the U.S.$2.8 million due from nodal sales to be paid out by the bankrupt transmission operator over time at a steep discount. To date, a significant portion has been received, but an outstanding balance of U.S.$600 thousand remains.

Walmart power supply dispute

In response to Winter Storm Uri, the Rocksprings project company declared a temporary force majeure event under the PPA entered into between the Rocksprings project company and Walmart Stores, Inc. (**Walmart**), dated 26 January 2015 (the **Rocksprings Walmart PPA**).

Under the Rocksprings Walmart PPA, the Rocksprings project company has the option to settle power requests either physically or financially. During Winter Storm Uri, the Rocksprings project company could not settle physically and accrued U.S.$10 million in financial settlement costs as a result of high power prices during the extreme weather event.

This claim was ultimately settled with the cancellation of the PPA with Walmart and a financial payment by the Rocksprings project company to Walmart. Following the cancellation of the Walmart PPA the Rocksprings project company is selling the subject generation on a merchant basis.

3M power supply dispute

In April 2021, 3M Company (**3M**) sent a notice of default to the Rocksprings project company under its PPA in connection with power supply disruption during Winter Storm Uri. This was settled without admission of liability for U.S.$19.5 million.

Turner class action

Following Winter Storm Uri, in June 2021, the Rocksprings project company and a number of other defendants were served with an original petition issued in May 2021 in Harris County, Texas, naming it as a defendant in a class action lawsuit for wrongful death, personal injury and damages. The action involves 94 plaintiffs, including one deceased estate. The plaintiffs alleged that the Rocksprings project company, in addition to 310 other power generators, power distribution companies, gas suppliers and pipeline owners with operations in

Texas, negligently failed to prepare for extreme weather events and is liable for damages for loss of life, personal and property damage. The plaintiffs' damages were not quantified in the original petition, although the plaintiffs have sought compensatory, actual and exemplary damages under a jury trial.

In January 2023, an order was issued granting the generator defendants' motion to dismiss the claims in the Turner class action in part and denying it in part. The effect of this order is that plaintiffs' tortious interference and civil conspiracy claims against the generator defendants have been dismissed, but their negligence, gross negligence and private nuisance claims have survived at this stage.

3M cyber-attack

In October 2022, the Rocksprings project company faced a cyber-attack involving the redirection of U.S.$5.5 million in funds being paid to 3M under its PPA with 3M. A criminal investigation has been initiated by the operator and managing partner of the Rocksprings project and the bank involved. 3M and the Rocksprings project company continue their discussions on this issue. Both parties have undertaken investigations and both maintain that the intruder gained access via the other's system. To date, no formal claim or commencement of action against the Rocksprings project company has occurred.

London Array project

The London Array operating company (an unincorporated joint operation) and the companies invested in that joint venture filed a claim in the UK Competition Appeal Tribunal (the **Tribunal**) against one of the suppliers to the London Array project alleging anti-competitive practices pursuant to a European Commission Decision fining cables suppliers in relation to cartel arrangements. The claim was issued in July 2022 for approximately £50 million in damages by way of preliminary estimate. The quantum of damages will be the subject of expert evidence and determination by the Tribunal as to the amount of compensation in due course. This claim has been acknowledged and the claim process continues.

In addition, the companies invested in the London Array joint venture have submitted certain insurance claims. In respect of the most significant of these, a time-limited standstill agreement has been executed with insurers and, if a resolution is not reached by the end of July 2023, legal proceedings against the insurers may be initiated.

MANAGEMENT AND EMPLOYEES

MANAGEMENT

Board of Directors

The Board is responsible for overseeing the conduct of Masdar's business and supervising management. The Board appoints the Chief Executive Officer (the **CEO**) and works with the CEO to appoint the other members of senior management who are charged with managing the business.

Among other matters, the CEO is required to implement Masdar's strategy and to exercise control over its operations and risk management.

As at the date of this Base Offering Circular, the Board comprises the eight members (each, a **Director**) listed below. Each of the Directors was most recently appointed on 8 December 2022. Each Board member serves for a term of three years or until replaced by his appointing shareholder, if earlier.

Name	Position	Appointing shareholder
H.E. Dr. Sultan Al Jaber	Chairman	TAQA
H.E. Mohamed Alsuwaidi	Deputy Chairman	TAQA
Jasim Thabet	Director	TAQA
Farid Al Awlaqi	Director	TAQA
Khaled Salmeen	Director	ADNOC
Musabbeh Al Kaabi	Director	ADNOC
Dr. Bakheet Saeed Al Katheeri	Director	MIC
Ahmed Al Calily Al Ameri	Director	MIC

Brief biographies of each of the Directors are set out below.

H.E. Dr. Sultan Al Jaber, Chairman

H.E. Dr. Sultan Al Jaber is a member of the UAE Federal Cabinet, the Minister of Industry and Advanced Technology for the UAE, and the UAE's special envoy for climate. In his role as Minister of Industry and Advanced Technology, Dr. Al Jaber oversees efforts to further expand the industrial development of the UAE, and in particular promote in-country value, leveraging technology as a key enabler.

Dr. Al Jaber serves as Group CEO and Managing Director of ADNOC. Prior to this, Dr. Al Jaber was the Chief Executive Officer of the Energy platform at Mubadala. In 2006, while at Mubadala, he helped establish Masdar and served seven years as its CEO.

Dr. Al Jaber is also Chairman of Emirates Development Bank and Chairman of the Board of Trustees of the Mohamed bin Zayed University of Artificial Intelligence. He is a member of the Abu Dhabi Supreme Council for Financial and Economic Affairs and of the board of Emirates Global Aluminum (**EGA**).

Dr. Al Jaber also served as Chairman of the Abu Dhabi Ports Company (**ADPC**) from 2009-2019 and as Chairman of the UAE National Media Council from 2015 to 2020.

Dr. Al Jaber holds a PhD in business and economics from Coventry University in the United Kingdom, a Master of Business Administration from the California State University and a Bachelor's degree in Chemical Engineering from the University of Southern California, both in the United States.

H.E. Mohamed Hassan Alsuwaidi, Deputy Chairman

H.E. Mohamed Hassan Alsuwaidi is the Minister of Investment for the UAE and Managing Director and Chief Executive Officer of ADQ, an Abu Dhabi-based investment and holding company.

H.E. Alsuwaidi previously held several positions at MIC, including leading the metals and mining platform and other management positions for more than 10 years, and has expertise in the field of managing investments in infrastructure, utilities and other sectors. He is currently the Chairman of TAQA, the Second Vice Chairman of Aldar Properties PJSC, a Non-Executive Director of Abu Dhabi National Oil Company for Distribution and a Non-Executive Director and Member of the Investment Committee of the Abu Dhabi Pension Fund. He also holds board positions in numerous ADQ-consolidated companies.

H.E. Al Suwaidi holds a Bachelor's degree in accounting from UAE University.

Jasim Thabet, Director

Mr. Thabet serves as TAQA's Group Chief Executive Officer and Managing Director, a role he has held since July 2020. Mr. Thabet, who was elected to TAQA's Board of Directors in 2019, is an energy industry veteran with more than two decades of experience.

Prior to his role at TAQA, he served as Chief Executive Officer and Managing Director of ADPower, where he leveraged the company's portfolio of assets throughout the value-chain to support the transformation of the power and water sector in the UAE. He also served as CEO of the National Central Cooling Company PJSC (**Tabreed**) and is a board member of the Abu Dhabi Chamber of Commerce and Industry, Etihad Aviation Group and ADPC.

Mr. Thabet holds a Bachelor's degree in mechanical engineering from Saint Martin's University in the United States.

Farid Al Awlaqi, Director

Mr. Al Awlaqi is the Executive Director of TAQA's generation business line, a position he has held since July 2020. He previously served as Senior Vice President in the Energy platform at MIC where he had roles in operations, business developments, investments and asset management.

Mr. Al Awlaqi is the Chairman of the Supervisory Board of TAQA Morocco, and is a board member of other TAQA-consolidated companies.

Mr. Al Awlaqi holds a Master of Business Administration from the London Business School and a Master of Engineering in Petroleum Engineering from Imperial College, University of London.

Khaled Salmeen, Director

Mr. Salmeen has served as Executive Director of Downstream Industry, Marketing and Trading Directorate of ADNOC since January 2021, having previously served as Executive Director of the Marketing, Sales & Trading Directorate of ADNOC.

Mr. Salmeen holds a Bachelor's degree in Engineering from Colorado School of Mines in the United States, an Executive Master of Business Administration from INSEAD and a Project Management Professional certificate from the Project Management Institute and Harvard Business School.

Musabbeh Al Kaabi, Director

Mr. Al Kaabi is the Executive Director of the Low Carbon Solutions & International Growth Directorate at ADNOC. Created in November 2022, this directorate focuses on driving investments in new energies and low carbon solutions as well as international growth in areas such as gas, liquefied natural gas and chemicals.

Mr. Al Kaabi is also a board member of a number of MIC-consolidated companies.

Mr. Al Kaabi has a Bachelor's degree in Geophysical Engineering from the Colorado School of Mines in the United States and a Master's degree in Geoscience from Imperial College in the United Kingdom.

Dr. Bakheet Saeed Al Katheeri, Director

Dr. Al Katheeri is the Chief Executive Officer of MIC's UAE Investments platform. He is also a member of the boards of other MIC–consolidated *companies*.

Dr. Al Katheeri holds a Bachelor of Science degree in Petroleum Engineering and applied Mathematics from the University of Tulsa in the United States and a Master's degree in Environmental Science from UAE University. He also holds an Executive Master of Business Administration from Higher Colleges of Technology in the UAE and a Doctorate of Business Administration from the College of Business and Economics from the UAE University.

Ahmed Al Calily Al Ameri, Director

Mr. Al Ameri is MIC's Chief Strategy & Risk Officer, overseeing MIC's corporate strategy, ESG and enterprise and risk management framework. Before his appointment as the Chief Strategy & Risk Officer, he was the CEO of Energy at Mubadala where he oversaw its energy assets. He was also the Director General of the Abu Dhabi Technology Development Committee and, prior to that, he was the CEO and Managing Director of ADPC.

Mr. Al Ameri is a board member of a number of MIC-consolidated companies.

Mr. Al Ameri has a Bachelor's degree in Economics and Political Science from Boston University in the United States.

Address and absence of conflicts

The business address for each of the Directors appointed by (i) ADNOC is ADNOC's headquarters on Corniche Road West, Abu Dhabi (P.O. Box 898), (ii) TAQA is TAQA's headquarters in Al Maqam Tower, 3 Abu Dhabi Global Market Square, Al Maryah Island, Abu Dhabi (P.O. Box 55224) and (iii) MIC is MIC's headquarters at Mamoura Buildings, near Muroor (4th) Road and Mohammed Bin Khalifa (15th) Street, Abu Dhabi. There are no actual or potential conflicts of interest as at the date of this Base Offering Circular between the duties owed by the Directors to Masdar and their private interests or other duties.

Board committees

The Board has established the following four committees.

*Sustainability, Strategy and Investment Committee (**SSIC**)*

The SSIC acts as an internal consultative body for the Group's ESG-related matters and net-zero strategy, including by (i) reviewing, endorsing and making recommendations to the Board regarding the Group's annual and long-term ESG and net-zero targets and strategy, (ii) providing strategic advice on ESG topics, ESG-related risks, and opportunities and endorsing appropriate mitigation measures, (iii) reviewing ESG implementation activities and reporting activities and (iv) reviewing ESG materials, topics and related activities of any other Board committee. The SSIC also ensures that Masdar's overall investment process and guidelines remain fit for purpose and that its funds are invested in accordance with the approved processes, guidelines, policies and procedures, strategy and plan and reviews, endorses and approves (where appropriate) investment and divestment-related matters that require its approval in accordance with Masdar's delegation of authority.

The SSIC typically meets weekly unless there is no business to discuss, with ad hoc meetings being arranged when required. The members of the committee are Jasim Thabet (Chairman), Musabbeh Al Kaabi, Farid Al Awlaqi and Bakheet Saeed Al Katheeri.

*Nomination and Remuneration Committee (**NRC**)*

The NRC is responsible for Masdar's compensation strategy in relation to its employees and relevant contracted staff. It evaluates and approves all compensation-related policies, plans, frameworks and proposals and ensures that Masdar structures its compensation plans, policies and programmes to (i) attract and retain the best available personnel for positions of substantial responsibility and (ii) incentivise such persons to perform to the best of their abilities and promote the success of Masdar's business. The NRC also reviews, recommends and oversees the design of any grading mechanism and/or structure for Masdar's personnel and undertakes other specific duties and responsibilities as determined by the Board of Directors from time to time.

The NRC is required to meet at least four times a year, but may meet more often where required to fulfil its duties. The members of the committee are Farid Al Awlaqi (Chairman), Bakheet Saeed Al Katheeri, Jasim Thabet and Musabbeh Al Kaabi.

*Audit Risk and Compliance Committee (**ARCC**)*

The ARCC is responsible for overseeing Masdar's accounting policies, financial reporting process and the integrity of the Financial Statements; its external auditors, including their qualifications and independence, and the annual external and government audits; the effectiveness of Masdar's systems of internal control and managing and assessing its financial and operational risks; Masdar's risk management framework, process and controls; and Masdar's internal audit. The ARCC is also responsible for ensuring compliance with applicable laws and regulations, Masdar's codes of ethics and business conduct, and its other related policies and procedures established by management and the Board.

The ARCC is required to meet at least four times a year, but may meet more often where required to fulfil its duties. The members of the committee are Mohamed Alsuwaidi (Chairman), Musabbeh Al Kaabi, Farid Al Awlaqi and Ahmed Al Ameri.

*Technical and Projects Committee (**TPC**)*

The TPC is responsible for monitoring, guiding and supporting significant projects throughout their lifecycle, including (i) overseeing their compliance with HSE performance and risk management protocols, whilst promoting the right delivery culture, (ii) monitoring their budget utilisation and exploring optimisation opportunities and (iii) reviewing, endorsing and making recommendations to the Board regarding project delivery issues in line with the defined escalation matrix/threshold for each significant project and contractual commitments including, but not limited to, variations, emergency procurement and waiver of liquidated damages.

The TPC typically meets monthly unless there is no business to discuss, with ad hoc meetings being arranged when required. The members of the committee are Alastair Mulligan (Chairman), Musabbeh Al Kaabi, Muqeet Bawa and Olivier Chazalmartin.

Senior management

The table below identifies the members of Masdar's senior management team and their positions within Masdar.

Name	Position
Mohamed Jameel Al Ramahi	Chief Executive Officer
Niall Hannigan	Chief Financial Officer
Abdulaziz Al Obaidly..	Deputy Chief Operating Officer
Jonathan Evans..	General Counsel
Fawaz Al Muharrami...	Executive Director
Mohamed AlNuaimi..	Executive Director
Dr. Lamya Nawaf Fawwaz.....................................	Executive Director
Dr. Nikolas Meitanis	Executive Director
Tareq Al Qubali...	Executive Director

Brief biographies of each of member of Masdar's senior management team are set out below

Mohamed Jameel Al Ramahi, Chief Executive Officer

Mr. Al Ramahi has more than 23 years' experience in the oil and gas and renewable energy sectors. He joined Masdar in 2008 and has held senior leadership positions in Masdar for nearly 15 years, serving as Chief Financial Officer and Chief Operating Officer prior to his appointment as CEO in 2016.

Prior to joining Masdar, Mr. Al Ramahi headed Internal Audit as well as Financial Systems and Procedures in GASCO.

Mr. Al Ramahi has a Bachelor's degree in Business Administration (Finance) from Evansville University in the United States.

Niall Hannigan, Chief Financial Officer

Mr. Hannigan has more than 30 years' experience in accounting, auditing, financial management and strategy, risk management, commercial negotiation and business development.

Prior to joining Masdar in September 2010, he served as Chief Financial Officer for Zabeel Properties from 2008 to 2010 with the responsibility to advise the board on the medium- to long-term development strategy. He also served as Regional Chief Financial Officer for Emaar Properties from 2005 to 2008.

He is a qualified chartered accountant and a fellow of the Institute of Chartered Accountants in Ireland.

Abdulaziz Al Obaidly, Deputy Chief Operating Officer

Mr. Al Obaidly has more than 15 years' experience in the energy and utilities sectors, including renewables.

Before joining Masdar, Mr. Al Obaidly held management roles in TAQA, overseeing domestic generation. He held the role of General Manager of SHAMS Power Company, a subsidiary of Masdar, and was a fellow and research engineer at the Masdar Institute for Science and Technology.

Mr. Al Obaidly holds a Master's Degree in Energy Engineering from Aachen University in Germany. He also holds a Bachelor's degree in Mechanical Engineering from the UAE University.

Jonathan Evans, General Counsel

Mr. Evans has more than 24 years' experience in energy and renewable energy projects and investments, and their associate regulatory and risk landscapes, including 13 years' experience as Company Secretary to the Board, board committees and executive management committees.

Prior to rejoining Masdar in 2021, he was General Counsel and Company Secretary at EGA between 2014 and 2020. Before that, he was General Counsel and Company Secretary at Masdar from 2008 to 2013.

Mr. Evans has master's degrees in law from Georgetown, DC (1997) and King's College London (1999). He was called to the Bar in 1990 (Gray's Inn, London) and qualified as a solicitor in England and Wales in 2003.

Fawaz Al Muharrami, Executive Director

Mr. Al Muharrami has more than 23 years' experience in renewable energy projects. He joined Masdar in 2009 as Engineering Manager at Hydrogen Power Abu Dhabi. Prior to joining Masdar, he was a project leader at the Abu Dhabi Marine Operating Company (formerly known as ADMA OPCO and now known as ADNOC Offshore).

Mr. Al Muharrami has a Bachelor's degree in Engineering Management from the Higher Colleges of Technology in the UAE, where he earned a distinction with highest honour. He also holds a Higher Diploma in Chemical Engineering with distinction.

Mohamed AlNuaimi, Executive Director, Internal Audit

Mr. AlNuaimi has more than 23 years' experience in audit and finance and currently facilitates Masdar Internal Audit's mandate, which is to enhance and protect organisational value by providing risk-based and objective assurance, advice and insight.

Before joining Masdar, Mr. AlNuaimi held roles with other UAE government entities, including the Crown Prince's Court of Abu Dhabi, the President's Office and the UAE Air Force as an aerospace engineer for 11 years. He also helped in setting up the internal audit function at the UAE Ministry of Foreign Affairs and International Cooperation in 2011.

Mr. AlNuaimi was awarded a Master of Business Administration from Abu Dhabi University and a Bachelor's degree in Applied Business and Management from the Higher Colleges of Technology in Abu Dhabi. He has been a Certified Fraud Examiner since 2018.

Dr. Lamya Nawaf Fawwaz, Executive Director, Brand & Strategic Initiatives

Dr. Fawwaz has 24 years' experience in the oil and gas and renewable energy fields and serves as Director of the Zayed Sustainability Prize, an annual award that accelerates the development of sustainable solutions that promote prosperity across the world, leads Abu Dhabi Sustainability Week, one of the world's largest sustainability gatherings, serves as Programme Director of the UAE-led Women in Sustainability, Environment and Renewable Energy (WiSER) initiative, which aims to encourage more women to be involved in innovative solutions to the world's energy and climate challenges, and oversees Masdar's youth outreach initiatives, which aim to inspire and empower the next generation of sustainability leaders.

Prior to joining Masdar, Dr. Fawwaz was the Vice President of Institutional Advancement and Public Affairs at the Masdar Institute of Science and Technology, the world's first graduate-level university dedicated to advanced energy and sustainable technologies. She also spent 10 years at ADNOC before joining Masdar in 2009.

Dr. Fawwaz holds a Doctorate in Higher Education Administration, a Master's degree in Information System Technology and a Bachelor's degree in Business Administration from George Washington University in the United States.

Dr. Nikolas Meitanis, Executive Director, Strategy & Corporate Development

Dr. Meitanis has more than 18 years' experience in the strategy and consulting field.

Dr. Meitanis joined Masdar in 2010 to work on the Abu Dhabi Carbon Capture and Storage Network project and other carbon market related activities. Over the years he has held various commercial, investment management and strategy roles including the role of Adviser to the CEO for over four years.

Before joining Masdar, Dr. Meitanis held several strategic management consulting roles with Boston Consulting Group and Roland Berger.

Dr. Meitanis holds a PhD in Low Energy Nuclear Physics from the Massachusetts Institute of Technology in the United States.

Tareq Al Qubali, Executive Director, Human Capital & Corporate Services

Mr. Al Qubali has more than 20 years' experience in the oil and gas and renewable energy sectors. He currently leads the Groups' Human Capital & Corporate Services Division, where he brings a wealth of experience in the support and corporate services sector and is actively engaged in various internal and external ad-hoc strategic assignments.

Prior to joining Masdar in 2011, Mr. Al Qubali spent much of his career in the oil and gas industry. His experience spans strategic planning and execution, corporate support services, business reporting and intelligence, stakeholder management, board governance and operational performance management.

Mr. Al Qubali holds an Executive Master's degree in Strategic Management from CERT in collaboration with MIT Sloan School of Management and Harvard Business School, and is an alumni of the London Business School in the United Kingdom.

Address and absence of conflicts

The business address for each member of Masdar's senior management team is P.O. Box 54115, Abu Dhabi, UAE. There are no actual or potential conflicts of interest as at the date of this Base Offering Circular between the duties owed by the members of senior management to the Group and their private interests or other duties.

EMPLOYEES

As at 31 December 2022, the Group had 214 employees compared to 209 as at 31 December 2021 and 197 as at 31 December 2020. These employees represent 35 different nationalities.

Masdar prioritises employee development, training and well being in order to help attract, retain and empower the best talent. It supports employees throughout their careers through numerous programmes and recognition initiatives. Masdar's overall employee retention rate was 98 per cent. in 2022.

Employee engagement is considered to be vital to Masdar's culture. Regular engagement and dialogue across Masdar ensures that staff have the latest information and knowledge to hand. Frequent employee engagement surveys are held, which generate high response rates and indicate that employees are proud to work for Masdar and fully believe in its mission and vision.

Masdar emphasises well being in the workplace through many employee-led wellness programmes and initiatives and is a strong advocate of a healthy work-life balance and parent-friendly policies, such as flexible working options.

Masdar also seeks to empower women in supervisory roles, who accounted for almost a quarter of those in such positions as at 31 December 2022.

Growing the skills, abilities and knowledge of its people is essential to Masdar's continued success. In 2022, Masdar employees completed more than 4,000 hours of training across 43 internal and external courses. Topics ranged across soft and hard skills, including finance, data analysis, clean energy leadership, project management and slide design.

As at 31 December 2022, Masdar's Emiratisation ratio was 52.34 per cent.

TAXATION

GENERAL

Prospective purchasers of Notes are advised to consult their tax advisers as to the consequences, under the tax laws of the countries of their respective citizenship, residence or domicile, of a purchase of Notes, including, but not limited to, the consequences of receipt of payments under the Notes and their disposal or redemption.

FOREIGN ACCOUNT TAX COMPLIANCE ACT

Pursuant to certain provisions of the U.S. Internal Revenue Code of 1986, commonly known as FATCA, a **foreign financial institution** (as defined by FATCA) may be required to withhold on certain payments it makes (**foreign passthru payments**) to persons that fail to meet certain certification, reporting or related requirements. The Issuer may be a foreign financial institution for these purposes. A number of jurisdictions (including the United Arab Emirates) have entered into, or have agreed in substance to, intergovernmental agreements with the United States to implement FATCA (**IGAs**), which modify the way in which FATCA applies in their jurisdictions. Under the provisions of IGAs as currently in effect, a foreign financial institution in an IGA jurisdiction would generally not be required to withhold under FATCA or an IGA from payments that it makes. Certain aspects of the application of the FATCA provisions and IGAs to instruments such as the Notes, including whether withholding would ever be required pursuant to FATCA or an IGA with respect to payments on instruments such as the Notes, are uncertain and may be subject to change. Even if withholding would be required pursuant to FATCA or an IGA with respect to payments on instruments such as the Notes, such withholding would not apply prior to the date that is two years after the date on which final regulations defining foreign passthru payments are published in the U.S. Federal Register and Notes characterised as debt (or which are not otherwise characterised as equity and have a fixed term) for U.S. federal tax purposes that are issued on or prior to the date that is six months after the date on which final regulations defining foreign passthru payments are published generally would be grandfathered for purposes of FATCA withholding unless materially modified after such date. However, if additional Notes (as described under "*Terms and Conditions of the Notes—Further Issues*") that are not distinguishable from previously issued Notes are issued after the expiration of the grandfathering period and are subject to withholding under FATCA, then withholding agents may treat all Notes, including the Notes offered prior to the expiration of the grandfathering period, as subject to withholding under FATCA. Holders should consult their own tax advisers regarding how these rules may apply to their investment in Notes. In the event any withholding would be required pursuant to FATCA or an IGA with respect to payments on the Notes, no person will be required to pay additional amounts as a result of the withholding.

THE PROPOSED FINANCIAL TRANSACTIONS TAX (FTT)

On 14 February 2013, the European Commission published a proposal (the **Commission's Proposal**) for a Directive for a common FTT in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (the **participating Member States**). However, Estonia has since stated that it will not participate.

The Commission's Proposal has very broad scope and could, if introduced, apply to certain dealings in Notes (including secondary market transactions) in certain circumstances. The issuance and subscription of Notes should, however, be exempt.

Under the Commission's Proposal the FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in Notes where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

However, the FTT proposal remains subject to negotiation between participating Member States. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate.

Prospective holders of Notes are advised to seek their own professional advice in relation to the FTT.

UNITED ARAB EMIRATES

The following is a general summary of the current tax law and practice in the UAE in force as at the date of this Base Offering Circular and does not constitute legal or tax advice. Prospective investors in the Notes are advised to consult their own tax advisers with respect to the tax consequences under the tax laws of the country in which they are resident, of the purchase ownership or disposition of the Notes or any interest therein.

Under current legislation, there is no requirement for withholding or deduction for or on account of UAE or Abu Dhabi taxation in respect of payments made by Issuer under the Notes. In the event of the requirement for any such withholding, the Issuer has undertaken to gross-up any payments subject to certain limited exceptions described in Condition 8.

SUBSCRIPTION AND SALE

The Dealers have, in a Programme Agreement (such Programme Agreement as modified and/or supplemented and/or restated from time to time, the **Programme Agreement**) dated 17 July 2023, agreed with the Issuer a basis upon which they or any of them may from time to time agree to purchase Notes. Any such agreement will extend to those matters stated under "*Form of the Notes*" and "*Terms and Conditions of the Notes*". In the Programme Agreement, the Issuer has agreed to reimburse the Dealers for certain of their expenses in connection with the establishment and any future update of the Programme and the issue of Notes under the Programme and to indemnify the Dealers against certain liabilities incurred by them in connection therewith.

SELLING RESTRICTIONS

United States

The Notes have not been and will not be registered under the Securities Act or the securities laws of any state or other jurisdiction of the United States and may not be offered or sold within the United States to, or for the account or benefit of, U.S. persons except in certain transactions exempt from or not subject to, the registration requirements of the Securities Act. Terms used in this paragraph have the meanings given to them by Regulation S under the Securities Act.

The Notes in bearer form are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to a United States person, except in certain transactions permitted by U.S. Treasury regulations. Terms used in this paragraph have the meanings given to them by the U.S. Internal Revenue Code of 1986 and Treasury regulations promulgated thereunder. The applicable Pricing Supplement will identify whether TEFRA C rules or TEFRA D rules apply or whether TEFRA is not applicable.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it will not offer, sell or deliver Notes (a) as part of their distribution at any time or (b) otherwise until 40 days after the later of the commencement of the offering and the Issue Date (the **Resale Restriction Termination Date**), within the United States or to, or for the account or benefit of, U.S. persons except in accordance with Regulation S of the Securities Act. Each Dealer has further agreed, and each further Dealer appointed under the Programme will be required to agree, that it will send to each dealer to which it sells any Notes prior to the Resale Restriction Termination Date a confirmation or other notice setting forth the restrictions on offers and sales of the Notes within the United States or to, or for the account or benefit of, U.S. persons. Terms used in this paragraph have the meanings given to them by Regulation S under the Securities Act.

In addition, until 40 days after the commencement of the offering of any Series of Notes, an offer or sale of such Notes within the United States by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with an available exemption from registration under the Securities Act.

Prohibition of Sales to EEA Retail Investors

Unless the Pricing Supplement in respect of any Notes specifies "Prohibition of Sales to EEA Retail Investors" as "Not Applicable", each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Base Offering Circular as completed by the Pricing Supplement in relation thereto to any retail investor in the EEA. For the purposes of this provision:

(a) the expression **retail investor** means a person who is one (or more) of the following:

  (i) a retail client as defined in point (11) of Article 4(1) of MiFID II;

(ii) a customer within the meaning of the Insurance Distribution Directive, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or

(iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (the **Prospectus Regulation**); and

(b) the expression an **offer** includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes.

If the Pricing Supplement in respect of any Notes specifies " Prohibition of Sales to EEA Retail Investors" as "Not Applicable", in relation to each Member State of the EEA, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Base Offering Circular as completed by the applicable Pricing Supplement in relation thereto to the public in that Member State except that it may make an offer of such Notes to the public in that Member State:

(A) at any time to any legal entity which is a qualified investor as defined in the Prospectus Regulation;

(B) at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation) subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer; or

(C) at any time in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of Notes referred to in paragraphs (A) to (C) above shall require the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision:

- the expression **an offer of Notes to the public** in relation to any Notes in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes; and

- the expression **Prospectus Regulation** means Regulation (EU) 2017/1129.

United Kingdom

Prohibition of Sales to UK Retail Investors

Unless the Pricing Supplement in respect of any Notes specifies "Prohibition of Sales to UK Retail Investors" as "Not Applicable", each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Base Offering Circular as completed by the Pricing Supplement in relation thereto to any retail investor in the UK. For the purposes of this provision:

(a) the expression **retail investor** means a person who is one (or more) of the following:

(i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA;

(ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or

(iii) not a qualified investor as defined in Article 2 of the UK Prospectus Regulation; and

(b) the expression an **offer** includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes.

If the Pricing Supplement in respect of any Notes specifies "Prohibition of Sales to UK Retail Investors" as "Not Applicable", each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Base Offering Circular as completed by the applicable Pricing Supplement in relation thereto to the public in the UK except that it may make an offer of such Notes to the public in the UK:

(A) at any time to any legal entity which is a qualified investor as defined in Article 2 of the UK Prospectus Regulation;

(B) at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in Article 2 of the UK Prospectus Regulation) in the UK subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer; or

(C) at any time in any other circumstances falling within section 86 of the FSMA,

provided that no such offer of Notes referred to in paragraphs (A) to (C) above shall require the Issuer or any Dealer to publish a prospectus pursuant to section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

For the purposes of this provision:

- the expression **an offer of Notes to the public** in relation to any Notes means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes; and

- the expression **UK Prospectus Regulation** means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA.

Other regulatory restrictions

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that:

(a) in relation to any Notes which have a maturity of less than one year, (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business and (ii) it has not offered or sold and will not offer or sell any Notes other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the Notes would otherwise constitute a contravention of Section 19 of the FSMA by the Issuer;

(b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of any Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and

(c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Notes in, from or otherwise involving the UK.

United Arab Emirates (excluding the Abu Dhabi Global Market and the Dubai International Financial Centre)

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that the Notes to be issued under the Programme have not been and will not be offered, sold or publicly promoted or advertised by it in the United Arab Emirates (excluding the Abu Dhabi Global Market and the Dubai International Financial Centre) other than in compliance with any laws applicable in the United Arab Emirates (excluding the Abu Dhabi Global Market and the Dubai International Financial Centre) governing the issue, offering and sale of securities.

Abu Dhabi Global Market

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered and will not offer the Notes to be issued under the Programme to any person in the Abu Dhabi Global Market unless such offer is:

(a) an "Exempt Offer" in accordance with the Market Rules Module of the Financial Services Regulatory Authority (the **FSRA**) Rulebook; and

(b) made only to persons who meet the Professional Client criteria set out in Rule 2.4.1 of the Conduct of Business Module of the FSRA Rulebook.

Dubai International Financial Centre

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered and will not offer the Notes to be issued under the Programme to any person in the Dubai International Financial Centre unless such offer is:

(a) an "Exempt Offer" in accordance with the Markets Rules (MKT) Module of the Dubai Financial Services Authority (the **DFSA**) Rulebook; and

(b) made only to persons who meet the Professional Client criteria set out in Rule 2.3.3 of the Conduct of Business Module of the DFSA Rulebook.

Kingdom of Saudi Arabia

No action has been or will be taken in the Kingdom of Saudi Arabia that would permit a public offering of the Notes. Any investor in the Kingdom of Saudi Arabia or who is a Saudi person (a **Saudi Investor**) who acquires any Notes pursuant to an offering should note that the offer of Notes is a private placement under the Rules on the Offer of Securities and Continuing Obligations as issued by the Board of the Capital Market Authority (the **CMA**) pursuant to its resolution number 3-123-2017 dated 27 December 2017 as amended by its resolution number 8-5-2023 dated 18 January 2023 (the **KSA Regulations**), made through a capital market institution licensed by the CMA, in each case, in accordance with the KSA Regulations.

The Notes may thus not be advertised, offered or sold to any person in the Kingdom of Saudi Arabia other than to "institutional and qualified clients" under Article 8(a)(1) of the KSA Regulations or by way of a limited offer under Article 9 of, or as otherwise required or permitted by, the KSA Regulations. Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that any offer of Notes made by it to a Saudi Investor will be made in compliance with the Article 10 and either Article 8(a)(1) or Article 9 of the KSA Regulations.

Each offer of Notes shall not therefore constitute a "public offer", an "exempt offer" or a "parallel market offer" pursuant to the KSA Regulations, but is subject to the restrictions on secondary market activity under the KSA Regulations.

Kingdom of Bahrain

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered or sold, and will not offer or sell, any Notes except on a private placement basis to persons in the Kingdom of Bahrain who are "accredited investors".

For this purpose, an **accredited investor** means:

(a) an individual holding financial assets (either singly or jointly with a spouse) of U.S.$1,000,000 or more excluding that person's principal place of residence;

(b) a company, partnership, trust or other commercial undertaking which has financial assets available for investment of not less than U.S.$1,000,000; or

(c) a government, supranational organisation, central bank or other national monetary authority or a state organisation whose main activity is to invest in financial instruments (such as a state pension fund).

Singapore

Each Dealer has acknowledged, and each further Dealer appointed under the Programme will be required to acknowledge, that this Base Offering Circular has not been and will not be registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Base Offering Circular or any other document or material in connection with the offer or sale or invitation for subscription or purchase of the Notes, whether directly or indirectly, to any person in Singapore other than: (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act 2001 (2020 Revised Edition) of Singapore, as modified or amended from time to time (the **SFA**)) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) pursuant to, and in accordance with the conditions of, any other applicable provisions of the SFA.

Where Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:

(i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(c)(ii) of the SFA;

(ii) where no consideration is or will be given for the transfer;

(iii) where the transfer is by operation of law;

(iv) pursuant to Section 276(7) of the SFA; or

(v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018 of Singapore.

Notification under Section 309B(1)(c) of the SFA – Unless otherwise stated in the applicable Pricing Supplement all Notes issued or to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Hong Kong

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that:

(a) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Notes other than: (i) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the **SFO**) and any rules made under the SFO; or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the **C(WUMP)O**) or which do not constitute an offer to the public within the meaning of the C(WUMP)O; and

(b) it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to any Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under the SFO.

Japan

The Notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended; the **FIEA**) and each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it will not offer or sell any Notes, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (as defined under Item 5, Paragraph 1, Article 6 of the Foreign Exchange and Foreign Trade Act (Act No. 228 of 1949, as amended)), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and any other applicable laws, regulations and ministerial guidelines of Japan.

General

Each Dealer has represented and agreed and each further Dealer appointed under the Programme will be required to represent and agree that it will (to the best of its knowledge and belief) comply with all applicable securities laws and regulations in force in any jurisdiction in which it purchases, offers, sells or delivers Notes or possesses or distributes this Base Offering Circular and will obtain any consent, approval or permission required by it for the purchase, offer, sale or delivery by it of Notes under the laws and regulations in force in any jurisdiction to which it is subject or in which it makes such purchases, offers, sales or deliveries and neither the Issuer nor any of the other Dealers shall have any responsibility therefor.

Neither the Issuer nor any of the Dealers represents that Notes may at any time lawfully be sold in compliance with any applicable registration or other requirements in any jurisdiction, or pursuant to any exemption available thereunder, or assumes any responsibility for facilitating any such sale.

GENERAL INFORMATION

Authorisation

The establishment of the Programme and the issue of Notes have been duly authorised by a resolution of the Board of Directors of the Issuer dated 13 June 2023.

Listing of Notes

Application has been made to the London Stock Exchange for the Notes issued under the Programme during the period of 12 months from the date of this Base Offering Circular to be admitted to the ISM. The ISM is not a regulated market for the purposes of UK MiFIR. The ISM is a market designated for professional investors. Notes admitted to trading on the ISM are not admitted to the Official List of the FCA. The London Stock Exchange has not approved or verified the contents of this Base Offering Circular.

Documents Available

For the period of 12 months following the date of this Base Offering Circular, copies of the following documents will be available for inspection during normal business hours at the specified office of the Principal Paying Agent for the time being in London:

(a) the Articles of Association (with an English translation thereof) of the Issuer;

(b) the Agency Agreement (which includes the forms of the Notes) and the Deed of Covenant;

(c) a copy of this Base Offering Circular; and

(d) any future base offering circulars, prospectuses, information memoranda, supplements and Pricing Supplements (save that Pricing Supplements will only be available for inspection by a holder of such Note and such holder must produce evidence satisfactory to the Issuer or the Paying Agent as to its holding of Notes and identity) to this Base Offering Circular and any other documents incorporated herein or therein by reference.

Clearing Systems

The Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg (which are the entities in charge of keeping the records). The appropriate Common Code and ISIN for each Tranche of Notes allocated by Euroclear and Clearstream, Luxembourg will be specified in the applicable Pricing Supplement. If the Notes are to clear through an additional or alternative clearing system the appropriate information will be specified in the applicable Pricing Supplement.

The address of Euroclear is Euroclear Bank SA/NV, 1 Boulevard du Roi Albert II, B-1210 Brussels, Belgium. The address of Clearstream, Luxembourg is Clearstream Banking S.A., 42 Avenue JF Kennedy, L-1855 Luxembourg.

Conditions for determining price

The price and amount of Notes to be issued under the Programme will be determined by the Issuer and each relevant Dealer at the time of issue in accordance with prevailing market conditions.

Significant or Material Change

There has been no significant change in the financial or trading position of the Issuer or the Group and there has been no material adverse change in the prospects of the Issuer or the Group, in each case since 31 December 2022.

Litigation

Neither the Issuer nor any other member of the Group is or has been involved in any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Issuer is aware) in the 12 months preceding the date of this Base Offering Circular which may have or have in such period had a significant effect on the financial position or profitability of the Issuer or the Group.

Auditors

The auditors of the Issuer are KPMG Lower Gulf Limited (**KPMG**), independent auditors, who have audited the Financial Statements in accordance International Standards on Auditing, as stated in their respective reports included in this Base Offering Circular. KPMG have no material interest in the Issuer.

Dealers transacting with the Issuer

Certain of the Dealers and their affiliates have engaged, and may in the future engage, in financing, investment banking and/or commercial banking transactions with, and may perform services to the Issuer and its affiliates in the ordinary course of business for which they may receive fees. They have received, or may in the future receive, customary fees and commission for these transactions. In particular, in the ordinary course of their business activities, the Dealers and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of the Issuer and its affiliates. Certain of the Dealers or their affiliates that have a lending relationship with the Issuer and its affiliates routinely hedge their credit exposure to the Issuer and its affiliates consistent with their customary risk management policies. Typically, such Dealers and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in securities, including potentially the Notes issued under the Programme. Any such short positions could adversely affect future trading prices of Notes issued under the Programme. The Dealers and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

INDEX TO FINANCIAL STATEMENTS

Abu Dhabi Future Energy Company PJSC (Masdar)

REPORT OF THE BOARD OF DIRECTORS AND
CONSOLIDATED FINANCIAL STATEMENTS

31 DECEMBER 2022

Abu Dhabi Future Energy Company PJSC (Masdar)

REPORT OF THE BOARD OF DIRECTORS

31 DECEMBER 2022

REPORT OF THE BOARD OF DIRECTORS continued
For the year ended 31 December 2022

It is our pleasure to report the activities and results for the year ended 31 December 2022 of Abu Dhabi Future Energy Company PJSC ("Masdar" or the "Company").

The Company had consisted of two primary commercial business operations up until 30 November 2022, the Renewable Energy business (RE) and the Sustainable Real Estate business (SRE). Following the guidance of His Highness Sheikh Mohammed bin Zayed Al Nahyan, in late 2021 an announcement was that Mubadala Investment Company (Mubadala), Abu Dhabi National Energy Company PJSC (TAQA), and Abu Dhabi National Oil Company PJSC(ADNOC) would consolidate their combined efforts in renewable energy and green hydrogen through the Company (the Transaction). The Transaction involved (i) the transfer of the SRE business out of the Company to Mubadala; (ii) the transfer of ownership of the Ninety Sixth Investment Company LLC (an entity established to hold the equity interests in a portfolio of US renewable energy assets) from Mubadala to the Company; and (iii) the acquisition by TAQA and ADNOC of a majority equity interest in the Company from Mubadala. The transaction was completed with an effective date of 1 December 2022, from which date the revised ownership structure of the Company is TAQA – 43%, ADNOC – 24% and Mubadala – 33%.

The SRE business has been reflected as a disposal on that date, with the net asset value offset through the shareholder current account. SRE operations up until the disposal date have been shown as discontinued operations in the consolidated statement of comprehensive income. The key financial highlights refer to the continuing operation of the Company, which is the RE business, while the Business Unit Performance refers to all units of the Company.

Business Review

Key financial highlights:

- Revenues of AED 621.39 million, a decrease of 13.3% over 2021 primarily due to a decrease in IFRIC 12 concession revenue (2022 AED 73.14 million and 2021 AED 288.3m) recognized based on the construction status of the underlying projects, Nur Navoi Solar FE and Shamal Zarafshan Energy FE. Renewable power generation revenue of AED 482.6, an increase 16.2% over 2021 with increased revenue generated from the London Array offshore wind farm due to higher merchant power prices in the UK. The gross profit of AED 335.8 million (2021: AED 244.65 million) represents a margin of 54.0% (2021: 34.1%). The increase in gross profit margin is because of a higher proportion of overall revenue coming from London Array where revenue growth has not been matched by a corresponding increase in cost of sale resulting in significantly higher margins.

- Net income from continuing operations of AED 459.53 million, an increase of 154.30% over 2021 due to an increase in gross profit, other income and gain on derivatives in particular fair valuation of interest rate swaps.

- Cost of fixed assets under PPE, including assets under construction, increased by 2.5% to AED 2.2 billion (changes in the year included increases from additions of AED 314 million, offset by reductions from exchange differences of AED 233 million and a transfer of AED 16.11 million related to decommissioning liabilities.

- Equity of AED 6.52 billion, an increase of 30.81% over 2021 primarily due to the profit for the year of AED 540m, other OCI increases of AED 569 million (hedging reserves AED 612 million and foreign currency reserves AED (43) million) and net increase of AED 426.10 million related with transaction with shareholders.

Masdar has grown into an organization with a substantial portfolio of diversified assets under management, construction and development in a variety of renewable energy technologies and geographies, (including among others, the London Array and Dudgeon offshore wind farms in the UK, Shams One, the Concentrated Solar Power (CSP) plant in Abu Dhabi's western region, Tafila, the onshore wind farm in Jordan, DEWA Phase 3 an 800MW solar PV project in Dubai, the Baynouna 200MW solar PV project in Jordan, the Tesla 158 MW onshore wind project in Serbia, Hywind (the first utility scale floating offshore wind farm in the UK), a 300MW solar PV and a 400MW onshore wind farm in Saudi Arabia, the Nur Navoi 100 MW Solar PV in Uzbekistan and waste to energy projects in the UAE and Australia.

With the change in the ownership structure the Company is poised to become a global renewable energy powerhouse with a mandate to grow the business to c 100GW gross renewable energy capacity by 2030 and 1,000ktpa of green hydrogen production by 2030. Management, the Board, and the shareholders have reviewed (and will continue to

Business Unit Performance - continued

review) the Company's strategies, operating models, processes, and organizational structure to ensure a business that is designed to deliver both effectively and efficiently against its objectives whilst responding to market dynamics.

Masdar Renewable Energy

In 2022 Masdar Renewable Energy demonstrated strong resilience in the aftermath of a global pandemic (Covid-19), significant supply chain disruption and the impact from the Russian-Ukrainian conflict, and the business continues to make steady progress globally concluding with yet another successful year. The business was able to mitigate these challenges by reorganizing its supply chains and adopting an agile approach to project development and execution.

The Russian-Ukrainian conflict and the changing political landscape also presented significant challenges to our operations. With several countries revising their energy policies and regulations because of the changing and unstable global environment, the business had to invest more in understanding and adapting to these changes. We took these challenges as opportunities leveraging our strengths and further expanded our business in certain markets.

Masdar's global footprint has continued to grow during the year, with several new projects either secured or in the pipeline across the globe. The Company has secured several solar power projects in Europe, Africa, Central Asia, and the Middle East that has further consolidated Masdar's position as one of the leading renewable energy companies in the world. Despite the challenges in the sector, we continued to deliver our commitment towards sustainability and carbon neutrality.

2022 proved to be another successful year and the following are key advancement in our growth journey:

- Dumat Al Jandal 400MW Onshore Wind Farm and South Jeddah Solar PV 300MW in KSA – successfully reached Commercial Operation date (COD) and ready for Energization respectively.
- Azerbaijan Area 60 230MW Solar PV and Zarafshan 500MW Onshore Wind project in Uzbekistan - both projects reached Financial Close in 2022 and the construction is progressing as per plan.
- Sharjah Waste-to-Energy (30MW) – the first commercial WTE in the UAE and the Middle East, which is a joint venture (50:50) between Masdar and Bee'ah was successfully inaugurated by the Ruler of Sharjah in May 2022. As of January 2023, 50,452 tons of waste was processed, and 14,568 MWh generated.
- Al Dhafra Solar PV in Abu Dhabi–The record-breaking project will have a capacity of 2 GW and supply power to the plant's off-taker, Emirates Water and Electricity Company (EWEC). The project has achieved its first energization in October 2022 and is progressing towards COD in Q2 2023.
- Cirata Floating Solar – The 145 MW PV plant the first floating solar photovoltaic (PV) plant in Indonesia which will be built on a 225-hectare plot of the 6200-hectare Cirata Reservoir, in the West Java region is progressing towards COD.
- East Rockingham Waste-to-Energy – In 2020, Masdar made its first investment in Australia after acquiring a stake in the country's second utility-scale waste-to-energy (WTE) facility. The project has successfully advanced construction to 90% and is progressing towards COD this year overcoming challenges faced due to COVID-19 restrictions.
- Masdar acquired leading battery energy storage developer in the UK. This acquisition will enable the development, construction, operational management, and financing of renewable energy storage projects under Masdar-Arlington platform
- Infinity Power Holdings (IPH), a joint venture between Masdar and Infinity Energy, acquired Lekela Power in a landmark renewable energy deal for the African continent. Lekela Power currently operates 1GW of wind power projects in South Africa, Egypt, and Senegal, and has a 1.8GW project pipeline in different stages of development. The acquisition by IPH of Lekela Power successfully closed in Q1 2023.
- The consortium which Masdar participated in was nominated as preferred bidder for the Amaala project in KSA. The project scope include power generation 280MWp PV, BESS, water desalination RO and pipelines, wastewater treatment and biodiesel generators.
- Masdar was also awarded the Bukhara 300MW solar PV with BESS project in Uzbekistan.
- The Company continued to expand and forge new bilateral arrangements with governments to develop renewables energy projects, including executing several strategic MOUs, e.g., Azerbaijan 4GW and Egypt 10GW onshore wind.

Business Unit Performance - continued

- The Energy Services team under Masdar Renewable Energy continued delivering government mandated and funded special projects, with significant progress made in delivering the flagship UAE Wind program (105MW) and 15MW PV project. The team also successfully handed over 3MW PV plants in Socotra, 5MW plant in the Seychelles and the Be'eah 525kWp facility. In addition, the team has completed construction of the Antigua & Barbuda and Belize projects under the Caribbean program, whilst the Aden 120MW solar PV project in Aden-Yemen has been initiated, to be completed in 2023.
- Energy Services team through EMERGE, the leading ESCO joint venture with EDF in the region, has also achieved several successful milestones including (i) achieved commercial operations for Miral Warner Bros 8MW; and (ii) secured various new ESCO projects including, SeaWorld 10MW, Al Khazna 7MW, Coca Cola Al Ahlia 2MWp; Abu Dhabi Motor Sports Management ~1MWp, American Community School ~1MWp, ADNOC Distribution Dubai Service Stations ~2MWp, Yahsat 1.2MW PV
- Masdar has also expanded its O&M services through MSTS, (the wholly owned O&M services company), to include the provision of O&M services to the Baynouna 200MW solar PV project in Jordan, and of the Nur Navoi 100MW solar PV project in Uzbekistan. MSTS has also secured the rights to provide O&M services for the Zarafshan 500MW onshore wind project in Uzbekistan (currently under construction) and Tesla Wind, the 158MW onshore wind project in Serbia. This project is currently in operation and represents the first wind O&M project for MSTS. The team at MSTS have also secured and signed O&M services agreements for a number of roof top projects in the UAE (ADAC, Warner Brothers and SeaWorld)
- 2022 has also seen progress on a number of pilot activities in technologies and most significantly in the area of Green Hydrogen where (i) agreement has been reached with a number of local and international private and governmental entities for the construction of a demonstration plant in Masdar city: and (ii) a number of strategic MOUs have been executed to assess large scale green hydrogen development & production including the execution of an MOU with IPH & Hassan Alaam to explore the development of 4GW of green hydrogen in Egypt; and (iii) Masdar has continued to monetize carbon through our carbon trading team.

Sustainable Real Estate

The Sustainable Real Estate business was transferred to Mubadala effective 1 December 2022 and has up until the effective date of disposal been recognized as an asset held for disposal on the balance sheet, whilst income has been recognized as income from discounted operations. Up until the effective date of disposal the SRE business has continued to perform strongly with key 2022 highlights including:

- Maintaining a high level of occupancy (above 95%) in all owned real estate assets
- Awarding over AED 1.2B worth of construction contracts on The Link (30,000 m² GFA) and Masdar City Square (48,000 m² GFA), M13-B R&D Development (4,800 m² GFA) and Discovery Park North, an iconic community project.
- The Masdar Green REIT, the UAE's first Green sustainable real estate investment trust, secured a USD 200m dollar loan facility from First Abu Dhabi bank and used this facility to acquire additional assets represent 62,000 sqm of leasable space and an additional AED 701 million in asset values.
- Completion of construction and official opening of Central Park Phase 2, a multi award winning project, including Sustainable Project of the Year.

Brand & Strategic Initiatives - Communicating Change

Through 2022, Masdar continued its progression as one of the world's fastest-growing renewable energy companies, culminating in it becoming the UAE's Renewable Energy champion, with the two new shareholders in the form of TAQA and ADNOC coming on board for the first time in our history. The new partnership, first announced in 2021, brings together three of the nation's energy giants –TAQA, Mubadala and ADNOC – to consolidate their efforts under the refreshed Masdar brand.
The new shareholder announcement was covered extensively in the media, including in Reuters, S&P Global, Energy Intelligence, Asian Power, WAM and Al Khaleej. It also resulted in over 41,500 impressions on social media.

Throughout the year, the marketing and communications teams strove to position Masdar as a global leader in Renewable Energy, while also demonstrating how we operate in alignment with the UAE's strategic objectives and climate goals. Key highlights include:

Business Unit Performance - continued

- Masdar senior executives completed a total of 48 speaking engagements throughout the year.
- Secured CEO participation in several tier-1 sessions, including at CERAWeek, the world's leading energy event, the NYT Climate Forward at COP27, and at Economist Impact Sustainability Week, and successfully placed six CEO thought leadership pieces and op-eds in a range of written media.
- Completed 115 media opportunities, including CNN Abu Dhabi, National Geographic, Harvard Business Review, the Nikkei newspaper in Japan, South China Morning Post, CGTN-Arabic, Bloomberg, S&P Global, Deutsche Welle and Newsweek – Special Report, amongst many others.
- Generated over 12,500 press clippings for the year, with an estimated ad value of more than US$44 million. This coverage ensures that Masdar, its projects, strategic initiatives, brand, and spokespeople are directly visible to key decision makers, from industry leaders, and project developers, through to policy makers, financial institutions and more.

Another key measure of success for Masdar is our recognition in industry awards, and we enjoyed another strong year in 2022, with some key awards secured. These include the "Innovators of the Future" at the Arabian Business Awards, the Hydrogen Future Awards 2022, the WiRA Awards and the prestigious S&P Global Platts 2022, with our CEO being recognized as "Trailblazer of the Year."

Finally, in anticipation of the COP28 climate change conference being held in the UAE in 2023, Masdar had a significant presence at COP27 in Egypt – our biggest participation in any COP to date. We made a total of nine announcements around the event, with executives participating in 13 panel sessions. We also secured 11 interviews, or feature/op-ed opportunities. These activities resulted in 4,000-plus local and regional media clippings, and over 2,000 international media clippings, with an ad value of US$13 million.

Digital Communications

Masdar's digital channels allow us to engage a wider range of target audiences with the company's owned content on a global level. This allows us to further amplify key announcements and spokespeople, while educating audiences on our purpose, highlighting trending topics of strategic importance to our objectives, and creating high levels of engagement with local and global stakeholders during key events.

Last year saw the launch of the Masdar "Power to Change" digital films series, which achieved over 1.9 million impressions and 898,000 video views for the first two episodes. The campaign for the new Masdar logo reveals on social media achieved more than 500,000 views globally and more than 250,000 viewers engaged with it across all platforms.

For Abu Dhabi Sustainability Week (ADSW), we developed a mobile app with a rich experience for both public and registrant users, expanding the target audience, reach and usage. The app achieved +11K downloads.

Other key numbers for Digital include:

- Masdar's social media accounts achieved over 26% growth, with over 30 million impressions across 2,700 posts and promotions, generating over 4.7 million engagements.
- Website traffic increased over 130%, with new users rising over 135%. There was also an increase of 108% in the sessions on the website.
- Introduced WiSER social media accounts and managed to achieve over 7,000 pledges for I am WiSER campaign
- The Masdar newsletter increased subscriptions by 29%, while subscriptions for the ADSW newsletter climbed 32%.
- Significant increase for ADSW social media followers by 66%, 150.5 million impressions across 2,754 posts and promotions, generating 4.6 million engagements.

Abu Dhabi Sustainability Week

As the first global sustainability event of the year, Abu Dhabi Sustainability Week (ADSW) 2023 reinforced the UAE's unwavering commitment to addressing global challenges as a responsible energy leader and constructive global citizen, working in close partnership with the global community.

Business Unit Performance - continued

Under the theme "United on Climate Action Towards COP28," ADSW 2023 marked success on multiple indicators, including 40,000 overall participations for all events across the week, 13 heads of state attending, 800 speakers, and VIPs from 175 countries, including decision makers across government and private sectors.

The ADSW Opening Ceremony and the Zayed Sustainability Prize Awards Ceremony were attended by global leaders including Ilham Aliyev, President of Azerbaijan, João Manuel Lourenco, President of Angola, Yoon Suk Yeol, President of the Republic of Korea, Wavel Ramkalawan, President of the Republic of Seychelles, and Hakainde Hichilema, President of the Republic of Zambia.

The 2023 edition also saw the addition of seven new initiatives including: Green Hydrogen Summit, Innovation Zone, ZSP Forum and Investor Connect, Youth Connect, FoodTech Challenge Finale, and Arctic Circle Abu Dhabi Forum. It was also the occasion to strengthen our thought-leadership footprint with the publication of four reports and whitepapers – on Future Proofing Family Businesses, the UAE Hydrogen Economy, the Power of the Blue Economy and Hard-to-Abate Industries – and the hosting of action-oriented thematic roundtables.

Other major events that took place throughout the week included the Abu Dhabi Sustainable Finance Forum, the ADSW Summit, the Atlantic Council Global Energy Forum, Innovate by Masdar City, the 13th IRENA Assembly, Women in Sustainability, Environment and Renewable Energy (WiSER) Forum, the World Future Energy Summit, and the Youth 4 Sustainability Hub.

- Major announcements made at ADSW 2023 included: A first wave of investment of US$20 billion announced as part of the US-UAE Partnership to Accelerate Renewable Energy (PACE), with Masdar and a consortium of US private investors targeting the funding and development of 15 GW of Renewable Energy projects in the US by 2035.
- Masdar demonstrating its commitment to helping African nations in their Renewable Energy transition by signing agreements with three countries – Angola, Uganda, and Zambia – to explore the development of renewable energy projects with a potential combined capacity of up to 5 GW
- Masdar signing an agreement with the Kazakh Ministry of Energy and state investment development fund to jointly explore the development of a wind farm of up to 1 GW, in the Republic of Kazakhstan
- Masdar signing joint development agreements with the State Oil Company of the Republic of Azerbaijan (SOCAR), to explore the development of onshore wind and solar projects, and integrated offshore wind and green hydrogen projects, with a total potential combined capacity of 4 GW.

Zayed Sustainability Prize
2022 was a memorable year for the Prize, with a 13 percent increase in number of submissions year-on-year. The team successfully increased awareness of the Prize by implementing a global campaign, including four activations, generating coverage with an average of over US$27 million, and increasing social media followers by 18 % and social media visitors by 97 %.

To encourage submissions, the team hosted panel discussions, webinars, and workshops in partnership with key opinion leaders in eight priority countries, including the UK, Finland, Kenya and South Korea, resulting in a collective increase of applications of 34 percent in those markets. These activities resulted in over 4,500 submissions being received from 151 countries.

The Prize's thought-leadership platform, Voices of Sustainability, garnered over 2 million views in its second year, featuring important figures in the industry like Professor Laurence Tubiana, and covering a range of topics, from how to finance a more sustainable future to how to increase healthcare access for all.

The Prize continued to empower youth through its MENA-focused Ecothon, its global virtual and physical Youth Sustainability Academy and their participation in COP27. The Ecothon encouraged youth to solve the issue of energy storage and winners received a free trip to Expo 2020 Dubai.

During the Youth Academy, 150 students learned about the importance of sustainability and the career opportunities within the industry while also receiving hands-on training on how to generate and implement sustainable solutions.

The Prize's Youth Ambassadors participated in various activities throughout COP27. Over two weeks, the Ambassadors participated in speaking opportunities, a Youth Dialogue session and one-on-one interview sessions with global leaders.

REPORT OF THE BOARD OF DIRECTORS continued
For the year ended 31 December 2022

Business Unit Performance - continued

The Company continues to focus on enhancing the efficiency and effectiveness of its support functions and to benchmark against industry best practices. Throughout the year the Company has been focused on supporting the shareholders through the due diligence and transaction closure processes related to the entry of TAQA and ADNOC as shareholders in the Company post the transfer of the SRE business to Mubadala and the transfer of the US renewable energy portfolio under the Ninety Sixth Investment Company from Mubadala to the Company. This culminated in the successful closing of the transaction in late 2022. The business support function has also been actively engaging with the new shareholder group to align on governance framework, operating and financial systems, policies, processes, procedures, and reporting framework, amongst other areas.

Human Capital continued to recommend and implement projects and initiatives aimed at enabling Masdar to achieve its strategy and growth plans in line with leading practices, and focused on the continuous attraction, development, motivation, recognition, and engagement of talent including:

- Employee engagement & recognition:
  - Ran four programs including ‘emerging leaders’, mentorship, and the introduction of Coursera
  - Conducted approx.70 training sessions for over 400 participants (over 4,500 hours of training)
  - Continued focus on recognition initiatives such as Kafu, Shukran and the Annual awards

- Emiratization & retention:
  - Maintained a solid Emiratization rate - year end Emiratization rate of percentage which is in line with plan
- Future of Work*:*
  - Masdar was recognized as a pioneer in future of work initiatives, winning the parent-friendly label and getting shortlisted for the Future Workplace Awards
  - Continued focus on employee wellness with more than 30 sessions conducted for more than 1,000 participants

- Supporting Masdar’s Organizational Change in the UAE and beyond
  - Worked with multiple shareholders and stakeholders on Korn Ferry project focused on a comprehensive review of organizational structure, reward framework, grading structure and HR policies for the new Masdar post the change in shareholders.
  - Provided ongoing HC support for the SRE team, particularly about the impact of the business transfer to Mubadala
  - Continued to provide HC support and advice for the establishment and enhancement of HC practices, policies, and procedures across Masdar's international footprint

Going forward

The completion of the transaction which saw TAQA (43%) and ADNOC (24%) become shareholders in the Company alongside Mubadala (33%) represents a new dawn for the Company, acting as the vehicle through which the three shareholders are consolidating their efforts in renewable energy and green hydrogen, with very aggressive global growth targets (100GW gross renewable energy capacity and 1,000ktpa of green hydrogen production) by 2030.

The completion of the transaction has seen several changes in corporate governance including the establishment and appointment of a new Board of Directors and associated Board sub-committees, the implementation of a new delegation of authority and the development and approval by the shareholders of a revised strategy designed to ensure that the Company meets these new growth targets. With the completion of the Transaction the Company has an even stronger mandate to significantly advance renewable energy and clean technology through investments in the development of advanced new technologies and through renewable energy project development as well as green hydrogen production.

In late 2022 the Board of Directors has approved the Company’s operating plans and budgets for 2023 to 2032, designed to deliver against the strategic growth objectives and to deliver economic value to the shareholders. Management, with the support of the Board and the shareholders is committed to deliver against the approved operating plans and budgets, and in particular on:

REPORT OF THE BOARD OF DIRECTORS continued
For the year ended 31 December 2022

Business Unit Performance - continued

- Delivering against the growth strategy for the Company with a continuing focus on greenfield and brownfield development and investment opportunities and an increased focus on M&A activities
- Delivering value to shareholders through effective investment, project delivery and asset management systems and processes
- Effective identification and management of risk (given the continuing impact of global macro-economic and geo-political issues)
- Effective cost management (which must be balanced with the development of new investment opportunities and revenue growth)
- Development and implementation of a comprehensive financing strategy, leveraging off the strength of the Company's balance sheet whilst maintaining its existing investment grade credit ratings

Whilst the global economic and geo-political environment remains challenging, given the fundamentals of our markets and the support of our shareholder, management believes that there remains very good reason to be optimistic about the Company's growth prospects in the near and long term.

Director

Abu Dhabi Future Energy Company PJSC (Masdar)

CONSOLIDATED FINANCIAL STATEMENTS

31 DECEMBER 2022

KPMG Lower Gulf Limited
Level 19, Nation Tower 2
Corniche Road, P.O. Box 7613
Abu Dhabi, United Arab Emirates
Tel. +971 (2) 401 4800, www.kpmg.com/ae

Independent auditors' report

To the Shareholders of Abu Dhabi Future Energy Company PJSC (Masdar)

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of Abu Dhabi Future Energy Company PJSC (Masdar) ("the Company") and its subsidiaries ("the Group"), which comprise the consolidated statement of financial position as at 31 December 2022, the consolidated statements of profit or loss and other comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2022, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with IFRS Standards as issued by the International Accounting Standards Board (IFRS Standards).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs) and applicable requirements of Financial Statements Auditing Standards for the Subject Entities issued vide ADAA Chairman's Resolution No. (88) of 2021 in the United Arab Emirates (ADAA Auditing Standards). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with International Ethics Standards Board for Accountants International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) together with the ethical and independence requirements of United Arab Emirates that are relevant to our audit of the consolidated financial statements in the United Arab Emirates, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Business combination

See Notes 3.2 and 29 to the consolidated financial statements.

The key audit matter	How the matter was addressed in our audit
During the year the Group undertook a number of acquisitions, including the acquisition of Ninety Sixth Investment Company and Arlington Group Services Limited. The Group accounts for business combinations using the acquisition method in accordance with IFRS 3 – Business Combinations, including those with entities under common control ('common control transactions'). The acquisition of Ninety Sixth Investment company amounted to a common control transaction. In accordance with IFRS 3 – Business Combinations, the Group evaluates whether the acquisition meets the criteria of a business or an asset acquisition. This was particularly relevant for the acquisition of the interest in Arlington Group Services Limited as it is a business in the early stages of development. The Group has recognized most of the identifiable assets and liabilities acquired, including investments in joint ventures, and part of the consideration paid at provisional amounts. The Group also recognized the investments in joint ventures acquired as part of acquisition in Ninety Sixth Investment company at their provisional amounts. Due to the significant level of judgment involved in concluding whether the acquisition of interest amounted to business combinations, and the judgment involved in arriving at provisional amounts described above, we identified business combinations and acquisition of joint ventures to be a key audit matter.	We reviewed the assessment performed by the Group to conclude if the acquisition meets the criteria of a business or an asset acquisition, particularly in the case of the Group's purchase of its stake in Arlington Group Services Limited, by reviewing the agreements underpinning the transactions and enquiries of management to assess that the criteria for business combinations in accordance with IFRS 3 Business combinations had been satisfied. For business acquisitions and acquisition of joint ventures, we challenged the Group's judgment applied in relation to the identification and recognition of the assets and liabilities acquired and their estimated fair values or provisional amounts recognised to assess the reasonableness of provisional purchase price allocation as determined by the Group. We assessed the adequacy of the related disclosures in the consolidated financial statements in accordance with the requirements of IFRS.

Other Information

Management is responsible for the other information. The other information comprises the Report of the Board of Directors.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS Standards and their preparation in compliance with the applicable provisions of the UAE Federal Decree Law No. 32 of 2021, and the applicable provisions of Law No. (1) of 2017 (as amended) concerning the Financial System of the Government of Abu Dhabi and instructions issued by the Department of Finance and applicable provisions of the laws and regulations and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with Governance are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and ADAA Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs and ADAA Auditing Standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

KPMG

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements (continued)

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

Further, as required by the UAE Federal Decree Law No. 32 of 2021, we report that for the year ended 31 December 2022:

i) we have obtained all the information and explanations we considered necessary for the purposes of our audit;

ii) the consolidated financial statements have been prepared and comply, in all material respects, with the applicable provisions of the UAE Federal Decree Law No. 32 of 2021;

Report on Other Legal and Regulatory Requirements (continued)

iii) the Group has maintained proper books of account;

iv) the financial information included in the Directors' report is consistent with the books of account of the Group;

v) as disclosed in note 9 and 29.2 to the consolidated financial statements, the Group has purchased shares during the year ended 31 December 2022;

vi) note 12 to the consolidated financial statements discloses material related party transactions and the terms under which they were conducted; and

vii) based on the information that has been made available to us, nothing has come to our attention which causes us to believe that the Group has contravened during the financial year ended 31 December 2022 any of the applicable provisions of the UAE Federal Decree Law No. 32 of 2021 or in respect of the Company, its Articles of Association, which would materially affect its activities or its consolidated financial position as at 31 December 2022.

Further, as required by the Abu Dhabi Accountability Authority's Chairman Resolution No.(88) of 2021 pertaining to Financial Statements Auditing Standards for the Subject Entities, we report that based on the procedures performed and information provided to us by management and those charged with governance, nothing has come to our attention that causes us to believe that the Group has not complied, in all material aspects, with any of the provisions of the following laws applicable to its activities, regulations and circulars as applicable, which would have a material impact on the consolidated financial statements as at 31 December 2022:

i) Law No. (1) of 2017 (as amended) concerning the Financial System of the Government of Abu Dhabi and instructions issued by the Department of Finance pertaining to the preparation and implementation of the annual budget of Subject Entities;

ii) its Memorandum/Articles of Association which would materially affect its activities or its financial position as at 31 December 2022; and

iii) relevant provisions of the applicable laws, resolutions and circulars that have an impact on the Company's consolidated financial statements.

KPMG Lower Gulf Limited

Avtar Singh Jalif
Registration No.: 5413
Abu Dhabi, United Arab Emirates

Date: 12 July 2023

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

At 31 December

	Notes	***2022*** ***AED '000***	*2021* *AED '000*
ASSETS			
Non-current assets			
Property, plant and equipment	*6*	**1,415,001**	1,346,934
Right-of-use assets	*20*	**279,131**	301,809
Intangible assets and goodwill	*8*	**212,568**	45,177
Investment in equity-accounted investees	*9*	**3,691,838**	1,134,759
Other non-current financial assets	*10*	**21,961**	243,272
Finance lease receivables	*11*	**47,957**	-
Loans to related parties	*12*	**236,808**	207,440
Derivative financial asset	*31 & 19*	**403,212**	46,036
Deferred tax assets	*28*	**107,993**	146,112
Contract assets	13	**297,061**	278,099
		6,713,530	3,749,638
Current assets			
Finance lease receivables	*11*	**4,244**	-
Loan to related parties	*12*	**293,268**	245,536
Due from related parties	*12*	**94,236**	173,102
Trade and other receivables	*13*	**1,069,794**	411,460
Contract assets	13	**27,211**	1,927
Inventories	*14*	**87**	87
Cash and cash equivalents	*15*	**3,150,649**	716,497
Assets held for sale	29	**-**	4,094,229
		4,639,489	5,642,838
Total assets		**11,353,019**	9,392,476
EQUITY AND LIABILITIES			
Equity			
Share capital	*16*	**8,000,000**	8,000,000
Contributed equity loan	*17*	**1,083,683**	-
Shareholder's account	*17*	-	(1,680,060)
Reserves	*17 & 18*	**452,436**	(170,405)
Accumulated losses		**(3,016,830)**	(1,165,842)
		6,519,289	4,983,693
Non-controlling interest		**(383)**	-
Total equity		**6,518,906**	4,983,693
Non-current liabilities			
Bank borrowings	*19*	**1,780,411**	1,980,392
Lease liabilities	*20*	**274,404**	302,500
Other non-current liabilities	*21*	**176,869**	112,885
Deferred tax liabilities	*28*	**256,075**	231,685
		2,487,759	2,627,462
Current liabilities			
Due to related parties	*12*	**41,103**	32,579
Bank borrowings	*19*	**688,205**	125,336
Lease liabilities	*20*	**25,487**	16,803
Trade and other payables	*22*	**1,591,559**	428,289
Liabilities directly associated with assets as held for sale	29	**-**	1,178,314
		2,346,354	1,781,321
Total liabilities		**4,834,113**	4,408,783
TOTAL EQUITY AND LIABILITIES		**11,353,019**	9,392,476

Director **Director**

The accompanying notes 1 to 33 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December

	Notes	2022 AED '000	2021 AED '000
Continuing operations			
Revenue	23	**621,393**	716,514
Cost of sales	23.1	**(285,593)**	(471,864)
GROSS PROFIT		**335,800**	244,650
Income from government grants	24	**57,568**	30,052
Other income	25	**450,392**	261,311
Research and development expenses		**(2,921)**	(3,414)
Project expenses	26.1	**(144,460)**	(76,017)
General and administrative expenses	26	**(393,544)**	(283,765)
Change in fair value of financial assets carried at fair value through profit or loss	10	**30,372**	24,871
Share of results of equity-accounted investees, net	9	**58,667**	58,736
Gain on derivatives, net		**155,984**	16,099
(Provision for) / reversal of expected credit losses on trade and finance lease receivables	13 & 11	**(883)**	1,262
Reversal of expected credit losses on loans to related parties, net	12	**38,524**	13,950
Finance income	27.1	**42,130**	48,127
Finance expense	27	**(120,478)**	(106,109)
Profit before income tax from continuing operations		**507,151**	229,753
Income tax	28	**(47,621)**	(49,041)
Profit after income tax from continuing operations		**459,530**	180,712
Profit after income tax from discontinued operations	29	**80,811**	269,793
Profit for the year		**540,341**	450,505
Attributable to:			
Equity holders of the parent		**540,724**	-
Non-controlling interest		**(383)**	-
Profit for the year		**540,341**	450,505
Other comprehensive Income			
Items that are or may be reclassified subsequently to profit or loss			
Share of movement in hedging reserves of equity-accounted investees	9	**460,773**	119,913
Other movement in hedging reserve, net		**151,532**	82,504
		612,305	202,417
Foreign currency translation differences for foreign operations		**(43,536)**	(23,389)
Other comprehensive income for the year, net of income tax		**568,769**	179,028
Total comprehensive income for the year		**1 109 110**	629,533

The accompanying notes 1 to 33 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGE IN EQUITY
For the year ended 31 December

	Share capital	*Contributed Equity Loan*	*Shareholder's account*	*Investment reserve*	*Statutory reserve*	*Other reserve*	*Reserves Total reserves*	*Accumulated Losses*	*Total*	*Non controlling Interest*	*Total Equity*
	AED '000	*AED '000*	*AED '000*	*AED '000*	*AED '000*	*AED '000*	*AED '000*	*AED '000*	*AED '000*	*AED '000*	*AED '000*
Balance on 1 January 2021	8,000,000	-	(1,680,060)	246,321	143,203	(784,007)	(394,483)	(1,538,162)	4,387,295	-	4,387,295
Profit for the year	-	-	-	-	-	-	-	450,505	450,505	-	450,505
Other comprehensive income for the year	-	-	-	-	-	179,028	179,028	-	179,028	-	179,028
Total comprehensive income for the year	-	-	-	-		179,028	179,028	450,505	629,533	-	629,533
Transactions with shareholder (note 17)				-	-	-	-	(33,135)	(33,135)	-	(33,135)
Transfer to statutory reserve during the year	-	-	-	-	45,050	-	45,050	(45,050)	-	-	
Balance at 31 December 2021	8 000 000		(1 680 060)	246 321	188 253	(604 979)	(170 405)	(1 165 842)	4 983 693	-	4 983 693
Balance on 1 January 2022	**8,000,000**	**-**	**(1,680,060)**	**246,321**	**188,253**	**(604,979)**	**(170,405)**	**(1 165 842)**	**4,983,693**	**-**	**4,983,693**
Profit for the year								**540,724**	**540,724**	**(383)**	**540,341**
Other comprehensive income for the year	**-**	**-**	**-**	**-**	**-**	**568,769**	**568,769**	**-**	**568,769**	**-**	**568,769**
Total comprehensive income for the year	**-**	**-**	**-**	**-**	**-**	**568,769**	**568,769**	**-**	**1,109,493**	**(383)**	**1,109,110**
Transactions with shareholder (note 17)	**-**	**1,083,683**	**(657,580)**	**-**	**-**	**-**	**-**	**-**	**426,103**		**426,103**
Transfer of shareholder's account to retained earnings	**-**	**-**	**2,337,640**	**-**	**-**	**-**	**-**	**(2,337,640)**	**-**	**-**	**-**
Transfer to statutory reserve during the year	**-**	**-**	**-**	**-**	**54,072**	**-**	**54,072**	**(54,072)**	**-**		**-**
Balance at 31 December 2022	**8,000,000**	**1,083,683**	**- -**	**246,321**	**242,325**	**(36,210)**	**452,436**	**(3,016,830)**	**6,519,289**	**(383)**	**6,518,906**

CONSOLIDATED STATEMENT OF CASH FLOWS
For the year ended 31 December

	Notes	***2022*** ***AED '000***	*2021* *AED '000*
OPERATING ACTIVITIES			
Profit before income tax from continuing operations		**507,151**	229,753
Profit after income tax from discontinued operations		**80,811**	269,793
		587,962	499,546
Adjustments for:			
Depreciation of property, plant and equipment and right-of-use assets	*6 & 20*	**106,254**	137,234
Gain on disposal of a subsidiary	*25*	-	(28,119)
Change in fair value of investment properties	*7*	-	(106,947)
Change in fair value of financial assets carried at fair value through profit or loss	*10*	**(30,372)**	(24,871)
Amortisation of intangible assets	*8*	**4,304**	5,774
Share of results of equity-accounted investees, net	*9*	**(58,667)**	(58,736)
Finance lease income	*11.2*	**(3,754)**	(27,540)
Interest on lease liabilities	*20*	**13,327**	14,468
Gain on sale of plant property and equipment		-	(1,040)
Provision for expected credit losses on finance lease receivables, net	*11*	-	1,646
Provision for / (reversal of) expected credit losses on trade and other receivables, net	*11 & 13*	**883**	(1,262)
Reversal of expected credit losses on loans to related parties, net	*12*	**(38,524)**	(13,950)
Unwinding of decommissioning liability	*21.1*	**900**	(7,179)
Gain on derivatives, net		**(155,984)**	(16,099)
Employees' end of service benefit charge	*21.2*	**9,799**	6,611
Dividend Income	25	**(85,085)**	(125,239)
Finance income	*27*	**(42,130)**	(48,127)
Finance expense	*27*	**120,478**	62,086
Operating cash flows before changes in working capital		**429,391**	268,256
Working capital adjustments:			
Trade and other receivables		**(846,580)**	(322,053)
Due from related parties		**78,867**	(67,137)
Due to related parties		**8,524**	(254,655)
Finance lease receivable		-	(49,900)
Trade and other payables		**1,043,611**	62,317
		713,813	(363,172)
Income Tax paid		**(12,128)**	
Employees' end of service benefit paid	*21.2*	**(279)**	(4,305)
Net cash generated from / (used in) operating activities		**701,406**	(367,477)

CONSOLIDATED STATEMENT OF CASH FLOWS
For the year ended 31 December

	Notes	2022 AED '000	2021 AED '000
INVESTING ACTIVITIES			
Purchase of property, plant and equipment	6	**(314,055)**	(21,484)
Net cash flow arising from disposal of a subsidiary		-	114,773
Investment in equity-accounted investees	9	**(310,662)**	(293,562)
Investment in financial assets carried at fair value through profit or loss	10	**(14,550)**	-
Addition in Investment Property	7	-	(58,916)
Addition in Intangibles	8	**(12,146)**	(1,880)
Acquisition of subsidiary net of cash acquired		**(44,147)**	-
Disposal of Plant Property and Equipment		-	9,983
Distributions from financial asset carried at fair value through profit or loss	10	**121,824**	37,484
Dividends from equity-accounted investees	9 & 25	**184,890**	214,485
Loans given to related parties		**(136,389)**	(33,846)
Proceeds from loan to related party		**103,001**	57,589
Finance income received		**13,924**	32,544
Net cash (used in) / generated from investing activities		**(408,310)**	57,170
FINANCING ACTIVITIES			
Proceeds from borrowings	19	**662,739**	232,957
Repayment of borrowings	19	**(115,466)**	(244,725)
Shareholder's Contribution	17	**1,083,683**	-
Other net receipts from shareholder		**688,954**	-
Finance expense paid		**(119,488)**	(62,086)
Repayment of lease liabilities	20	**(28,034)**	(32,015)
Net cash generated from / (used in) financing activities		**2,172,388**	(105,869)
NET INCREASE / (DECREASE) IN CASH AND CASH EQUIVALENTS		**2,465,484**	(416,176)
Cash and cash equivalents on 1 January		**716,497**	1,229,254
Effect of movement in exchange rates on cash held		**(31,332)**	(8,738)
CASH AND CASH EQUIVALENTS AT 31 DECEMBER		**3 150 649**	804,340
Discontinued operations cash and bank balance at 31 December	29.1	**-**	(87,843)
CASH AND CASH EQUIVALENTS AT 31 DECEMBER	15	**3 150 649**	716,497

Significant non-cash transactions not included in the consolidated statement of cash flows are as follows:

Transactions with shareholder (note 17)		1,346,533	-

The accompanying notes 1 to 33 form an integral part of these consolidated financial statements.

1 GENERAL INFORMATION

Abu Dhabi Future Energy Company PJSC (Masdar) (the "Company") is registered as a public joint stock company in the Emirate of Abu Dhabi. The Company was incorporated on 9 December 2007. The Company is owned by Abu Dhabi National Energy Company PJSC (TAQA), Mamoura Diversified Global Holding PJSC and Abu Dhabi National oil Company (ADNOC) PJSC. All shareholder companies are incorporated in the Emirate of Abu Dhabi. The ultimate owner of the Company is the Government of Abu Dhabi.

These consolidated financial statements include the financial performance and position of the Company and its subsidiaries (together, the "Group") and the Group's interest in its equity-accounted investees.

The Company was formed for the purpose of implementing the Masdar initiative, whose primary objective is to invest in or acquire participations in entities in Abu Dhabi or abroad, and to be active in the renewable energy, energy efficiency, carbon reduction, carbon capture and storage and other forms of sustainability related technologies. The Group's primary activities also include the provision of services for the reduction of carbon emissions.

The Masdar initiative has four primary objectives:

- to reduce the carbon footprint of Abu Dhabi.
- to enhance the Abu Dhabi brand in the new energy and sustainability markets.
- to foster the development of a knowledge-based economy in Abu Dhabi; and
- to be profitable.

During the year 2021 Masdar Sustainable Real Estate had been classified as held for sale in consolidated statement of financial position and discontinued operation in consolidated statement of comprehensive income. Effect of held for sale balances and discontinued operations have been presented in note 29.

The registered office of the Company is P.O. Box 54115, Abu Dhabi, United Arab Emirates.

The Company has not made any social contributions during the year ended 31 December 2022.

These consolidated financial statements were approved and authorised for issue on July 11th 2023

2 BASIS OF PREPARATION

The consolidated financial statements have been prepared on a going concern basis and in accordance with International Financial Reporting Standards (IFRSs) issued by the International Accounting Standards Board (IASB) and requirements of the applicable laws including UAE Federal Decree Law No. 32 of 2021 which came into effect on January 2, 2022 replacing the UAE Federal Law No. 2 of 2015 (as amended) and the applicable provisions of Law No. (1) of 2017 (as amended) issued by the Department of Finance. IFRSs comprise accounting standards issued by the IASB as well as Interpretations issued by the International Financial Reporting Interpretations Committee (IFRIC).

On 9 December 2022, the UAE Ministry of Finance released the Federal Decree-Law No. 47 of 2022 on the Taxation of Corporations and Businesses (the Law) to enact a Federal corporate tax (CT) regime in the UAE. The CT regime will become effective for accounting periods beginning on or after 1 June 2023.

As at 31 December 2022, the Law was not considered to be substantively enacted from the perspective of IAS 12 – Income Taxes since the threshold of income over which the 9% tax rate would apply and other clarifications were yet to prescribed by way of Cabinet Decisions.

The Cabinet of Ministers Decision No. 116/2022 effective from 2023, has confirmed the threshold of income over which the 9% tax rate would apply, and the Law is considered to be substantively enacted. A rate of 9% will apply to taxable income exceeding AED 375,000, a rate of 0% will apply to taxable income not exceeding AED 375,000.

The Group is currently in the process of assessing the impact on the consolidated financial statements, both from current and deferred tax perspective.

2 BASIS OF PREPARATION - *continued*

These consolidated financial statements are presented in United Arab Emirates Dirham ("AED") which is the currency of primary economic environment in which the Group operates. Each entity in the Group determines its own functional currency. All amounts have been rounded to the nearest thousand, unless otherwise indicated.

2.1 Basis of consolidation

The consolidated financial statements comprise the financial statements of the Group as at 31 December 2022. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Group has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure, or rights, to variable returns from its involvement with the investee; and
- The ability to use its power over the investee to affect its returns

Generally, there is a presumption that a majority of voting rights results in control. To support this presumption and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement(s) with the other vote holders of the investee
- Rights arising from other contractual arrangements; and/or
- The Group's voting rights and potential voting rights

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income, and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of OCI are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies. All intra-group assets and liabilities, equity, income, expenses, and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises the related assets (including goodwill), liabilities, non-controlling interest, and other components of equity, while any resultant gain or loss is recognised in profit or loss. Any investment retained is recognised at fair value.

3 SIGNIFICANT ACCOUNTING POLICIES

3.1 New standards, interpretations and amendments

The Group applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after 1 January 2022. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

The nature and the impact of each interpretation or amendment is described below.

New and Revised IFRSs

The following new and revised IFRSs have been adopted in these consolidated financial statements. The application of these new and revised IFRSs has not had any material impact on the amounts reported for the current and prior years but may affect the accounting for future transactions or arrangements.

3 SIGNIFICANT ACCOUNT POLICIES - *continued*

	Effective for annual periods beginning on or after
IFRS 9 Financial Instruments. The amendment clarifies that in applying the '10 per cent' test to assess whether to derecognise a financial liability, an entity includes only fees paid or received between the entity (the borrower) and the lender, including fees paid or received by either the entity or the lender on the other's behalf. The amendment is applied prospectively to modifications and exchanges that occur on or after the date the entity first applies the amendment.	01 January 2022
IFRS 16 Leases. The amendment removes the illustration of the reimbursement of leasehold improvements. As the amendment to IFRS 16 only regards an illustrative example, no effective date is stated.	01 January 2022
Amendments to IAS 16 – Property, Plant and Equipment – Proceeds before Intended Use. The amendments prohibit deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced before that asset is available for use, i.e., proceeds while bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Consequently, an entity recognises such sales proceeds and related costs in profit or loss. The entity measures the cost of those items in accordance with IAS 2 Inventories. The amendments also clarify the meaning of 'testing whether an asset is functioning properly'. IAS 16 now specifies this as assessing whether the technical and physical performance of the asset is such that it is capable of being used in the production or supply of goods or services, for rental to others, or for administrative purposes. If not presented separately in the statement of comprehensive income, the financial statements shall disclose the amounts of proceeds and cost included in profit or loss that relate to items produced that are not an output of the entity's ordinary activities, and which line item(s) in the statement of comprehensive income include(s) such proceeds and cost. The amendments are applied retrospectively, but only to items of property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after the beginning of the earliest period presented in the financial statements in which the entity first applies the amendments. The entity shall recognise the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the beginning of that earliest period presented.	01 January 2022
Amendments to IFRS 3 Business Combinations – Reference to the Conceptual Framework The amendments update IFRS 3 so that it refers to the 2018 Conceptual Framework instead of the 1989 Framework. They also add to IFRS 3 a requirement that, for obligations within the scope of IAS 37, an acquirer applies IAS 37 to determine whether at the acquisition date a present obligation exists because of past events. For a levy that would be within the scope of IFRIC 21 Levies, the acquirer applies IFRIC 21 to determine whether the obligating event that gives rise to a liability to pay the levy has occurred by the acquisition date. Finally, the amendments add an explicit statement that an acquirer does not recognise contingent assets acquired in a business combination.	01 January 2022

3 SIGNIFICANT ACCOUNT POLICIES - *continued*

	Effective for annual periods beginning on or after
Onerous Contracts—Cost of Fulfilling a Contract (Amendments to IAS 37, Provisions, Contingent Liabilities and Contingent Assets), clarifies that when assessing if a contract is onerous, the cost of fulfilling it includes all costs related directly to the contract. Such costs include both:	01 January 2022

the incremental costs of the contract (i.e., costs a company would avoid if it did not have the contract, like direct labour and materials); and
an allocation of other costs that relate directly to fulfilling the contract (e.g., contract management and supervision, or depreciation of equipment used in fulfilling it).

3.2 Summary of significant accounting policies

Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred and included in general and administrative expenses.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances, and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

Any contingent consideration is measured at fair value at the date of acquisition. If an obligation to pay contingent consideration that meets the definition of a financial instrument is classified as equity, then it is not remeasured, and settlement is accounted for within equity. Otherwise, other contingent consideration is remeasured at fair value at each reporting date and subsequent changes in the fair value of the contingent consideration are recognized in profit or loss."

Goodwill is initially measured at cost (being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests and any previous interest held over the net identifiable assets acquired and liabilities assumed). If the fair value of the net assets acquired is more than the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in consolidated statement of profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill has been allocated to a cash-generating unit (CGU) and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the cash-generating unit retained.

A contingent liability recognized in a business combination is initially measured at its fair value. Subsequently, it is measured at the higher of the amount that would be recognized in accordance with the requirements for provisions in IAS 37 Provisions, Contingent Liabilities and Contingent Assets or the amount initially recognized less (when appropriate) cumulative amortisation recognized in accordance with the requirements for revenue recognition.

3 SIGNIFICANT ACCOUNT POLICIES - ***continued***

Investment in associates and joint ventures

The Group has investments in equity-accounted investees including associates and joint ventures.

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

On acquisition of an associate or a joint venture, the Group undertakes a notional purchase price allocation (PPA), identifying and valuing assets and liabilities of the associate or joint venture, as if it had acquired a business. These fair value adjustments are not recorded separately, because the investment itself is a single line item. However, the fair values identified form the basis for additional depreciation, amortisation and similar adjustments that are reflected in the investor's share of the results in subsequent years. Adjustments in the notional purchase price allocation include assets not recognised by the associate or joint venture (such as internally developed intangible assets and similar assets). Adjustments might also be made to recognise the fair value of assets carried by the investee at cost (such as property, plant and equipment) and to recognise liabilities at appropriate values.

Where the Group acquires an associate or joint venture, it might be necessary to use provisional figures to undertake a provisional PPA to report the acquisition at the reporting date. The Group will finalise the fair values and PPA, within one-year from the date of acquisition and will report in the following reporting period.

The Group's investments in its associate and joint venture are accounted for using the equity method.

Under the equity method, the investment in an associate or a joint venture is initially recognised at cost including any transaction costs. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment separately. The consolidated statement of profit or loss reflects the Group's share of the results of operations of the associate or joint venture. Appropriate adjustments to the Group's share of the results of associate or joint venture after acquisition are made in order to account, for example, for amortisation of the intangible assets acquired based on their fair values at the acquisition date. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

The aggregate of the Group's share of profit or loss of an associate and a joint venture is shown on the face of the consolidated statement of profit or loss outside operating profit and represents profit or loss after tax and non-controlling interests in the subsidiaries of the associate or joint venture.

The financial statements of the associates or joint ventures are prepared for the same reporting period.

When necessary, adjustments are made to bring the accounting policies in line with those of the Group. After application of the equity method, the Group determines whether it is necessary to recognise an impairment loss on its investment in its associate or joint venture. At each reporting date, the Group determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognises the loss as 'Provision for impairment on equity accounted investees' in the consolidated statement of profit or loss.

Upon loss of significant influence over the associate or joint control over the joint venture, the Group measures and recognizes any retained investment at its fair value. Any difference between the carrying amount of the associate or

3 SIGNIFICANT ACCOUNT POLICIES - ***continued***

joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognized in consolidated profit or loss.

Interests in joint operations
A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

When a group entity undertakes its activities under joint operations, the Group as a joint operator recognizes in relation to its interest in a joint operation:

- its assets, including its share of any assets held jointly.
- its liabilities, including its share of any liabilities incurred jointly.
- its revenue from the sale of its share of the output arising from the joint operation.
- its share of the revenue from the sale of the output by the joint operation; and
- its expenses, including its share of any expenses incurred jointly.

The Group accounts for the assets, liabilities, revenues, and expenses relating to its interest in a joint operation in accordance with the IFRSs applicable to the assets, liabilities, revenues and expenses.

When a group entity transacts with a joint operation in which a group entity is a joint operator (such as a sale or contribution of assets), the Group is conducting the transaction with the other parties to the joint operation, and gains and losses resulting from the transactions are recognized in the Group's consolidated financial statements only to the extent of other parties' interests in the joint operation.

During the year the Group acquired a subsidiary that has a number of investments in the United States. The subsidiary has several investments in jointly controlled wind and solar farms, through limited liability Companies, with other equity investors and tax equity partners.

Tax equity partnerships

The Group has equity investments in certain companies in the United States of America, which also comprise investors whose investment participation in those entities, typically via a different class of shares governed through tax equity partnerships arrangements, is principally in return for a certain level of tax benefits expected during the initial years of operations of these entities in the form of Production Tax Credits and Investment Tax Credits. Once those investors have achieved the targeted returns specified in the underlying investment agreements their interest in the cash or other entitlements associated with their investment stake flips to either a nominal amount or their interests are acquired by the other equity investors in those entities. In arriving at its equity accounted share of its interest in these entities, the Group considers the tax investors' entitlements under these arrangements to determine whether they amount to an equity or liability balance classification.

Current versus non-current classification of assets and liabilities

The Group presents assets and liabilities in the consolidated statement of financial position based on current/non-current classification. An asset is current when it is:

- Expected to be realised or intended to be sold or consumed in the normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realised within twelve months after the reporting period

Or

- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in the normal operating cycle
- It is held primarily for the purpose of trading

3 SIGNIFICANT ACCOUNT POLICIES - ***continued***

Current versus non-current classification of assets and liabilities - continued

- It is due to be settled within twelve months after the reporting period

Or

- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period

The Group classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

Revenue recognition

Revenue from contracts with customers
The Group recognises revenue from contracts with customers based on a five-step model as set out in IFRS 15:

Step 1 Identify contract(s) with a customer: A contract is defined as an agreement between two or more parties that creates enforceable rights and obligations and sets out the criteria for every contract that must be met.

Step 2 Identify performance obligations in the contract: A performance obligation is a promise in a contract with a customer to transfer a good or service to the customer.

Step 3 Determine the transaction price: The transaction price is the amount of consideration to which the Group expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties.

Step 4 Allocate the transaction price to the performance obligations in the contract: For a contract that has more than one performance obligation, the Group allocates the transaction price to each performance obligation in an amount that depicts the amount of consideration to which the Group expects to be entitled in exchange for satisfying each performance obligation.

Step 5 Recognise revenue when (or as) the Group satisfies a performance obligation.

The Group satisfies a performance obligation and recognises revenue over time, if one of the following criteria is met:

a) The Group’s performance does not create an asset with an alternate use to the Group and the Group has as an enforceable right to payment for performance completed to date.
b) The Group’s performance creates or enhances an asset that the customer controls as the asset is created or enhanced.
c) The customer simultaneously receives and consumes the benefits provided by the Group’s performance as the Group performs.

For performance obligations where none of the above conditions are met, revenue is recognised at the point in time at which the performance obligation is satisfied.

Revenue from sale of land
Revenue from sale of land is measured at the fair value of the consideration received or receivable, considering contractually defined terms of payment and excluding taxes and duty. The Group assesses its revenue arrangements against specific criteria to determine if it is acting as principal or agent.

Revenue is recognised to the extent it is probable that the economic benefits will flow to the Group and the revenue and costs, if applicable, can be measured reliably, revenue is recognized over period of time under IFRS 15 upon progress completion for related works.

Special projects
Special projects include management consulting fees and supplier of solar panels, The Group acts as a project management consultant for some projects which are completed for other parties. Revenue from special projects is

3 SIGNIFICANT ACCOUNT POLICIES – ***continued***

recognised over time based on the stage of completion of the projects, revenue from supply of solar panels under fully owned subsidiary Source Trading Company are realized based on point in time.

Development fee
Revenue from development fee is recognised at point in time, when the right to receive payment has been established.

Renewable power generation
Revenue is recognised, net of Value Added Tax, based on net electricity supplied during the period based on meter readings and market prices as specified under contract terms. Revenue is recognised at a single point in time when electricity is supplied, and the performance obligation met.

Revenue is recognised when the quantity and rates can reasonably be determined, and the control have been transferred to third party.

Finance lease income
The Group's policy for recognition of revenue from finance leases is described in leases accounting policy.

Service Concession Revenues
Revenue related with construction or upgrade services under a service concession arrangement is recognized over time. Operation or service revenue is recognized in the period in which the services are provided by the Group.

Concession under Power Purchase Agreement (PPA). Under the term of IFRIC12 "Service Concession Arrangements", a concession operator has a twofold activity.

- A construction activity in respect of its obligation to design, construct, finance and own the plant and, prior to the Commercial Operations Date ("COD"), the interconnection facilities; and
- An operating and maintenance activity in respect of concession asset after the COD.

Revenue is recognised in accordance with IFRS15. In return for its activities, the operator – the company receives remuneration from the grantor; the financial assets model applies.

The Company determines the stand-alone selling price of construction and operating services underlying each performance obligation to allocate the transaction price to each performance obligation. As the stand-alone selling price of construction service is not directly observable, the Company estimates the price by using expected costs plus margin method. The Company applies a margin to the project cost of 2% to determine construction revenue.

The Company generates revenue from operating and maintenance (O&M) services using the O&M contractors to generate electric power and dispatch it to the national grid. Operation services entail the Company to generate and to deliver electric power to the national grid, which simultaneously receives and consumes the entire electric power output. The Company transfers the benefit of the service to the national grid as it performs, and therefore satisfies its performance obligation over time. The Company estimates the price of operation services on a residual basis, which is the difference between (i) the total cash receipts receivable under the PPA concession arrangement and (ii) revenue from construction services. The Company's selling price of operation services is allocated over time of the project operations. During the operation services phase, the Company allocates the actual cash receipts between revenue for providing operation services in the reporting period and the remaining part to settle concession asset for the construction services.

In reference to operation services, the Company estimated the price of operation services on residual basis. The Company allocated the actual cash receipts received in the period between operation services revenue and the remaining part to settle concession asset for the construction services.

The Group recognises a financial asset arising from a service concession arrangement when it has an unconditional contractual right to receive cash from or at the direction of the grantor for the construction or upgrade services provided, and the right to receive cash depends only on the passage of time. Such financial assets are measured at fair value on initial recognition and classified as financial assets measured at amortised cost.

If the Group is paid for the construction services partly by a financial asset and partly by an intangible asset, then each component of the consideration is accounted for separately and is initially recognised at the fair value of the consideration

3 SIGNIFICANT ACCOUNT POLICIES - *continued*

The right to receive cash from the grantor is conditional on the company's future performance and depends on the factual power generation during the contractual period. Thus, the group presents a contract asset in the statement of financial position.

Other income

Other income is recognised when the right to receive payment has been established.

Income from sales of Renewable Obligation Certificates (ROCs), Levy Exemption Certificates and Recycled Buyouts is recognised based on market rates unless specified otherwise under contract terms, net of Value Added Tax.

Group undertake interest rate swaps for upcoming projects based on fair value and record fair value through profit or loss.

Finance income

Finance income comprises interest income on financial assets, gains on hedging instruments and foreign exchange gains. Interest income on financial investments is recognised in consolidated profit or loss and when they accrue using the effective interest method. Foreign currency gains and losses are reported on a net basis.

Project expenses

Project expenses comprise expenses incurred on screening, feasibility studies and pre-development phases of various projects undertaken by the Group. Such expenditure is charged to consolidated profit or loss as incurred, other than expenditure on project related property, plant and equipment, which is carried as an asset in the consolidated statement of financial position when there is reasonable certainty that the project will be developed, and future economic benefits will flow to the Group. In the absence of such certainty, these expenses are charged to consolidated profit or loss, cost related to feasibility studies is expensed out even if the development criteria are met.

Foreign currencies

The Group's consolidated financial statements are presented in AED, which is also the Parent Company's functional currency. For each entity, the Group determines the functional currency and items included in the financial statements of each entity are measured using that functional currency.

Transactions and balances
Transactions in foreign currencies are initially recorded by the Group's entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition.

Transactions in foreign currencies are translated into the respective functional currencies of Group companies at the exchange rates at the dates of the transactions.

Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the exchange rate at the reporting date. Non-monetary assets and liabilities that are measured at fair value in a foreign currency are translated into the functional currency at the exchange rate when the fair value was determined. Non-monetary items that are measured based on historical cost in a foreign currency are translated at the exchange rate at the date of the transaction. Foreign currency differences are generally recognised in profit or loss and presented within finance costs.

However, foreign currency differences arising from the translation of the following items are recognised in OCI:

- an investment in equity securities designated as at FVOCI (except on impairment, in which case foreign currency differences that have been recognised in OCI are reclassified to profit or loss).
- a financial liability designated as a hedge of the net investment in a foreign operation to the extent that the hedge is and

3 SIGNIFICANT ACCOUNT POLICIES – *continued*

- qualifying cash flow hedges to the extent that the hedges are effective.

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated into AED at the exchange rates at the reporting date. The income and expenses of foreign operations are translated into AED at the exchange rates at the dates of the transactions. Foreign currency differences are recognised in OCI and accumulated in the translation reserve, except to the extent that the translation difference is allocated to NCI. When a foreign operation is disposed of in its entirety or partially such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. If the Group disposes of part of its interest in a subsidiary but retains control, then the relevant proportion of the cumulative amount is reattributed to NCI. When the Group disposes of only part of an associate or joint venture while retaining significant influence or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.
has context menu

Borrowing costs
Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period to get ready for its intended use or sale are capitalised as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur.

Property, plant and equipment

Property, plant and equipment are stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of replacing part of the plant and equipment and borrowing costs for long-term construction projects only if it is probable that the future economic benefits associated with the expenditure will flow to the Group. When significant parts of property, plant and equipment are required to be replaced at intervals, the Group depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the property, plant and equipment as a replacement only if it is probable that the future economic benefits associated with the expenditure will flow to the Group. All other repair and maintenance costs are recognised in consolidated profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met. Refer to significant accounting judgements, estimates and assumptions (note 4) and other liabilities (note 21) for further information about the recognised decommissioning provision.

Depreciation is calculated using the straight-line method and is recognized in profit and loss to allocate the assets' cost to their residual values over their estimated useful lives as follows:

	Years
Land and Buildings	10 – 25
Plant and machinery	10 – 25
Furniture and fixtures	3-6

Freehold land is not depreciated.

An item of property, plant and equipment and any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statement of profit or loss when the asset is derecognised.

The residual values, useful lives and methods of depreciation of property, plant and equipment are reviewed at each financial year end and adjusted prospectively, if appropriate.

Capital work in progress

Properties or assets during construction for production, supply or administrative purposes, are carried at cost, less any recognised impairment loss. Cost includes all direct costs attributable to the design and construction of the property

3 SIGNIFICANT ACCOUNT POLICIES – *continued*

including related staff costs, and for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. When the assets are ready for intended use, the capital work in progress is transferred to the appropriate property, plant and equipment category and is accounted in accordance with the Group's policies, work in progress is not depreciated.

Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Group as a lessee
The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

i) Right-of-use assets

The Group recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received.

Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as follows:

	Years
Land	10-20
Building	3 - 20
Vessels	5
Plant and machinery	18
Office equipment	3-5

The right-of-use assets are also subject to impairment. Refer to the accounting policies for *Impairment of non-financial assets.*

ii) Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in – substance fixed payments) less any lease incentives receivable, variable lease payments that depend on a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date where the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

iii) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a

3 SIGNIFICANT ACCOUNT POLICIES – *continued*

purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

Group as a lessor
Leases where the Group transfers substantially all of the risks and benefits of ownership of the asset through its contractual arrangements to the customer are considered as a finance lease. The amounts due from lessees under finance leases are initially recognised as receivables at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding receivable from the lessee is included in the consolidated statement of financial position as a finance lease receivable, or as due from a related party, where applicable, and is carried at the amount of the net investment in the lease after making provision for impairment. Finance lease income is recognised over the term of the lease using the net investment method (before tax) to give a constant rate of return on the net investment in the leases.

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms

and is included in revenue in the statement of profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Investment properties

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated at fair value which reflects market conditions at the reporting date. Gains or losses arising from changes in the fair values of investment properties are included in profit or loss in the period in which they arise, including the corresponding tax effect. Fair values are determined based on an annual evaluation performed by an accredited external independent valuer applying a valuation model recommended by the International Valuation Standards Committee.

Investment properties are derecognised either when they have been disposed of or when they are permanently withdrawn from use and no future economic benefit is expected from their disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognised in consolidated profit or loss in the period of derecognition.

Transfers are made to (or from) investment property only when there is a change in use. For a transfer from investment property to owner-occupied property, the deemed cost for subsequent accounting is the fair value at the date of change in use. If owner-occupied property becomes an investment property, the Group accounts for such property in accordance with the policy stated under property, plant and equipment up to the date of change in use at carrying amount.

Any gain arising on this remeasurement is recognized in profit or loss to the extent that it reverses a previous impairment loss on the specific property, with any remaining gain recognized in OCI and presented in the revaluation reserve. Any loss is recognized in profit or loss. However, to the extent that an amount is included in the revaluation surplus for that property, the loss is recognized in OCI and reduces the revaluation surplus within equity.

Investment properties under construction are measured at cost until either its fair value becomes reliably determinable or construction is completed.

Income taxes

Income tax expense/benefit comprises current and deferred tax. Current and deferred tax are recognised in profit or loss except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity or in other comprehensive income.

3 SIGNIFICANT ACCOUNT POLICIES – ***continued***

Current income tax
Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date in the countries where the Group operates and generates taxable income.

Current income tax relating to items recognised directly in equity is recognised in equity and not in the consolidated statement of profit or loss. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax
Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax liabilities are recognised for all taxable temporary differences, except:

- When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:

When the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside profit or loss is recognised outside profit or loss. Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity. Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Value added tax (VAT)

Expenses and assets are recognised net of the amount of VAT, except:

- When VAT incurred on a purchase of assets or services is not recoverable from the taxation authority, in which case, VAT is recognised as part of the cost of acquisition of the asset or as part of the expense item, as applicable
- When receivables and payables are stated with the amount of VAT included

3 SIGNIFICANT ACCOUNT POLICIES - ***continued***

The net amount of VAT recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the consolidated statement of financial position.

Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses. Internally generated intangibles, excluding capitalised development costs, are not capitalised and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred.

The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the consolidated statement of profit or loss in the expense category that is consistent with the function of the intangible assets.

Intangible assets with indefinite useful lives are not amortised, but are tested for impairment annually, either individually or at the cash-generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in the consolidated statement of profit or loss when the asset is derecognized.

Computer software
Acquired computer software licences are capitalised based on the costs incurred to acquire and bring to use the specific software. These costs are amortised on a straight-line basis over their estimated useful lives which is normally a period of three to five years.

Licenses
Acquired licenses are shown at historical cost. Licenses have a finite useful life and are carried at cost less accumulated amortisation. Amortisation is calculated using the straight-line method to allocate the cost of licenses over their estimated useful lives.

Internally generated intangible assets
Research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when the Group can demonstrate:

- The technical feasibility of completing the intangible asset so that the asset will be available for use or sale
- Its intention to complete and its ability and intention to use or sell the asset
- How the asset will generate future economic benefits
- The availability of resources to complete the asset
- The ability to measure reliably the expenditure during development

Following initial recognition of the development expenditure as an asset, the asset is carried at cost less any accumulated amortization and accumulated impairment losses. Amortization of the asset begins when development is complete, and the asset is available for use. It is amortized over the period of expected future benefit. Amortization is recorded in cost of sales. During the period of development, the asset is tested for impairment annually.

3 SIGNIFICANT ACCOUNT POLICIES - *continued*

The estimated useful lives of intangible assets are as follows:

	Years
Software	3
Other License *	24
Goodwill	

*Other Intangible license represent the right to own and operate the London Array offshore windfarm which is being amortised from the date of commercial operation of the windfarm.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the Group expects some or all of provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognised as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision presented in the consolidated statement of profit or loss net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

Onerous contracts

Present obligations arising under onerous contracts are recognised and measured as provisions. An onerous contract is considered to exist where the Group has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract.

Decommissioning liabilities

The Group records a provision for decommissioning costs of a facility or an item of plant and to restore the site on which it is located. Decommissioning costs are provided for at the present value of expected costs to settle the obligation using estimated cash flows and are recognised as part of the cost of the relevant asset. The cash flows are discounted at a current pre-tax rate that reflects the risks specific to the decommissioning liability. The unwinding of the discount is expensed as incurred and recognised in the consolidated statement of profit or loss as a finance cost. The estimated future costs of decommissioning are reviewed annually and adjusted as appropriate. Changes in the estimated future costs, or in the discount rate applied, are added to or deducted from the cost of the asset.

Employee benefits

An accrual is made for the estimated liability for employees' entitlement to annual leave as a result of services rendered by eligible employees up to the end of the year.

Provision is also made for the full amount of end of service benefit due to non-UAE national employees in accordance with the provisions of IAS 19, management carries out an exercise to assess the present value of its obligations using the projected unit credit method, in respect of employees' end of service benefits payable under the UAE Labour Law, for their period of service up to the end of the year. The accrual relating to annual leave is disclosed as a current liability, while the provision relating to end of service benefit is disclosed as a non-current liability.

Pension contributions are made in respect of UAE national employees to the UAE General Pension and Social Security Authority in accordance with the UAE Federal Law No. (2), 2000 for Pension and Social Security. Such contributions are charged to the consolidated statement of profit or loss during the employees' period of service.

Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants where the government is deemed by the Group to be acting in the capacity of a government, as opposed to an ultimate shareholder, are recognised in consolidated statement of profit or loss on a systematic basis

3 SIGNIFICANT ACCOUNT POLICIES - ***continued***

Government grants - continued

over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate; such as grants for the Group to purchase, construct or otherwise acquire non-monetary assets are recognised as deferred government grant in the consolidated statement of financial position and transferred to consolidated statement of profit or loss on a systematic and rational basis over the useful lives of the related assets. Where the government is deemed by the Group to be acting in the capacity of an ultimate shareholder, Government grants are recognised as additional shareholder contribution in the consolidated statement of changes in equity.

Government grants that are receivable as compensation for expenses already incurred or for the purpose of giving immediate financial support to the group with no future related costs are recognised in consolidated statement of profit or loss in the period in which they become receivable.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

Land granted by the Government of Abu Dhabi is recognised at nominal value where there is reasonable assurance that the land will be received, and the Group will comply with any applicable attached conditions.

Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(i) Financial assets

Initial recognition and measurement
Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. Except for trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15.

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Trade receivables and debt securities issued are initially recognized when they are originated. All other financial assets and financial liabilities are initially recognized when the Group becomes a party to the contractual provisions of the instrument.

Purchases or sales of financial assets that require delivery of assets by regulation or convention in the marketplace (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

Subsequent measurement
For purposes of subsequent measurement, financial assets are classified in four categories:

- Financial assets at fair value through profit or loss
- Financial assets at amortised cost (debt instruments)

3 SIGNIFICANT ACCOUNT POLICIES - ***continued***

- Financial assets at fair value through OCI with recycling of cumulative gains and losses upon derecognition (debt instruments)

Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)

Financial assets at amortised cost (debt instruments)
The Group measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest rate (EIR) method and are subject to impairment. Gains and losses are recognised in the interim statement of comprehensive income when the asset is derecognised, modified, or impaired.

Financial assets at fair value through profit or loss
Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value basis are measured at FVTPL

This category includes debt investments and equity investments which the Group had not irrevocably elected to classify at fair value through OCI. Dividends on equity investments are recognised as other income in the statement of profit or loss when the right of payment has been established.

Derecognition
A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

- The rights to receive cash flows from the asset have expired; or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the assets.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of its continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Impairment of financial assets
The Group records an allowance for ECLs for all financial instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

The Group recognises loss allowances for ECLs on financial assets measured at amortised cost which comprise of finance lease receivables, loans to related parties, contract assets and trade receivables group does not recognize any loss allowance for ECL on due from related party balances.

3 SIGNIFICANT ACCOUNT POLICIES - ***continued***
Impairment of financial assets - continued

The Group measures loss allowances at an amount equal to lifetime ECLs, except for the following, which are measured at 12-month ECLs:

- debt securities that are determined to have low credit risk at the reporting date; and
- the debt securities and bank balances for which credit risk (i.e., the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

The Group assumes that the credit risk on a financial asset has increased significantly if it is more than 30 days past due.

The Group considers a financial asset to be in default when:

- the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held); or
- the financial asset is more than 90 days past due.

The Group considers a debt security to have low credit risk when its credit risk rating is equivalent to the globally understood definition of 'investment grade'.

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the reporting date (or a shorter period if the expected life of the instrument is less than 12 months).

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

Measurement of ECL
ECLs are recognised in two stages:

a) Stage 1
For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL).

b) Stage 2 and Stage 3
For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e., the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive).

ECLs are discounted at the effective interest rate of the financial asset.

For due from related parties and trade receivables that do not contain a significant financing component, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

For finance lease receivables, loans to related parties and receivables under payment plan, the Group measures ECL on an individual basis. The measurement of the loss allowance is based on the present value of the asset's expected cash flows using the asset's original EIR, regardless of whether it is measured on an individual basis or a collective basis.

3 SIGNIFICANT ACCOUNT POLICIES – *continued*

Credit-impaired financial assets - continued

The key inputs into the measurement of ECLs are the term structures of the following variables:

- Probability of default (PD).
- Loss given default (LGD).
- Exposure at default (EAD).
- Definition of default.
- Significant increase in credit risk; and
- Expected life.

These parameters are derived from the Group's internally developed statistical models and other historical data and are explained in detail in note 4.

Credit-impaired financial assets
At each reporting date, the Group assesses whether financial assets carried at amortised cost are credit impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer.
- a breach of contract such as a default or being more than 90 days past due.
- the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise.
- it is probable that the borrower will enter bankruptcy or another financial reorganisation; or
- the disappearance of an active market for a security because of financial difficulties.

Write-off
Financial assets are written off (either partially or in full) when there is no realistic prospect of recovery. This is generally the case when the Group has exhausted all legal and remedial efforts to recover from the customers. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

The group has the following financial assets:
Finance lease receivables
Loans to related parties
Trade and other receivables
Due from related parties
Cash and cash equivalents

ii) Financial liabilities

Initial recognition and measurement
Financial liabilities are classified as measured at amortised cost or fair value through profit and loss.
Financial liability is initially measured at fair value plus or minus, for an item not at FVTPL transaction costs that are directly attributable to its acquisition or issue, all financial liabilities are recognised initially at fair value and, in the case of borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables (except deferred income), bank borrowings, due to related parties (except deferred government grants) and derivative financial liability.

Subsequent measurement
The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at fair value through profit or loss
A Financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition

3 SIGNIFICANT ACCOUNT POLICIES - ***continued***

Financial liabilities at amortized cost
This is the category most relevant to the Group. After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by considering any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit or loss. This category generally applies to interest-bearing loans and borrowings.

Interest rate benchmark reform
When the basis for determining the contractual cash flows of a financial asset or financial liability measured at amortised cost changed as a result of interest rate benchmark reform, the Group updated the effective interest rate of the financial asset or financial liability to reflect the change that is required by the reform. A change in the basis for determining the contractual cash flows is required by interest rate benchmark reform if the following conditions are met:

- the change is necessary as a direct consequence of the reform; and
- the new basis for determining the contractual cash flows is economically equivalent to the previous basis – i.e., the basis immediately before the change.

When changes were made to a financial asset or financial liability in addition to changes to the basis for determining the contractual cash flows required by interest rate benchmark reform, the Group first updated the effective interest

rate of the financial asset or financial liability to reflect the change that is required by interest rate benchmark reform. After that, the Group applied the policies on accounting for modifications to the additional changes.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability at fair value. The difference in the respective carrying amounts is recognised in the interim consolidated statement of comprehensive income.

Derivative financial instruments

Initial recognition and subsequent measurement
The Group uses derivative financial instruments, such as interest rate swaps, to hedge its interest rate risk. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Changes in the fair value of derivative financial instruments that do not qualify for hedge accounting are recognised in consolidated statement of profit or loss as they arise. Derivative financial instruments that do not qualify for hedge accounting are classified as held for trading derivatives.

For the purpose of hedge accounting, the Group designates certain derivatives into two types of hedge categories:

- fair value hedges which hedge the exposure to changes in the fair value of a recognised asset or liability; and
- cash flow hedges which hedge exposure to variability in cash flows that are either attributable to a particular risk associated with a recognised asset or liability, or a highly probable forecasted transaction that will affect future reported net income.

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which it wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge.

3 SIGNIFICANT ACCOUNT POLICIES – *continued*

The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined). A hedging relationship qualifies for hedge accounting if it meets all the following effectiveness requirements:

- There is 'an economic relationship' between the hedged item and the hedging instrument
- The effect of credit risk does not 'dominate the value changes' that result from that economic relationship
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item

Fair value hedges

The change in the fair value of a hedging instrument is recognised in the consolidated statement of profit or loss as a finance cost. The change in the fair value of the hedged item attributable to the risk hedged is recorded as part of the carrying value of the hedged item and is also recognised in the consolidated statement of profit or loss as a finance cost.

For fair value hedges relating to items carried at amortised cost, any adjustment to carrying value is amortised through profit or loss over the remaining term of the hedge using the EIR method. EIR amortisation may begin as soon as an adjustment exists and no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged.

If the hedged item is derecognised, the unamortised fair value is recognised immediately in consolidated statement of profit or loss.

When an unrecognised firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognised as an asset or liability with a corresponding gain or loss recognised in consolidated statement of profit or loss.

Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognised in OCI in the cash flow hedge reserve, while any ineffective portion is recognised immediately in the consolidated statement of profit or loss.

The Group uses interest rate swaps as hedges of its exposure to interest rate risk on borrowings. The ineffective portion relating to foreign currency contracts is recognised in finance costs and the ineffective portion relating to commodity contracts is recognised in other operating income or expenses.

Amounts recognised as OCI are transferred to consolidated statement of profit or loss when the hedged transaction affects consolidated statement of profit or loss, such as when the hedged financial income or financial expense is recognised or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognised as OCI are transferred to the initial carrying amount of the non-financial asset or liability.

If the hedging instrument expires or is sold, terminated, or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss previously recognised in OCI remains separately in equity until the forecast transaction occurs or the foreign currency firm commitment is met.

Impairment of non-financial assets

The Group assesses at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an assets or CGU's fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount

3 SIGNIFICANT ACCOUNT POLICIES - ***continued***

rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Group's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. A long-term growth rate is calculated and applied to project future cash flows after the fifth year.

For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognized impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the assets or CGU's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years.

Goodwill is tested for impairment annually and when circumstances indicate that the carrying value may be impaired, Impairment is determined for goodwill by assessing the recoverable amount of each CGU (or group of CGUs) to which the goodwill relates. When the recoverable amount of the CGU is less than its carrying amount, an impairment loss is recognized. Impairment losses relating to goodwill cannot be reversed in future periods.

Impairment losses are recognized in profit or loss. They are allocated first to reduce the carrying amount of any goodwill allocated to CGU, and then to reduce the carrying amounts of the other assets in the CGU on a pro rata basis.

Intangible assets with indefinite useful lives are tested for impairment annually at the CGU level, as appropriate, and when circumstances indicate that the carrying value may be impaired.

Cash and short-term deposits

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise petty cash fund, current accounts, and term deposits with banks with original maturities less than three months.

Fair value measurement

The Group measures financial instruments such as derivatives, and non-financial assets such as investment properties, at fair value at each balance sheet date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability; or
- In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

3 SIGNIFICANT ACCOUNT POLICIES - *continued*

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the consolidated financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities.
- Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognized in the consolidated financial statements at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities based on the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy, as explained above.

Fair-value related disclosures for financial instruments and non-financial assets that are measured at fair value or where fair values are disclosed, are summarized in note 31.4.

Assets held for sale and discontinued operations

The Group classifies non-current assets and disposal groups as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. Non-current assets and disposal groups classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Costs to sell are the incremental costs directly attributable to the disposal of an asset (disposal group), excluding finance costs and income tax expense.

The criteria for held for sale classification is regarded as met only when the sale is highly probable, and the asset or disposal group is available for immediate sale in its present condition. Actions required to complete the sale should indicate that it is unlikely that significant changes to the sale will be made or that the decision to sell will be withdrawn. Management must be committed to the plan to sell the asset and the sale expected to be completed within one year from the date of the classification.

Property, plant and equipment and intangible assets are not depreciated or amortized once classified as held for sale.

Assets and liabilities classified as held for sale are presented separately as current items in the statement of financial position.

A disposal group qualifies as discontinued operation if it is a component of an entity that either has been disposed of, or is classified as held for sale, and:

- Represents a separate major line of business or geographical area of operations.
- Is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or
- Is a subsidiary acquired exclusively with a view to resale

Discontinued operations are excluded from the results of continuing operations and are presented as a single amount as profit or loss after tax from discontinued operations in the statement of profit or loss.

3 SIGNIFICANT ACCOUNT POLICIES - ***continued***

Additional disclosures are provided in note 29. All other notes to the consolidated financial statements include amounts for continuing operations, unless indicated otherwise.

3.3 Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's consolidated financial statements are disclosed below. The Group does not expect the following new standards, interpretations and amendments to have a material impact on its financial position, performance or disclosures when applied at a future date. The Group intends to adopt these standards when they become effective.

New and revised IFRSs	*Effective for annual periods beginning on or after*
IFRS 17 Insurance Contracts	1 January 2023
Amendments to IAS 1: Classification of Liabilities as Current or Non-current	1 January 2024
Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2 Making Materiality Judgements – Disclosure of Accounting Policies	1 January 2023
Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates	1 January 2023
Amendments to IAS 12 Income Taxes relating to deferred Tax related to Assets and Liabilities arising from a Single Transaction	1 January 2023
IAS 12 for international tax reform – Pillar Two Model Rules	1 January 2023
Lease Liability in a Sale-and-Leaseback (Amendments to IFRS 16, Leases)	1 January 2024
Classification of Liabilities as Current or Non-current, and Non-current Liabilities with Covenants (Amendments to IAS 1, Presentation of Financial Statements)	1 January 2024
Supplier Finance Arrangements (Amendment to IAS 7, Statement of Cash Flows and IFRS 7, Financial Instruments: Disclosures)	1 January 2024

4 CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

The preparation of the Group's consolidated financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

4.1 Critical judgments in applying accounting policies

Significant judgments made by management that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are:

Satisfaction of performance obligations
The Group is required to assess each of its contracts with customers to determine whether performance obligations are satisfied over time or at a point in time in order to determine the appropriate method for recognising revenue. The Group has assessed that based on the contracts entered with customers and the provisions of relevant laws and regulations, the Group recognises revenue over time in the following circumstances:

a) where contracts are entered into for sale and development (sale of land with obligation to deliver infrastructure), the Group does not create an asset with an alternative use to the Group and has an enforceable right to payment for performance completed to date; and

b) where contracts are entered into to provide services (property management and facility management), the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs.

Where the above criteria are not met, revenue is recognised at a point in time. Where revenue is recognised at a point of time, the Group assesses each contract with customers to determine when the performance obligation of the Group under the contract is satisfied.

4.1 Critical judgments in applying accounting policies - *continued*

Government Grants

The Group receives land grants from the Government of Abu Dhabi and the Group applies various judgments with respect to the accounting for such grants. The Group recognizes the land grants in the consolidated financial statements initially at nominal value i.e., AED 1. The group exercises judgment and estimation for associating future economic benefits related to the recognised grants between the categories, future economic benefits established, future economic benefits uncertain or no future economic benefits which impacts subsequent costs allocated to each grant which was initially recognised at AED 1. Costs are only assigned to the category where future economic benefits have been established.

Significant judgment is also required to determine whether the Government of Abu Dhabi in granting land banks to the Group is acting in its capacity as a shareholder or in its capacity as a government. This determination involves significant judgement.

Classification of investees as joint ventures
The Group has determined that it has joint control over the following investees:

Name of investees	***Ownership interest as at 31 December 2022***	*Ownership interest as at 31 December 2021*
London Array Project	**20%**	20%
Tesla Wind D.O.O. Beograd	**60%**	60%
Shams Power Company PJSC	**51%**	51%
Dudgeon Offshore Wind Ltd	**35%**	35%
Jordan Wind Power Company PJSC	**50%**	50%
Hywind Scotland Ltd.	**25%**	25%
Emirates Solar Power Company LLC	**60%**	60%
Krnovo Green Energy D.o.o	**49%**	49%
Sharjah Waste to Energy Company LLC	**50%**	50%
The Catalyst Limited	-	50%
Baynouna Holdings B.V.	**70%**	70%
Baynouna Solar Energy PSC	**70%**	70%
Batwind Project	**50%**	50%
Dumat Wind Contracting Company LLC	**49%**	49%
Dumat Al Jandal Wind Energy Company LLC	**49%**	49%
East Rockingham RRF Holdco Trust 2	**36.67%**	36.67%
Masdar Taaleri Generation d.o.o. Beograd	**50%**	50%
Masdar Tribe Energy Holdings RSC Limited	**90%**	90%
Masdar Tribe Energy Western Australia RSC Limited	**16.75%**	16.75%
South Jeddah Noor PV Energy Company LLC	**35.7%**	35.7%
PV Energy Maintenance Company LLC	**35.7%**	35.7%
Noor Midelt Solar Hybrid 1 Company	**30%**	30%
Noor Midelt O&M1 Company	**37%**	37%
PT Pembangkitan Jawa Bali Masdar Solar Energi	**49%**	49%
Fonnes SP. Z.O.O	**50%**	50%
Infinity Power Holding BV	**49%**	49%
Dudgeon Extension Limited	**35%**	35%
Emerge Limited	**51%**	51%
Noor Midelt 1 Procurement Company DMCC	**54%**	54%
Noor Jeddah Energy Service Company LLC	**35.70%**	35.70%
Energize O&M Company LLC	**60%**	60%
Dhafrah Solar Energy Holding Company LLC	**33.34%**	33.34%
Dhafrah PV2 Energy Company LLC	**20%**	20%
Dimona Solar Park Ltd	**49%**	49%

4.1 Critical judgments in applying accounting policies - *continued*

Dimona Sun Ltd	**49%**	49%
PT Masdar Mitra Solar Radiance	**47.50%**	47.50%
Infinity 50 for Renewable Energy SAE	-	48%
Masdar Armenia 1 CJSC	**85%**	85%
Sterling Wind Phase 1 Holding LLC - Class A shares	**100%**	
Masdar IPH Wind S.A.E	4%	4%
MW Energy Limited	**50%**	-
Blue Palm Class B Wind Holdco	**50%**	-
Blue Palm Class B Solar Holdco	**62.5%**	-
Val Verde Wind Holdco III LLC – Class A shares	**100%**	-

Joint control is assessed on the basis that decisions about relevant activities are taken jointly with other venturers. Where the Group has more or less than 50% ownership interest, but decisions require unanimous approval of all participants then the Group considers it does not have control and investments are considered joint ventures.

Most of the above investees are limited liability companies whose legal form confers separation between the parties to the joint arrangement and the companies themselves. Furthermore, there is no contractual arrangement or any other facts and circumstances that indicate that the parties to the joint arrangement have rights to the assets and obligations for the liabilities of the joint arrangement.

Common control of the Shareholder
Acquisitions of entities/businesses which are under the common control of the Shareholder are recorded at fair value at the date of transfer. In case of disposal of entities/businesses, a gain or loss (including reclassification of amounts previously recognised in the other comprehensive income) to the extent of fair value is recognised in the profit or loss. Any transfer of business without consideration is debited to equity at carrying amounts of net assets.

Project expenses
Project expenses comprise expenses incurred on screening, feasibility studies and pre-development phases of various projects undertaken by the Group. As stated in note 3 to the consolidated financial statements, the portion of such expenditure relating to property, plant and equipment is capitalised when there is reasonable certainty that projects will be developed in the future and future economic benefits will flow to the Group. The process of estimating the degree of certainty involves significant judgments on the part of senior management. Some of these projects tend to have long gestation periods and in certain cases depend on some form of government support. Furthermore, in some instances, the project size and economics are reassessed in the light of the changing economic climate, resulting in an increase in the overall project development timelines, or a downsizing of the project or certain of its component. Management periodically assesses the likelihood of such projects proceeding and uses the results of such assessments to determine whether any provision for impairment losses are required. The estimates and underlying judgments are reviewed on an ongoing basis. Actual results may differ from these estimates and judgments.

Finance leases
The Group has entered into Musataha lease arrangements over certain land classified previously as investment properties as described in notes 7 to the consolidated financial statements. In accordance with the guidance set out in IFRS 16 *Leases*, the Group has determined, based on an evaluation of the terms and conditions of the arrangements, that the exercise of the lease renewal option is reasonably certain and that the present value of the minimum lease payments constitute substantially all of the fair value of the leased asset. Therefore, the Group does not retain all significant risks and rewards of ownership of these properties and accordingly, the Group accounts for these lease arrangements as finance leases as described in note 11 to the consolidated financial statements.

Business combinations
The Group undertakes investments in renewable energy related projects, at various stages of development. Judgement is applied to determine whether the investments, particularly for investments in projects at an early stage, amount to business combinations in accordance with IFRS 3 Business combinations, as opposed to purchase of particular assets or other entitlements.

4.2 Key sources of estimation uncertainty

The key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are discussed below:

Impairment and non-collectability of financial assets

IFRS 9 requires management to make significant judgements for the calculation of expected credit losses (ECL). The impact is mainly driven by inputs, assumptions and techniques used for ECL calculation under IFRS 9.

Inputs, assumptions and techniques used for ECL calculation – IFRS 9 Methodology
Key concepts in IFRS 9 that have the most significant impact and require a high level of judgment, as considered by the Group while determining the impact assessment, are:

Probability of Default (PD)
The Probability of Default is an estimate of the likelihood of default over a given time horizon. A default may only happen at a certain time over the assessed period, if the financial asset has not been previously derecognized.

Loss Given Default (LGD)
The Loss Given Default is an estimate of the loss arising in the case where a default occurs at a given time. It is based on the difference between the contractual cashflows due and those that the lender would expect to receive, including from the realization of any collateral. It is usually expressed as a percentage of the EAD.

Exposure at Default (EAD)
The Exposure at Default is an estimate of the exposure at a future date, considering expected changes in the exposure after the reporting date, including repayments of principal and interest, whether scheduled by contract or otherwise, expected drawdowns on committed facilities, and accrued interest from missed payments.

Significant increase in credit risk
The Group monitors all financial assets and issues loan commitments, if any, that are subject to the impairment requirements to assess whether there has been a significant increase in credit risk since initial recognition. If there has been a significant increase in credit risk, the Group will measure the loss allowance based on lifetime rather than 12-month ECL. In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort, based on the Group's historical experience and expert credit assessment including forward-looking information.

Credit-impaired financial assets
A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Evidence of credit-impairment includes observable data about the following events:

- significant financial difficulty of the borrower or issuer.
- a breach of contract such as a default or past due event.
- the lender of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession that the lender would not otherwise consider.
- the disappearance of an active market for a security because of financial difficulties; or
- the purchase of a financial asset at a deep discount that reflects the incurred credit losses.

Definition of default
The definition of default used in the measurement of expected credit losses and the assessment to determine movement between stages will be consistent with the definition of default used for internal credit risk management purposes.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

When assessing if the borrower is unlikely to pay its credit obligation, the Group takes into account both qualitative

4.2 Key sources of estimation uncertainty - *continued*

and quantitative indicators. The Group uses a variety of sources of information to assess default which are either developed internally or obtained from external sources.

Expected life
When measuring ECL, the Group considers the maximum contractual period over which the Group is exposed to credit risk. All contractual terms should be considered when determining the expected life, including prepayment options and extension and rollover options. For certain revolving credit facilities that do not have a fixed maturity, the expected life is estimated based on the period over which the Group is exposed to credit risk and where the credit losses would not be mitigated by management actions.

As at 31 December 2022, provision for net expected credit losses of trade receivables is AED 0.88 million *(2021: AED 1.26 million),* due from related parties is AED nil *(2021: AED Nil)*, net related party loans ECL reversal is AED 38.52 million *(2021: AED 13.95 million)* trade receivable provision is net off with finance lease receivables ECL reversal AED 0.07 million *(2021: AED Nil)*.

Any difference between the amounts collected in future periods and the amounts expected to be received will be recognised in the consolidated statement of profit or loss.

Impairment losses on investment in equity-accounted investees
After the application of the equity method of accounting, the Group determines whether it is necessary to recognise any additional impairment loss on the carrying value of the investment in equity-accounted investees by comparing its recoverable amount with the higher of value in use or fair value less costs to sell with its carrying amount.

In determining the value in use of the investment, the Group estimates:

- its share of the present value of the estimated future cash flows expected to be generated by the associates, including the cash flows from the operations of the associates and the proceeds on the ultimate disposal of the investment; or
- the present value of the estimated future cash flows expected to arise from dividends to be received from the investment and from its ultimate disposal.

Impairments are reversed if conditions for impairment are no longer present. Evaluating whether an impairment should be reversed requires the selection of key assumptions about the future.

Accumulated impairment losses on investment in a joint operation recognised on the consolidated statement of financial position as at 31 December 2022 is AED Nil *(2021: AED Nil).*

Impairment of property, plant and equipment and capital work in progress
Properties classified under property, plant and equipment and capital work in progress are assessed for impairment based on the assessment of cash flows on individual cash-generating units when there is an indication that those assets have suffered an impairment loss. Cash flows are determined with reference to recent market conditions, prices existing at the end of the reporting period, contractual agreements, and estimations over the useful lives of the assets and discounted using a range of discounting rates that reflects current market assessments of the time value of money and the risks specific to the asset. The net present values are compared to the carrying amounts to assess any probable impairment.

Accumulated impairment losses as at 31 December 2022 on property, plant and equipment are AED Nil *(2021: AED Nil)* and accumulated impairment loss on intangible assets is AED 80.5 million *(2021: AED 80.5 million)*.

Useful lives of property, plant and equipment and intangible assets
Management reviews the residual values and estimated useful lives of property, plant and equipment and intangible assets at the end of each annual reporting period in accordance with IAS 16 and IAS 38. Management determined that current year expectations do not differ from previous estimates based on its review.

Decommissioning liability
The provision for decommissioning costs is based on current legal and constructive requirements, technology, price levels and expected plans for remediation. Management bases these estimates on its best knowledge and reports from independent experts. Actual costs and cash outflows can differ from estimates because of changes in laws and

4.2 Key sources of estimation uncertainty - *continued*

regulations, public expectations, market conditions, discovery and analysis of site conditions and changes in technology.

Deferred taxes
The Group operates in a number of tax jurisdictions and is, therefore, required to estimate its income taxes in each of these tax jurisdictions in preparing its consolidated financial statements. In calculating income taxes, consideration is given to factors such as tax rates based on the tax legislation in force at the end of the reporting period in the different jurisdictions, non-deductible expenses, valuation allowances, changes in tax law and management's expectations of future operating results.

The Group estimates deferred income taxes based on temporary differences between the income and losses reported in its consolidated financial statements and its taxable income and losses as determined under the applicable tax laws. The tax effect of these temporary differences is recorded as deferred tax assets or liabilities in the consolidated financial statements. Deferred taxes are determined using tax rates approved or about to be approved at the end of the reporting period of each company and expected to apply when the corresponding deferred tax asset is realised, or the deferred tax liability is settled.

Leases – Estimating the incremental borrowing rate
The Group cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR, therefore, reflects what the Group 'would have to pay', which requires estimation when no observable rates are available or when they need to be adjusted to reflect the terms and conditions of the lease. The Group estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

5 SUBSIDIARIES, EQUITY-ACCOUNTED INVESTEES AND JOINT OPERATIONS

Details of the Group's subsidiaries, equity-accounted investees and joint operations at the end of the reporting period are as follows:

			Ownership interest	
Subsidiaries	***Domicile***	***Principal activities***	***2022***	*2021*
Masdar City Services L.L.C.	UAE	Services	**-**	100%
Masdar Energy Limited	UAE	Holding company	**100%**	100%
Noor One Solar Power Company L.L.C. (formerly Masdar Photovoltaic L.L.C.)	UAE	Holding company	**100%**	100%
Masdar Holding L.L.C.	UAE	Holding company	**100%**	100%
Masdar Energy Holding L.L.C.	UAE	Holding company	**100%**	100%
Masdar PV GmbH	Germany	Manufacturing	**100%**	100%
Masdar Solar &Wind Cooperatief U.A.	Netherlands	Investment in renewable energy	**100%**	100%
Masdar Energy BV	Netherlands	Investment in renewable energy	**100%**	100%
Masdar Energy UK Limited	UK	Renewable energy	**100%**	100%
Masdar Finance BV	Netherlands	Services	**100%**	100%
Masdar Offshore Wind UK Limited	UK	Investment in renewable energy	**100%**	100%
Masdar City Investment L.L.C	UAE	Holding company	**-**	100%
Masdar Egypt Investment 1 Limited	UAE	Holding company	**100%**	100%
Masdar Egypt Investment 2 Limited	UAE	Holding company	**100%**	100%
Masdar Egypt Investment 3 Limited	UAE	Holding company	**100%**	100%
Masdar Egypt Investment 4 Limited	UAE	Holding company	**100%**	100%
Ras Ghareb Investment Holding Limited	UAE	Holding company	**100%**	100%
Yas Energy Company SAE	Egypt	Renewable energy	**100%**	100%
Masdar Oman Holding Limited	Oman	Renewable energy	**100%**	100%
Masdar Offshore Wind Scotland Limited	UK	Renewable energy	**100%**	100%
Masdar Specialised Technial Services LLC	UAE	Services	**100%**	100%
Masdar UK charging infrastructure SPV Restricted Limited	UAE	Investment	**100%**	100%
Masdar Egypt BV	Netherlands	Renewable energy	**100%**	100%
Masdar B04 Limited	UAE	Real estate	**-**	100%
Masdar B04 – 0 Limited	UAE	Real estate	**-**	100%
Masdar B-10 Limited	UAE	Real estate	**-**	100%
Masdar M12 Limited	UAE	Real estate	**-**	100%

SUBSIDIARIES, EQUITY-ACCOUNTED INVESTEES AND JOINT OPERATIONS – continued

Subsidiaries	*Domicile*	*Principal activities*	*Ownership interest* **2022**	2021
Masdar B02 Limited	UAE	Real estate	**-**	100%
Masdar G10 Limited	UAE	Real estate	**-**	100%
Masdar M13 Limited	UAE	Real estate	**-**	100%
Masdar B05 Limited	UAE	Real estate	**-**	100%
Masdar M13-T Limited	UAE	Real estate	**-**	100%
Masdar G13 Limited	UAE	Real estate	**-**	100%
Masdar B03 Limited	UAE	Real estate	**-**	100%
Masdar B11 Limited	UAE	Real estate	**-**	100%
Masdar Musataha 1 Limited	UAE	Real estate	**-**	100%
Masdar Musataha 2 Limited	UAE	Real estate	**-**	100%
Nur Navoi Solar Holding RSc Limited	UAE	Renewable energy	**100%**	100%
Masdar Moroc RSC Limited	UAE	Renewable energy	**100%**	100%
Source Trading Company Limited	UAE	Services	**100%**	100%
Madar Indonesia Solar Holdings RSC Limited	UAE	Renewable energy	**100%**	100%
Masdar Cirata Solar RSC Limited	UAE	Renewable energy	**100%**	100%
Masdar CIS Holdings RSC Limited	UAE	Renewable energy	**100%**	100%
Masdar Capital Management Limited	UAE	Services	**-**	100%
Masdar Green REIT (CEIC) Limited	UAE	Real estate	**-**	100%
Masdar Energy UK II Limited	UK	Renewable energy	**100%**	100%
Masdar Offshore Wind UK II Limited	UK	Renewable energy	**100%**	100%
Abu Dhabi Future Energy Holding Company LLC	KSA	Renewable energy	**100%**	100%
Shamol Zarafshan Enegy FE LLC	Uzbekistan	Renewable energy	**100%**	100%
Masdar Al-Dhafra Holding RSC Limited	UAE	Renewable energy	**100%**	100%
Masdar Power Services	Uzbekistan	Renewable energy	**100%**	100%
Masdar Israel Holding RSC Limited	UAE	Renewable energy	**100%**	100%
Shamol Zarafshan Energy Holding RSC Limited	UAE	Renewable energy	**100%**	100%
Jizzak Holding RSC Limited	UAE	Renewable energy	**100%**	100%
Nur Sherabad Holding RSC Limited	UAE	Renewable energy	**100%**	100%
Area 60 Holding RSC Limited	UAE	Renewable energy	**100%**	100%
Nur Samarkand Holding RSC Limited	UAE	Renewable energy	**100%**	100%
AYG-1 Holding RSC Limited	UAE	Renewable energy	**100%**	100%
Masdar Azerbaijan LLC	Azerbaijan	Renewable energy	**100%**	100%
Masdar Azerbaijan Energy LLC	Azerbaijan	Renewable energy	**100%**	100%
Nur Navoi Solar LLC	Uzbekistan	Renewable energy	**100%**	100%
Al Dhafra Wind Energy Company	UAE	Renewable energy	**100%**	100%
ADFEC Morocco SARLAU	Morocco	Renewable energy	**100%**	100%
Shamol Zarafshan LLC	Uzbekistan	Renewable energy	**100%**	100%
Nur Jizzak Solar PV Foreign Enterprise Limited Liabilty Company	Uzbekistan	Renewable energy	**100%**	100%
Nur Sherabad Solar PV Foreign Enterprise Limited liability Company	Uzbekistan	Renewable energy	**100%**	100%
Nur Samakand Solar PV Foreign Enterprise Limited liability Company	Uzbekistan	Renewable energy	**100%**	100%
ADV 003 Limited	UK	Renewable energy	**90%**	-
ADV 004 Limited	UK	Renewable energy	**90%**	-
ADV 005 Limited	UK	Renewable energy	**90%**	-
ADV 006 Limited	UK	Renewable energy	**90%**	-
ARL 016 Limited	UK	Renewable energy	**90%**	-
ARL Energy Development Limited	UK	Renewable energy	**90%**	-
AVE 002 Limited	UK	Renewable energy	**90%**	-
ESL 001 Limited	UK	Renewable energy	**90%**	-
ESL 002 Limited	UK	Renewable energy	**90%**	-
Masdar Americas LLC	USA	Renewable energy	**100%**	-
Ninety Sixth Investment Company LLC	UAE	Renewable energy	**100%**	-
Masdar APAC Pte Ltd	Singapre	Renewable energy	**100%**	-
Masdar Arlington Energy Storage UK Holdco Ltd	UK	Renewable energy	**100%**	-
Masdar Big Beau Holding LLC	USA	Renewable energy	**100%**	-
Masdar Blue Palm Holding LLC	USA	Renewable energy	**100%**	-
Masdar CES Europe B.V.	Netherlands	Renewable energy	**100%**	-
Masdar Energy Storage Development UK Ltd	UK	Renewable energy	**100%**	-
Masdar Global Offshore Wind Holding RSC Limited	UAE	Renewable energy	**100%**	-
Masdar Israel Holding RSC Limited	UAE	Renewable energy	**100%**	-
Masdar Miligan Holding LLC	USA	Renewable energy	**100%**	-
Masdar Rocksprings Holding Inc	USA	Renewable energy	**100%**	-
Masdar Rocksprings Wind Holdco Corp	USA	Renewable energy	**100%**	-
Masdar Sterling Holding Inc	USA	Renewable energy	**100%**	-
Masdar Sterling Wind Holdco Corp	USA	Renewable energy	**100%**	-
Masdar UK Development Company Limited	UK	Renewable energy	**100%**	-
Masdar USA One Holding RSC Ltd	UAE	Renewable energy	**100%**	-
Masdar USA Two Holding RSC Ltd	UAE	Renewable energy	**100%**	-
Masdar Uzbekistan LLC Foreign Enterprise	Uzbekistan	Renewable energy	**100%**	-

SUBSIDIARIES, EQUITY-ACCOUNTED INVESTEES AND JOINT OPERATIONS – continued

			Ownership interest	
Joint Ventures	***Domicile***	***Pricipal Activities***	***2022***	*2021*
Noor One Solar Power Company LLC	UAE	Renewable energy	**100%**	-
Rocksprings Wind Masdar Opco LLC	USA	Renewable energy	**100%**	-
Sterling Wind Masdar Opco LLC	USA	Renewable energy	**100%**	-
Associates				
London Array Limited	UK	Services	**20%**	20%
Hero Future Energies Global Limited	UK	Renewable energy	**-**	21%
Joint ventures				
Dudgeon Holding Limited (Dudgeon Offshore Wind Limited) (“Dudgeon”)	UK	Renewable energy	**35%**	35%
Shams Power Company PJSC	UAE	Renewable energy	**51%**	51%
Jordan Wind Power Company PSC	Jordan	Renewable energy	**50%**	50%
Tesla Wind B.V.	Netherlands	Renewable energy	**50%**	50%
Masdar Taaleri Generation d.o.o	Serbia	Renewable energy	**50%**	50%
Hywind Scotland Limited (“Hywind”)	UK	Renewable energy	**25%**	25%
Emirates Solar Power Company LLC *	UAE	Renewable energy	**60%**	60%
Sharjah Waste to Energy Company LLC (“Sharjah W2E”)	UAE	Renewable energy	**50%**	50%
Emirates waste to energy company LLC	UAE	Renewable energy	**50%**	50%
Krnovo HoldCo D.o.o (“Krnovo”)	Montenegro	Renewable energy	**49%**	49%
Baynounah Holdings B.V. (“Baynounah”)*	Netherlands	Holding company	**70%**	70%
Baynouna Solar Energy PSC	Jordan	Renewable energy	**70%**	70%
Dumat Al Jandal Wnd Energy Company LLC	Saudi Arabia	Renewable energy	**49%**	49%
Dumat Wind Contracting Company LLC	Saudi Arabia	Renewable energy	**49%**	49%
Masdar Tribe Energy Holdings RSC Limited*	UAE	Holding Company	**90%**	90%
Masdar Tribe Energy Western Australia RSC Limited	UAE	Renewable energy	**17%**	17%
East Rockingham RRF Holdco Trust 2	Australia	Renewable energy	**37%**	37%
South Jeddah Noor PV Energy Company LLC	Saudi Arabia	Renewable energy	**36%**	36%
PV Energy Maintenance Company LLC	Saudi Arabia	Renewable energy	**36%**	36%
Noor Midelt Solar Hybrid 1 Company	Morocco	Renewable energy	**30%**	30%
Noor Midelt O&M1 Company	Morocco	Renewable energy	**37%**	37%
PT Pembangkitan Jawa Bali Masdar Solar Energi	Indonesia	Renewable energy	**49%**	49%
Fonnes SP. Z.O.O	Poland	Renewable energy	**50%**	50%
Masdar specialized technical service LLC Abu Dhabi Branch*	UAE	Renewable energy	**100%**	100%
Sharjah waste to energy plant maintenance LLC*	UAE	Renewable energy	**100%**	100%
Masdar Green Hydrogen*	UAE	Renewable energy	**100%**	-
Infinity 50 for Renewable Energy SA	Egypt	Renewable energy	**-**	48%
Infinity Power Holding BV	Netherlands	Renewable energy	**49%**	49%
Emerge Limited*	UAE	Renewable energy	**51%**	51%
Noor Midelt 1 Procurement Company DMCC*	UAE	Renewable energy	**54%**	54%
Noor Jeddah Energy Service Company LLC	Saudi Arabia	Renewable energy	**35.70%**	35.70%
Energize O&M Company LLC*	UAE	Renewable energy	**60%**	60%
Dhafrah Solar Energy Holding Company LLC	UAE	Renewable energy	**33.34%**	33.34%
Dhafrah PV2 Energy Company LLC	UAE	Renewable energy	**20%**	20%
Dimona Solar Park Ltd	Israel	Renewable energy	**49%**	49%
Dimona Sun Ltd	Israel	Renewable energy	**49%**	49%
PT Masdar Mitra Solar Radiance	Indonesia	Renewable energy	**47.50%**	47.50%
Masdar Tribe Australia Holdings Ltd	UAE	Renewable energy	**50%**	50%
Masdar Tribe Australia PTY Ltd	Australia	Renewable energy	**50%**	50%
Masdar Armenia 1 CJSC*	Armenia	Renewable energy	**85%**	85%
Shuaa Energy 2 PSC	UAE	Renewable energy	**24%**	24%
Dudgeon Extension Limited	UK	Renewable energy	**35%**	35%
Blue Palm Holdings*	USA	Renewable energy	**100% class B**	-
Sterling Wind Phase 1 Holdings LLC*	USA	Renewable energy	**100% class A**	-
Rocksprings Val Verde Wind LLC*	USA	Renewable energy	**100% Class B**	-
Joint operations				
London Array Project (unincorporated)	UK	Renewable energy	**20%**	20%
Batwind Project (unincorporated)	UK	Renewable energy	**50%**	50%

The Group does not have any material partly owned subsidiaries.

The Group’s investments in associates and joint ventures are accounted for using the equity method of accounting.

The summarised financial information of material equity-accounted investees is disclosed in note 9 to the consolidated financial statements.

*The entities where company has equal to or more than 50% shareholding are classified as equity accounted investees due to absence of control and voting rights.

6 PROPERTY, PLANT AND EQUIPMENT

	Land and Building	*Plant and Machinery*	*Furniture and Fixture*	*Capital Work in Progress*	*Total*
	AED '000	*AED '000*	*AED '000*	*AED '000*	*AED 000*
					2022
Cost:					
1 January 2022	**6,824**	**2,107,711**	**42,718**	**23,835**	**2,181,088**
Additions	**-**	**34**	**15,598**	**298,423**	**314,055**
Change in estimate of decommissioning liability	**-**	**(16,108)**	**-**	**-**	**(16,108)**
Disposal	**-**	**-**	**(647)**	**-**	**(647)**
Effect of movement in exchange rates	**(731)**	**(231,730)**	**(17)**	**(143)**	**(232,621)**
31 December 2022	**6,093**	**1,859,907**	**57,653**	**322,115**	**2,245,767**
Accumulated depreciation and impairment:					
1 January 2022	**3,297**	**794,858**	**35,999**	**-**	**834,154**
Depreciation Charge for the year	**290**	**81,012**	**5,001**		**86,302**
Addition on acquisition of subsidiary	**-**	**-**	**186**	**-**	**186**
Disposal	**-**	**-**	**(647)**	**-**	**(647)**
Effect of movement in exchange rates	**(360)**	**(88,853)**	**(17)**	**-**	**(89,229)**
31 December 2022	**3,227**	**787,017**	**40,522**	**-**	**830,766**
Carrying amount:					
31 December 2022	**2,866**	**1,072,890**	**17,130**	**322,115**	**1,415,001**

	Land and Building	*Plant and Machinery*	*Furniture and Fixture*	*Capital Work in Progress*	*Total*
	AED '000	*AED '000*	*AED '000*	*AED '000*	*AED 000*
					2021
Cost:					
1 January 2021	16,739	2,510,722	50,119	71,931	2,649,511
Additions, net	-	(9,059)	4,950	25,593	21,484
Assets Held for Sale	(9,845)	(373,173)	(12,350)	(64,732)	(460,100)
Disposal	-	-	-	(8,943)	(8,943)
Effect of movement in exchange rates	(70)	(20,779)	(1)	(14)	(20,864)
31 December 2021	6,824	2,107,711	42,718	23,835	2,181,088
Accumulated depreciation and impairment:					
1 January 2021	8,779	923,314	39,618	27,500	999,211
Depreciation Charge for the year	550	105,608	8,731	-	114,889
Assets Held for Sale	(5,995)	(225,335)	(12,350)	(27,500)	(271,180)
Effect of movement in exchange rates	(37)	(8,729)	-	-	(8,766)
31 December 2021	3,297	794,858	35,999	-	834,154
Carrying amount:					
31 December 2021	3,527	1,312,853	6,719	23,835	1,346,934

Included in plant and machinery is a decommissioning liability relating to the London Array Project amounting to AED 53.97 million as at 31 December 2022 *(2021: AED 87.53 million)* (note 21).

CWIP is mainly related to general service office renovation works and ICT hardware and software amounting to AED 15.92 million, Al Dhafra Wind UAE wind program project AED 303.13 million, MEUK 1.19 million, and Energy Services AED 1.88 million.

6 PROPERTY, PLANT AND EQUIPMENT - ***continued***

Al Dhafra Wind company is constructing 23 wind turbines and a solar plant in different locations in the UAE such as Sir Baniyas Island, Delma Island, Sila and mountains overlooking Al-Halah, project is funded by Crown Prince Court and it is owned by Al Dhafra Wind Energy Company a fully owned subsidiary.

Depreciation charge has been allocated to cost of sales and general and administrative expenses as follows:

	2022 AED '000	*2021 AED '000*
Cost of sales	**84,108**	89,051
General and administrative expenses (note 26)	**2,194**	25,838
	86,302	114,889

7 INVESTMENT PROPERTIES

	2022 AED '000	*2021 AED '000*
Investment properties		
At 01 January	-	2,526,937
Change in fair value of investment properties	-	106,947
Transfer to assets held for sale	-	(2,633,884)
Total	-	-
At 31 December	-	-

	2022 AED '000	*2021 AED '000*
Investment properties under development		
At 01 January	-	42,899
Additions	-	58,916
Transfers from inventory	-	10,516
Allocation from Capital Accruals	-	37,227
At 31 December	-	149,558
Total	-	2,783,442
Transfer to assets held for sale	-	(2,783,442)
Total	-	-

Details of the Group's investment properties and information about the fair value hierarchy are as follows:

	Level 3 AED '000	***Fair value AED '000***
2021:		
IRENA Headquarters building and land	472,165	472,165
Siemens building and land	331,850	331,850
Incubator building and land	113,260	113,260
Etihad building and land	538,405	538,405
Accelerator building	63,070	63,070
MI Neighbourhood	966,400	966,400
Visitors centre	77,988	77,988
Accelerator 2	70,746	70,746
	2,633,884	2,633,884

Investment properties under development are measured at cost until either its fair value becomes reliably determinable, or construction is completed.

INVESTMENT PROPERTIES - continued

Breakup of cost is as follows:

	AED '000
2021:	
B-02	58,956
MC square	67,460
Innovation hub	23,142
	149,558

*During 2021, certain plots of land were transferred from inventories to investment properties for the purpose of new rental properties. Accordingly, the net cost of the land plots amounting to AED 10.5 million was transferred to investment properties.

Sensitivity to significant changes in unobservable inputs

For investment properties categorised into Level 3 of the fair value hierarchy, the following information is relevant as at 31 December 2021:

Investment property	**Valuation techniques**	**Significant unobservable input**	**Sensitivity**
IRENA Headquarters office building and land	Fair Market Value	Yield rate of 9.25% *	a) AED 60.9 million – AED 304.6 million.
		Market rent at an average of AED 1,635 per sq.m per annum **	b) AED 4.7 million – 23.6 million.
Siemens office building and land	Fair Market Value	Yield rate of 9.25% *	a) AED 42.8 million – AED 214.1 million.
		Market rent at an average of AED 1,588 per sq.m per annum **	b) AED 3.3 million – AED 16.6 million.
Incubator office building and land	Fair Market Value	Yield rate of 9.50% *	a) AED 14.2 million – AED 70.8 million.
		Market rent at an average of AED 1,836 per sq.m per annum **	b) AED 1.1 million – AED 5.7 million.
Etihad residential land and building	Fair Market Value	Yield rate of 8.75% *	a) AED 70.1 million – AED 350.5 million.
		Market rent at an average of AED 743 per sq.m per annum **	b) AED 5.4 million – AED 26.9 million.
Accelerator building	Fair Market Value	Yield rate of 9.50% *	a) AED 7.9 million – AED 39.4 million.
		Market rent at an average of AED 1,492 per sq.m per annum **	b) AED 0.6 million – AED 3.2 million.
MI Neighborhood	Fair Market Value	Yield rate of 8.92% *	a) AED 128.5 million to AED 642.6 million
		Market rent at an average of AED 1,160 per sq.m per annum **	b) AED 9.7 million – AED 48.3 million.

INVESTMENT PROPERTIES - continued

Investment property	Valuation techniques	Significant unobservable input	Sensitivity
Visitors Centre	Fair Market Value	Yield rate of 9.50% *	a) AED 9.7 million – AED 48.7 million.
		Market rent at an average of AED 1,356 per sq.m per annum **	b) AED 0.8 million – AED 3.9 million.
Accelerator 2	Fair Market Value	Yield rate of 9.50% *	a) AED 8.8 million – AED 44.2 million.
		Market rent at an average of AED 1,236 per sq.m per annum **	b) AED 0.7 million – AED 3.5 million.

*Taking into account the capitalization of rental income potential, prevailing market conditions, covenant strength of the tenant, and risks and investors' intentions.

**Taking into account the comparable investment and rental transactions, evidence of demand within the vicinity, size, location, terms, covenant, and other material factors.

a) An increase/decrease of 1% - 5% in the market yield would result in a decrease/increase in fair value of
b) An increase/decrease of 1% - 5% in the market rent used would result in an increase/decrease in fair value of

8 INTANGIBLE ASSETS AND GOODWILL

	Software AED 000	*License AED 000*	*Goodwill AED 000*	*Total AED 000*
2022				
Cost:				
1 January 2022	**21,149**	**149,792**	**-**	**170,941**
Addition	**1,190**	**10,956**	**164,132**	**176,278**
Disposal	**(328)**	**-**	**-**	**(328)**
Effect of movement in exchange rates	92	**(7,517)**	**-**	**(7,425)**
31 December 2022	**22,103**	**153,231**	**164,132**	**339,466**
Accumulated amortisation and impairment:				
1 January 2022	**19,380**	**106,384**	**-**	**125,764**
Amortization Charge for the year	**1,669**	**2,635**	**-**	**4,304**
Disposal	**(328)**	**-**	**-**	**(328)**
Effect of movement in exchange rates	**-**	**(2,842)**	**-**	**(2,842)**
31 December 2022	**20,721**	**106,177**	**-**	**126,898**
Carrying amount:				
31 December 2022	**1,382**	**47,054**	**164,132**	**212,568**

INTANGIBLE ASSETS AND GOODWILL - continued

2021	*Software AED 000*	*License AED 000*	*Goodwill AED 000*	*Total AED 000*
Cost:				
1 January 2021	21,969	150,499	-	172,468
Addition	1,880	-	-	1,880
Held for Sale	(2,700)	-	-	(2,700)
Effect of movement in exchange rates	-	(707)	-	(707)
31 December 2021	21,149	149,792	-	170,941
Accumulated amortisation and Impairment:				
1 January 2021	18,903	103,733	-	122,636
Amortization Charge for the year	2,838	2,936	-	5,774
Held for Sale Assets	(2,361)	-	-	(2,361)
Effect of movement in exchange rates	-	(285)	-	(285)
31 December 2021	19,380	106,384	-	125,764
Carrying amount:				
31 December 2021	1,769	43,408	-	45,177

Details of Goodwill on Acquisition of Arlington Group Services Ltd of AED 164.13 million is given in note 29.2.2.

Amortization is reported in statement of comprehensive income under general and administrative expenses 31 December 2022 AED 4.30 million (2021: AED 5.77 million) and management has reviewed and assessed that there are no Impairment indicators for intangible assets.

During the year, Group has recorded goodwill on acquisition of Arlington Group Services Limited (AGSL), as described in note 29.2. The Group has identified AGSL as a single cash generating unit. Given that the acquisition was at fair value and close to the year end, the Group has concluded that there was not any impairment in the goodwill arising on acquisition.

9 EQUITY – ACCOUNTED INVESTEES

Summarised financial information in respect of the Group's material equity-accounted investees, not adjusted for the percentage ownership held by the Group, is set out below.

The summarised financial information below represents amounts shown in the equity-accounted investees' financial statements prepared in accordance with IFRSs.

	Classification	*Current assets AED'000*	*Non-current assets AED'000*	*Current liabilities AED'000*	*Non-current Liabilities AED'000*	*Net assets AED'000*	*Cash & Cash equivalents AED 000*	**Current -** *Trade & other* **payables & provisions** *AED'000*	
2022									
Shams Power Company PJSC	Joint venture	178,536	1,682,926	134,725	1,381,971	344,766	97,401	19,385	11,643
Jordan Wind Power Company PJSC	Joint venture	99,232	656,992	73,082	524,003	159,139	76,307	19,461	-
Tesla Wind Doo	Joint venture	121,160	938,771	68,053	757,441	234,438	59,862	5,675	-
Hywind Scotland Limited	Joint venture	110,275	978,816	7,613	179,654	901,824	33,264	2,804	-
Emirates Solar Power Company LLC	Joint venture	35,625	67,965	38,308	-	65,282	1,993	140	-
Sharjah WTE	Joint venture	242,678	936,162	119,830	763,913	295,097	241,439	11,435	-
Baynouna Solar Energy PSC	Joint venture	221,603	747,328	79,904	694,593	194,434	208,421	21,578	63,600
East Rockingham	Joint venture	189,670	1,226,401	8,141	972,597	435,333	182,328	5,761	6,680
Infinity Power Holdings BV	Joint venture	204,231	984,556	185,610	801,412	201,766	174,237	27,715	-
Rocksprings Val Verde Wind LLC	Joint venture	54,750	719,335	11,447	383,647	378,991	38,957	8,691	15,777
Sterling Wind Phase 1 Holdings LLC	Joint venture	7,477	172,704	3,704	75,870	100,608	3,837	3,704	-
Blue Palm Holdings	Joint venture	-	5,347,364	191,165	1,789,076	3,367,123	-	-	-

9 EQUITY – ACCOUNTED INVESTEES - ***continued***

2021

	Classification	*Current assets AED'000*	*Non-current assets AED'000*	*Current liabilities AED'000*	*Non-current Liabilities AED'000*	*Net assets AED'000*	*Cash & Cash equivalents AED'000*	**Current -** *Trade & other* **payables & provisions** *AED'000*	**Non-current Trade & other payables & provisions** *AED'000*
Shams Power Company PJSC	Joint venture	158,106	1,812,765	128,689	1,697,926	144,256	74,935	14,370	8,187
Jordan Wind Power Company PJSC	Joint venture	119,912	701,117	107,236	600,671	113,122	94,696	18,522	-
Tesla Wind Doo	Joint venture	121,446	1,019,659	91,358	860,517	189,231	66,293	5,318	-
Hywind Scotland Limited	Joint venture	89,920	1,120,004	1,688	130,183	1,078,053			
Emirates Solar Power Company LLC	Joint venture	28,739	-	31,317	-	(2,579)	2,682	80	-
Sharjah WTE	Joint venture	42,776	704,285	127,056	670,674	(50,669)	38,767	70,214	-
Baynouna Solar Energy PSC	Joint venture	178,154	791,586	77,644	843,398	48,699	164,444	40,700	63,549
East Rockingham	Joint venture	158,559	1,077,195	113,736	998,513	123,506	56,257	105,045	6,840
Infinity Power Holdings BV	Joint venture	106,273	743,631	46,888	384,785	418,231	95,146	11,077	-

9 EQUITY – ACCOUNTED INVESTEES – ***continued***

	Revenue	*Depreciation & amortization*	*Interest expense*	*Income tax expense*	*Profit (loss) for the year*	*Other Comprehensive income for the year*	*Total comprehensive income/(loss) for the year*	*Group's share of total comprehensive income/(loss) for the year*	*Dividends received by the Group*
	AED'000	*AED'000*	*AED'000*	*AED'000*	*AED'000*	*AED'000*	*AED'000*	*AED'000*	*AED'000*
2022									
Shams Power Company PJSC	362,476	106,701	104,932	-	83,519	202,195	285,714	143,707	43,090
Jordan Wind Power Company PJSC	150,171	48,998	46,099	1,167	30,488	49,134	79,622	36,727	16,803
Tesla Wind Doo	144,204	37,359	60,952	-	37,354	17,791	55,144	33,086	-
Hywind Scotland Limited	211,862	62,329	1,806	28,869	93,582	-	93,582	22,013	39,912
Emirates Solar Power Company LLC	-	-	-	-	(23,439)	106,871	83,433	50,060	-
Sharjah WTE	221,479	1,705	44,357	-	274,320	75,767	350,087	175,044	-
Baynouna Solar Energy PSC	134,804	40,949	44,726	-	34,873	89,991	124,865	87,405	-
East Rockingham	-	7	-	-	(5,308)	112,366	107,058	39,195	-
Infinity Power Holdings BV	150,628	45,248	411,243	(7,142)	(296,158)	-	(296,158)	(145,117)	-
Rocksprings Val Verde Wind LLC	-	-	-	-	-	-	-	-	-
Sterling Wind Phase 1 Holdings LLC	785	-	-	-	785	-	785	785	-
Blue Palm Holdings	-	-	-	-	-	-	-	-	-

9 EQUITY – ACCOUNTED INVESTEES - *continued*

	Revenue	*Depreciation & amortization*	*Interest expense*	*Income tax expense*	*Profit (loss) for the year*	*Other Comprehensive income for the year*	*Total comprehensive income/(loss) for the year*	*Group's share of total comprehensive income/(loss) for the year*	*Dividends received by the Group*
	AED'000	*AED'000*	*AED'000*	*AED'000*	*AED'000*	*AED'000*	*AED'000*	*AED'000*	*AED'000*
2021									
Shams Power Company PJSC	374,356	106,017	110,077	-	85,965	106,830	192,795	97,095	60,687
Jordan Wind Power Company PJSC	154,177	49,079	47,022	1,220	32,424	26,640	59,064	25,831	-
Tesla Wind Doo	171,114	39,376	47,593	-	67,375	20,241	87,616	52,570	
Hywind Scotland Limited	178,880	70,735	1,299	21,613	59,877	-	59,877	13,725	28,559
Emirates Solar Power Company LLC	-	-	-	-	(80)	-	(80)	(48)	-
Sharjah WTE	278,260	1,758	35,959	-	22,101	33,224	55,325	27,663	-
Baynouna Solar Energy PSC	124,164	41,191	39,243	-	31,545	39,382	70,927	49,649	-
East Rockingham	-	5	-	-	(915)	5,109	4,194	1,538	-
Infinity Power Holdings BV	62,549	19,142	36,235	4,795	(47,780)	-	(47,780)	(962)	-

9 EQUITY – ACCOUNTED INVESTEES - ***continued***

Reconciliation of the summarised financial information to the carrying amount of the Group's interest in material equity-accounted investee recognised in the consolidated financial statements:

	Ownership interest	*Net assets AED'000*	*Group's share of net assets AED'000*	*Intangible assets AED'000*	*Carrying amount AED'000*
2022					
Shams Power Company PJSC	51%	344,766	175,831	22,698	198,529
Jordan Wind Power Company PJSC	50%	159,139	79,569	47,807	127,377
Tesla Wind Doo	60%	234,438	140,663	-	140,663
Hywind Scotland Limited	25%	901,824	225,456	27,236	252,692
Emirates Solar Power Company LLC	60%	65,282	39,169	-	195,110
Sharjah WTE	50%	295,097	147,548	-	147,548
Baynouna Solar Energy PSC	70%	194,434	136,104	-	136,104
East Rockingham	37%	435,333	159,334	-	159,334
Infinity Power Holdings BV	49%	201,766	98,865	-	98,865
Rocksprings Val Verde Wind LLC	50%	378,991	123,797	-	123,797
Sterling Wind Phase 1 Holdings LLC	50%	100,608	98,268	-	98,268
Blue Palm Holdings	50%	3,367,123	1,683,562	88,948	1,772,510
Other investments *					241,041
Total					**3,691,838**

9 EQUITY – ACCOUNTED INVESTEES - continued

	Ownership interest	*Net assets AED'000*	*Group's share of net assets AED'000*	*Intangible assets AED'000*	*Carrying amount AED'000*
2021					
Shams Power Company PJSC	51%	144,256	73,571	24,341	97,912
Jordan Wind Power Company PJSC	50%	113,122	56,561	50,891	107,452
Tesla Wind Doo	60%	189,231	113,538	-	113,538
Hywind Scotland Limited	25%	1,078,053	270,176	32,551	302,727
Emirates Solar Power Company LLC	60%	(2,579)	-	-	-
Sharjah WTE	50%	(50,669)	-	-	-
Baynouna Solar Energy PSC **	70%	69,569	48,698		48,698
East Rockingham	37%	123,506	45,290	-	45,290
Infinity Power Holdings BV	49%	418,231	204,933	-	204,933
Other investments *					214,209
Total					**1,134,759**

*** Immaterial associates and equity accounted investees.**

**** Baynouna Holding B.V is holding company of Baynouna Solar Energy PSC.**

9 EQUITY – ACCOUNTED INVESTEES - ***continued***

2022	***AED '000'***
Carrying amount of interest in other investments	**241,041**
Group's share of:	
- Loss from continuing operations	(37,898)
- Other comprehensive income	126,528
Total comprehensive income	**88,630**

2021	*AED '000'*
Carrying amount of interest in other investments	214,209
Group's share of:	
- Loss from continuing operations	(23,462)
- Other comprehensive income	-
Total comprehensive income	(23,462)

The movement in investment in equity-accounted investees is set out below:

	Associates' AED '000	*Joint ventures AED '000*	*Total AED '000*
At 1 January 2022	**178,528**	**956,231**	**1,134,759**
Investments during the year (i)		**2,305,238**	**2,305,238**
Share of results of equity-accounted investees	**(30,732)**	**89,399**	**58,667**
Disposal of associates/ joint venture(ii)	**(144,001)**	-	**(144,001)**
Dividends received (iii)	-	**(99,805)**	**(99,805)**
Share of movement in hedge and other reserves	-	**460,773**	**460,773**
Share of movement in foreign exchange reserves	**(407)**	**(21,328)**	**(21,735)**
Reclassification (iv)	-	**(2,059)**	**(2,059)**
At 31 December 2022	**3,389**	**3,688,449**	**3,691,838**
At 1 January 2021	238,435	638,714	877,149
Investments during the year	-	293,562	293,562
Share of results of equity-accounted investees	(59,868)	118,604	58,736
Disposal of a joint venture	-	(55,259)	(55,259)
Dividends received	-	(89,246)	(89,246)
Share of movement in hedge and other reserves	-	119,913	119,913
Share of movement in foreign exchange reserves	(39)	(18,046)	(18,085)
Reclassified to held for sale		(2,932)	(2,932)
Reclassification	-	(49,079)	(49,079)
At 31 December 2021	178,528	956,231	1,134,759

(i) During the year, the Group has made the following significant investments:

- Additional contribution in Infinity Power Holdings BV, a joint venture, for a consideration of USD 9.8 million (AED 36.1 million)
- Additional contribution in Dudgeon Extension Limited, a joint venture, for a consideration of GBP 7.4 million (AED 32.4 million).
- 33.67% ownership interest in East Rockingham, a joint venture, for a consideration of AUD 15.1 million (AED 86.4 million).

9 EQUITY – ACCOUNTED INVESTEES - ***continued***

- Additional contribution in Emirates Solar Power Company, a joint venture, for a consideration of AED 155.5 million.
- 50% ownership interest in Rocksprings Val Verde Wind LLC, a joint venture, with an estimated fair value of USD 33.7 million (AED 123.8 million).
- 50% ownership interest in Sterling Wind Phase 1 Holdings LLC, a joint venture, with an estimated fair value of USD 26.5 million (AED 97.5 million).
- 50% ownership interest in Blue Palm Holdings, a joint venture, with an estimated fair value of USD 482.5 million (AED 1,772.5 million).

(ii) Rocksprings Val Verde Wind LLC, Sterling Wind Phase I Holdings LLC and blue Palm Holdings include investments made through tax equity partnerships. The Group has assessed their terms and determined that they amount to liability measured at amortised cost balance classification to arrive at its equity accounted balance. A change in the tax equity partner's entitlements to tax benefits is recognised in this liability balance, with the corresponding amount recognised as a financial expense.

(iii) During the year, the Group disposed of its entire investment in Hero Future Energies Global Limited for a consideration of AED 266 million (USD 72.5 million), disclosure is given in note 10.

(iv) During the year, the Group received dividends from following investments:

a. AED 43.1 million from a joint venture, Shams Power Co.,
b. AED 39.9 million (GBP 8.8 million) from a joint venture, Hywind Scotland Limited and
c. AED 16.5m (USD 4.5 million) from Jordan Wind Power Company.

(v) Reclassification comprises of reclassification of balances from loans to related parties to investments in Krnovo (AED 10.34 million) Sharjah W2E (AED 22.83 million), Masdar CES Europe BV AED 28.80 and Emerge limited AED 2.31 million.

10 OTHER NON-CURRENT FINANCIAL ASSETS

	2022 AED '000	*2021 AED '000*
Financial assets at fair value through profit or loss		
Unquoted convertible investments		
Hero Future Energies Private Limited	-	208,369
Unquoted equity investments		
Zouk Charging Infrastructure Investment Fund LP	**21,961**	34,903
	21,961	243,272

During the year fair value loss of AED 68.09 million (2021: fair value gain of AED 19.05 million) was booked against Hero Future Energies Private Limited ("HFEP") and has been recognized in the consolidated statement of profit or loss. The investment was sold in the year.

During the year, the Group contributed AED 14.55 million to the Zouk Charging Infrastructure Investment Fund LP ("Zouk"). The Group also received AED 121.82 million from Zouk as distributions from the fund. *(2021: Group received net distribution AED 37.48 million)* which has been recognized in the consolidated statement of profit or loss for the year ended 31 December 2022.

The fund is unquoted and a fair value loss of AED 23.36 million *(2021: gain AED 5.82 million)* has been recognized in the consolidated statement of profit or loss for the year ended 31 December 2022.

Company decided to dispose of its investment in Hero Future Energies Global Limited, an equity accounted investee, and Hero Future Energies Private Limited, a financial investment carried at fair value through Profit loss and transferred the investment carrying values after adjusting fair value movement as at the year end 31 December 2022 to other receivable:

OTHER NON-CURRENT FINANCIAL ASSETS - continued

	HFE Equity accounted investee *AED 000*	HFE Investment FVTPL *AED 000*	Total *AED 000*
Opening balance 01 January 2022	**174,733**	**208,369**	**383,102**
Share of result of equity accounted investee	**(30,732)**	**-**	**(30,732)**
Change in fair value	**-**	**(68,093)**	**(68,093)**
Foreign exchange loss	**-**	**(17,948)**	**(17,948)**
Disposal value receivable *	**144 001**	**122 328**	**266 329**

*At 31 December 2022 AED 266 million was receivable and included in other receivable receivables, and payment was subsequently received.

Change in fair value of financial assets carried at fair value through profit or loss reported in consolidated statement of comprehensive income was AED 30.37 million, which consist of Sky Fall Zouk Fund fair value loss of AED 23.36 million (2021: gain AED 5.82 million), HFE FVPTL Investment fair value loss of AED 68.09 million (2021: fair value gain of AED 19.05 million), offset by AED 121.82 million share of profit from Sky Fall Zouk fund.

11 FINANCE LEASE RECEIVABLES

	2022 *AED '000*	*2021* *AED '000*
Finance lease receivables:		
Gross receivables - Reclass	**53,889**	408,760
Less: provision for expected credit losses	**(1,688)**	(15,924)
	52 201	392,836
Non-current	**47,957**	308,887
Current	**4,244**	83,949
Assets held for sale	-	(392,836)
	52,201	-

The movement in the provision for expected credit losses is as follows:

	2022 *AED '000*	*2021* *AED '000*
As at 01 January	-	14,278
Reclassification	**1,759**	-
Provision for expected credit losses	**-**	1,646
Asset held for sale		(15,924)
Reversal of expected credit losses	(71)	-
As at 31 December	**1,688**	-

Past due finance lease receivables as at 31 December 2022 amounted to AED 2.06 million (2021: AED 1.96 million), Trade receivable provision of impairment for credit losses are provided AED 0.95million (2021: AED 1.26 million) and finance lease receivable have recorded reversal of AED 0.07 million (2021: AED Nil) net cost shown in statement of comprehensive income is AED 0.88 million.

11.1 Leasing agreements

The Group has entered Musataha lease agreements for a plot of land in Jebel Al Dannah. The underlying lease has a lease term of 50 years, as per the lease term and other terms and conditions of the agreement, this have been accounted as finance lease.

11.2 Amounts receivable under finance leases

	Minimum lease payments	
	2022	*2021*
	AED '000	*AED '000*
Less than one year	**3,928**	70,904
One to two years	**3,928**	24,995
Two to three years	**3,928**	25,614
Three to four years	**3,928**	26,249
Four to five years	**3,928**	26,899
Later than five years	**153,206**	2,394,047
Total	**172,846**	2,568,708
Less: unearned finance income	**(120,645)**	(2,159,948)
Present value of minimum lease payments	**52 201**	408,760

The interest rate inherent in the leases is fixed at the contract date for the entire lease term. The average effective interest rate 7.11% (2021: 7.11%) per annum.

Finance income amounting to AED 3.75 million (2021: AED 3.76 million) have been recognized in statement of total comprehensive income and is included under Revenue (note 23).

12 RELATED PARTIES

Related parties represent the Government of Abu Dhabi and related departments and institutions, associated companies, joint ventures, shareholders, directors and key management personnel of the Group, management entities engaged by the Group, and entities controlled, jointly controlled, or significantly influenced by such parties. Pricing policies and terms of these transactions are approved by the Group's management.

Group's major shareholders are Government-owned entities, and the Group enters into transactions with them and other related parties in the ordinary course of business at mutually agreed terms. The Group also maintains significant balances with the shareholders and other related parties which arise from commercial transactions. Apart from the transactions as mentioned in note 12.2, 12.3 and 12.5 to these financial statements none of the other transactions are individually or collectively significant.

12.1 Loans to related parties

Loans to related parties are classified as follows:

	2022	*2021*
	AED '000	*AED '000*
Gross receivables	**603,718**	573,231
Less: provision for expected credit losses	**(73,642)**	(120,255)
	530,076	452,976
Non-current	**236,808**	207,440
Current	**293,268**	245,536
	530,076	452,976

12.1 Loans to related parties - *continued*

	2022	*2021*
	AED '000	*AED '000*
Equity Accounted Investees		
Shams Power Company PJSC ("Shams")	**40,808**	42,884
Dumat Al Jundal	**14,346**	**-**
Jordan Wind Project Company PJSC ("JPWC")	**6,277**	9,430
Sharjah Waste to Energy LLC ("SW2E")	**123,361**	92,461
Baynouna Holdings B.V ("Baynouna")	**79,412**	69,637
Krnovo Energy d.o.o. ("Krnovo")	**113,884**	97,921
PT Pembangkitan Jawa Bali Masdar Solar Energi ("Cirata")	**2,086**	7,746
Infinity Power Holdings BV	**47,164**	-
Contino Omikron Sp. Z.O.O ("Contino")	**10,660**	11,327
Pileus Energy SP. Z.O.O ("Pileus")	**23,271**	24,712
Fonnes Sp. Z.o.o	**1,021**	30,597
Cibuk 2	**3,106**	-
Emerge Ltd	**58,842**	**-**
Masdar Tribe Australia Holding Ltd	**2,887**	898
Tesla Vetroelektrane Balkana d.o.o. ("Tesla")	**2,951**	65,363
	530,076	452,976

The movement in the provision for expected credit losses is as follows:

	2022	*2021*
	AED '000	*AED '000*
On 1 January	**120,255**	144,060
Provision for expected credit losses	**9,329**	2,525
Reversal of provision for expected credit losses **	**(47,853)**	(16,475)
Other movement	-	(5,097)
Effect of movement in exchange rates	**(8,089)**	(4,758)
At 31 December	**73,642**	120,255

** The reversal of provision for expected credit losses relates to improvement in credit profiles and scheduled repayments received. Net profit or loss impact is credit AED 38.52 million (2021: AED 13.95 million).

Summarised below are the key terms of the loan to related parties as at 31 December:

Parties	*Currency*	*Nominal interest rate*	*Year of maturity*	***2022 AED '000***	*2021 AED '000*
Shams	AED	-	2038	**40,808**	42,884
Dumat Al Jundal	USD	-	On demand	**14,346**	
JWPC	USD	9%	On demand	**6,277**	9,430
SW2E	AED	6.13%	2023	**123,361**	92,461
Baynouna	USD	-	On demand	**79,412**	69,637
Krnovo	EUR	8.45%	2038	**113,884**	97,921
Cirata	USD	2.50%	2023	**2,086**	7,746
Infinity	USD	10%	2035	**47,164**	-
Contino	EUR	4%	2030	**10,660**	11,327
Fonnes Sp Z.o.o	EUR	3%	2031	**1,021**	30,597
Emerge Limited	AED	7.14%	On demand	**58,842**	-
Pileus	EUR	4%	2030	**23,271**	24,712
Masdar Tribe Australia Holding	AUD	-	On demand	**2,887**	898
Cibuk 2	EUR	-	On demand	**3,106**	**-**
Tesla	EUR	4.25%	On demand	**2,951**	65,363
Total				**530 076**	452,976

Loan to related parties are unsecured. The loan to related parties have been provided at mutually agreed interest rates.

12.2 Due from related parties

Due from related parties are classified as follows:

Current:	***2022***	*2021*
Entities under common control		
Ministry of Foreign Affairs	**-**	700
Crown Price Court	**20,450**	44
Department of Finance	**2,475**	1,655
Ninety sixth investment Company	**-**	8,005
Mubadala Treasury Holding Company	**-**	92,760
Sub-total	**22,925**	103,164
Equity Accounted Investees		
Emerge Limited	**14,341**	9,983
Dumat Al Jundal	**4,179**	579
Infinity 50 for Renewal Energy S.A.E	**35**	35
Shams Power Company PJSC	**948**	731
Tesla Vetroelektrane Balkanan D.O.O	**437**	436
Baynouna Holdings B.V.	**9,417**	9,771
Dudgeon Offshore Wind UK Limited	**31,064**	40,866
Noor Midelt	**3,795**	3,795
Emirates Solar Power Company LLC	**1,832**	1,995
Sharjah Waste to Energy	**531**	444
Shuaa Energy 2 PSC	**4,732**	1,303
Sub-total	**71,311**	69,938
Total	**94,236**	173,102

Terms and condition of transactions with related parties

There have been no guarantees provided or received for any related party receivables or payables. For the year ended 31 December 2022, the Group has not recorded any impairment of receivables relating to amounts owed by a related party (2021: nil). This assessment is undertaken each financial year through examining the financial position of the related parties and the market which the related parties operate.

12.3 Due to related parties

	2022	*2021*
	AED '000	*AED '000*
Shareholders		
Mubadala Development Company	**1,191**	398
The Government of Abu Dhabi*	**37,124**	29,542
Entities under common control		
Abu Dhabi National Oil Company	-	14
MDC General Services Holding Company L.L.C.	**1,008**	1,254
MDC Business Management Services L.L.C.	**1,155**	472
Emirates Telecommunications Corporation – Etisalat	**250**	750
Abu Dhabi National Hotel Company	**375**	149
	41 103	32,579

*The balance due to the Government pertains to unutilised government grants (note 24).

12.4 Other related party balances

	2022	*2021*
	AED '000	*AED '000*
Cash and bank balances	**2,138,215**	604,091
Deferred income	**11,894**	11,788
Project advances (note 22)*	**1,218,942**	248,427

Cash and bank balances and restricted cash comprise call, current, and deposit accounts and term deposits with entity under common control.

*Funds received from entities under common control of the Government of Abu Dhabi for future Energy Services project developments, to be undertaken for the substantive benefit and title of these common control entities, in exchange for a fee.

12.5 Transactions with related parties

Significant transactions with related parties during the year were as follows:

	2022 *AED '000*	*2021* *AED '000*
Shareholders		
Funds received from Shareholders – Mamoura Diversified Global Holding PJSC (MDGH)	**357,615**	-
Funds received from Shareholders – Abu Dhabi National Energy Company PJSC	**465,983**	-
Funds received from Shareholders – Abu Dhabi National Oil Company (ADNOC) PJSC	**260,084**	-
Funds remitted to Mubadala Treasury Holding Company	**387,123**	351,647
Shuaa 2 loan received from Shareholders – MDGH	**216,139**	**-**
Arlington equity accounted investee funding received from MDGH	**72,676**	**-**
Ninety sixth investment company transferred in from MDGH	**2,663,164**	**-**
Masdar City all legal entities transferred to MDGH	**3,129,526**	**-**
Equity Accounted Investees		
Recharge of costs to Shams Power Company PJSC	**1,019**	885
Interest charged to related parties	**36,344**	39,411
Entities under common control		
Recharge of costs from MDC General Services Holding Company	**12,276**	9,069
Recharge of costs from MDC Business Management Services L.L.C.	**7,695**	9,803
Other income *	**4,317**	35,053

*Other Income is mainly related with Shuaa Energy, Dumat Wind Contracting and Abu Dhabi Sustainability Week.

Key management personnel compensation is as follows:

	2022 *AED '000*	*2021* *AED '000*
Salaries	**19,553**	17,246
Other benefits – direct allowances	**14,780**	13,517
Other long-term benefits – Pension	**3,076**	3,827
Post-employment end of service benefits	**1,622**	965
	39,031	35,555

13 TRADE AND OTHER RECEIVABLES

	2022 *AED '000*	*2021* *AED '000*
Current portion:		
Other trade receivables (note 13.1)	**28,173**	30,711
Accrued income	**137,106**	117,972
Restricted cash	**17,786**	163,868
Short term advances	**173,946**	5,820
Staff receivables	**15,983**	16,084
Tax receivables	**16,696**	17,971
Other receivables *	**669,261**	46,639
Prepayments	**10,843**	12,395
	1,069,794	411,460

13.1 Trade receivables

Trade receivables mainly represent amounts due from renewable power generation and Energy Services. The average credit period on sale of goods or services is 60 days. No interest is charged on trade receivables.

The Group has adopted a policy of dealing with only creditworthy counterparties. Adequate assessment is made before accepting an order from a counterparty. Of the trade receivables balance at the end of the year, AED 4.65 million (2021: AED 5.65 million) representing 9% (2021: 18%) of total trade receivables is due from three major customers (2021: two). Management considers each of these customers to be reputable and creditworthy and is confident that this concentration of credit risk will not result in any significant loss to the Group.

Included in the Group's trade receivables balance are unimpaired debts with a carrying amount of AED 14.62 million as at 31 December 2022 (2021: AED 16.11 million) which are past due at the reporting date but there has not been a significant change in the credit quality of the customers and the amounts are still considered recoverable.

*Other receivables include AED 266 million HFE sale proceed, AED 194 million advance payment to contract under Shamal Zarafshan, AED 38 million advance payment under ninety sixth Investment Company and AED 170 million recoverable project expenses.

Fixed deposit for ninety days from deposit opening date as on reporting date is presented as restricted cash and deposit not meeting this criterion are shown as fixed deposit.

	2022	*2021*
	AED '000	*AED '000*
Ageing of trade receivables:		
Not past due	**14,624**	16,108
Past due but not impaired:		
Due for 61 to 120 days	**12,367**	7,489
Due for 121 to 360 days	**1,182**	6,058
Due for more than 360 days	**-**	1,056
	13,548	14,603
	28,173	30,711

The Group recognises expected credit loss (ECL) for trade receivables based on simplified approach. Management considers factors that are specific to the debtors, general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money, where appropriate.

The movement in the provision for expected credit losses on trade receivables is as follows:

	2022	*2021*
	AED '000	*AED '000*
As at 1 January	**228**	12,631
Provision for expected credit losses	**954**	(1,262)
	1,182	11,369
Assets Held for Sale transfer	**-**	(11,141)
As at 31 December	**1 182**	228

13.1 Trade receivables - *continued*

	AED '000	*AED '000*
Provision of expected credit losses on trade receivables:		
Not past due	-	-
Past due but not impaired:		
Due for 61 to 120 days	-	-
Due for 121 to 360 days	**1,182**	-
Due for more than 360 days	-	228
	1,182	228

Trade receivable provision for credit losses are provided AED 0.95 million (2021: AED 1.26 million) and finance lease receivable have recorded reversal of AED 0.07 million (2021: AED Nil) net cost shown in profit or loss is AED 0.88 million

13.2 Receivable from WinWindOY, net

	2022 ***AED '000***	*2021* *AED '000*
Receivable from WinWindOY	**356,285**	356,285
Less: provision for impairment loss	**(356,285)**	(356,285)
	-	-

WinWindOY is in default under the terms of the settlement agreement. In December 2014, the Group filed arbitration proceedings with the London Court of International Arbitration. In October 2015, the Group received an arbitration award of approximately AED 380.5 million (EUR 95 million) in damages for the principal amount of the receivable and interest, recovery of arbitration and legal costs and 5% interest from the date of the arbitration award. Management has applied for the recognition of the arbitration award in the courts of India, where Siva, the obligor of WinWindOY is domiciled. However, during 2017, the Group recognised an additional impairment loss against the carrying value of the loan amounting to AED 42.6 million due to the significant decline in the creditworthiness of Siva and limited visibility over Siva's unencumbered assets to be pursued for legal action.

During 2019, Masdar became aware that one of the entities against which Masdar had a claim, Siva Industries and Holdings Limited ('SIHL'), was undergoing an insolvency resolution process in India and an independent interim resolution professional had been appointed to oversee this process in line with requirements under Indian law. During that year, as per insolvency proceeding settlement submission in January 2021 relating to Siva Industries and Holdings Limited, Masdar was expected to receive USD 1.44 million in two instalments as a final settlement for the claim, however, later on a settlement proposal was submitted by the promoters of Siva to the Committee of Creditors ('COC'), which was approved by the COC in April 2021, this approval along with the application to withdraw the insolvency proceedings filed thereafter was dismissed by the National Company Law Tribunal, Chennai in August 2021, rejected the settlement proposal and dismissed the application for withdrawal of the corporate insolvency resolution proceedings. The NCLT allowed the application filed by the Resolution Professional for liquidation of SIHL and appointed a liquidator to carry out the liquidation process. Currently on account of the settlement proposal, the creditors are entitled to receive the settlement amount as per the settlement proposal and Masdar had agreed to receive as full and final settlement, INR 10.52 crores (USD 1.35 million), (AED 4.95 million) at a conversion of USD 1 = INR 77.76 as of June 7, 2022), in two tranches, and all debts owed to Masdar by SIHL and Siva Skylink Global Limited shall stand discharged. Therefore, Masdar was initially expected to be paid the settlement amount in two tranches, (i) between 3rd June to 3rd July 2022 USD 0.20 million (AED 0.73 million) (ii) between 3rd June to 30 November 2022 USD 1.15 million (AED 4.22 million).

The Advising Bank is waiting for a copy of Guarantee Letter dated 21 August 2008 from SIHL for calculating late submission fees. Once the late submission fee is levied by the Advising Bank, and after approval thereof from the Reserve Bank of India, funds would be remitted shortly thereafter.

13.3 Contract Asset

Service concession receivable related with Nur Navoi Solar FE and Shamal Zarafshan Energy FE, Uzbekistan, are as follows:

	2022 AED '000	2021 AED '000
Non-current receivable	**297,061**	278,099
Current receivable	**27,211**	1,927
	324,272	280,026

	2022 AED '000	2021 AED '000
Ageing of contract asset		
Not past due	**324,272**	280,026
Past due but not impaired:		
Due for 61 to 120 days	-	-
Due for 121 to 360 days	-	-
Due for more than 360 days	-	-
	324,272	280,026

The transition from a contract asset to a receivable occurs once the amounts to be received have no conditions, other than the passage of time. While operator is obliged to provide services (by also maintaining the asset's performance to meet contracted standards) during the operating phase in order to be paid the consideration for its earlier construction services, the contract asset remains conditional (i.e., remains as a contract asset) and does not transition to a receivable).

14 Inventories

	2022 AED '000	2021 AED '000
Opening as at 01 January	**87**	413,981
Transfer to investment properties	-	(10,516)
Cost of sales	-	(25,713)
Balance as at 31 December	-	377,752
Transfer to Assets held for sale	-	(377,665)
	87	87

Cost of sale has been presented as part of discontinued operation in note 29.

	2022 AED '000	2021 AED '000
Finished goods	**87**	87

15 CASH AND CASH EQUIVALENTS

	2022	*2021*
	AED '000	*AED '000*
Call and current accounts	**1,962,425**	716,407
Fixed Deposit	**1,188,194**	-
Cash in hand	**30**	90
	3,150,649	716,497

Deposit and call accounts are placed with commercial banks and are short-term in nature. Deposit and call accounts earn interest at prevailing market rates.

Fixed deposit for ninety days from deposit opening date as on reporting date is presented as restricted cash and deposit not meeting this criterion are shown as fixed deposit.

Geographical concentration of cash and term deposits is as follows:

	2022	*2021*
	AED '000	*AED '000*
Within UAE	**2,102,789**	508,753
Outside UAE	**1,047,860**	207,744
	3,150,649	716,497

Cash within the UAE includes AED 960.81 million held in separate accounts for funds advanced for specific special projects and grants. AED 1,000 million is held on a one month rolling fixed deposit.

Cash outside the UAE includes AED 581.70 million for the acquisition in a joint venture, AED 280.61 million in subsidiary project companies with projects under development and AED 102.05 million in the subsidiaries having the London Array investment.

16 SHARE CAPITAL

Share capital comprises 8,000,000,000 *(2021: 8000,000,000)* authorised, issued and fully paid-up ordinary shares with a par value of AED 1 each.

17 SHAREHOLDER'S ACCOUNT

Shareholder's account represents an account to record transactions with the initial shareholder in its capacity as shareholder of the Group. There are no contractual obligations to settle the balance in the Shareholder's account. Therefore, this balance is more akin to equity instruments rather than liabilities, and accordingly, has been presented within equity.

During year the Company received AED 1,083.68 million (USD 295 million) contributed equity loan from Shareholders for financing of investments.

During the year the Shareholder's account was adjusted by a net AED 657.58 million for various transactions: funds received (AED 72.68 million) for investment in a subsidiary, Arlington Group Services Limited, the acquisition of Ninety Sixth Investment Company (AED 2,663.16 million), the disposal of Masdar City (AED 3,129.53 million) and settlement of Mubadala group intercompany balances (AED (263.89 million). On completion of the change in the Company's shareholders on 01 December 2022 the amount of AED 2,337.64 million was reclassified from the shareholder's current account to retained earnings as per an agreement amongst the shareholders.

18 RESERVES

Investment reserve
Investment reserve reflects funds received by the Group from Mubadala the initial Shareholder and disbursed to Masdar Clean Tech Fund for investment purposes. This reserve is in the nature of a non-distributable capital reserve which is funded by the Government of Abu Dhabi.

Statutory reserve
As required by article 241 of the UAE Federal Law No. 32 of 2021, the Group is required to transfer 10% of its net profit for the year to a non-distributable statutory reserve. The statutory reserve is not available for distribution.

Other reserves
Other reserves include Hedging reserve of AED 485.58 million as at 31 December 2022 (2021: AED (126.72) million) and Exchange rate fluctuation reserve of (AED 449.37) million as at 31 December 2022 (2021: AED (478.26) million).

19 BANK BORROWINGS

	2022 ***AED '000***	*2021* *AED '000*
At amortised cost		
Current	**688,205**	125,336
Non-current:	**1,808,829**	2,010,212
Less: deferred financing costs	**(28,418)**	(29,820)
	1,780,411	1,980,392
	2,468,616	2,105,728

The movement in the bank borrowings is as follows:

	2022 ***AED '000***	*2021* *AED '000*
As at 01 January	**2,105,728**	2,131,099
Repayments during the year	**(115,466)**	(244,725)
Loan obtained during the year	**662,739**	232,957
Amortisation of deferred financing costs	**1,402**	3,916
Foreign exchange fluctuations	**(185,787)**	(17,519)
At 31 December	**2,468,616**	2,105,728

Loan 1

London Array offshore wind farm project refinanced debt amount is GBP 395 million with a maturity date of December 2032. The loan facility refinancing is secured by pledge of Masdar Energy UK Limited shares and also subject to various covenants as stipulated in the loan facility agreement. Masdar Energy UK Limited's bank borrowings are repayable in 26 semi-annual instalments starting March 2020.

Masdar Energy UK Limited entered an interest rate swap for the full value and tenure of the term loan. The derivative is designated as a hedge and has been determined as effective and so changes in fair value amounting to AED 136.24 million (2021: AED 71.74 million) are recognised in other comprehensive income. As at 31 December 2022, the fair value of the derivative recognised amounted to an asset of AED 237.84 million (2021: Asset AED 42.04 million) and the notional principal amount is AED 1,469.94 million (2021: AED 1,764.80 million).

Senior secured project finance term loan facility from a syndicate of lenders including Banco Santander, S.A., London Branch - BNP Paribas Fortis SA/NV - MUFG Bank, Ltd. - Siemens Bank GmbH - Societe Generale, London Branch - Standard Chartered Bank - Sumitomo Mitsui Banking Corporation, London Branch, at interest rate SONIA + Margin, secured against shares held in operator and other requirements per facility agreement.

19 BANK BORROWINGS – *continued*

The amount of Masdar Energy UK limited net equity pledged as at 31 December 2022 AED 450.54 million (2021: AED 111.98 million).

Loan 2
During 2022, USD 145 million (AED 532.66 million) was drawn against a short-term credit facility of USD 250 million (AED 918.38 million). USD 105 million was unutilized as at 31 December 2022.

Short-term bridge-to-bond term loan facility from First Abu Dhabi Bank and Sumitomo Mitsui Banking Corporation with an initial maturity date of 08 August 2023 and options to extend by up to 12 months to 8 August 2024.

Loan 3
During 2022, AED 55 million was drawn against a revolving credit facility of AED 92.50 million. AED 37.50 million was unutilized as at 31st December 2022, Revolving corporate credit facility from First Abu Dhabi Bank with an expiration date of 09 December 2026.

Loan 4
During 2022, USD 10 million (AED 36.75 million) was drawn against a revolving credit facility of USD 100 million (AED 367.35 million). USD 90 million was unutilized as at 31 December 2022.

Revolving corporate credit facility from a group of 13 banks; BAML, BNP Paribas, CACIB, Citibank, DBS, Intesa, JPM, Mizuho, Natixis, Standard Chartered Bank, Societe Generale, Sumitomo Mitsui Banking Corporation, and UniCredit Bank, with an expiration date of 09 December 2026. The Credit Adjustment Spread is for loans of one month, for loans of three months, and for loans of six months.

Loan 5
The Group availed a USD 59.36 million (AED 218.06 million) equity bridge loan facility from the European Bank for Construction and Development for Nur Navoi project in Uzbekistan, under Nur Navoi Solar Holding RSC Limited. The facility is fully repayable on 09 December 2026 as a bullet payment and is supported by a corporate guarantee from the Company.

Nur Navoi Solar Holding RSC entered an interest rate swap for the full value and tenure of the loan. The derivative is designated as a hedge and has been determined as effective and so changes in fair value amounting to AED 26.84 million (2021: AED 2.71 million) are recognized in other comprehensive income. As at 31 December 2022, the fair value of the derivative recognized amounted to an asset of AED 29.55 million (2021: Asset AED 2.71 million) and the notional principal amount is AED 220.39 million (2021: AED 218.39 million).

Loan 6
During 2022, under Nur Navoi Solar FE Uzbekistan project repaid AED 7.84 million of senior debt facilities from Asian Development Bank and International Financial Corporation. The aggregate amount of loan is USD 52.54 million (AED 193 million), the facilities are repayable in semi-annual instalments from June 2022 to December 2040.

Nur Navoi Solar FE LLC entered an interest rate swap for the full tenure of the loan. The derivative is designated as a hedge and has been determined as effective and so changes in fair value amounting to AED 28.73 million (2021: AED 2.89 million) are recognized in other comprehensive income. As at 31 December 2022, the fair value of the derivative recognized amounted to an asset of AED 31.62 million (2021: Asset AED 1.29 million) and the notional principal amount is AED 127.79 million (2021: AED 134.39 million).

Senior secured project finance term loan facilities from Asian Development Bank and International Financial Corporation, repayable in semi-annual instalments from June 2022 to December 2040. These facilities comprise floating rate loans totalling USD 27m (AED 99.2m) with a rate of interest of LIBOR + margin, a floating rate loan in the amount of USD 17.5m (AED 64.3m) with a rate of interest of LIBOR + margin, and a fixed rate loan of USD 8m (AED 29.4m). The floating rate loans are hedged using senior secured interest rate swaps from International Financial Corporation for their full tenure, loan is senior secured with lien against the assets of the borrower.

19 BANK BORROWINGS - *continued*

Loan 7
During 2022 Shamol Zarafshan Energy Foreign Enterprise LLC, a subsidiary of the Group, secured USD 276.6 million (AED 1,016.09 million) of senior debt facilities from Asian Development Bank, European Bank for Construction and Development, International Finance Corporation, Japan International Cooperation Agency, First Abu Dhabi.

Bank and Natixis. The facilities are repayable in semi-annual instalments from March 2026 to August 2042. As at 31 December 2022, the facilities were undrawn.

Shamol Zarafshan Energy Foreign Enterprise LLC entered into an interest rate swap for the full tenure of the loan. The derivative is designated as a hedge and has been determined as effective and so changes in fair value amounting to AED 42.53 million (2021: AED nil) are recognized in other comprehensive income. As at 31 December 2022, the fair value of the derivative recognized amounted to liability of AED 42.53 million (2021: AED nil) and the notional principal amount is AED nil (2021: AED nil).

Senior secured project finance term loan facilities from Asian Development Bank, European Bank for Construction and Development, International Finance Corporation, Japan International Cooperation Agency, First Abu Dhabi Bank and Natixis, repayable in semi-annual instalments from March 2026 to August 2042. These facilities comprise floating rate loans totalling USD 137.50 million (AED 505.10 million) with a rate of interest of SOFR + margin, a floating rate loan in the amount of USD 37 million (AED 135.92 million) with a rate of interest of SOFR + margin, and floating rate loans totalling USD 102 million (AED 374.70 million) with a rate of interest of SOFR + margin. The loans are hedged using senior secured interest rate swaps from International Financial Corporation and European Bank for Construction and Development for their full tenure.

Loan 8
During 2022 Masdar Azerbaijan Energy LLC, a subsidiary of the Group, secured USD 108.3 million (AED 397.84 million) of senior debt facilities from Asian Development Bank, European Bank for Construction and Development, Japan International Cooperation Agency, and Abu Dhabi Fund for Development. The facilities are repayable in semi-annual instalments from August 2024 to July 2042. As at 31 December 2022, the facilities were undrawn.

Masdar Azerbaijan Energy LLC entered an interest rate swap for the full tenure of the loan. The derivative is designated as a hedge and has been determined as effective and so changes in fair value amounting to AED 0.35 million (2021: AED nil) are recognized in other comprehensive income. As at 31 December 2022, the fair value of the derivative recognized amounted to an asset of AED 0.35 million (2021: AED nil) and the notional principal amount is AED nil (2021: AED nil).

Senior secured project finance term loan facility from Asian Development Bank, European Bank for Construction and Development, and Abu Dhabi Fund for Development, repayable in semi-annual instalments from August 2024 to July 2042. These facilities comprise floating rate loans totalling USD 38.90 million (AED 142.90 million) with a rate of interest of SOFR + margin, a floating rate loan in the amount of USD 19.40 million (AED 71.27million) with a rate of interest of SOFR+ margin, and a floating rate loan in the amount of USD 50 million (AED 183.68 million) with a rate of interest of SOFR + margin. The loans are hedged using senior secured interest rate swaps from European Bank for Construction and Development for their full tenure.

Lender	*Currency*	*Interest rate*	*Security*	***2022 AED '000***	*2021 AED '000*
Bank loan (1)	GBP	SONIA + margin	Secured	**1,444,150**	1,735,356
Bank Loan (2)	USD	SOFR + margin	Unsecured	**532,658**	-
Revolving credit (3)	AED	EIBOR + margin	Unsecured	**55,000**	-
Revolving credit (4)	USD	SOFR+CAS+ margin	Unsecured	**36,734**	-
Bank loan (5)	USD	LIBOR + margin	Unsecured	**218,074**	218,074
Bank loan (6)	USD	LIBOR + margin	Senior Secured	**182,000**	152,297
				2,468,616	2,105,727

BANK BORROWINGS - continued

Consolidated agreed-upon instalment schedule for the above-mentioned bank borrowings is as follows:

	2022 ***AED '000***	*2021* *AED '000*
Within 1 year	**810,335**	172,984
Between 1 – 2 years	**166,954**	176,414
Between 2 – 5 years	**764,870**	781,297
More than 5 years	**1,002,960**	1,266,685
	2 745 119	2,397,380

Changes in liabilities arising from financing activities

2022	**Bank Borrowing** ***AED '000'***	**Finance Cost payable** ***AED '000'***	**Lease Liabilities** ***AED '000'***	**Derivative Financial Assets** ***AED '000'***	**Contributed Equity Loan** ***AED '000'***	**Shareholder's Account** ***AED '000'***
Balance on 1 January 2022	**2,105,728**	**-**	**319,303**	**46,036**	**-**	**(1,680,060)**
Proceed from borrowings	**662,739**	**-**	**-**	**-**	**-**	**-**
Repayment of borrowings	**(115,466)**		**-**	**-**	**-**	**-**
Finance cost paid		**(119,488)**	**-**	**-**	**-**	**-**
Repayment of lease liabilities including interest	**-**	**-**	**(28,034)**	**-**	**-**	**-**
Shareholders' contribution	**-**	**-**	**-**	**-**	**1,083,683**	**-**
Shareholder's account	**-**	**-**	**-**	**-**	**-**	**688,954**
Changes from financing cashflow:	**547,273**	**(119,488)**	**(28,034)**	**-**	**1,083,683**	**688,954**
Other (i)	**(184,385)**	**-**	**8,622**	**357,176**	**-**	**(1,346,534)**
Balance at 31 December 2022	**2,468,616**	**-**	**299,891**	**403,212**	**1,083,683**	**(2,337,640)**
2021						
Balance at 1 January 2021	2,131,099	-	339,366	(70,193)	-	(1,680,060
Proceed from borrowings	232,957	-	-	-	-	-
Repayment of borrowings	(244,725)	-	-	-	-	-
Finance cost paid	-	(62,086)	-	-	-	-
Repayment of lease liabilities including interest	-	-	(32,015)	-	-	-
Shareholder's contribution	-	-	-	-	-	-
Shareholder's account	-	-	-	-	-	-
Changes from financing cashflow:	(11,768)	(62,086)	(32,015)	-	-	-
Other (i)	(13,603)	-	11,952	116,229	-	-
Balance at 31 December 2021	2,105,728	-	319,303	46,036	-	(1,680,060)

(i) Others include non-cash impacts of new leases, foreign exchange fluctuations, valuation changes on derivatives and other non-cash transactions with shareholders.

*The closing balance under Shareholder's Account AED 2,337.64 million is transferred to retained earnings as per an agreement amongst the shareholders.

20 RIGHT-OF-USE ASSETS AND LEASE LIABILITIES

Set out below are the carrying amounts of the Group's right-of-use assets and lease liabilities and the movements during the year:

Right-of-use assets

	Land AED 000	***Building AED 000***	***Vessels AED 000***	***Plant & Machinery AED 000***	***Office Equipment AED 000***	***Total AED 000***
2022						
Cost:						
1 January 2022	**25,845**	**3,260**	**8,599**	**329,797**	**294**	**367,795**
Addition	**-**	**29,217**	**-**	**-**	**-**	**29,217**
Effect of movement in exchange rate	**(2,770)**	**(349)**	**(922)**	**(35,343)**	**-**	**(39,384)**
31 December 2022	**23,075**	**32,128**	**7,677**	**294,454**	**294**	**357,628**
Accumulated Depreciation						
I January 2022	**4,308**	**686**	**5,733**	**54,966**	**294**	**65,987**
Depreciation charge for the year	**1,308**	**208**	**1,741**	**16,695**	**-**	**19,952**
Effect of movement in exchange rate	**(864)**	**(74)**	**(614)**	**(5,890)**	**-**	**(7,442)**
31 December 2022	**4,752**	**820**	**6,860**	**65,771**	**294**	**78,497**
Carrying Amount:						
31 December 2022	**18,323**	**31,308**	**817**	**228,683**	**- -**	**279,131**

	Land AED 000	*Building AED 000*	*Vessels AED 000*	*Plant & Machinery AED 000*	*Office Equipment AED 000*	*Total AED 000*
2021						
Cost:						
1 January 2021	26,109	3,293	8,687	333,160	294	371,543
Addition	-	-	-	-	-	-
Effect of exchange rate	(265)	(33)	(88)	(3,363)	-	(3,749)
31 December 2021	25,844	3,260	8,599	329,797	294	367,794
Accumulated Depreciation;						
I January 2021	2,901	462	3,861	37,018	220	44,462
Depreciation charge for the year	1,459	233	1,944	18,635	74	22,345
Effect of exchange rate	(54)	(9)	(72)	(687)	-	(822)
31 December 2021	4,306	686	5,733	54,966	294	65,985
Net Carrying Value 31 December 2021	21,538	2,574	2,866	274,831	-	301,809

Lease Liabilities

	2022 AED '000	*2021 AED '000*
As at 1 January	**319,303**	339,366
Addition during the year	**29,217**	-
Interest expense	**13,327**	14,468
Payments made during the year	**(28,034)**	(32,015)
Effect of movement in exchange rate	**(33,922)**	(2,516)
As at 31 December	**299,891**	319,303

Lease Liabilities - continued

Lease liabilities are disclosed in the consolidated statement of financial position as:

	2022 *AED'000*	*2021* *AED'000*
Current	**25,487**	16,803
Non-current	**274,404**	302,500
	299,891	319,303

The average effective interest rate applied in the leases are from 2% to 5% (2021: 2% to 5%) per annum.

Maturity analysis of lease liabilities is disclosed in note 31.3.

The following are the amounts recognised in the consolidated statement of profit or loss:

	2022 *AED'000*	*2021* *AED'000*
Depreciation on right-of-use assets	**19,952**	22,345
Interest expense on lease liabilities	**13,327**	14,468
Expense relating to short term or low value leases	**304**	832
Total amount recognised in profit or loss	**33 583**	37,645

Depreciation on right of use assets in the consolidated statement of profit or loss is as follows:

	2022 *AED'000*	*2021* *AED'000*
Cost of sales	**19,952**	22,272
General and administrative expenses	**-**	73
	19,952	22,345

Following balances are recognized in consolidated statement of cash flows

	2022 *AED 000*	*2021* *AED 000*
Lease liability payment including finance expense	**28,034**	32,015

21 OTHER NON-CURRENT LIABILITIES

	2022 *AED '000*	*2021* *AED '000*
Decommissioning liability (note 21.1)	**62,943**	87,530
Provision for employees' end of service benefit (note 21.2)	**34,875**	25,355
Deferred Consideration	**79,051**	-
	176,869	112,885

* Deferred consideration is related with acquisition of Masdar Arlington Energy Storage UK Holdco, and it is expected to be paid in 2030.

21.1 Decommissioning liability

	2022 AED '000	2021 AED '000
As at 01 January	**87,530**	95,693
Unwinding of decommissioning liability	**900**	549
Other movement	**(16,107)**	(7,728)
Effect of movement in exchange rates	**(9,380)**	(984)
As at 31 December	**62,943**	87,530

A provision has been recognised for the decommissioning costs related to the London Array project. The costs are expected to be incurred from 2037. However, there is a possibility that the decommissioning will not take place until after that date.

The undiscounted and un-escalated amount of the expected cash flows required to settle the decommissioning liability is estimated to be AED 64.6 million as at 31 December 2022 (2021: AED 64.6 million). The liability for the expected cash flows, as reflected in the consolidated financial statements, has been inflated at 2.66% (2021: 2%) and discounted using a risk-free rate of 3.95% (2021: 1.15%). Abandonments are expected to occur from 2037 and related costs will be funded mainly from the cash generated by the operating activities of Masdar Energy UK limited.

21.2 Employee's end of service benefits

Movement in the provision for employees end of service benefits is as follows:

	2022 AED '000	2021 AED '000
As at 01 January	**25,355**	39,211
Charge for the year	**9,799**	6,610
Liabilities directly associated with assets as held for sale	**-**	(16,161)
Paid during the year	**(279)**	(4,305)
As at 31 December	**34,875**	25,355

22 TRADE AND OTHER PAYABLES

	2022 AED '000	2021 AED '000
Trade payables	**30,809**	12,307
Project advances	**1,218,942**	248,427
Deferred income	**11,894**	11,788
Retentions	**26,039**	2,126
Accrued expenses	**201,900**	99,083
Other payables	**101,975**	54,558
	1 591 559	428,289

The average credit period on trade payables is 31 days. No interest is charged on trade payables. The Group has financial risk management policies in place to ensure that all payables are paid within the pre-agreed credit terms.

23 REVENUES

	2022 AED '000	2021 AED '000
Revenue from contracts with customers	**617,289**	714,966
Finance lease and rental income	**4,104**	1,548
	621,393	716,514
Disaggregation of revenue from contracts with customers:		
Renewable power generation	**482,592**	415,401
Concession Revenue (i)	**73,141**	288,299
Special projects	**58,090**	8,608
Development fee income	**3,466**	2,658
	617,289	714,966
Geographical markets		
United Kingdom	**481,797**	415,401
United Arab Emirates	**60,395**	9,718
Uzbekistan	**74,292**	289,847
Kingdom of Saudi Arabia	**805**	-
	617 289	714,966
Timing of revenue recognition:		
Over time	**90,419**	288,299
At a point in time	**526,870**	426,667
	617 289	714,966

(i) Concession Revenue

	2022 AED 000	2021 AED 000
Revenue from construction	**60,799**	286,764
Revenue from operation	**12,342**	1,535
	73,141	288,299

Trade Receivables and contract assets from contracts with customers:

		2022 AED 000	2021 AED 000
Trade receivable	*13*	**28,173**	30,711
Contract assets	*13.3*	**324,272**	280,026
Contract liabilities – deferred income	*22*	**11,894**	11,788

Movement in contract asset:

	2022 AED '000	2021 AED '000
As at 01 January	**280,026**	-
Concession revenue	**73,141**	288,299
Receipts during the year	**(18,235)-**	(5,136)
Effect of movement in exchange rates	**(10,660)**	(3,137)
As at 31 December	**324,272**	280,026

Trade Receivables and contract assets from contracts with customers - continued

The transition from a contract asset to a receivable occurs once the amounts to be received have no conditions, other than the passage of time. While operator is obliged to provide services (by also maintaining the asset's performance to meet contracted standards) during the operating phase in order to be paid the consideration for its earlier construction services, the contract asset remains conditional.

Revenue from related parties is disclosed in note 12.

Movement in contract liabilities:

	2022 AED '000	*2021 AED '000*
As at 01 January	**11,788**	-
Net movement in profit or loss	**106**	11,788
As at 31 December	**11,894**	11,788

23.1 COST OF SALES

	2022 AED '000	*2021 AED '000*
Service Concession cost of sale - construction	**59,607**	281,141
Service Concession cost of sale – operation	**4,571**	1,510
Depreciation	**84,108**	89,051
Operation and maintenance	**75,787**	71,066
Right of Use Asset depreciation	**19,952**	22,272
Others	**41,568**	6,824
	285,593	471,864

Other cost is related Source Trading Company cost of sale.

24 GOVERNMENT GRANTS

24.1 Income from Government Grants

	2022 AED '000	*2021 AED '000*
Income from government grants	**57,568**	30,052
Expenses incurred in relation to government grants	**(57,568)**	(27,522)
	-	2,530

Income from government grants mainly represents the annual budgetary grants related to income for operation of the IRENA and Zayed Sustainability Prize. Grants related to assets or activities which are yet to be undertaken are included within deferred government grants.

24.2 Land grants

The Group has received the following parcels of land by way of government grants, which have been classified into the 'future economic benefits established', 'no future economic benefits' and 'future economic benefits uncertain' categories. Where future economic benefit has been established, land is recognised as either property, plant and equipment ("PPE") or assets held for sale (HFS).

Land identification	*Granted year*	*Area in square ft*	*Cost as at 31 December 2022 AED '000*	*Cost as at 31 December 2021 AED '000*	*Recognised as*
Future economic benefits established					
Masdar City Phase 1	2008	5,907,593	-	89,545	HFS
Masdar City Phase 2	2008	5,869,798	-	131,367	HFS
Masdar City Phase 4	2008	1,064,504	-	1,065	HFS
Masdar City Phase 5	2008	12,050,811	-	155,688	HFS
Etihad	2014	418,738	-	97,900	HFS
IRENA Headquarters	2008	126,861	-	48,320	HFS
Siemens	2010	69,176	-	35,746	HFS
Incubator	2010	36,438	-	24,985	HFS
Madinat Zayed	2008	26,909,776	-	-	PPE
Hai Al Dawoody	2009	1,076	-	-	PPE
Hamran	2009	1,076	-	-	PPE
10 MW Power Plant	2008	2,283,359	-	-	HFS
Ryan	2008	296,632	-	-	HFS
Khazna	2008	592,796	-	88,670	HFS
GEMS	2014	457,520	-	68,041	HFS
Visitor centre	2016	70,429	-	-	HFS
MI Neighbourhood	2016	609,656	-	98,121	HFS
Eco Villa	2016	25,205	-	-	HFS
Accelerator	2016	133,892	-	5,425	HFS
Accelerator II	2019	144,096	-	3,331	HFS
Siadah	2019	122,769	-	31,398	HFS
Reportage Hospitality	2019	95,648	-	24,309	HFS
B-02	2020	223,106	-	33,750	HFS
J-02	2021	576,181	-	74,574	HFS
M - 10b	2021	64,584	-	4,643	HFS
MC 2	2021	311,313	-	43,102	HFS
Future economic benefits uncertain					
Madinat Zayed	2008	116,202,049	-	-	PPE
No future economic benefits					
Masdar City Land	2008	15,753,053	-	-	HFS

Future economic benefits established

The part of the Madinat Zayed land that has been identified and used for the purpose of construction and operation of a solar power station has been recorded as property, plant and equipment at nominal value. The remainder of the land has been classified as future economic benefit uncertain as discussed below.

The Hai Al Dawoody and Hamran land have been identified for the purpose of testing of solar radiation in relation to solar plants projects and, accordingly, have been recorded as property, plant and equipment at nominal value.

Future economic benefits uncertain

The Group is of the view that the future economic benefits from the use of the remaining Madinat Zayed land is uncertain as the future use of this land is unknown and the Group will not comply with the conditions attaching to them or there is a possibility that it will not be used for commercial purposes and may, possibly, revert to the Government. Accordingly, it is uncertain that future economic benefits will flow to the Group from the ownership of the Madinat Zayed land.

The areas of land identified as held for sale (HFS) relates to land within Masdar City that are part of the overall assets included in the sale of Masdar City during 2022.

25 OTHER INCOME

	2022	*2021*
	AED '000	*AED '000*
Gain on disposal of investment in jointly controlled entity (note 9)	**-**	28,119
Dividend income from a joint venture (i)	**85,085**	125,239
Others (ii)	**365,307**	107,953
	450,392	261,311

(i) During the year, the Group recognized dividend income amounting to AED 85.08 million (GBP 18.9 million) *(2021: AED 125.24 million (GBP 25.2 million)* from a joint venture, Dudgeon Offshore Wind UK Limited. The amount of dividend, being in excess of the carrying amount of the investment in joint venture, has been recognised in the consolidated statement of comprehensive income.

(ii) Others include derivative gain of AED 317.11 million from Azerbaijan, Jizzak, Samarkand, Sherabad, Zarafshan and Ella projects (2021: Nil).

26 GENERAL AND ADMINISTRATIVE EXPENSES

	2022	*2021*
	AED '000	*AED '000*
Staff cost	**252,160**	244,602
Advertising, publicity, and events	**75,990**	24,234
Depreciation (note 6 and note 20)	**2,194**	8,095
Amortization (note 8)	**4,305**	5,774
Others*	**58,895**	1,060
	393,544	283,765

General and administrative expenses during the year included AED 57.57 million *(2021: AED 27.52 million)* charged as part of expenses incurred in relation to government grants (note 24).

*Other expenses are mainly related with office expenses reported in Masdar Americas, Masdar Azerbaijan, Nur Navoi Solar FE, PT Masdar Clean Energy Indonesia LLC, Shamal Zarafshan and ADFEC Morocco, ADFEC Office expenses and Travel expenses.

26.1 PROJECT EXPENSES

	2022	*2021*
	AED '000	*AED '000*
Project expense	**144,460**	76,017

Project expenses are related to legal, technical, financial and tax consultancies for upcoming projects.

27 FINANCE EXPENSES

	2022	*2021*
	AED '000	*AED '000*
Interest expense on borrowings	**58,021**	52,601
Bank charges	**8,783**	9,485
Interest on lease liabilities (note 20)	**13,327**	14,468
Net foreign exchange gain/loss	**40,347**	29,555
	120,478	106,109

27.1 FINANCE INCOME

	2022 AED '000	2021 AED '000
Interest income on loans and receivables (including bank balances)	**42,130**	48,127

28 INCOME TAXES RELATING TO CONTINUING OPERATIONS

28.1 Income tax recognised in consolidated statement of profit or loss

	2022 AED '000	2021 AED '000
Tax expense		
Income tax	**(20,924)**	(5,839)
- Prior year	**(16,263)**	-
- Current year	**(4,661)**	(5,839)
Deferred tax	**(26,697)**	(43,202)
Total income tax expense recognised in the current year relating to continuing operations	**(47,621)**	(49,041)

The Company operates in the UAE and, accordingly, is not subject to tax on its profits. The Group's net income tax expense of AED 47 million *(2021: AED 49 million)* is a result of income taxes associated with Masdar Energy UK Limited and Masdar Offshore Wind UK Limited, subsidiaries that operate in the United Kingdom and Nur Navoi Solar FE, a subsidiary located in Uzbekistan. Deferred tax assets primarily relate to taxable losses and the deferred tax liability relates to capital allowances in advance of depreciation.

The income tax expense for the year can be reconciled to the accounting profit as follows:

	2022 AED '000	2021 AED '000
Profit before income tax from continuing operations	**499,744**	229,753
Profit subject to tax	**269,369**	179,284
Income tax expense	**(51,180)**	(34,064)
Effect of non-deductible items and taxable allowances	**(6,588)**	(6,997)
Effect of temporary differences arising from other assets	**5,712**	6,224
Utilization of brought forward tax losses	**21,451**	(11,652)
Effect of difference in applicable tax rates	**(12,355)**	(2,552)
Prior year adjustment	**(4,661)**	-
Income tax expense recognised in consolidated statement of profit or loss	**(47,621)**	(49,041)

The tax rate used for the 2022 and 2021 reconciliations above is the corporate tax rate of 19% *(2021: 19%)* of Masdar Energy UK Limited on taxable profits under tax laws in the United Kingdom.

Deferred tax assets and liabilities as at 31 December 2022 have been calculated at 25% *(2021: 25%)* being the substantively enacted tax rate at the end of reporting period.

INCOME TAXES RELATING TO CONTINUING OPERATIONS - continued

Current tax movement

	2022 ***AED '000***	*2021* *AED '000*
As at 01 January	**(5,821)**	1,850
Current year charge including prior year	**20,924**	5,839
Tax paid	**(12,128)**	(14,512)
Effect of movement in exchange rates	**501**	1,002
Income tax (recoverable) / payable	**3,476**	(5,821)

28.2 Deferred tax balances

The following is the analysis of deferred tax assets (liabilities) presented in the consolidated statement of financial position:

	2022 ***AED '000***	*2021* *AED '000*
Deferred tax assets	**107,993**	146,112
Deferred tax liabilities	**(256,075)**	(231,685)
	(148,082)	(85,573)

	At 1 January AED '000	***Recognised in profit or loss AED '000***	***Recognised in other reserves AED '000***	***Effect of movement in exchange rate AED '000***	***At 31-December AED '000***
2022:					
Deferred tax liabilities in relation to:					
Property, plant and equipment	**(224,601)**	**3,689**	**-**	**23,859**	**(197,053)**
Other liabilities	**(7,084)**	**(3,723)**	**(50,120)**	**1,905**	**(59,022)**
					(256,075)
Deferred tax assets in relation to:					
Tax losses	**135,477**	**(21,451)**	**-**	**(10,427)**	**103,599**
Other assets	**10,635**	**(5,212)**	**-**	**(1,029)**	**4,394**
					107,993
	(85,573)	**(26,697)**	**(50,120)**	**14,308**	**(148,082)**
2021:					
Deferred tax liabilities in relation to:					
Property, plant and equipment	(173,923)	(53,616)	-	2,938	(224,601)
Other liabilities	-	-	(6,889)	(195)	(7,084)
					(231,685)
Deferred tax assets in relation to:					
Tax losses	127,126	11,652	-	(3,301)	135,477
Other assets	22,608	(1,238)	(10,493)	(242)	10,635
					146,112
	(24,189)	(43,202)	(17,382)	800	(85,573)

Tax losses carried forward of AED 414.4m (2021 AED 559.4m) do not have any expiry period and are applied at an average tax rate of 25% (2021 24.2%), giving rise to a deferred tax asset of AED 103.6 million (2021: AED 135.48 million).

29 DISCONTINUED OPERATION AND ACQUISITION OF SUBSIDIARIES

29.1 Discontinued operation

29.1.1 Sustainable Real Estate as discontinued operation

During the prior year, following the guidance of His Highness Sheikh Mohammed bin Zayed Al Nahyan, an announcement was made by the shareholder to sell a majority interest in the Company. The transaction involves the sale of a stake in the Clean Energy (CE) business and then shareholder retaining 100% equity interest in the Sustainable Real Estate (SRE) business. The SRE business will be structured through a separate legal entity and this legal entity will then be wholly owned by the sole shareholder. This was achieved through a series of transactions completed on 1 December 2022 and the SRE business was classified as Held for Sale (HFS) in the consolidated statement of financial position and as discontinued operations in the consolidated statement of comprehensive income up until this disposal date.

Financial performance:

	2022	*2021*
	AED '000	*AED 000*
Revenue	**354,153**	423,959
Cost of sales	**(102,020)**	(146,239)
Gross profit	**252,133**	277,720
Other Income	**5,503**	3,880
Share of Results of equity-accounted investees	**(1,884)**	(2,843)
Provision for expected credit losses on trade receivable, net	**(6,411)**	-
Government grant income	**13,397**	17,712
Change in fair value of investment properties	**-**	106,947
General expenses	**(181,927)**	(133,623)
Profit after tax from SRE	**80,811**	269,793

The significant classes of assets and liabilities in the consolidated financial statements were as follows:

	30 November 2022 disposed	***31 December2021***
	AED '000'	***AED '000***
Assets		
Property, plant and equipment	**169,766**	188,920
Investment properties	**2,856,006**	2,783,442
Finance lease receivables	**305,736**	392,836
Intangible assets	**5**	339
Inventories	**363,863**	377,665
Cash and cash equivalents	**139,012**	87,842
Due from related parties	**-**	27,130
Investment in equity accounted investees	**2,647**	2,932
Non-current trade receivables	**-**	6,146
Trade and other receivables	**416,602**	226,977
Total assets	**4,253,637**	4,094,229
Liabilities		
Due to related parties	**-**	561
Other non-current liabilities	**694,467**	716,170
Trade and other payables	**429,641**	461,583
Total liabilities	**1,124,108**	1,178,314

29.1 Discontinued operations - continued

Cash Flow from discontinued operations

	For the period from 01 January to 30 November 2022	*2021*
	AED 000	*AED 000*
Net cash flows used in operating activities	**134,240**	86,523
Net cash flows used in investing activities	**(73,569)**	(191,953)
Net cash flows generated by financing activities	**(9,502)**	-

29.2 ACQUISITION OF SUBSIDIARIES

29.2.1 Acquisition of Ninety Sixth Investment Company LLC:

On 30 November 2022 the group acquired a 100% interest in the shares of Ninety Sixth Investment Company LLC, a company registered in the UAE. A Company previously fully owned by the Shareholder and transferred for fair value of the assets and liabilities of Ninety Sixth Investment Company LLC on 30 November 2022.

Ninety Sixth Investment Company LLC holds investments in operating wind and solar jointly controlled entities and provides asset management services of these investments on behalf of the Company. Operational investments include: Sterling Wind, a 30 MW wind farm in Lea County, New Mexico, USA; Rocksprings, a 149 MW wind farm in Val Verde County, Texas, USA; and six assets under the Blue Palm structure of Coyote, a 243 MW wind farm in Scurry County, Texas, USA; Desert Harvest 1, a 114 MW solar PV farm in Riverside County, California, USA; Desert Harvest II, a 100 MW solar PV farm and 40 MW battery storage project in Riverside County, California, USA; Las Majadas, a 273 MW wind farm in Willacy County, Texas, ISA; Maverick I, a 173 MW Solar PV farm in Riverside County, California, USA; Maverick 4, a 136 MW Solar PV farm in Riverside County, California, USA

The Company has undertaken an internal preliminary assessment of the fair values of the identifiable net assets and provisionally concluded that their total fair values approximate to the total carrying values of the net assets in the underlying entities. A formal external review will be conducted within one year of the acquisition date and should that conclude on any adjustments to the above amounts then the accounting for the acquisition will be revised at that point.

29.2.2 Acquisition of Arlington (Group Services) Limited:

On 20 October 2022 the group acquired a 90% equity interest in the Arlington (Group Services) Limited (AGSL), a company registered in the United Kingdom.

AGSL comprises a group of companies in the early stage of developing battery energy storage businesses in the United Kingdom and has the rights to such development at a number of determined sites in the United Kingdom. The consideration payable includes a contingent proportion, payable if certain battery storage development milestones are achieved. The Group has assessed the likelihood of these milestones being achieved and estimated the consideration due. The excess of this total consideration over the net assets of the AGSL group at the date of acquisition has been provisionally recognised as goodwill, though the Group will undertake a formal assessment of the separately identifiable assets (including, for instance, other intangible assets such as know-how and licences), and liabilities at the date of acquisition within one year of that date, which may result in the allocation of that goodwill to those assets and liabilities, at which point the accounting for the acquisition will be revised.

29.2.2 Acquisition of Arlington (Group Services) Limited - continued

The consideration for the acquisition consists of:

- GBP 4.56 million in cash on completion of the sale for the all the 900 Class A ordinary shares.
- GBP 6.50 million deferred cash planning condition consideration; and
- A deferred consideration of a minimum of GBP 12 million and a maximum of GBP 30 million based on installed capacity that has become operational by the end of 31 December 2030.

The planning condition was met, and consideration paid in January 2023.

Acquisition costs incurred by the Company have been included in the administrative expenses for the year.

The identifiable assets acquired, and liabilities assumed at the acquisition date:

	AED 000
Property plant and equipment	**5,673**
Cash and cash equivalent	**10,242**
Receivables and prepayments	**4,305**
Payable and accruals	**(4,165)**
Total identifiable net assets acquired	**16,055**

The Company has made an internal, provisional assessment of the fair values of the identifiable net assets and concluded that the carrying values align with the fair value.

Goodwill arising from the acquisition has been recognized as follows:

	AED 000
Consideration transferred	**71,861**
Planning condition consideration	**28,918**
Deferred consideration	**79,408**
Total consideration	**180,187**
Identifiable net assets acquired	**(16,055)**
Total Goodwill on acquisition of AGSL	**164,132**

30 COMMITMENTS AND CONTINGENCIES

Capital commitments

Capital commitments as at 31 December are as follows:

	1 year or less AED '000
2022:	
Capital commitments	**925 851**
Group's share in the commitments of its equity-accounted investees	**36,604**
Commitments towards Financials Investment FVTP&L	**113,570**
Group's share in the commitments of its joint operations	**1,606**
2021:	
Capital commitments	843,613
Group's share in the commitments of its equity-accounted investees	22,786
Commitments towards Financials Investment FVTP&L	135,356
Group's share in the commitments of its joint operations	863

COMMITMENTS AND CONTINGENCIES - continued

Operating commitments
As at 31 December 2022, the Group has operating lease commitments amounting to AED 12.25 million (2021: AED 25.74 million) repayable within one year from the end of the reporting period.

Guarantees
As at 31 December 2022, the Group had issued corporate guarantees which benefit lenders in respect of USD-denominated equity bridge loan facilities amounting to AED 531 million (2021: AED 531 million) for the purposes of funding its equity commitments on the Dumat Al Jundal, Al Dhafra PV2 and Noor Jeddah projects. In addition, the company has issued a corporate guarantee for the benefit of lender in respect of an equity bridge loan in its subsidiary Nur Navoi Solar for the amount of AED 312 million (2021: AED 312 million).

The Group has issued performance guarantees amounting to AED 2,315 million against various projects as at 31 December 2022 (2021: 1,491.06 million).

As at 31 December 2022, the banks have issued guarantees and letters of credit for the Group under various uncommitted trade finance facilities with banks including Abu Dhabi Commercial Bank, First Abu Dhabi Bank, Societe Generale, Emirates NBD and MUFG amounting to AED 1,204 million (2021: 961.39 million).

31 FINANCIAL INSTRUMENTS

31.1 Capital management

The policy of the Board of Directors is to maintain a strong capital base to maintain investor, creditor and market confidence and to sustain future development of the business. The Board of Directors monitors the return on capital.

The Company and its subsidiaries incorporated in the UAE are subject to certain capital requirements of the UAE Federal Decree Law No. 32 of 2021, which they are compliant with. Neither the Company nor any of its subsidiaries are subject to externally imposed capital requirements.

The capital structure of the Group consists of net debt (bank borrowings offset by cash and bank balances, excluding restricted cash) and equity of the Group (comprising issued capital, share capital under issuance, reserves and additional shareholder contribution offset by accumulated losses as detailed in notes 16 to 18).

Gearing ratio
The gearing ratio as at 31 December is as follows:

	2022 ***AED '000***	*2021* *AED '000*
Debt (i)	**2,468,617**	2,105,728
Cash and bank balances	**(3,150,649)**	(716,497)
Net debt	**(682,032)**	1,389,231
Equity (ii)	**6 518 906**	4,983,693
Net debt to equity ratio	**(10.46%)**	27.88%

(i) Debt comprises bank borrowings (note 19).

(ii) Equity includes all capital and reserves of the Group that are managed as capital.

31.2 Categories of financial instruments

	2022	*2021*
	AED '000	*AED '000*
Financial assets not carried at fair value		
Finance lease receivables	**52,201**	-
Loans to related parties	**530,076**	452,976
Trade and other receivables	**747,899**	275,273
Due from related parties	**94,236**	173,102
Cash and cash equivalents	**3,150,649**	716,497
	4,575,061	1,617,848
Financial liabilities not carried at fair value		
Bank borrowings	**2,468,617**	2,105,728
Lease liabilities	**299,891**	319,304
Trade and other payables including other non-current liabilities *	**514,610**	267,392
Due to related parties	**41,103**	32,579
	3 324 221	2,725,003

As at 31 December 2022 and 2021, the Group considers that the carrying amounts of above financial assets and financial liabilities recognised in the consolidated financial statements approximate their fair values.
*This does not include project advances and end of service benefits

31.3 Financial risk management

Financial risk management

The Group has exposure to the following risks arising from financial instruments:

• Credit risk
• Liquidity risk
• Market risk.

Risk management framework

The Company's board of directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The board of directors has established the risk management committee, which is responsible for developing and monitoring the Group's risk management policies. The committee reports regularly to the board of directors on its activities.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to maintain a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Group audit committee oversees how management monitors compliance with the Group's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. The Group audit committee is assisted in its oversight role by internal audit. Internal audit undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the audit committee

Market risk
Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: currency risk, interest rate risk and credit risk.

Currency risk
Currency risk is the risk that the Group is exposed to currency fluctuations on its transactions that are denominated in a currency other than the respective functional currencies of Group entities. There is no significant exposure to currency risk to the Group. Whilst the Group has significant currency exposure to the US dollar, this does not result in a significant currency risk to the Group as the rate of the AED is pegged to the US dollar.

Interest rate risk
Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's variable rate borrowings.

Interest rate sensitivity analysis
The sensitivity analyses below have been determined based on the exposure to interest rates for both derivatives and non-derivative instruments at the end of the reporting period. For floating rate liabilities, the analysis is prepared assuming the amount of the liability outstanding at the end of the reporting period was outstanding for the whole year. A 100-basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents Group's assessment of the reasonably possible change in interest rates.

If interest rates had been 100 basis points higher/lower and all other variables were held constant, the Group's profit for the year ended 31 December 2022 would decrease/increase by AED 6.79 million (2021: AED 0.18 million) and Equity, other comprehensive income net of tax effect AED 17.9 million (2021: AED 20.88 million) for total bank borrowing AED 2,468.62 million (2021: AED 21.05 million).

Interest rate swap contracts
Under interest rate swap contracts, the Group agrees to exchange the difference between the fixed and floating rate interest amounts calculated on agreed notional principal amounts. Such contracts enable the Group to mitigate the risk of changing interest rates on the fair value of issued fixed rate debt and the cash flow exposures on the issued variable rate debt.

Cashflow sensitivity analysis for variable rate instruments:

	Profit or loss		***Equity, net of tax***	
Effects in AED '000'	***100 bp Increase***	***100 bp Decrease***	***100 bp Increase***	***100 bp Decrease***
31 December 2022				
Variable-rate instruments	**(6,786)**	**6,786**	**-**	**-**
Interest rate swaps	**-**	**-**	**17,900**	**(17,900)**
Cash flow sensitivity (net)	**(6 786)**	**6 786**	**17 900**	**(17 900)**

	Profit or loss		*Equity, net of tax*	
Effects in AED '000'	*100 bp Increase*	*100 bp Decrease*	*100 bp Increase*	*100 bp Decrease*
31 December 2021				
Variable-rate instruments	(179)	179	-	-
Interest rate swaps	-	-	20,878	(20,878)
Cash flow sensitivity (net)	(179)	179	20,878	(20,878)

The fair value of interest rate swaps at the end of the reporting period is determined by discounting the future cash flows using the curves at the end of the reporting period and the credit risk inherent in the contract. The average interest rate is based on the outstanding balances at the end of the reporting period.

The Group designates derivatives (interest rate swaps) as cash flow hedging instruments, therefore, a change in interest rates booked in other comprehensive income and would not affect profit or loss, group also undertake derivatives for upcoming projects on the basis of fair value hedges and book fair value through profit or loss

Financial risk management - continue

The following table provides a reconciliation by risk category of components of equity and analysis of other comprehensive income, net of tax, resulting from cash flow hedge accounting:

	2022 Hedging Reserve AED '000'	*2021 Hedging Reserve AED '000'*
As at 1 January	**(126,722)**	(329,138)
Change in fair value – Interest rate swap	**199,427**	90,415
Share of movement in equity accounted investees	**460,773**	119,913
Deferred Tax movement	**(50,120)**	(6,889)
Effect of movement in exchange rates	**2,226**	(1,023)
As at 31 December	**485,584**	(126,722)

Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. Credit risk arises principally from the Group's trade and other receivables and cash and bank balances.

The Group has adopted a policy of only dealing with creditworthy counterparties. The Group attempts to control credit risk by monitoring credit exposures and continually assessing the creditworthiness of third parties. Balances with banks are assessed to have low credit risk of default since these banks are highly regulated by the central banks in the country of operation.

Concentration of credit risk arises when a number of counterparties are engaged in similar business activities, or activities in the same geographic region, or have similar economic features that would cause their ability to meet contractual obligations to be similarly affected by changes in economic, political, or other conditions. Concentration of credit risk indicates the relative sensitivity of the Group's performance to developments affecting a particular industry or geographic location. The Group is exposed to credit risk on cash and bank balances, trade, and other receivables, due from related parties, loans to related parties and finance lease receivables.

The amount that best represents the maximum credit risk exposure on financial assets at the end of the reporting period, in the event of counterparties failing to perform their obligations generally approximates their carrying value. Trade and other receivables and balances with banks are not secured by any collateral.

Maximum exposure to credit risk without considering any collateral or bilateral netting agreements:
The table below shows the maximum exposure to credit risk for the components of the statement of financial position. The maximum exposure is shown gross, before the effect of mitigation through the use of bilateral netting and collateral agreements.

	2022 AED '000	*2021 AED '000*
Finance lease receivables (note 11)	**52,201**	-
Loan to related parties (note 12)	**530,076**	452,976
Due from related parties (note 12)	**94,236**	173,102
Contract Asset (note 13)	**324,272**	280,026
Trade and other receivables (note 13)	**1,069,794**	411,460
Derivative financial asset (31)	**403,212**	46,036
Cash and bank balances (note 15)	**3,150,649**	716,497
Total credit risk exposure	**5,624,440**	2,080,097

Where financial instruments are recorded at fair value the amounts shown above represent the current credit risk exposure but not the maximum risk exposure that could arise in the future as a result of changes in values.

Credit risk - continued

Cash and Bank balances with Fitch ratings

Fitch Rating	***2022*** ***AED '000'***	*2021* *AED '000'*
A-	**102,051**	110,499
A+	**225,520**	-
AA-	**2,795,152**	598,846
Cash and others	**27,926**	7,153
	3 150 649	716,497

Credit quality per class of financial assets

The Group's credit risk rating systems and processes differentiate exposures in order to highlight those with greater risk factors and higher potential severity of loss. Loan to related parties majorly relates to Shams Power Company PJSC, Sharjah Waste to Energy LLC, Infinity Power Holdings B.V and Baynouna Holdings BV, refer note 9 and 12 for details.

	31 December 2022				*31 December 2021*			
	Stage 1 12-month ECL AED'000	***Stage 2 Lifetime ECL Not credit-impaired AED'000***	***Stage 3 Lifetime ECL Credit-impaired AED'000***	***Total AED'000***	*Stage 1 12-month ECL AED'000*	*Stage 2 Lifetime ECL Not credit-impaired AED'000*	*Stage 3 Lifetime ECL Credit-impaired AED'000*	*Total AED'000*
Finance lease receivables	**-**	**53,889**	**-**	**53,889**	-	408,760	-	408,760
Provision for expected credit losses					-	**(15,924)**	-	**(15,924)**
Reclass Held for Sale	**-**	**(1,688)**	**-**	**1,688**				
Held for Sale reclass	**-**	**-**	**-**	**-**	-	(392,836)	-	(392,836)
-								
Total carrying amount	**-**	**52 211**	**-**	**52 211**	-	-	-	-
Loan to related parties	**439,487**	**164,231**	**-**	**603,718**	301,106	272,125	-	573,231
Provision for expected credit losses	**(32,582)**	**(41,060)**	**-**	**(73,642)**	(26,015)	(94,240)	-	(120,255)
Total carrying amount	**406,905**	**123,171**	**-**	**530,076**	275,092	177,885	-	452,976
Due from related parties	**94,236**	**-**	**-**	**94,236**	173,102	-	-	173,102
Provision for expected credit losses	**-**	**-**	**-**	**-**	-	-	-	-
Total carrying amount	**94 236**	**-**	**-**	**94 236**	173,102	-	-	173,102
Receivables under payment plan	**-**	**-**	**-**	**-**	84,540	-	-	84,540
Provision for expected credit losses	**-**	**-**	**-**	**-**	(142)	-	-	(142)
Held for Sale	**-**	**-**	**-**	**-**	(84,398)	-	-	84,398
Total carrying amount	**-**	**-**	**-**	**-**	-	-	-	-
Movement in Impairment loss allowance or ECL Provision								
Finance lease receivables provision								
At the beginning of the year	**-**	**-**	**-**	**-**	-	14,278	-	14,278
ECL recognised under IFRS 9	**-**	**-**	**-**	**-**	-	2,534	-	2,534
Reversal on cancellation	**-**	**-**	**-**	**-**	-	(888)	-	(888)
Reclass	**-**	**1,688**	**-**	**1,688**	-			
Held for Reclass	**-**	**-**	**-**	**-**		(15,924)		(15,924)
Total carrying amount	**-**	**1,688**	**-**	**1,688**	-	-	-	-
Loan to related parties' provision								
At the beginning of the year	**26,015**	**94,240**	**-**	**120,255**	40,700	103,360	-	144,060
ECL recognised under IFRS 9	**-**	**-**	**-**	**-**	-	-	-	-
At the beginning of the year (as per IFRS 9)	**26,015**	**94,240**	**-**	**120,255**	40,700	103,360	-	144,060
Transfer from stage 2 to stage 1								
Allowances for impairment made during the year	**8,908**	**420**	**-**	**9,328**	2,525	-	-	2,525
Reversal on recoveries during the year	**(1,569)**	**(46,283)**	**-**	**(47,852)**	(11,073)	(5,402)	-	(16,475)
Other	**-**	**-**	**-**	**-**	(5,097)	-	-	(5,097)
Effect of movement in exchange rates	**(772)**	**(7,317)**	**-**	**(8,089)**	(1,040)	(3,718)	-	(4,758)
Total carrying amount	**32 582**	**41 060**	**-**	**73 642**	26 015	94 240	-	120 255
Receivables under payment plan								
At the beginning of the year	-	-	-	-	83	-	-	83
ECL recognised under IFRS 9								
At the beginning of the year (as per IFRS 9)	-	-	-	-	83	-	-	83
Allowances for impairment made during the year	-	-	-	--	59	-	-	59
Reversal on cancellation during the year								
Held for Sale	-	-	-		(142)	-	-	(142)
Write-offs								
Total carrying amount	**-**	**-**	**-**	**-**	-	-	-	-

Credit quality per class of financial assets - continued

The loss allowance for other trade receivables is measured at an amount equal to lifetime expected credit losses under simplified approach as presented in note 13 to the Group's consolidated financial statements.

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group ensures that it has sufficient cash and liquid assets on demand to meet its expected operational expenses; this excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters. The Group maintains adequate amount of its cash resources in bank and in short term deposits.

The Group has significant future capital commitments (note 30) for which it relies completely on funding from the Parent Company.

The following tables detail the Group's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The tables have been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The tables include both interest and principal cash flows and excluding the impact of netting arrangements. To the extent that interest flows are floating rate, the undiscounted amount is derived from interest rate curves at the end of the reporting period.

The contractual maturity is based on the earliest date on which the Group may be required to pay.

	Within 1 year AED '000	***Between 1-2 year AED '000***	***Between 2-5 year AED '000***	***More than 5 years AED '000***	***Total AED '000***	***Carrying Amount AED '000***
2022						
Bank borrowing	**810,335**	**166,954**	**764,870**	**1,002,960**	**2,745,119**	**2,468,616**
Due to related parties	**41,103**	**-**	**-**	**-**	**41,103**	**41,103**
Other non-current liabilities	**-**	**-**	**-**	**141,994**	**141,994**	**141,994**
Trade and other payables	**1,280,756**	**-**	**-**	**-**	**1,280,756**	**1,591,559**
Lease liabilities	**38,243**	**36,486**	**85,955**	**230,491**	**391,175**	**299,891**
	2,170,437	**203,440**	**850,825**	**1,375,445**	**4,600,147**	**4,543,163**

	Within 1 year AED '000	*Between 1-2 year AED '000*	*Between 2-5 year AED '000*	*More than 5 years AED '000*	*Total AED '000*	*Carrying Amount AED '000*
2021						
Bank borrowing	172,984	176,414	781,297	1,266,685	2,397,380	2,105,728
Due to related parties	32,579	-	-	-	32,579	32,579
Other non-current liabilities	-	-	-	87,530	87,530	87,530
Trade and other payables	262,859	-	-	-	262,859	428,289
Lease liabilities	30,916	46,637	69,956	287,367	434,876	319,303
	499,338	223,051	851,253	1,641,582	3,215,224	2,973,429

Contract liabilities – Deferred Income

	2022 AED '000	*2021 AED '000*
Ageing of Contract liabilities		
Not past due	**11,894**	11,788
Past due but not impaired:		
Due for 61 to 120 days	**-**	-
Due for 121 to 360 days	**-**	-
Due for more than 360 days	**-**	-
	11,894	11,788

Liquidity risk - continued

The amount included above for variable interest rate instruments for non-derivative financial liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period.

The following table details the Group's liquidity analysis for its interest rate swaps. The table has been drawn up based on the undiscounted contractual net cash inflows and outflows on derivative instruments that settle on a net basis.

	Within 1-year AED '000	*Between 1 - 2 years AED '000*	*Between 2 - 5 years AED '000*	*Total AED '000*	*Carrying amount AED '000*
2022					
Interest rate swaps	**57,563**	**52,979**	**317,024**	**427,567**	**403,212**
2021					
Interest rate swaps	12,872	11,976	35,447	60,295	46,036

Financing facilities

The Group has access to financing facilities as described in note 19, of which AED 2,520.63 million were unused at the end of the reporting period (2021: AED 852.72 million). The Group expects to meet its other obligations from operating cash flows and proceeds of maturing financial assets.

The following table details various information regarding interest rate swap contracts outstanding at the end of the reporting period

	Notional principle Value 2022 AED '000'	*Notional principle Value 2021 AED '000'*	***Fair value 2022 AED '000'***	*Fair value 2021 AED '000'*
Outstanding receives floating pay fixed contracts				
Less than 1 year *	**(570,453)**	125,139	**166,693**	2,855
1 to 2 years *	**(457,591)**	133,622	**21,683**	3,042
2 to 5 years	**971,735**	689,382	**105,684**	13,570
5 years +	**1,874,429**	1,171,440	**109,152**	26,569
	1,818,120	2,119,583	**403,212**	46,036

*Notional profile in first two years are negative (increasing) due to Shamol Zarafshan and Azerbaijan loan drawdowns.

31.4 Fair value measurements

The following analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

- Level 1 – quoted prices in active markets for assets and liabilities
- Level 2 – inputs other than quoted prices included within Level 1 are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)
- Level 3 – inputs for the asset or liability that are not based on observable market data (unobservable inputs)

Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis

Some of the Group's financial assets and financial liabilities are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation technique(s) and inputs used).

Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis - continued

	Fair value as at		*Fair value hierarchy*	*Valuation technique(s) and key input(s)*
	2022	*2021*		
	AED'000	*AED'000*		
Financial Assets				
Derivative financial assets	**403,212**	46,036	Level 2	Future cash flows are estimated based on forward interest rates (from observable yield curves at the end of reporting period)
Financial assets carried at fair value through profit or loss				
Debt investment – HFEP	-	208,369	Level 3	Discounted cash flow
Equity investment – Zouk	**21,961**	34,903	Level 3	Net Asset Value

The fair values of the financial assets and financial liabilities included in the level 2 category above have been determined in accordance with generally accepted pricing models based on a discounted cash flow analysis, with the most significant observable inputs being the discount rate that reflects the credit risk of counterparties.

Derivative financial assets include USD 39 million (AED146.38 million) in respect of interest rate swap for upcoming projects, and other bank loan related hedges AED 256.83 million are disclosed in note number 19.

The fair values of the financial assets and financial liabilities included in the level 3 category above have been determined based on a discounted cash flow analysis and net asset values.

As at 31 December 2022 and 2021, the Group considers that the carrying amounts of other financial assets and financial liabilities recognised in the consolidated financial statements approximate their fair values.

32 Geographical information and segment reporting

Group is mainly in the business on renewable power generation across different geographies and accordingly Chief Operating Decision Maker (CODM) reviews the results of operating activities of the group as a single business segment.

The following tables present revenue, certain asset information relating to the Group based on geographical location as at 31 December:

2022

	United Arab Emirates AED'000'	**Europe AED '000'**	**Uzbekistan AED '000'**	**Kingdom of Saudi Arabia AED '000'**	**United States of America AED '000'**	**Australia AED '000'**	**Others AED '000'**	**Total AED '000'**
Revenues	**64,499**	**481,797**	**74,292**	**805**	**-**	**-**	**-**	**621,393**
Non-current assets	**1,022,882**	**2,152,732**	**297,061**	**90,173**	**1,994,576**	**159,643**	**463,297**	**6,180,364**

2021

	United Arab Emirates AED'000'	Europe AED '000'	Uzbekistan AED '000'	Kingdom of Saudi Arabia AED '000'	United States of America AED '000'	Australia AED '000'	Others AED '000'	Total AED '000'
Revenues	11,266	415,401	289,847	-	-	-	-	716,514
Non-current assets	178,406	2,423,313	278,099	176	-	42,075	392,149	3,314,218

33 Events after reporting date

In March 2023 Masdar, through its US subsidiary, acquired a 50% equity interest in Big Beau through Big Beau Class B Holdco for USD 85.76 million. Big Beau consists of 128 MW Solar wind farm and 40MW of battery storage and reached COD in December 2022. The wind farm is located in Kem County, California. The investment is classified as a jointly controlled and the Company will equity account for its share of results from the date of acquisition.

In February 2023 the Company acquired a 15% interest in Pertamina Geothermal Energy Tbk (PGE) by participating in PGE's initial public offering. Masdar acquired 6,209,421,300 shares at IDR 875 per share for a total consideration of IDR 5,433 billion (USD 365.65 million equivalent). 10% of PGE's shares are now publicly listed. PGE has rights to 13 geothermal working areas in Indonesia and has a total installed capacity of 1,877 MW, of which 672 MW are operated by PGE and 1,205 MW are under joint operation contractor. PGE is a green energy company that currently contributes 82% of the installed geothermal capacity in Indonesia. The Company will classify the investment as an associate and equity account for its share of results from the date of acquisition.

In February 2023 the Company received USD 370 million as a loan from the Shareholders. The loan is classified as a contributed equity loan and the funds were used for the completion of the acquisition in PGE. In April 2023 the Company received USD 65 million as a loan from the shareholders. The loan is classified as a contributed equity loan and the funds were used for the completion of the acquisition through Infinity Power BV.

Masdar has a 49% joint venture interest in Infinity Power Holdings BV. In March 2023 the JV acquired 100% of Lekela Power BV for a consideration of USD 825.44 million. Masdar's share of the consideration was USD 404.47 million. Lekela has a portfolio of seven operational scale wind power projects located South Africa, Egypt, and Senegal with an installed capacity of 1,035 MW.

* In these financial statements, certain comparative financial information has been reclassified for better presentation.

Abu Dhabi Future Energy Company PJSC (Masdar)

REPORT OF THE BOARD OF DIRECTORS AND
CONSOLIDATED FINANCIAL STATEMENTS

31 DECEMBER 2021

Abu Dhabi Future Energy Company PJSC (Masdar)

REPORT OF THE BOARD OF DIRECTORS

31 DECEMBER 2021

REPORT OF THE BOARD OF DIRECTORS
For the year ended 31 December 2021

It is our pleasure to report the activities and results for the year ended 31 December 2021 of Abu Dhabi Future Energy Company PJSC ("Masdar" or the "Company").

The Company consists of two primary commercial business operations, the Clean Energy business (CE) and the Sustainable Real Estate business (SRE). Following the guidance of His Highness Sheikh Mohammed bin Zayed Al Nahyan, in late 2021an announcement was made by the shareholder to sell a majority interest in the Company. The transaction involves the sale of the CE business and the shareholder would retain the SRE business. The SRE business will be structured through a separate legal entity and this legal entity will then be wholly owned directly by the existing shareholder. The transaction was not completed as of 31 December 2021 and the SRE business is, therefore, shown as Assets Held For Sale (HFS) in the consolidated statement of financial position and discontinued operations in the consolidated statement of comprehensive income. The key financial highlights refer to the continuing operation of the Company, which will be the CE business, while the Business Unit Performance refers to all units of the Company.

Business Review

Key financial highlights:

- Revenues of AED 716.51 million, an increase of 91.6% over 2020 primarily due to AED 288.30m in concession revenue recognized in 2021. The gross profit of AED 244.65 million (2020: AED 169.4 million) represents a margin of 34.1% (2020: 45.3%)

- Net income continuing operations of AED 180.71 million, a decrease of 54% over 2020 due to a gain on the sale of an investment in Spain recognized in 2020.

- Cost of fixed assets under PPE, including assets under construction, reduced by18% to AED 2.2 billion (changes in the year included increases from additions of AED 21 million, offset by reductions from, exchange differences of AED 21m, disposal of AED 9mand SRE PPE of AED 460m transferred to HFS .

- Equity of AED 4.98 billion, an increase of 13.3% over 2020 primarily due to a reduction in the accumulated loss of AED 451m in the year.

Masdar has grown into an organization with a substantial portfolio of diversified assets under management and development in a variety of demanding sectors, (including among others, the London Array and Dudgeon offshore wind farms in the UK, Masdar City, Shams One, the Concentrated Solar Power (CSP) plant in Abu Dhabi's western region, Tafila, the onshore wind farm in Jordan, DEWA Phase 3 an 800MW solar PV project in Dubai, the Baynouna 200MW solar PV project in Jordan, the Tesla 158 MW onshore wind project in Serbia, Hywind (the first utility scale floating offshore wind farm in the UK), 300MW solar PV and a 400MW wind farm in Saudi Arabia, 100 MW Solar PV in Uzbekistan and waste to energy projects in the UAE and Australia. As we have grown, we have continued to review our strategies, operating models, processes and organisational structure. Our goal is to get ever closer to a business that is designed to deliver both effectively and efficiently against our objectives whilst responding to market dynamics.

Business Unit Performance

Masdar Clean Energy

In 2021, while there has been a significant and continuous effect of COVID-19 global pandemic on supply chain disruption and significant increase in commodities and logistics costs, Masdar Clean Energy's ("Masdar CE") business has been extremely resilient; advancing delivery of projects in our existing asset base and securing substantial growth in 2021.

Approximately ~2.5 GW net capacity for Masdar CE representing a good mix of technologies that includes solar, wind and waste to energy was added across the globe covering Azerbaijan, Armenia, Uzbekistan, Greece, Serbia, Poland, Australia, Egypt and GCC enabling Masdar CE to capture a first mover advantage in these high potential markets, as well as affirming once more our leadership in the Middle East and North Africa by securing an additional 523 MW (net Masdar share) of solar capacity in 2021, while we have been extending our footprint in new and existing markets, our portfolio of operating assets continued to meet performance targets.

Business Unit Performance continued

During 2021, Masdar CE also entered into regionally based strategic partnerships with leading local or regional peers to further accelerate our growth in a sector that affords more opportunities and is increasingly characterized by local specificities and differing market norms. Masdar CE considers such regional offices as necessary enablers in executing our strategy and meeting our ambitious growth targets. They allow us to be closer to the opportunities, deploying capital earlier on in the development process, as well as mitigating risk and managing stakeholder relationships more effectively. Most recent expansion on this front includes offices in Singapore (APAC), London (UK - focused on offshore wind), Amsterdam (Netherlands) and Washington D.C. (USA). Further, we have established and are in the process of establishing offices to deliver and later manage our projects in Baku (Azerbaijan), Tashkent (Uzbekistan), Jakarta (Indoneisa) and elsewhere. Finally, Masdar CE has also expanded its operations as part of Joint Ventures such as HFE in Delhi (India), IPH in Cairo (Egypt), MTG in Europe, MWE in CIS and Solar Radiance in Indonesia.

2021 proved to be another successful year with regards to reaching project financial closes and advancing delivery for a number of projects:

- Nur Navoi 100MW – In December 2021, Masdar completed construction and achieved Commercial Operation Date on the Republic of Uzbekistan first public-private partnership (PPP) solar power plant.

- Cirata Floating Solar – In June 2021, Masdar reached Financial Close on the 145 MW PV plant, the first floating solar photovoltaic (PV) plant in Indonesia which will be built on a 225-hectare plot of the 6200-hectare Cirata Reservoir, in the West Java region.

- South Jeddah Solar PV 300MW – In April 2021, a consortium led by Masdar reached Financial Close and signed the Power Purchase Agreement (PPA) with the Offtaker SPPC to design, finance, build and operate part of the second phase of the Kingdom of Saudi Arabia's renewable energy program.

- East Rockingham Waste-to-Energy – In January 2020, Masdar made its first investment in Australia after acquiring a stake in the country's second utility-scale waste-to-energy (WTE) facility. The project construction progressed well in 2021, successfully completed grid connection and Commercial Operation Date (COD) is expected in 2022. Upon completion the project will process 300,000 tons per annum of non-recyclable municipal, commercial and industrial waste and up to 30,000 tons of bio-solids per annum. The facility will generate 29 MW of baseload renewable energy.

- Sharjah Waste-to-Energy – the first commercial WTE (30MW) in the UAE and the Middle East, which is a joint venture (50:50) between Masdar and Bee'ah is progressing in line with expectations. The project construction was largely completed by December 2021 and it is expected to achieve completion by Q2-2022.

- Dumat Al Jandal Wind Farm – In 2019, Masdar consortium was announced as winner of the tender for Saudi Arabia's first wind farm and the largest in the Middle East, 400 MW. Project completed construction, reached energization and targeting COD by end of 2022.

- Al Dhafra Solar PV – In December 2020 Abu Dhabi National Energy Company (TAQA) and Masdar – alongside partners EDF and JinkoPower announced a successful financial closing of the project. The record-breaking project will have a capacity of 2 GW and supply power to the plant's off-taker, Emirates Water and Electricity Company (EWEC). The project construction is progressing towards reaching energization by May-2022.

- Mlawa and Grajewo Wind Farms in Poland - Successfully completed construction of both wind farms which were inaugurated on 8 December 2021 at the Polish Pavilion at EXPO 2020

- Azerbaijan Area 60 230MW Solar PV and Zarafshan 500MW Wind Project - both projects signed PPA and are expected to reach Financial Close by 2Q 2022.

Part of Masdar CE, Masdar Energy Services has successfully initiated and completed a number of renewable energy projects during 2021, including advancing construction on projects across 11 Caribbean countries under the UAE Caribbean Renewable Energy Fund (CREF), after the successful completion of projects in Barbados, Bahamas and St. Vincent and the Grenadines in 2019. The Masdar Energy Services successfully commissioned a 5MW PV and

Business Unit Performance continued

2.5MWh battery storage project in the Seychelles and the 3MW Solar PV Hybrid Plant in Socotra. The unit is also delivering the flagship UAE Wind Turbines Pilot Project (13.5MW). The ESCo business segment completed construction and energization of projects in Abu Dhabi including: ADAC Midfield Terminal 2.98MW Solar PV Car Park, Miral Warner Brothers 7MWp Rooftop & 3MW PV plants in Socotra, and the set-up of Emerge, our dedicated platform for Energy Efficiency & On-site Solar PV in the UAE and Saudi Arabia. Under Emerge, the ESCo business further secured various projects including SeaWorld 8.2MWp; Al Khazna 7MWp; Al Dahra 1.2MWp.

Masdar CE made significant progress on its O&M services company (MSTS) where it established Masdar Power Services LLC, the onshore company as a regional Central Asia O&M hub and secured a 25 year O&M agreements with Nur Navoi (Uzbekistan) with future projects in the pipeline and established Energize O&M Company LLC, a JV between MSTS (60%) and EDF (40%) which took over the O&M services of DEWA 800 MW plant in Dubai.

Another dedicated team within Masdar CE continues to oversee a number of pilot activities in technologies and fields important to Abu Dhabi, most significantly in the area of Green Hydrogen (where a demonstration plant is to be built in collaboration with private and governmental entities in Masdar city), solar desalination, carbon trading and battery storage solutions.

Masdar City

Development at Masdar City, designed to be a global hub for clean technology and renewable energy as well as the innovation hub for Abu Dhabi made significant strides in 2021 despite the difficulty of working under Covid-19 restrictions. During 2021 Masdar City signed significant tenant agreements with the Abu Dhabi Center for Public Health for office space, G42 for an expanded presence at Masdar City with additional office space, and Khalifa University for residential accommodations for their students. This leaves Masdar City office space at or close to 100% for all office buildings. Accordingly two major investment projects received approval for development including the first commercial scale net zero buildings in the region, namely The Link and Masdar City Square (MC2). These developments will enable Masdar City to continue to push the boundaries of commercially viable sustainability. This will create showcase projects under construction during COP 28 which is planned to be hosted in the UAE in November 2023. In addition, the Platinum certified Eco Residences project, added the Rethinking The Future Award to its portfolio of awards in 2021.

Masdar City continues to attract third party developers, primarily in the residential and light industrial asset classes, with Reportage signing for an additional residential plot based on the attractiveness of their current development.

Masdar City launched the UAE's first Green sustainable real estate investment trust (the "Masdar Green REIT') in the region in 2020 with four assets initially place in the REIT: Siemens building, IRENA building, Incubator building, and Accelerator building. These four buildings represent over 57,000 sqm. of leaseable space and are valued at approximately AED 950m. Masdar City partnered with Emirates NBD Asset Management to provide management services to the Masdar Green REIT, together Masdar Capital Management (a recently established FSRA Regulated Fund Manager) and Emirates NBD Asset Management bring significant experience and expertise in sustainable real estate and property asset management to the partnership. This expertise enabled an increase in asset valuation within the REIT's real estate portfolio during 2021despite a very challenging market and also resulted in the Masdar Green REIT securing an approved financing facility with FAB at very competitive rates. The financing facility will be executed during the second half of 2022.

Core to the strategy of creating an attractive community while third parties develop many of the individual plots, Masdar City is developing the two main park areas and significant progress was made on both in 2021. Central Park, a community green space which will connect the Masdar Institute buildings to the central core of the IRENA building, saw phase 1 of the park completed in 2019 while phase 2 began construction in 2020 and was substantially completed during 2021 (expected to be opened in 2022). Discovery Park, a community recreation and family education park began construction of the South phase in 2020 with a FIFA football field, basketball courts, paddle tennis courts, and outdoor recreation facility, and was completed in 2021. Additionally, Masdar City completed the widening of the Metro boulevard which runs past the MAF mall and the IRENA building connecting Khalifa City A to the airport and linking walking, running, and biking paths to create an 8km loop.

Business Unit Performance continued

Activities within the Masdar City Free Zone also reflect the increased demand within Masdar City with the number of registered companies in Masdar Free Zone (MFZ) having increased to over 1,100 companies, whilst the business unit continues to maximize revenue per square meter through management of the business center space and the introduction of new products and services.

As evidence of Masdar City's desirability as a technology hub, multiple pilot projects were launched within Masdar City by both local and international companies from start-ups to SME to multi-nationals. Highlights included:

- Partnership with KU/Aquovum to create water from air at commercial volumes using renewable energy
- Partnership with local startup FortyGuard to test pavers that reduce the outdoor heat
- Partnership with local startup Dft to test window films that reduce heat gain and cooling consumption
- Agreement with Tesla to expand EV charging infrastructure ensuring Masdar City remains the largest hub of super chargers in the UAE

Brand & Strategic Initiatives - Taking communications to the next level

For Masdar, 2021 proved to be a milestone year, with the company celebrating its 15th anniversary, greatly expanding its global footprint and portfolio capacity, and announcing a proposed new shareholding structure for the first time in its history. It was also a year of huge significance for the UAE, which announced its Net Zero by 2050 strategic initiative (the first country in the Middle East & North Africa region to do so), introduced its Principles of the 50 campaign, and was named as the host nation for the COP28 climate change conference in 2023.

Accordingly, it was important that the Brand & Strategic Initiatives (B&SI) division both continued to showcase Masdar's success on a global level, and demonstrated our alignment with the UAE's strategic objectives. Our external communications strategy focused on amplifying Masdar's position as a global leader in renewable energy and sustainable urban development, while highlighting Masdar's leading role in driving the global climate change agenda. Masdar also introduced campaigns through the year to support the UAE's positioning and climate action.

Throughout the year, we continued to position Masdar as a leading voice in the climate change agenda, and in the sustainability and renewable energy sectors, with a record 92 speaking engagements secured for senior Masdar executives – up from 39 the year before. Our CEO, Mohamed Jameel Al Ramahi, completed more than 15 interviews and engagements, including participating in events such as the US Chamber of Commerce's Global Energy Institute Virtual Event, and the Australia-UAE Business Council.

Our efforts to increase our profile in the media, especially internationally, were also extremely successful, with high profile interviews in major platforms – including the BBC, Bloomberg, Reuters, Wired, Dubai TV ADTV, CNN Arabia, MEES, Gulf Intelligence and The National – which had a PR value of around USD11 million-plus, and we generated more than 3,000 press clippings over the year. This coverage ensures that Masdar, its projects, strategic initiatives, brand and spokespeople are directly visible to key decision makers, from industry leaders, and project developers, through to policy makers, financial institutions and more.

One measure of the success of our positioning is our recognition in industry awards, with Masdar receiving a number of notable accolades during 2021 at both the regional and global levels. These included being named 'Energy Company of the Year' for the third time at the Gulf Business Awards, and receiving the 'Award of Excellence – Power' at the S&P Global Platts Global Energy Awards 2021, beating companies from across the entire energy sector and demonstrating our leadership in clean energy.

Our flagship campaign of the year was the '*For A Sustainable Future*' campaign, which we launched in April 2021 to both celebrate our 15-year anniversary and reintroduce the company to regional and international audiences. The campaign was supported by 360 degrees communications and marketing, featuring content across print, online, television, digital and outdoor advertising, and generated widespread media coverage both domestically and internationally, with the campaign launch film alone receiving more than 5.5 million views across social media.

Brand & Strategic Initiatives - Taking communications to the next level continued

The second phase of the campaign, launched in June 2021, was designed to support the positioning of Masdar City as a global hub for technology and innovation. The campaign hashtags trended in the UAE, KSA, Kuwait, Bahrain, Qatar and Oman generating a total of 227 million impressions, and delivering over 236,000 visits to the website.

Masdar Announcements
2021 saw Masdar step up its commitment to helping nations achieve their sustainability goals and fight climate change, with the company's renewable energy portfolio, either installed or in development, expanding 40 percent to over 15 gigawatts (GW). The amount of CO2 our projects abated increased 38 percent to 7.5m tonnes in 2021 from an adjusted 5.4m tonnes a year earlier.

We also signed agreements in countries such as Saudi Arabia, Iraq, the United States, Uzbekistan, Poland, Indonesia, Ethiopia, Ukraine, Kazakhstan, Armenia, Azerbaijan, Greece and Georgia, growing our footprint to over 40 countries.

We also advanced our green hydrogen ambitions with the signing of a strategic partnership with France's ENGIE, announced during French President Macron's official visit to the UAE, to develop projects with a capacity of at least 2 GW by 2030, representing a total investment of US$5 billion.

Digital Communications
Masdar's digital channels allow us to engage a wider range of target audiences with the company's owned content on a global level. This allows us to further amplify key announcements and spokespeople, while educating audiences on our purpose, highlighting trending topics of strategic importance to our objectives, and creating high levels of engagement with local and global stakeholders during key events.

For 2021, digital communications objectives were all overachieved, including numbers of social media followers on all accounts, newsletter subscribers, and engagement rates online, while we also over delivered on digital activations/projects across all platforms.

In total, we developed and delivered around 10 new digital activations across Masdar and the Abu Dhabi Sustainability Week (ADSW), including: ADSW website revamp and ADSW Mobile App; The Catalyst website enhancement and re-development; Y4S social media platforms; a digital plan for Masdar Green REIT; the Y4S Forum 2021, where we supported Y4S in launching the platform and running the forum; and campaigns for Masdar City Free Zone new packages; and Masdar City's women's packages campaign.

We also extended our successful Masdar Talks series to Masdar City, enabling Free Zone tenants to be part of the platform, and launched ADSW Talks. This virtual series features short interviews with influential figures from across the sustainability sector, who share their perspectives on the challenges and opportunities of sustainable development.

Digital key numbers:

- Masdar social media followers grew to 319,807 in 2021, an increase of 47,037 (+17.2%)
- Masdar newsletter subscribers increased to 4,546, a growth of 951 (+26.4%)
- Introduced the Masdar Green REIT LinkedIn page, and launched a campaign to promote it, resulting in 2,144 followers and 749,653 impressions in 2021
- ADSW social media followers grew to 161,154 in 2021, an increase of 18,672 (+13.1%)
- ADSW newsletter subscribers increased to 20,113, a growth of 16,713 (+491%)

ADSW expansion
An exceptional year for Masdar built up to an exceptional Abu Dhabi Sustainability Week (ADSW) 2022, which not only returned to a physical format for the first time in two years, but took place in more than one location, with the ADSW Opening Ceremony and the Zayed Sustainability Prize Awards Ceremony being held at the Dubai Exhibition Centre as part of Expo 2020.

Brand & Strategic Initiatives - Taking communications to the next level continued

ADSW expansion continued
His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President, Prime Minister and Ruler of Dubai, attended the ADSW Opening Ceremony. The opening event was also attended by H.H. Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai, Deputy Prime Minister and Minister of Finance.

All other ADSW events, including the ADSW Summit, IRENA Assembly, Atlantic Council Global Energy Forum, World Future Energy Summit, Innovate, Abu Dhabi Sustainable Finance Forum, Women in Sustainability, Environment and Renewable Energy (WiSER) Forum, and the Youth 4 Sustainability Hub were held in Abu Dhabi or virtually.

Despite the logistical challenges posed by holding events in different locations, ADSW 2022 proved a huge success, with a panel of 600 speakers, including three heads of state, 12 ministers, 10 chairman-level executives, and four heads of United Nations' organizations. The ADSW Summit virtual audience also increased more than 200 percent from 2020, while ADSW hosted 30,000 participants from 150 countries.

Major announcements made at ADSW include:

- Masdar and ENGIE signing a collaboration agreement with Fertiglobe to study the development of a green hydrogen facility targeted to be operational by 2025 with capacity of up to 200 megawatts to supply Fertiglobe's ammonia production plants at Ruwais.

- The signing of an agreement with Cosmo Energy Holdings Co., one of Japan's largest energy companies, to explore the development of renewable energy initiatives, including offshore wind projects, in Japan; and.

- Masdar City, through its Masdar Green Real Estate Investment Trust (REIT), signing a financing commitment for US$ 200 million with First Abu Dhabi Bank (FAB) relating to financing of the REIT portfolio to facilitate further acquisitions and portfolio growth

Zayed Sustainability Prize
2021 was an outstanding year for the Prize, with a record number of submissions. The team successfully increased awareness of the Prize by implementing two global campaigns across the year, both featuring a range of activations, generating coverage with an AVE of almost US$20 million, and by engaging over 50 global influencers and increasing social media followers by 15 percent.

The team also developed and launched an online monthly 'fireside chat' series entitled Voices of Sustainability, which has received over 1.4 million views to date. The team also focused on countries that had previously had low levels of participation in the Prize, hosting seminars and workshops, engaging key opinion leaders and influencers, and developing collateral in native languages.

These activities resulted in a record 4,000 submissions being received from 151 countries, a 68.5 percent increase from the previous cycle. A number of countries – including China, Indonesia, Japan, Canada, Singapore, Argentina, and South Africa – had huge spikes in submissions, with China being in the top ten countries for submissions for the first time in the Prize's history.

Business Support Functions

The Company continues to focus on enhancing the efficiency and effectiveness of its support functions and to benchmark against industry best practices. During 2021, the Company's engagement with Mubadala's Business Management Services (BMS) continued to evolve. BMS is a shared services company established to support the Mubadala Group and allow it to run more effectively and efficiently. BMS has the ability to support a wide spectrum of critical business services, across the functions of Finance, HC, IT, Procurement, Office Support and Facility Management. The migration of certain ICT, Human Capital and Finance services to BMS has allowed Masdar to focus even more on our core business activities, while at the same time obtaining high-quality and more cost effective services and solutions from BMS in certain functional business management areas.

Business Unit Performance continued

Human Capital continues to recommend and implement projects and initiatives aimed at enabling Masdar to achieve its strategy and growth plans in line with leading practices, and focused on the continuous attraction, development, motivation, recognition and engagement of talent including:

- Employee engagement & recognition:
  - alongside executive management to facilitate the implementation of action plans for Worked divisional engagement focus areas, alongside continuous check ins with management on progress and deliverables, including facilitation of over 10 team building/ engagement related sessions
  - Launched 2021 engagement survey with a high response rate of 87%, and strong improvements vs. 2019 Employee Engagement Survey results
  - Ensure that employee recognition programs are completed on time and as per agreed standards e.g. KAFU

- Emiratization & retention:
  - Achieved a 55.50% Emiratization in 2021 through continued focus on the attraction, development, and retention of talented UAE nationals, despite the effects of the pandemic on hiring.
  - Achieved a very healthy attrition rate of 1.50% at the end of 2021 through continuing to focus on employee retention and wellness tools and programs.

- International support and advice:
  - Supported Masdar's subsidiaries establishing their presence (locally or internationally) through providing HC support in terms of policies, processes and procedures as well as ensuring equitable pay practices in line with local market standards.

- Wellness & flexible working guidelines and sessions:
  - Introduced the guidelines for remote working and flexible working solutions
  - Conducted 30+ Wellness Sessions with over 1500 attendees and a 95% session satisfaction rate

- Talent management:
  - Ensured the continuous roll out and enhancement of talent development programmes
  - Ensured that talent development initiatives and programmes are completed on time and as per agreed standards.

The programmes and initiatives include, but are not limited to, leadership development, emerging leaders, mentoring and coaching.

Going forward, On 29 November 2021, the shareholder announced its intension for the disposal of a 67% interest in the Company to Abu Dhabi National Oil Company ("ADNOC") and Abu Dhabi National Energy Company ("TAQA"). The disposal will be limited to net assets related to the Company's Renewables and Strategic Initiatives Business ("Clean Energy Business") and will exclude net assets related to Sustainable Real Estate/Masdar City (including land related assets) ("Sustainable Real Estate Business"), which will be disposed by the company to the shareholder. In addition, the Ninety Sixth Investment Company LLC, currently wholly owned subsidiary of the shareholder but under management of the Company, holding investments in US renewable assets, with a net carrying value of AED 2,330 million as at 31 December 2021, will be transferred to the Company and will become part of Masdar Clean Energy Business before the disposal of the 67% interest to ADNOC and TAQA. The sale transaction is under process as at 31 December 2021 and the transaction is expected to close in the second half of 2022 and it is expected that subsequent to the completion of the transaction, the shareholder will lose control over the Company as the shareholder will not have the practical ability to direct the relevant activities of Masdar.

The Company has ambitions to grow to at least 100 GW of clean energy capacity in under ten years. Under the new shareholders, the Company will also have a mandate to develop a green hydrogen hub based out of Abu Dhabi.

REPORT OF THE BOARD OF DIRECTORS continued
For the year ended 31 December 2021

Business Unit Performance continued

In late 2021 the Board of Directors approved the Company's operating plans and budgets for 2022. With the expected future change in ownership and control the Company will have an even stronger mandate to significantly advance renewable energy and clean technology through investments in the development of advanced new technologies and through renewable energy project development as well as green hydrogen production. Whilst management continues to work to implement and achieve the approved operating plans and budgets, new more ambitious operating plans and budgets are being drawn up to be approved by the new Board upon completion of the transaction. This will then outline the mandate for the growth strategy for the Company in the coming years. In the meantime, the Board expects that we continue to manage operating costs and cash aggressively and remain vigilant about risks inherent in our businesses. This has to be balanced with the development of new investment opportunities and revenue growth. With an increased focus on value creation as well as enhancing the Company's capacity to return cash to our Shareholder and develop strategies to become self-financing in the medium term, the Company will be continuing to explore brownfield and M&A investment opportunities and monetisation strategies. Enhancement of cash yield, optimization of operational efficiency and cost optimization remain key areas of focus particularly as management positions the business to operate and grow in a more competitive industry sector and a significantly more challenging local, regional and global macro-economic environment given the continuing impact of the COVID-19 pandemic and other global macroeconomic and geopolitical issues. However, given the fundamentals of our markets and the support of our principal stakeholders, management believes that there remains very good reason to be optimistic about our growth prospects in the near and long term.

Mohamed Jameel Al Ramahi
Director and Chief Executive Officer

Abu Dhabi Future Energy Company PJSC (Masdar)

CONSOLIDATED FINANCIAL STATEMENTS

31 DECEMBER 2021

KPMG Lower Gulf Limited
Level 19, Nation Tower 2
Corniche Road, P.O. Box 7613
Abu Dhabi, United Arab Emirates
Tel. +971 (2) 401 4800, www.kpmg.com/ae

Independent auditors' report

To the Shareholders of Abu Dhabi Future Energy Company PJSC (Masdar)

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of Abu Dhabi Future Energy Company PJSC (Masdar) ("the Company") and its subsidiaries ("the Group"), which comprise the consolidated statement of financial position as at 31 December 2021, the consolidated statements of profit or loss and other comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with International Ethics Standards Board for Accountants International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the United Arab Emirates, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of Matter: Comparative Information

We draw attention to Note 29.2 to the consolidated financial statements which indicates that the comparative information presented as at and for the year ended 31 December 2020 has been restated. Our opinion is not modified in respect of this matter.

Other Matter Relating to Comparative Information

The consolidated financial statements of Abu Dhabi Future Energy Company – PJSC (Masdar) as at and for the year ended 31 December 2020, excluding the adjustments described in Note 29.2 to the consolidated financial statements were audited by another auditor who expressed an unmodified opinion on those financial statements on 14 June 2021.

As part of our audit of the consolidated financial statements as at and for the year ended 31 December 2021, we audited the adjustments described in Note 29.2 that were applied to restate the comparative information presented as at and for the year ended 31 December 2020. We were not engaged to audit, review, or apply any procedures to the consolidated financial statements for the year ended 31 December 2020, other than with respect to the adjustments described in Note 29.2 to the consolidated financial statements. Accordingly, we do not express an opinion or any other form of assurance on those respective financial statements taken as a whole. However, in our opinion, the adjustments described in Note 29.2 are appropriate and have been properly applied.

Other Information

Management is responsible for the other information. The other information comprises the Report of the Board of Directors.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS and their preparation in compliance with the applicable provisions of the UAE Federal Law No. (2) of 2015 (as amended), and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with Governance are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

— Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

— Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements (continued)

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on Other Legal and Regulatory Requirements

Further, as required by the UAE Federal Law No. (2) of 2015 (as amended), we report that for the year ended 31 December 2021:

i) we have obtained all the information and explanations we considered necessary for the purposes of our audit;

ii) the consolidated financial statements have been prepared and comply, in all material respects, with the applicable provisions of the UAE Federal Law No. (2) of 2015 (as amended);

iii) the Group has maintained proper books of account;

iv) the financial information included in the Report of the Board of Directors is consistent with the books of account of the Group;

v) as disclosed in note 5 and 9 to the consolidated financial statements, the Group has purchased shares during the year ended 31 December 2021;

vi) note 12 to the consolidated financial statements discloses material related party transactions and the terms under which they were conducted;

vii) based on the information that has been made available to us, nothing has come to our attention which causes us to believe that the Group has contravened during the financial year ended 31 December 2021 any of the applicable provisions of the UAE Federal Law No. (2) of 2015 (as amended) or in respect of the Company, its Articles of Association, which would materially affect its activities or its consolidated financial position as at 31 December 2021; and

viii) note 1 to the consolidated financial statements discloses that Company has not made any social contributions during the year ended 31 December 2021.

Report on Other Legal and Regulatory Requirements (continued)

Further, as required by the Resolution of the Chairman of the Abu Dhabi Accountability Authority No. (1) of 2017 pertaining to Auditing the Financial Statements of Subject Entities, we report that based on the procedures performed and information provided to us, nothing has come to our attention that causes us to believe that the Group has not complied, in all material respects, with any of the provisions of the following laws, regulations and circulars as applicable, which would materially affect its activities or the financial statements as at 31 December 2021:

- Law No. (1) of 2017 concerning the Financial System of the Government of Abu Dhabi and instructions issued by the Department of Finance pertaining to the preparation and implementation of the annual budget of Subject Entities;
- Law of establishment; and

Relevant provisions of the applicable laws, resolutions and circulars organising the Group's operations.

KPMG Lower Gulf Limited

Emilio Pera
Registration No.: 1146
Abu Dhabi, United Arab Emirates

Date: 1 August 2022

CONSOLIDATED STATEMENT OF FINANCIAL POSITION
At 31 December 2021

	Notes	2021 AED '000	Restated 2020 AED '000
ASSETS			
Non-current assets			
Property, plant and equipment	6	**1,346,934**	1,650,300
Right-of-use assets	20	**301,809**	327,080
Investment properties	7	**-**	2,569,836
Intangible assets	8	**45,177**	49,832
Investment in equity-accounted investees	9	**1,134,759**	877,149
Other non-current financial assets	10	**243,272**	259,820
Finance lease receivables	11	**-**	262,263
Loans to related parties	12	**146,363**	249,356
Derivative Financial Asset	31	**46,036**	-
Trade and other receivables	13	**278,099**	51,801
Deferred tax assets	28	**146,112**	149,735
		3,688,561	6,447,172
Current assets			
Finance lease receivables	11	**-**	54,779
Loan to related parties	12	**306,613**	189,388
Due from related parties	12	**173,102**	133,094
Trade and other receivables	13	**413,387**	529,896
Inventories	14	**87**	413,981
Cash and Cash Equivalents	15	**716,497**	1,229,254
Assets held for sale	29	**4,094,229**	-
		5,703,915	2,550,392
Total assets		**9,392,476**	8,997,564
EQUITY AND LIABILITIES			
Equity			
Share capital	16	**8,000,000**	8,000,000
Shareholder's account	17	**(1,680,060)**	(1,680,060)
Reserves	18	**(170,405)**	(394,483)
Accumulated losses		**(1,165,842)**	(1,538,162)
Total equity		**4,983,693**	4,387,295
Non-current liabilities			
Bank borrowings	19	**1,980,392**	1,886,717
Lease liabilities	20	**302,500**	322,305
Derivative financial liability	31	-	70,193
Other non-current liabilities	21	**112,885**	950,379
Deferred tax liabilities	28	**231,685**	173,924
		2,627,462	3,403,518
Current liabilities			
Due to related parties	12	**32,579**	287,795
Bank borrowings	19	**125,336**	244,382
Lease liabilities	20	**16,803**	17,061
Trade and other payables	22	**428,289**	657,513
Liabilities directly associated with assets as held for sale	29	**1,178,314**	-
		1,781,321	1,206,751
Total liabilities		**4,408,783**	4,610,269
TOTAL EQUITY AND LIABILITIES		**9 392 476**	8,997,564

Mohamed Jameel Al Ramahi
Director and Chief Executive Officer

Niall Hannigan
Chief Financial Officer

The accompanying notes 1 to 31 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
For the year ended 31 December 2021

	Notes	2021 AED '000	Restated 2020 AED '000
Continuing operations			
Revenue and other operating income	23	**716,514**	373,920
Cost of sales	23.1	**(471,864)**	(204,516)
GROSS PROFIT		**244,650**	169,404
Income from government grants	24	**30,052**	55,253
Other income	25	**261,311**	525,473
Research and development expenses		**(3,414)**	(3,546)
Project expenses		**(76,017)**	(46,032)
Provision for expected credit losses on trade receivables, net	13	**1,262**	-
General and administrative expenses	26	**(283,765)**	(242,236)
Profit from operating activities		**174,079**	458,316
Change in fair value of financial assets carried at fair value through profit or loss	10	**24,871**	(11,972)
Share of results of equity-accounted investees, net	9	**58,736**	152
Gain on derivatives, net		**16,099**	1,437
(Provision for) reversal of expected credit losses on loans to related parties, net	12	**13,950**	(11,777)
Finance income	27.1	**48,127**	41,333
Finance expense	27	**(106,109)**	(69,507)
Profit before income tax from continuing operations		**229,753**	407,982
Income tax	28	**(49,041)**	(11,836)
Profit after income tax from continuing operations		**180,712**	396,146
Profit after income tax from discontinued operations	29	**269,793**	51,017
Profit for the year		**450,505**	447,163
Other comprehensive loss		-	-
Items that may be reclassified subsequently to profit or loss			
Share of movement in hedging reserves of equity-accounted investees	9	**119,913**	(98,087)
Recycle of hedging reserve on disposal	9	-	58,853
Other movement in hedging reserve, net		**82,504**	(44,480)
		202,417	(83,714)
Foreign currency translation differences for foreign operations		**(23,389)**	(46,671)
Other comprehensive income / (loss) for the year, net of income tax		**179,028**	(130,385)
Total comprehensive income for the year		**629 533**	316,778

The accompanying notes 1 to 31 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
For the year ended 31 December 2021

					Reserves					
	Share capital AED 000	*Share capital under issuance AED 000*	*Additional shareholder contribution AED 000*	*Shareholder's account AED 000*	*Investment reserve AED 000*	*Statutory reserve AED 000*	*Other reserve AED 000*	*Total reserves AED 000*	*Accumulated losses AED 000*	*Net equity AED 000*
Balance at 1 January 2020	368,000	7,632,000	1,227,376	-	246,321	98,487	(653,621)	(308,813)	(3,207,502)	5,711,061
Profit for the year	-	-	-	-	-	-	-	-	447,163	447,163
Other comprehensive loss for the year	-	-	-	-	-	-	(130,386)	(130,386)	-	(130,386)
Total comprehensive income for the year	-	-	-	-	-	-	(130,386)	(130,386)	447,163	316,777
Conversion of share capital under issuance to share capital (note 16)	7,632,000	(7,632,000)	-	-	-	-	-	-	-	-
Transactions with shareholder (note 17)	-	-	(1,227,376)	(1,680,060)	-	-	-	-	1,266,893	(1,640,543)
Transfer to statutory reserve during the year	-	-	-	-	-	44,716	-	44,716	(44,716)	-
Balance at 31 December 2020	8,000,000	-	-	(1,680,060)	246,321	143,203	(784,007)	(394,483)	(1,538,162)	4,387,295
Balance at 1 January 2021	**8 000 000**	**-**	**-**	**(1 680 060)**	**246 321**	**143 203**	**(784 007)**	**(394 483)**	**(1 538 162)**	**4 387 295**
Profit for the year	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**450,505**	**450,505**
Other comprehensive loss for the year	**-**	**-**	**-**	**-**	**-**	**-**	**179,028**	**179,028**	**-**	**179,028**
Total comprehensive income for the year	**-**	**-**	**-**	**-**	**-**	**-**	**179,028**	**179,028**	**450,505**	**629,533**
Transactions with shareholder (note 17)	**-**	**-**			**-**	**-**	**-**	**-**	**(33,135)**	**(33,135)**
Transfer to statutory reserve during the year	**-**	**-**	**-**	**-**	**-**	**45,050**	**-**	**45,050**	**(45,050)**	**-**
Balance at 31 December 2021	**8 000 000**	**-**	**-**	**(1 680 060)**	**246 321**	**188 253**	**(604 979)**	**(170 405)**	**(1 165 842)**	**4 983 693**

The accompanying notes 1 to 31 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS
For the year ended 31 December 2021

	Notes	***2021*** ***AED '000***	***Restated*** *2020* *AED '000*
OPERATING ACTIVITIES			
Profit before tax for the year from continuing operations		**229,753**	407,982
Profit before tax for the year from discontinued operations		**269,793**	51,017
		499,546	458,999
Adjustments for:			
Depreciation of property, plant and equipment and right-of-use assets	*6 & 20*	**137,234**	137,694
Write-offs of property, plant and equipment	*6*	-	1,763
Gain on disposal of investment in a joint venture	*29*	-	(311,834)
Gain on disposal of a subsidiary	*29.3*	**(28,119)**	(28,344)
Change in fair value of investment properties	*7*	**(106,947)**	83,904
Change in fair value of financial assets carried at fair value through profit or loss	*10*	**(24,871)**	11,972
Amortisation of intangible assets	*8*	**5,774**	3,378
Share of results of equity-accounted investees, net	*9*	**(58,736)**	2,694
Finance lease income		**(27,540)**	(24,355)
Interest on lease liabilities	*20*	**14,468**	13,836
Gain on sale of plant property and equipment	*29.4*	**(1,040)**	**-**
Provision for (reversal of) expected credit losses on finance lease receivables, net	*11*	**1,646**	2,608
Provision for expected credit losses on trade and other receivables, net	*13*	**(1,262)**	4,263
Provision for (reversal of) expected credit losses on loans to related parties, net	*12*	**(13,950)**	11,777
Decommissioning liability charge	*21.2*	**(7,179)**	1,053
Gain on derivatives, net		**(16,099)**	(1,437)
Employees' end of service benefit charge	*21.3*	**6,611**	7,847
Dividend income from a joint venture	*25*	**-**	(167,641)
Interest income	*27*	**(48,127)**	(42,501)
Finance costs	*27*	**62,086**	75,061
Operating cash flows before changes in working capital		**393,495**	240,737
Working capital adjustments:			
Trade and other receivables		**(322,053)**	(118,425)
Change in Due from related parties		**(67,137)**	(190,115)
Change in Due to related parties		**(254,655)**	(787,900)
Inventories		-	(135,152)
Finance lease receivable		**(49,900)**	(14,996)
Trade and other payables		**62,317**	(41,062)
		(237,933)	(1,046,913)
Employees' end of service benefit paid	*21.3*	**(4,305)**	(3,264)
Net cash (used in) generated from operating activities		**(242,238)**	(1,050,177)

CONSOLIDATED STATEMENT OF CASH FLOWS
For the year ended 31 December 2021

	Notes	**2021** **AED '000**	***Restated*** *2020* *AED '000*
INVESTING ACTIVITIES			
Purchase of property, plant and equipment	*6*	**(21,484)**	(18,954)
Purchase of intangible assets	*8*	-	(845)
Proceeds from disposal of joint venture	*9*	-	676,843
Net cash flow arising from disposal of a subsidiary	*29.3*	**114,773**	98,322
Additions to investment properties	*7*	-	(65,978)
Investments in equity-accounted investees	*9*	**(293,562)**	(154,098)
Investment in financial assets carried at fair value through profit or loss	*10*	-	(101,420)
Addition in Investment Property and Inventory	*7*	**(58,916)**	-
Addition Intangibles	*8*	**(1,880)**	-
Disposal of Plant Property and Equipment	*29.4*	**9,983**	-
Distribution from financial asset carried at fair value through profit or loss	*10*	**37,484**	48,420
Proceeds on dissolution of a joint venture	*9*	-	-
Dividends received from equity-accounted investees	*9*	**89,246**	201,350
Additional loan given to related parties		**(33,846)**	(107,639)
Repayment of related party loan		**57,589**	26,235
Finance income received		**32,544**	22,601
Net cash generated from (used in) investing activities		**(68,069)**	624,837
FINANCING ACTIVITIES			
Proceeds from borrowings	*19*	**232,957**	2,326,251
Repayment of borrowings	*19*	**(244,725)**	(986,921)
Finance costs paid		**(62,086)**	(75,061)
Repayment of lease liabilities	*20*	**(32,015)**	(29,402)
Net cash generated from financing activities		**(105,869)**	1,234,867
NET (DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS		**(416,176)**	809,527
Cash and cash equivalents at 1 January		**1,229,254**	413,554
Exchange fluctuations		**(8,738)**	6,173
CASH AND CASH EQUIVALENTS AT 31 DECEMBER		**804,340**	1,229,254
SRE Discontinued operations cash and bank balance at 31 Dec.	*29.1*	**(87 843)**	-
CASH AND CASH EQUIVALENTS AT 31 DECEMBER	*15*	**716,497**	1,229,254

Significant non-cash transactions not included in the consolidated statement of cash flows are as follows:

	2021 **AED'000**	*2020* *AED'000*
Transfer from construction work in progress to inventories (note 6)	**-**	(101,353)
Transfers from property, plant and equipment to investment properties, net (note 6)	**-**	101,093
Transfer from inventories to investment properties (note 7)	**47,744**	33,258
Transactions with shareholder (note 17)	**-**	2,907,437

The accompanying notes 1 to 31 form an integral part of these consolidated financial statements.

1 GENERAL INFORMATION

Abu Dhabi Future Energy Company PJSC (Masdar) (the "Company") is registered as a private joint stock company in the Emirate of Abu Dhabi. The Company was incorporated on 9 December 2007. The Company is wholly owned by Mamoura Diversified Global Holding PJSC formerly, Mubadala Development Company PJSC (the "Parent Company"), a company incorporated in the Emirate of Abu Dhabi, which in turn is a company wholly-owned by Mubadala Investment Company PJSC ("MIC"). MIC is wholly owned by the Government of Abu Dhabi (the "Government").

These consolidated financial statements include the financial performance and position of the Company and its subsidiaries (together, the "Group") and the Group's interest in its equity-accounted investees .

The Company was formed for the purpose of implementing the Masdar initiative, whose primary objective is to invest in or acquire participations in entities in Abu Dhabi or abroad, and to be active in the renewable energy, energy efficiency, carbon reduction, carbon capture and storage and other forms of sustainability related technologies. The Group's primary activities also include the provision of services for the reduction of carbon emissions, development of sustainable real estate projects and establishment and operation of free zones on land granted by the Government in order to fulfil the Company's objectives.

The Masdar initiative has four primary objectives:

- to reduce the carbon footprint of Abu Dhabi;
- to enhance the Abu Dhabi brand in the new energy and sustainability markets;
- to foster the development of a knowledge based economy in Abu Dhabi; and
- to be profitable.

During the year 2021 Masdar Sustainable Real Estate has been classified as held for sale in consolidated statement of financial position and discontinued operation in consolidated statement of comprehensive income. Effect of held for sale balances and discontinued operations have been presented in note 29.

The registered office of the Company is P.O. Box 54115, Abu Dhabi, United Arab Emirates.

The Company has not made any social contributions during the year ended 31 December 2021.

These consolidated financial statements were approved and authorised for issue on 1 August 2022.

2 BASIS OF PREPARATION

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

The consolidated financial statements are prepared on historical cost basis except for derivative financial instruments, financial assets at fair value through profit or loss and investment properties, which are measured at fair values as explained in the accounting policies below.

These consolidated financial statements are presented in United Arab Emirates Dirham ("AED") which is the currency of primary economic environment in which the Group operates. Each entity in the Group determines its own functional currency.

The consolidated financial statements comprise the financial statements of the Group as at 31 December 2021. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Group has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure, or rights, to variable returns from its involvement with the investee; and
- The ability to use its power over the investee to affect its returns

2 BASIS OF PREPARATION continued

2.1 Basis of consolidation

Generally, there is a presumption that a majority of voting rights results in control. To support this presumption and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement(s) with the other vote holders of the investee
- Rights arising from other contractual arrangements; and/or
- The Group's voting rights and potential voting rights

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of OCI are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises the related assets (including goodwill), liabilities, non-controlling interest and other components of equity, while any resultant gain or loss is recognised in profit or loss. Any investment retained is recognised at fair value.

2.2 Considerations in respect of COVID-19 and the current economic environment

The impact of the Covid-19 continues which creates uncertainty across many of the Group's markets. Public policy and government responses have differed across each market and the Group has adopted measures designed to best serve employees, customers and wider stakeholders across its operation markets.

The Group's business has been affected by the Covid-19 which has resulted in border movement restrictions and operational constraints. The Group is taking steps to mitigate the impact of the Covid-19 on its business, and the nature of its business provides some protection, however there is no assurance these measures will be sufficient to offset the full impact of the Covid-19.

The full implications of the Covid-19 depend on a number of factors, such as the duration of the outbreak and the effectiveness of measures imposed by authorities. The effectiveness of macroeconomic measures (e.g. government stimulus packages and measures introduced by central banks) will also influence the impact that the Covid-19 will have on the economy and ultimately the Group.

Any of the foregoing, deterioration in general economic conditions or change in customer behaviour, including a prolonged period of travel, commercial or other similar restrictions, could have an effect on the Group's business, results of operations and financial condition

The main elements related to the consolidated financial statements considered as of 31 December 2021 are detailed as follows:

Going concern
The Group entered this crisis in a strong position, having previously reported profits of AED 447 million and available cash and cash equivalents of AED 1,229 million as of 31 December 2020. The Group responded dynamically to the challenges presented by the coronavirus pandemic implementing a series of measures to ensure the health and safety of its employees and subcontractors while ensuring uninterrupted services to its customers. These measures include work-from-home arrangements for all management and support staff, social distancing and hygiene measures and awareness campaigns, arrangements for coronavirus testing across the Group's sites, contact tracing and self-isolation arrangements as well as monitoring suppliers, subcontractors and partners. The Group also created country and customer-wide business continuity plans and return-to-work guides to support the new working arrangements.

2 BASIS OF PREPARATION continued

2.2 Considerations in respect of COVID-19 and the current economic environment continued

At 31 December 2021:

- the Group held cash and cash equivalents of AED 716 million (31 December 2020: 1,229 million) following the implementation of compensating cost saving measures and reductions to discretionary capital expenditure.
- the Group's current assets exceed current liabilities by AED 1,007 million; and
- the Group has undrawn credit facility amounting to AED 814 million.

Based on above, the Directors continue to consider it appropriate to adopt the going concern basis of accounting in preparing the consolidated financial statements.

Assessment of indicators of impairment of property and equipment and right of use assets
Management carried out an assessment of indicators of impairment of property and equipment and right of use assets as of 31 December 2021 based on prevalent market conditions and no indicators were identified in any of the Group's property, plant and equipment and right-of-use assets as a result of this exercise.

Expected credit losses
The current economic environment and future credit risk outlook have been considered in updating the estimate of loss allowances although the full economic impact of COVID-19 on the forward-looking expected credit loss is subject to uncertainty due to the limited forward-looking information currently available.

At 31 December 2021, management has assessed the expected credit losses for trade and other receivables, loan to a related party, finance lease receivables and amounts due from related parties. Reversal of impairment provision recognised in consolidated statement of profit or loss during the year amounted to AED 15.21 million (31 December 2020: provision charge AED 18.6 million).

Other assets
Due to the COVID-19 triggering event, the Group has reviewed its inventories as well as deferred tax assets. As a result of this work no impairment has been identified as of 31 December 2021 (31 December 2020: AED Nil).

3 SIGNIFICANT ACCOUNTING POLICIES

3.1 New standards, interpretations and amendments

The Group applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after 1 January 2021. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

The nature and the impact of each interpretation or amendment is described below.

New and revised IFRSs	Summary of requirement
Amendment to IFRS 16 *Leases*	The amendment extends, by one year, the May 2020 amendment that provides lessees with an exemption from assessing whether a COVID-19-related rent concession is a lease modification.
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 relating to Interest Rate Benchmark Reform - Phase 2	The amendment introduces a practical expedient for modifications required by the reform, clarify that hedge accounting is not discontinued solely because of the IBOR reform, and introduces disclosures that allow users to understand the nature and extent of risks arising from the IBOR reform to which the entity is exposed to and how the entity manages those risks as well as the entity's progress in transitioning from IBORs to alternative benchmark rates, and how the entity is managing this transition.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies

Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred and included in general and administrative expenses.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

Any contingent consideration to be transferred by the acquirer will be recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument and within the scope of IFRS 9 Financial Instruments, is measured at fair value with the changes in fair value recognised in the consolidated statement of profit or loss.

Goodwill is initially measured at cost (being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests and any previous interest held over the net identifiable assets acquired and liabilities assumed). If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in consolidated statement of profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill has been allocated to a cash-generating unit (CGU) and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the cash-generating unit retained.

A contingent liability recognized in a business combination is initially measured at its fair value. Subsequently, it is measured at the higher of the amount that would be recognized in accordance with the requirements for provisions in IAS 37 Provisions, Contingent Liabilities and Contingent Assets or the amount initially recognized less (when appropriate) cumulative amortisation recognized in accordance with the requirements for revenue recognition.

Investment in associates and joint ventures

The Group has investments in equity-accounted investees including associates and joint ventures.

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Investment in associates and joint ventures continued

On acquisition of an associate or a joint venture, the Group undertakes a notional purchase price allocation (PPA), identifying and valuing assets and liabilities of the associate or joint venture, as if it had acquired a business. These fair value adjustments are not recorded separately, because the investment itself is a single line item. However, the fair values identified form the basis for additional depreciation, amortisation and similar adjustments that are reflected in the investor's share of the results in subsequent years. Adjustments in the notional purchase price allocation include assets not recognised by the associate or joint venture (such as internally developed intangible assets and similar assets). Adjustments might also be made to recognise the fair value of assets carried by the investee at cost (such as property, plant and equipment) and to recognise liabilities at appropriate values.

Where the Group acquires an associate or joint venture, it might be necessary to use provisional figures to undertake a provisional PPA to report the acquisition at the reporting date. The Group will finalise the fair values and PPA, within one-year from the date of acquisition and will report in the following reporting period.

The Group's investments in its associate and joint venture are accounted for using the equity method.

Under the equity method, the investment in an associate or a joint venture is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment separately. The consolidated statement of profit or loss reflects the Group's share of the results of operations of the associate or joint venture. Appropriate adjustments to the Group's share of the results of associate or joint venture after acquisition are made in order to account, for example, for amortisation of the intangible assets acquired based on their fair values at the acquisition date. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

The aggregate of the Group's share of profit or loss of an associate and a joint venture is shown on the face of the consolidated statement of profit or loss outside operating profit and represents profit or loss after tax and non-controlling interests in the subsidiaries of the associate or joint venture.

The financial statements of the associate or joint venture are prepared for the same reporting period as the Group except Hero Future Energies.

When necessary, adjustments are made to bring the accounting policies in line with those of the Group. After application of the equity method, the Group determines whether it is necessary to recognise an impairment loss on its investment in its associate or joint venture. At each reporting date, the Group determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognises the loss as 'Provision for impairment on equity accounted investees' in the consolidated statement of profit or loss.

Upon loss of significant influence over the associate or joint control over the joint venture, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognised in consolidated profit or loss.

Interests in joint operations

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Interests in joint operations continued

When a group entity undertakes its activities under joint operations, the Group as a joint operator recognises in relation to its interest in a joint operation:

- its assets, including its share of any assets held jointly;
- its liabilities, including its share of any liabilities incurred jointly;
- its revenue from the sale of its share of the output arising from the joint operation;
- its share of the revenue from the sale of the output by the joint operation; and
- its expenses, including its share of any expenses incurred jointly.

The Group accounts for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with the IFRSs applicable to the particular assets, liabilities, revenues and expenses.

When a group entity transacts with a joint operation in which a group entity is a joint operator (such as a sale or contribution of assets), the Group is considered to be conducting the transaction with the other parties to the joint operation, and gains and losses resulting from the transactions are recognised in the Group's consolidated financial statements only to the extent of other parties' interests in the joint operation.

Current versus non-current classification of assets and liabilities

The Group presents assets and liabilities in the consolidated statement of financial position based on current/non-current classification. An asset is current when it is:

- Expected to be realised or intended to be sold or consumed in the normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realised within twelve months after the reporting period

Or

- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in the normal operating cycle
- It is held primarily for the purpose of trading
- It is due to be settled within twelve months after the reporting period

Or

- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period

The Group classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

Revenue recognition

Revenue from contracts with customers
The Group recognises revenue from contracts with customers based on a five-step model as set out in IFRS 15:

Step 1 Identify contract(s) with a customer: A contract is defined as an agreement between two or more parties that creates enforceable rights and obligations and sets out the criteria for every contract that must be met.

Step 2 Identify performance obligations in the contract: A performance obligation is a promise in a contract with a customer to transfer a good or service to the customer.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Revenue recognition continued

Revenue from contracts with customers continued

Step 3 Determine the transaction price: The transaction price is the amount of consideration to which the Group expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties.

Step 4 Allocate the transaction price to the performance obligations in the contract: For a contract that has more than one performance obligation, the Group allocates the transaction price to each performance obligation in an amount that depicts the amount of consideration to which the Group expects to be entitled in exchange for satisfying each performance obligation.

Step 5 Recognise revenue when (or as) the Group satisfies a performance obligation.

The Group satisfies a performance obligation and recognises revenue over time, if one of the following criteria is met:

a) The Group's performance does not create an asset with an alternate use to the Group and the Group has as an enforceable right to payment for performance completed to date.
b) The Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced.
c) The customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs.

For performance obligations where none of the above conditions are met, revenue is recognised at the point in time at which the performance obligation is satisfied.

Revenue from sale of land
Revenue from sale of land is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes and duty. The Group assesses its revenue arrangements against specific criteria to determine if it is acting as principal or agent.

Revenue is recognised to the extent it is probable that the economic benefits will flow to the Group and the revenue and costs, if applicable, can be measured reliably.

Special projects
The Group acts as a project management consultant for some projects which are completed for other parties. Revenue from special projects is recognised over time based on the stage of completion of the projects.

Development fee
Revenue from development fee is recognised at point in time, when the right to receive payment has been established.

Renewable power generation
Revenue is recognised, net of Value Added Tax, on the basis of net electricity supplied during the period based on meter readings and market prices as specified under contract terms. Revenue is recognised at a single point in time when electricity is supplied and the performance obligation met.

Revenue from sales of Renewable Obligation Certificates (ROCs), Levy Exemption Certificates and Recycled Buy-outs is recognised based on market rates unless specified otherwise under contract terms, net of Value Added Tax.

Revenue is recognised when the quantity and rates can reasonably be determined and the risks and rewards of ownership have been substantially transferred to a third party.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Revenue recognition continued

Finance income
Finance income comprises interest income on financial assets, gains on hedging instruments and foreign exchange gains. Interest income on financial investments is recognised in consolidated profit or loss and when they accrue using the effective interest method. Foreign currency gains and losses are reported on a net basis.

Finance lease income
The Group's policy for recognition of revenue from finance leases is described in leases accounting policy.

Rental income
The Group's policy for recognition of revenue from operating leases is described in leases accounting policy.

Service Concession Revenues
Revenue related with construction or upgrade services under a service concession arrangement is recognized over time. Operation or service revenue is recognized in the period in which the services are provided by the Group.

Concession under Power Purchase Agreement (PPA). Under the term of IFRIC12 "Service Concession Arrangements", a concession operator has a twofold activity;

- A construction activity in respect of it obligation to design, construct, finance and own the plant and, prior to the Commercial Operations Date ("COD"), the interconnection facilities; and
- An operating and maintenance activity in respect of concession asset after the COD.

Revenue and recognised in accordance with IFRS15. In return for its activities, the operator – the company receives remuneration from the grantor; the financial assets model applies.

The grantor contractually guarantees to pay the operator determinable amounts, even if payment is contingent on the operator ensuring that the infrastructure meets specified efficiency requirements. Therefore, the operator has an unconditional contractual right to receive payments from the concession grantor.

Other income
Other income is recognised when the right to receive payment has been established.

Project expenses

Project expenses comprise expenses incurred on screening, feasibility studies and pre-development phases of various projects undertaken by the Group. Such expenditure is charged to consolidated profit or loss as incurred, other than expenditure on project related property, plant and equipment, which is carried as an asset in the consolidated statement of financial position when there is reasonable certainty that the project will be developed and future economic benefits will flow to the Group. In the absence of such certainty, these expenses are charged to consolidated profit or loss.

Foreign currencies

The Group's consolidated financial statements are presented in AED, which is also the Parent Company's functional currency. For each entity, the Group determines the functional currency and items included in the financial statements of each entity are measured using that functional currency. The Group uses the direct method of consolidation and on disposal of a foreign operation, the gain or loss that is reclassified to profit or loss reflects the amount that arises from using this method.

Transactions and balances
Transactions in foreign currencies are initially recorded by the Group's entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Transactions and balances continued

Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date.

Differences arising on settlement or translation of monetary items are recognised in statement of consolidated profit or loss with the exception of monetary items that are designated as part of the hedge of the Group's net investment in a foreign operation. These are recognised in OCI until the net investment is disposed of, at which time, the cumulative amount is reclassified to profit or loss. Tax charges and credits attributable to exchange differences on those monetary items are also recorded in OCI.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item (i.e., translation differences on items whose fair value gain or loss is recognised in OCI or profit or loss are also recognised in OCI or profit or loss, respectively).

Group companies
On consolidation, the assets and liabilities of foreign operations are translated into AED at the rate of exchange prevailing at the reporting date and their statements of profit or loss are translated at exchange rates prevailing at the dates of the transactions. The exchange differences arising on translation for consolidation are recognised in OCI. On disposal of a foreign operation, the component of OCI relating to that particular foreign operation is reclassified to consolidated profit or loss.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition are treated as assets and liabilities of the foreign operation and translated at the spot rate of exchange at the reporting date.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other

Property, plant and equipment

Property, plant and equipment are stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of replacing part of the plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met. When significant parts of property, plant and equipment are required to be replaced at intervals, the Group depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the property, plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in consolidated profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met. Refer to significant accounting judgements, estimates and assumptions (note 4) and other liabilities (note 21) for further information about the recognised decommissioning provision.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Property, plant and equipment continued

Depreciation is calculated using the straight-line method to allocate the assets' cost to their residual values over their estimated useful lives as follows:

	Years
Buildings	20 – 30
Plant and machinery	10 – 24
Furniture and fixtures	5
Office equipment	3 – 5
Computers	3
Motor vehicles	4
Leasehold improvements	3 – 4

Freehold land is not depreciated.

An item of property, plant and equipment and any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statement of profit or loss when the asset is derecognised.

The residual values, useful lives and methods of depreciation of property, plant and equipment are reviewed at each financial year end and adjusted prospectively, if appropriate.

Capital work in progress

Properties or assets in the course of construction for production, supply or administrative purposes, are carried at cost, less any recognised impairment loss. Cost includes all direct costs attributable to the design and construction of the property including related staff costs, and for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. When the assets are ready for intended use, the capital work in progress is transferred to the appropriate property, plant and equipment category and is accounted in accordance with the Group's policies.

Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Group as a lessee
The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

i) Right-of-use assets

The Group recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Leases continued

Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as follows:

	Years
Land and buildings	10-18
Plant and machinery	18
Furniture, fittings and equipment	3-5

The right-of-use assets are also subject to impairment. Refer to the accounting policies for *Impairment of non-financial assets.*

ii) Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in – substance fixed payments) less any lease incentives receivable, variable lease payments that depend on a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date where the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

iii) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

Group as a lessor
Leases where the Group transfers substantially all of the risks and benefits of ownership of the asset through its contractual arrangements to the customer are considered as a finance lease. The amounts due from lessees under finance leases are initially recognised as receivables at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding receivable from the lessee is included in the consolidated statement of financial position as a finance lease receivable, or as due from a related party, where applicable, and is carried at the amount of the net investment in the lease after making provision for impairment. Finance lease income is recognised over the term of the lease using the net investment method (before tax) so as to give a constant rate of return on the net investment in the leases.

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms and is included in revenue in the statement of profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Investment properties

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated at fair value which reflects market conditions at the reporting date. Gains or losses arising from changes in the fair values of investment properties are included in profit or loss in the period in which they arise, including the corresponding tax effect. Fair values are determined based on an annual evaluation performed by an accredited external independent valuer applying a valuation model recommended by the International Valuation Standards Committee.

Investment properties are derecognised either when they have been disposed of or when they are permanently withdrawn from use and no future economic benefit is expected from their disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognised in consolidated profit or loss in the period of derecognition.

Transfers are made to (or from) investment property only when there is a change in use. For a transfer from investment property to owner-occupied property, the deemed cost for subsequent accounting is the fair value at the date of change in use. If owner-occupied property becomes an investment property, the Group accounts for such property in accordance with the policy stated under property, plant and equipment up to the date of change in use.

Investment properties under construction are measured at cost until either it s fair value becomes reliably determinable or construction is completed.

Income taxes

Income tax expense/benefit comprises current and deferred tax. Current and deferred tax are recognised in profit or loss except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity or in other comprehensive income.

Current income tax
Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date in the countries where the Group operates and generates taxable income.

Current income tax relating to items recognised directly in equity is recognised in equity and not in the consolidated statement of profit or loss. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax
Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date. Deferred tax liabilities are recognised for all taxable temporary differences, except:

- When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Income taxes continued

Deferred tax continued

- When the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside profit or loss is recognised outside profit or loss. Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity. Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Value added tax (VAT)
Expenses and assets are recognised net of the amount of VAT, except:

- When VAT incurred on a purchase of assets or services is not recoverable from the taxation authority, in which case, VAT is recognised as part of the cost of acquisition of the asset or as part of the expense item, as applicable
- When receivables and payables are stated with the amount of VAT included

The net amount of VAT recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the consolidated statement of financial position.

Inventories

Inventories comprise completed properties held for sale in the ordinary course of business and other operating inventories. Inventories are stated at the lower of cost and net realisable value. Cost is calculated using the weighted average cost method and comprises construction / acquisition costs and other charges incurred in bringing inventory to its present location and condition. Net realisable value represents the estimated selling price less all estimated selling and marketing costs to be incurred.

Land held for sale
Land held for sale is stated at the lower of cost and net realisable value. Costs include the cost of land acquired and all direct costs attributable to the infrastructure works of the land. Net realisable value represents the estimated selling price of the land less all estimated costs necessary to make the sale.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses. Internally generated intangibles, excluding capitalised development costs, are not capitalised and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred.

The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the consolidated statement of profit or loss in the expense category that is consistent with the function of the intangible assets.

Intangible assets with indefinite useful lives are not amortised, but are tested for impairment annually, either individually or at the cash-generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the consolidated statement of profit or loss when the asset is derecognized.

Computer software
Acquired computer software licences are capitalised on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortised on a straight-line basis over their estimated useful lives which is normally a period of three to five years.

Licenses
Acquired licenses are shown at historical cost. Licenses have a finite useful life and are carried at cost less accumulated amortisation. Amortisation is calculated using the straight-line method to allocate the cost of licenses over their estimated useful lives.

Internally-generated intangible assets
Research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when the Group can demonstrate:

- The technical feasibility of completing the intangible asset so that the asset will be available for use or sale
- Its intention to complete and its ability and intention to use or sell the asset
- How the asset will generate future economic benefits
- The availability of resources to complete the asset
- The ability to measure reliably the expenditure during development

Following initial recognition of the development expenditure as an asset, the asset is carried at cost less any accumulated amortisation and accumulated impairment losses. Amortisation of the asset begins when development is complete and the asset is available for use. It is amortised over the period of expected future benefit. Amortisation is recorded in cost of sales. During the period of development, the asset is tested for impairment annually.

The estimated useful lives of intangible assets are as follows:

	Years
Software	3
Others	24

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the Group expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognised as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provisions presented in the consolidated statement of profit or loss net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

Onerous contracts

Present obligations arising under onerous contracts are recognised and measured as provisions. An onerous contract is considered to exist where the Group has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract.

Decommissioning liabilities

The Group records a provision for decommissioning costs of a facility or an item of plant and to restore the site on which it is located. Decommissioning costs are provided for at the present value of expected costs to settle the obligation using estimated cash flows and are recognised as part of the cost of the relevant asset. The cash flows are discounted at a current pre-tax rate that reflects the risks specific to the decommissioning liability. The unwinding of the discount is expensed as incurred and recognised in the consolidated statement of profit or loss as a finance cost. The estimated future costs of decommissioning are reviewed annually and adjusted as appropriate. Changes in the estimated future costs, or in the discount rate applied, are added to or deducted from the cost of the asset.

Employee benefits

An accrual is made for the estimated liability for employees' entitlement to annual leave and leave passage as a result of services rendered by eligible employees up to the end of the year.

Provision is also made for the full amount of end of service benefit due to non-UAE national employees in accordance with the UAE Labour Law, for their period of service up to the end of the year. The accrual relating to annual leave and leave passage is disclosed as a current liability, while the provision relating to end of service benefit is disclosed as a non-current liability.

Pension contributions are made in respect of UAE national employees to the UAE General Pension and Social Security Authority in accordance with the UAE Federal Law No. (2), 2000 for Pension and Social Security. Such contributions are charged to the consolidated statement of profit or loss during the employees' period of service.

Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants where the government is deemed by the Group to be acting in the capacity of a government, as opposed to an ultimate shareholder, are recognised in consolidated statement of profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate; such as grants for the Group to purchase, construct or otherwise acquire non-monetary assets are recognised as deferred government grant in the consolidated statement of financial position and transferred to consolidated statement of profit or loss on a systematic and rational basis over the useful lives of the related assets. Where the government is deemed by the Group to be acting in the capacity of an ultimate shareholder, Government grants are recognised as additional shareholder contribution in the consolidated statement of changes in equity.

Government grants that are receivable as compensation for expenses already incurred or for the purpose of giving immediate financial support to the group with no future related costs are recognised in consolidated statement of profit or loss in the period in which they become receivable.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Government grants continued

Land granted by the Government of Abu Dhabi is recognised at nominal value where there is reasonable assurance that the land will be received, and the Group will comply with any applicable attached conditions.

In such cases the Group initially recognizes the land as Inventories in accordance with the definitions of inventories as per IAS 2. Subsequently, land is classified and measured as Property, plant and equipment, Investment property, Finance lease receivable and/or inventories based on the intended usage of property as determined by the Group.

Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Initial recognition and measurement
Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15.

(i) Financial assets

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

Subsequent measurement
For purposes of subsequent measurement, financial assets are classified in four categories:

- Financial assets at fair value through profit or loss
- Financial assets at amortised cost (debt instruments)
- Financial assets at fair value through OCI with recycling of cumulative gains and losses upon derecognition (debt instruments)
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)

The group has the following financial assets:

Cash and cash equivalents
Cash and cash equivalents which include cash on hand and deposits held at call with banks with original maturities of three months or less, are classified as financial assets at amortised cost.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Financial instruments continued

(i) Financial assets continued

Financial assets at amortised cost (debt instruments)
The Group measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognised in the interim statement of comprehensive income when the asset is derecognised, modified or impaired.

Financial assets at fair value through profit or loss
Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in the statement of profit or loss.

This category includes debt investments and equity investments which the Group had not irrevocably elected to classify at fair value through OCI. Dividends on equity investments are recognised as other income in the statement of profit or loss when the right of payment has been established.

Derecognition
A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

- The rights to receive cash flows from the asset have expired; or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the assets.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of its continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Impairment of financial assets
The Group records an allowance for ECLs for all financial instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

The Group recognises loss allowances for ECLs on financial assets measured at amortised cost which comprise of finance lease receivables, loans to related parties and trade receivables.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Financial instruments continued

(i) Financial assets continued

Impairment of financial assets continued

The Group measures loss allowances at an amount equal to lifetime ECLs, except for the following, which are measured at 12-month ECLs:

- debt securities that are determined to have low credit risk at the reporting date; and
- the debt securities and bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

The Group assumes that the credit risk on a financial asset has increased significantly if it is more than 30 days past due.

The Group considers a financial asset to be in default when:

- the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held); or
- the financial asset is more than 90 days past due.

The Group considers a debt security to have low credit risk when its credit risk rating is equivalent to the globally understood definition of 'investment grade'.

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the reporting date (or a shorter period if the expected life of the instrument is less than 12 months).

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

Measurement of ECL
ECLs are recognised in two stages:

a) Stage 1
For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL).

b) Stage 2 and Stage 3
For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive).

ECLs are discounted at the effective interest rate of the financial asset.

For due from related parties and trade receivables that do not contain a significant financing component, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Financial instruments continued

i) Financial assets continued

b) Stage 2 and Stage 3 continued

For finance lease receivables, loans to related parties and receivables under payment plan, the Group measures ECL on an individual basis. The measurement of the loss allowance is based on the present value of the asset's expected cash flows using the asset's original EIR, regardless of whether it is measured on an individual basis or a collective basis.

The key inputs into the measurement of ECLs are the term structures of the following variables:

- Probability of default (PD);
- Loss given default (LGD);
- Exposure at default (EAD);
- Definition of default;
- Significant increase in credit risk; and
- Expected life.

These parameters are derived from the Group's internally developed statistical models and other historical data and are explained in detail in note 4.

Credit-impaired financial assets
At each reporting date, the Group assesses whether financial assets carried at amortised cost are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or being more than 90 days past due;
- the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise;
- it is probable that the borrower will enter bankruptcy or other financial reorganisation; or
- the disappearance of an active market for a security because of financial difficulties.

Write-off
Financial assets are written off (either partially or in full) when there is no realistic prospect of recovery. This is generally the case when the Group has exhausted all legal and remedial efforts to recover from the customers. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

ii) Financial liabilities

Initial recognition and measurement
Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, customer deposits, borrowings or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables (except deferred income), bank borrowings, due to related parties (except deferred government grants) and derivative financial liability.

Subsequent measurement
The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at fair value through profit or loss
Financial liabilities at fair value through profit or loss include derivative financial liabilities designated upon initial recognition as at fair value through profit or loss.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Financial instruments continued

ii) Financial liabilities continued

Loans and borrowings
This is the category most relevant to the Group. After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit or loss. This category generally applies to interest-bearing loans and borrowings.

Derecognition
A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the interim consolidated statement of comprehensive income.

Derivative financial instruments

Initial recognition and subsequent measurement
The Group uses derivative financial instruments, such as interest rate swaps, to hedge its interest rate risk. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Changes in the fair value of derivative financial instruments that do not qualify for hedge accounting are recognised in consolidated statement of profit or loss as they arise. Derivative financial instruments that do not qualify for hedge accounting are classified as held for trading derivatives.

For the purpose of hedge accounting, the Group designates certain derivatives into two types of hedge categories:

- fair value hedges which hedge the exposure to changes in the fair value of a recognised asset or liability; and
- cash flow hedges which hedge exposure to variability in cash flows that are either attributable to a particular risk associated with a recognised asset or liability, or a highly probable forecasted transaction that will affect future reported net income.

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which it wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge.

The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined). A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

- There is 'an economic relationship' between the hedged item and the hedging instrument
- The effect of credit risk does not 'dominate the value changes' that result from that economic relationship
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item

Movements in the hedging reserve in equity are detailed in the consolidated statement of changes in equity.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Fair value hedges

The change in the fair value of a hedging instrument is recognised in the consolidated statement of profit or loss as a finance cost. The change in the fair value of the hedged item attributable to the risk hedged is recorded as part of the carrying value of the hedged item and is also recognised in the consolidated statement of profit or loss as a finance cost.

For fair value hedges relating to items carried at amortised cost, any adjustment to carrying value is amortised through profit or loss over the remaining term of the hedge using the EIR method. EIR amortisation may begin as soon as an adjustment exists and no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged.

If the hedged item is derecognised, the unamortised fair value is recognised immediately in consolidated statement of profit or loss.

When an unrecognised firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognised as an asset or liability with a corresponding gain or loss recognised in consolidated statement of profit or loss.

Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognised in OCI in the cash flow hedge reserve, while any ineffective portion is recognised immediately in the consolidated statement of profit or loss.

The Group uses interest rate swaps as hedges of its exposure to interest rate risk on borrowings. The ineffective portion relating to foreign currency contracts is recognised in finance costs and the ineffective portion relating to commodity contracts is recognised in other operating income or expenses.

Amounts recognised as OCI are transferred to consolidated statement of profit or loss when the hedged transaction affects consolidated statement of profit or loss, such as when the hedged financial income or financial expense is recognised or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognised as OCI are transferred to the initial carrying amount of the non-financial asset or liability.

If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss previously recognised in OCI remains separately in equity until the forecast transaction occurs or the foreign currency firm commitment is met.

At the date of the initial application, all of the Group’s existing hedging relationships were eligible to be treated as continuing hedging relationships. The adoption of the hedge accounting requirements of IFRS 9 had no significant impact on the Group’s financial statements.

Impairment of non-financial assets

The Group assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset’s recoverable amount. An asset’s recoverable amount is the higher of an asset’s or CGU’s fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Impairment of non-financial assets continued

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Group's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. A long-term growth rate is calculated and applied to project future cash flows after the fifth year.

Impairment losses of continuing operations are recognised in the consolidated statement of profit or loss in expense categories consistent with the function of the impaired asset, except for properties previously revalued with the revaluation taken to OCI. For such properties, the impairment is recognised in OCI up to the amount of any previous revaluation.

For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognised impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the asset's or CGU's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the consolidated statement of profit or loss unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

Goodwill is tested for impairment annually and when circumstances indicate that the carrying value may be impaired.

Impairment is determined for goodwill by assessing the recoverable amount of each CGU (or group of CGUs) to which the goodwill relates. When the recoverable amount of the CGU is less than its carrying amount, an impairment loss is recognised. Impairment losses relating to goodwill cannot be reversed in future periods.

Intangible assets with indefinite useful lives are tested for impairment annually at the CGU level, as appropriate, and when circumstances indicate that the carrying value may be impaired.

Cash and short-term deposits

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise petty cash fund, current accounts and term deposits with banks with original maturities less than three months.

Fair value measurement

The Group measures financial instruments such as derivatives, and non-financial assets such as investment properties, at fair value at each balance sheet date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability; or
- In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Group.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Fair value measurement continued

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the consolidated financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities;
- Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable;
- Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognized in the consolidated financial statements at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy, as explained above.

Fair-value related disclosures for financial instruments and non-financial assets that are measured at fair value or where fair values are disclosed, are summarized in note 31.4.

Assets held for sale and discontinued operations

The Group classifies non-current assets and disposal groups as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. Non-current assets and disposal groups classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Costs to sell are the incremental costs directly attributable to the disposal of an asset (disposal group), excluding finance costs and income tax expense.

The criteria for held for sale classification is regarded as met only when the sale is highly probable, and the asset or disposal group is available for immediate sale in its present condition. Actions required to complete the sale should indicate that it is unlikely that significant changes to the sale will be made or that the decision to sell will be withdrawn. Management must be committed to the plan to sell the asset and the sale expected to be completed within one year from the date of the classification.

Property, plant and equipment and intangible assets are not depreciated or amortised once classified as held for sale.

Assets and liabilities classified as held for sale are presented separately as current items in the statement of financial position.

3 SIGNIFICANT ACCOUNTING POLICIES continued

3.2 Summary of significant accounting policies continued

Assets held for sale and discontinued operations continued

A disposal group qualifies as discontinued operation if it is a component of an entity that either has been disposed of, or is classified as held for sale, and:

- Represents a separate major line of business or geographical area of operations;
- Is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations; or
- Is a subsidiary acquired exclusively with a view to resale

Discontinued operations are excluded from the results of continuing operations and are presented as a single amount as profit or loss after tax from discontinued operations in the statement of profit or loss.

Additional disclosures are provided in note 29. All other notes to the consolidated financial statements include amounts for continuing operations, unless indicated otherwise.

3.3 Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's consolidated financial statements are disclosed below. The Group does not expect the following new standards, interpretations and amendments to have a material impact on its financial position, performance or disclosures when applied at a future date. The Group intends to adopt these standards when they become effective.

New and revised IFRSs	***Effective for annual periods beginning on or after***
IFRS 17 Insurance Contracts	1 January 2023
Amendments to IAS 1: Classification of Liabilities as Current or Non-current	1 January 2023
Amendments to IAS 16: Property, Plant and Equipment: Proceeds before Intended Use	1 January 2022
Amendments to IAS 37: Onerous Contracts – Costs of Fulfilling a Contract	1 January 2022
IFRS 1 First-time Adoption of International Financial Reporting Standards	1 January 2022
IFRS 9 Financial Instruments – Fees in the '10%' test for derecognition of financial liabilities	1 January 2022
IAS 41 Agriculture – Taxation in fair value measurements	1 January 2022
Amendments to IFRS 3 *Business Combinations* relating to reference to the Conceptual Framework	1 January 2022
Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors relating to definition of Accounting Estimates	1 January 2023
Amendments to IAS 12 *Income Taxes* relating to deferred Tax related to Assets and Liabilities arising from a Single Transaction	1 January 2023

4 CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

The preparation of the Group's consolidated financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

4.1 Critical judgments in applying accounting policies

Significant judgments made by management that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are:

4 CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY continued

4.1 Critical judgments in applying accounting policies continued

Satisfaction of performance obligations
The Group is required to assess each of its contracts with customers to determine whether performance obligations are satisfied over time or at a point in time in order to determine the appropriate method for recognising revenue. The Group has assessed that based on the contracts entered into with customers and the provisions of relevant laws and regulations, the Group recognises revenue over time in the following circumstances:

a) where contracts are entered into for sale and development (sale of land with obligation to deliver infrastructure), the Group does not create an asset with an alternative use to the Group and has an enforceable right to payment for performance completed to date; and

b) where contracts are entered into to provide services (property management and facility management), the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs.

Where the above criteria are not met, revenue is recognised at a point in time. Where revenue is recognised at a point of time, the Group assesses each contract with customers to determine when the performance obligation of the Group under the contract is satisfied.

Classification of properties
In the process of classifying properties, management has made various judgments. Judgment is needed to determine whether a property qualifies as an investment property, property, plant and equipment and / or property held for sale i.e. inventories. The Group develops criteria so that it can exercise that judgment consistently in accordance with the definitions of investment property, property, finance lease receivable, plant and equipment and property held for sale. In making its judgment, management considered the detailed criteria and related guidance for the classification of properties as set out in IAS 2, IAS 16, IFRS16 and IAS 40, and in particular, the intended usage of property as determined by the management.

Government Grants
The Group receives land grants from the Government of Abu Dhabi and the Group applies various judgments with respect to the accounting for such grants. The Group recognizes the land grants in the consolidated financial statements based on an assessment of the future commercial viability of the land. The Group recognizes the land grants in the consolidated financial statements only if the estimated future economic benefits associated with the land, including compliance with any applicable conditions, are sufficiently certain. This assessment involves significant estimation and judgment.

Significant judgment is also required to determine whether the Government of Abu Dhabi in granting land banks to the Group is acting in its capacity as a shareholder or in its capacity as a government. This determination involves significant judgement.

4 CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

4.1 Critical judgments in applying accounting policies continued

Classification of investees as joint ventures
The Group has determined that it has joint control over the following investees:

Name of investees	***Ownership interest as at 31 December 2021***	*Ownership interest as at 31 December 2020*
London Array Project	**20%**	20%
Tesla Wind D.O.O. Beograd	**60%**	60%
Shams Power Company PJSC	**51%**	51%
Dudgeon Offshore Wind Ltd	**35%**	35%
Jordan Wind Power Company PJSC	**50%**	50%
Hywind Scotland Ltd.	**25%**	25%
Emirates Solar Power Company LLC	**60%**	60%
Krnovo Green Energy D.o.o	**49%**	49%
Sharjah Waste to Energy Company LLC	**50%**	50%
The Catalyst Limited	**50%**	50%
Baynouna Holdings B.V.	**70%**	70%
Batwind Project	**50%**	50%
Dumat Wind Contracting Company LLC	**49%**	49%
Dumat Al Jandal Wnd Energy Company LLC	**49%**	49%
East Rockingham RRF Holdco Trust 2	**36.67%**	36.67%
Masdar Taaleri Generation d.o.o. Beograd	**50%**	50%
Masdar Tribe Energy Holdings RSC Limited	**90%**	90%
Masdar Tribe Energy Western Australia RSC Limited	**17%**	17%
South Jeddah Noor PV Energy Company LLC	**35.7%**	35.7%
PV Energy Maintenance Company LLC	**35.7%**	35.7%
Noor Midelt Solar Hybrid 1 Company	**30%**	30%
Noor Midelt O&M1 Company	**37%**	37%
PT Pembangkitan Jawa Bali Masdar Solar Energi	**49%**	49%
Fonnes SP. Z.O.O	**50%**	50%
Infinity 50 for Renewable Energy SA	**48%**	48%
Infinity Power Holding BV	**49%**	49%
Dudgeon Extension Limited	**35%**	35%
Emerge Limited	**51%**	**-**
Noor Midelt 1 Procurement Company DMCC	**54%**	**-**
Noor Jeddah Energy Service Company LLC	**35.70%**	-
Energize O&M Company LLC	**60%**	-
Dhafrah Solar Energy Holding Company LLC	**33.34%**	-
Dhafrah PV2 Energy Company LLC	**20%**	-
Dimona Solar Park Ltd	**49%**	-
Dimona Sun Ltd	**49%**	-
PT Masdar Mitra Solar Radiance	**47.50%**	-
Masdar Tribe Australia Holdings Ltd	**50%**	-
Masdar Tribe Australia PTY Ltd	**50%**	-
Infinity 50 for Renewable Energy SAE	**48%**	-
Masdar Armenia 1 CJSC	**85%**	-

Joint control is assessed on the basis that decisions about relevant activities are taken jointly with other venturers. Where the Group has more than 50% ownership interest but decisions require unanimous approval of all participants then the Group considers it does not have control and investments are considered joint ventures.

Most of the above investees are limited liability companies whose legal form confers separation between the parties to the joint arrangement and the companies themselves. Furthermore, there is no contractual arrangement or any other facts and circumstances that indicate that the parties to the joint arrangement have rights to the assets and obligations for the liabilities of the joint arrangement.

4 CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

4.1 Critical judgments in applying accounting policies continued

Project expenses
Project expenses comprise expenses incurred on screening, feasibility studies and pre-development phases of various projects undertaken by the Group. As stated in note 3 to the consolidated financial statements, the portion of such expenditure relating to property, plant and equipment is capitalised when there is reasonable certainty that projects will be developed in the future and future economic benefits will flow to the Group. The process of estimating the degree of certainty involves significant judgments on the part of senior management. Some of these projects tend to have long gestation periods and in certain cases depend on some form of government support. Furthermore, in some instances, the project size and economics are reassessed in the light of the changing economic climate, resulting in an increase in the overall project development timelines, or a downsizing of the project or certain of its component. Management periodically assesses the likelihood of such projects proceeding and uses the results of such assessments to determine whether any provision for impairment losses are required. The estimates and underlying judgments are reviewed on an ongoing basis. Actual results may differ from these estimates and judgments.

Operating leases
The Group has entered into commercial property leases on certain buildings classified as investment properties as described in notes 7 to the consolidated financial statements. In accordance with the guidance set out in IFRS 16 *Leases*, the Group has determined, based on an evaluation of the terms and conditions of the arrangements, that the lease term does not constitute a substantial portion of the economic life of the commercial property. Therefore, the Group retains all significant risks and rewards of ownership of these properties and accordingly, the Group accounts for these lease arrangements as operating leases.

Finance leases
The Group has entered into Musataha lease arrangements over certain land classified previously as investment properties as described in notes 7 to the consolidated financial statements. In accordance with the guidance set out in IFRS 16 *Leases*, the Group has determined, based on an evaluation of the terms and conditions of the arrangements, that the exercise of the lease renewal option is reasonably certain and that the present value of the minimum lease payments constitute substantially all of the fair value of the leased asset. Therefore, the Group does not retain all significant risks and rewards of ownership of these properties and accordingly, the Group accounts for these lease arrangements as finance leases as described in note 11 to the consolidated financial statements.

Classification of financial assets
Financial assets are classified in their entirety on the basis of the Group's business model for managing the financial assets and the contractual cash flow characteristics of the investments. Management decides on acquisition of a financial asset whether it should be classified as amortised cost, fair value through profit or loss or fair value through other comprehensive income.

Debt instruments are measured at amortised cost only if:

(i) The asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and

(ii) The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

4 CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY continued

4.2 Key sources of estimation uncertainty

The key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are discussed below:

Impairment and non-collectability of financial assets

IFRS 9 requires management to make significant judgements for the calculation of expected credit losses (ECL). The impact is mainly driven by inputs, assumptions and techniques used for ECL calculation under IFRS 9.

Inputs, assumptions and techniques used for ECL calculation – IFRS 9 Methodology
Key concepts in IFRS 9 that have the most significant impact and require a high level of judgment, as considered by the Group while determining the impact assessment, are:

Probability of Default (PD)
The Probability of Default is an estimate of the likelihood of default over a given time horizon. A default may only happen at a certain time over the assessed period, if the financial asset has not been previously derecognized.

Loss Given Default (LGD)
The Loss Given Default is an estimate of the loss arising in the case where a default occurs at a given time. It is based on the difference between the contractual cashflows due and those that the lender would expect to receive, including from the realization of any collateral. It is usually expressed as a percentage of the EAD.

Exposure at Default (EAD)
The Exposure at Default is an estimate of the exposure at a future date, taking into account expected changes in the exposure after the reporting date, including repayments of principal and interest, whether scheduled by contract or otherwise, expected drawdowns on committed facilities, and accrued interest from missed payments.

Significant increase in credit risk
The Group monitors all financial assets and issued loan commitments, if any, that are subject to the impairment requirements to assess whether there has been a significant increase in credit risk since initial recognition. If there has been a significant increase in credit risk, the Group will measure the loss allowance based on lifetime rather than 12-month ECL. In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort, based on the Group's historical experience and expert credit assessment including forward-looking information.

Credit-impaired financial assets
A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Evidence of credit-impairment includes observable data about the following events:

- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or past due event;
- the lender of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession that the lender would not otherwise consider;
- the disappearance of an active market for a security because of financial difficulties; or
- the purchase of a financial asset at a deep discount that reflects the incurred credit losses.

Purchased or originated credit-impaired financial assets
Purchased or originated credit-impaired financial assets are treated differently because the asset is credit-impaired at initial recognition. For these assets, the Group recognises all changes in lifetime ECL since initial recognition as a loss allowance with any changes recognised in consolidated statement of comprehensive income. A favourable change for such assets creates an impairment gain.

4 CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY continued

4.2 Key sources of estimation uncertainty continued

Impairment and non-collectability of financial assets continued

Definition of default
The definition of default used in the measurement of expected credit losses and the assessment to determine movement between stages will be consistent with the definition of default used for internal credit risk management purposes.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

When assessing if the borrower is unlikely to pay its credit obligation, the Group takes into account both qualitative and quantitative indicators. The Group uses a variety of sources of information to assess default which are either developed internally or obtained from external sources.

Expected life
When measuring ECL, the Group considers the maximum contractual period over which the Group is exposed to credit risk. All contractual terms should be considered when determining the expected life, including prepayment options and extension and rollover options. For certain revolving credit facilities that do not have a fixed maturity, the expected life is estimated based on the period over which the Group is exposed to credit risk and where the credit losses would not be mitigated by management actions.

As at 31 December 2021, provision for expected credit losses of trade and other receivables is AED 356.51 million *(2020: AED 368.91 million),* due from related parties is AED nil *(2020: AED Nil)*, loans to related parties is AED 120.25 million *(2020: AED 144.06 million)* and finance lease receivables is AED Nil million *(2020: AED 14.27 million)*.

Any difference between the amounts actually collected in future periods and the amounts expected to be received will be recognised in the consolidated statement of profit or loss.

Impairment of inventories
When inventories become old or obsolete, an estimate is made of their net realisable value. Management has estimated the recoverability of inventories and has considered the allowance required for obsolescence. Management has estimated the allowance for inventory obsolescence on the basis of prior experience and the current economic environment.

Impairment losses on investment in equity-accounted investees
After the application of the equity method of accounting, the Group determines whether it is necessary to recognise any additional impairment loss on the carrying value of the investment in equity-accounted investees by comparing its recoverable amount with the higher of value in use or fair value less costs to sell with its carrying amount.

In determining the value in use of the investment, the Group estimates:

- its share of the present value of the estimated future cash flows expected to be generated by the associates, including the cash flows from the operations of the associates and the proceeds on the ultimate disposal of the investment; or
- the present value of the estimated future cash flows expected to arise from dividends to be received from the investment and from its ultimate disposal.

Impairments are reversed if conditions for impairment are no longer present. Evaluating whether an impairment should be reversed requires the selection of key assumptions about the future.

Accumulated impairment losses on investment in a joint operation recognised on the consolidated statement of financial position as at 31 December 2021 is AED Nil million *(2020: AED 7.22 million).*

4 CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY continued

4.2 Key sources of estimation uncertainty continued

Impairment of property, plant and equipment and capital work in progress
Properties classified under property, plant and equipment and capital work in progress are assessed for impairment based on the assessment of cash flows on individual cash-generating units when there is an indication that those assets have suffered an impairment loss. Cash flows are determined with reference to recent market conditions, prices existing at the end of the reporting period, contractual agreements and estimations over the useful lives of the assets and discounted using a range of discounting rates that reflects current market assessments of the time value of money and the risks specific to the asset. The net present values are compared to the carrying amounts to assess any probable impairment.

Accumulated impairment losses as at 31 December 2021 on property, plant and equipment are AED Nil million *(2020: AED 27.5 million)* and accumulated impairment loss on intangible assets is AED 80.5 million *(2020: AED 80.5 million)*.

Useful lives of property, plant and equipment and intangible assets
Management reviews the residual values and estimated useful lives of property, plant and equipment and intangible assets at the end of each annual reporting period in accordance with IAS 16 and IAS 38. Management determined that current year expectations do not differ from previous estimates based on its review.

Fair value of investment properties
The fair value of investment properties, including investment properties under construction, is determined by independent real estate valuation experts using recognised valuation methods such as the Investment method.

Using the investment method the fair value of the property is determined through analysis of income flow achievable for the properties and takes into account the projected annual expenditure. The principle rests on the thesis that the capital value of real estate will relate directly to the income that it generates or can be expected to generate. In determining the value a term and revision approach is adopted where the core income is capitalized into perpetuity.

Where the fair values of the investment properties under construction are not reliably determinable, they are carried at cost till the earlier of fair value being reliably determinable or completion. Accordingly, the Group has carried the investment properties under construction at cost where the fair value is not reliably determinable. Refer note 29.2 for further details.

The determination of the fair value of revenue-generating properties requires the use of estimates such as future cash flows from assets (such as leasing, tenants' profiles, future revenue streams, capital values of fixtures and fittings, and the overall repair and condition of the property) and discount rates applicable to those assets. These estimates are based on local market conditions existing at the end of the reporting period.

The valuation method used requires estimations based on certain assumptions, which are subject to uncertainty and might materially differ from the actual results.

The key assumptions used are as follows:

	%
Term yield	7.25 – 9.09
Reversion yield	7.64 – 9.00

Decommissioning liability
The provision for decommissioning costs is based on current legal and constructive requirements, technology, price levels and expected plans for remediation. Management bases these estimates on its best knowledge and reports from independent experts. Actual costs and cash outflows can differ from estimates because of changes in laws and regulations, public expectations, market conditions, discovery and analysis of site conditions and changes in technology.

4 CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY continued

4.2 Key sources of estimation uncertainty continued

Impairment and non-collectability of financial assets continued

Deferred taxes
The Group operates in a number of tax jurisdictions and is, therefore, required to estimate its income taxes in each of these tax jurisdictions in preparing its consolidated financial statements. In calculating income taxes, consideration is given to factors such as tax rates based on the tax legislation in force at the end of the reporting period in the different jurisdictions, non-deductible expenses, valuation allowances, changes in tax law and management's expectations of future operating results.

The Group estimates deferred income taxes based on temporary differences between the income and losses reported in its consolidated financial statements and its taxable income and losses as determined under the applicable tax laws. The tax effect of these temporary differences is recorded as deferred tax assets or liabilities in the consolidated financial statements. Deferred taxes are determined using tax rates approved or about to be approved at the end of the reporting period of each company and expected to apply when the corresponding deferred tax asset is realised or the deferred tax liability is settled.

Leases – Estimating the incremental borrowing rate
The Group cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group 'would have to pay', which requires estimation when no observable rates are available or when they need to be adjusted to reflect the terms and conditions of the lease. The Group estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

5 SUBSIDIARIES, EQUITY-ACCOUNTED INVESTEES AND JOINT OPERATIONS

Details of the Group's subsidiaries, equity-accounted investees and joint operations at the end of the reporting period are as follows:

			Ownership interest	
Subsidiaries	***Domicile***	***Principal activities***	***2021***	*2020*
Masdar City Services L.L.C.	UAE	Services	**100%**	100%
Masdar Energy Limited	UAE	Holding company	**100%**	100%
Noor One Solar Power Company L.L.C. (formerly Masdar Photovoltaic L.L.C.)	UAE	Holding company	**100%**	100%
Masdar Holding L.L.C.	UAE	Holding company	**100%**	100%
Masdar Energy Holding L.L.C.	UAE	Holding company	**100%**	100%
Masdar PV GmbH	Germany	Manufacturing	**100%**	100%
Masdar Solar &Wind Cooperatief U.A.	Netherlands	Investment in renewable energy	**100%**	100%
Masdar Energy BV	Netherlands	Investment in renewable energy	**100%**	100%
Masdar Energy UK Limited	UK	Renewable energy	**100%**	100%
Masdar Finance BV	Netherlands	Services	**100%**	100%
Masdar Offshore Wind UK Limited	UK	Investment in renewable energy	**100%**	100%
Masdar City Investment L.L.C	UAE	Holding company	**100%**	100%
Masdar Egypt Investment 1 Limited	UAE	Holding company	**100%**	100%
Masdar Egypt Investment 2 Limited	UAE	Holding company	**100%**	100%
Masdar Egypt Investment 3 Limited	UAE	Holding company	**100%**	100%
Masdar Egypt Investment 4 Limited	UAE	Holding company	**100%**	100%
Ras Ghareb Investment Holding Limited	UAE	Holding company	**100%**	100%
Baynoona Energy SAE	Egypt	Renewable energy	**100%**	100%
Yas Energy Company SAE	Egypt	Renewable energy	**100%**	100%
Masdar Oman Holding Limited	Oman	Renewable energy	**100%**	100%
Masdar City Cooling Company Limited	UAE	District cooling services	-	-
Masdar Offshore Wind Scotland Limited	UK	Investment in renewable energy	**100%**	100%

5 SUBSIDIARIES, EQUITY-ACCOUNTED INVESTEES AND JOINT OPERATIONS continued

Subsidiaries	*Domicile*	*Principal activities*	***Ownership interest* 2021**	*2020*
Masdar Specialised Technial Services LLC	UAE	Services	**100%**	100%
Masdar UK charging infrastructure SPV Restricted Limited	UAE	Investment	**100%**	100%
Nur Navoi Solar LLC	Uzbekistan	Renewable energy	**100%**	100%
Masdar Egypt BV	Netherlands	Renewable energy	**100%**	100%
Masdar B04 Limited	UAE	Real estate	**100%**	100%
Masdar B04 – 0 Limited	UAE	Real estate	**100%**	100%
Masdar B-10 Limited	UAE	Real estate	**100%**	100%
Masdar M12 Limited	UAE	Real estate	**100%**	100%
Masdar B02 Limited	UAE	Real estate	**100%**	100%
Masdar G10 Limited	UAE	Real estate	**100%**	100%
Masdar M13 Limited	UAE	Real estate	**100%**	100%
Masdar B05 Limited	UAE	Real estate	**100%**	100%
Masdar M13-T Limited	UAE	Real estate	**100%**	100%
Masdar G13 Limited	UAE	Real estate	**100%**	100%
Masdar B03 Limited	UAE	Real estate	**100%**	100%
Masdar B11 Limited	UAE	Real estate	**100%**	100%
Masdar Musataha 1 Limited	UAE	Real estate	**100%**	-
Masdar Musataha 2 Limited	UAE	Real estate	**100%**	-
Nur Navoi Solar Holding RSc Limited	UAE	Renewable energy	**100%**	100%
Masdar Moroc RSC Limited	UAE	Renewable energy	**100%**	100%
Source Trading Company Limited	UAE	Services	**100%**	100%
Madar Indonesia Solar Holdings RSC Limited	UAE	Renewable energy	**100%**	100%
Masdar Cirata Solar RSC Limited	UAE	Renewable energy	**100%**	100%
Masdar CIS Holdings RSC Limited	UAE	Renewable energy	**100%**	100%
Masdar Capital Management Limited	UAE	Services	**100%**	100%
Masdar Green REIT (CEIC) Limited	UAE	Real estate	**100%**	100%
Masdar Energy UK II Limited	UK	Renewable energy	**100%**	100%
Masdar Offshore Wind UK II Limited	UK	Renewable energy	**100%**	100%
Abu Dhabi Future Energy Holding Company LLC	KSA	Renewable energy	**100%**	100%
Shamol Zarafshan Enegy FE LLC	Uzbekistan	Renewable energy	**100%**	100%
VIS Solar 1 BV	UAE	Renewable energy	**-**	100%
Masdar Al-Dhafra Holding RSC Limited	UAE	Renewable energy	**100%**	-
Masdar Power Services	Uzbekistan	Renewable energy	**100%**	-
Masdar Israel Holding RSC Limited	UAE	Renewable energy	**100%**	-
Nur Navoi Solar Holding RSC Limited	UAE	Renewable energy	**100%**	-
Shamol Zarafshan Energy Holding RSC Limited	UAE	Renewable energy	**100%**	-
Jizzak Holding RSC Limited	UAE	Renewable energy	**100%**	-
Nur Sherabad Holding RSC Limited	UAE	Renewable energy	**100%**	-
Area 60 Holding RSC Limited	UAE	Renewable energy	**100%**	-
Nur Samarkand Holding RSC Limited	UAE	Renewable energy	**100%**	-
AYG-1 Holding RSC Limited	UAE	Renewable energy	**100%**	-
Masdar Azerbaijan LLC	Azerbaijan	Renewable energy	**100%**	-
Masdar Azerbaijan Energy LLC	Azerbaijan	Renewable energy	**100%**	-
Nur Navoi Solar LLC	Uzbekistan	Renewable energy	**100%**	-
Al Dhafra Wind Energy Company	UAE	Renewable energy	**100%**	-
ADFEC Morocco SARLAU	Morocco	Renewable energy	**100%**	-
Shamol Zarafshan LLC	Uzbekistan	Renewable energy	**100%**	-
Nur Jizzak Solar PV Foreign Enterprise Limited Liabilty Company	Uzbekistan	Renewable energy	**100%**	-
Nur Sherabad Solar PV Foreign Enterprise Limited liability Company	Uzbekistan	Renewable energy	**100%**	-
Nur Samakand Solar PV Foreign Enterprise Limited liability Company	Uzbekistan	Renewable energy	**100%**	-
Associates				
London Array Limited	UK	Services	**20%**	20%
Hero Future Energies Global Limited	UK	Renewable energy	**21%**	21%
Joint ventures				
Dudgeon Holding Limited (Dudgeon Offshore Wind Limited) ("Dudgeon")	UK	Renewable energy	**35%**	35%
Shams Power Company PJSC	UAE	Renewable energy	**51%**	51%
Jordan Wind Power Company PSC	Jordan	Renewable energy	**50%**	50%
Tesla Wind B.V.	Netherlands	Renewable energy	**50%**	50%
Masdar Taaleri Generation d.o.o	Serbia	Renewable energy	**50%**	50%
Hywind Scotland Limited ("Hywind")	UK	Renewable energy	**25%**	25%
Emirates Solar Power Company LLC (note 27)	UAE	Renewable energy	**60%**	60%

5 SUBSIDIARIES, EQUITY-ACCOUNTED INVESTEES AND JOINT OPERATIONS continued

Subsidiaries	*Domicile*	*Principal activities*	*Ownership interest* 2021	*Ownership interest* 2020
Sharjah Waste to Energy Company LLC ("Sharjah W2E")	UAE	Renewable energy	**50%**	50%
The Catalyst limited (Catalyst)	UAE	Renewable energy	**50%**	50%
Krnovo HoldCo D.o.o ("Krnovo")	Montenegro	Renewable energy	**49%**	49%
Baynounah Holdings B.V. ("Baynounah")	Netherlands	Holding company	**70%**	70%
Dumat Al Jandal Wnd Energy Company LLC	Saudi Arabia	Renewable energy	**49%**	49%
Dumat Wind Contracting Company LLC	Saudi Arabia	Renewable energy	**49%**	49%
Masdar Tribe Energy Holdings RSC Limited	UAE	Holding Company	**90%**	90%
Masdar Tribe Energy Western Australia RSC Limited	UAE	Renewable energy	**17%**	17%
East Rockingham RRF Holdco Trust 2	Australia	Renewable energy	**37%**	37%
South Jeddah Noor PV Energy Company LLC	Saudi Arabia	Renewable energy	**36%**	36%
PV Energy Maintenance Company LLC	Saudi Arabia	Renewable energy	**36%**	36%
Noor Midelt Solar Hybrid 1 Company	Morocco	Renewable energy	**30%**	30%
Noor Midelt O&M1 Company	Morocco	Renewable energy	**37%**	37%
PT Pembangkitan Jawa Bali Masdar Solar Energi	Indonesia	Renewable energy	**49%**	49%
Fonnes SP. Z.O.O	Poland	Renewable energy	**50%**	50%
Infinity 50 for Renewable Energy SA	Egypt	Renewable energy	**48%**	48%
Infinity Power Holding BV	Netherlands	Renewable energy	**49%**	49%
Emerge Limited	UAE	Renewable energy	**51%**	-
Noor Midelt 1 Procurement Company DMCC	UAE	Renewable energy	**54%**	-
Noor Jeddah Energy Service Company LLC	Saudi Arabia	Renewable energy	**35.70%**	-
Energize O&M Company LLC	UAE	Renewable energy	**60%**	-
Dhafrah Solar Energy Holding Company LLC	UAE	Renewable energy	**33.34%**	-
Dhafrah PV2 Energy Company LLC	UAE	Renewable energy	**20%**	-
Dimona Solar Park Ltd	Israel	Renewable energy	**49%**	-
Dimona Sun Ltd	Israle	Renewable energy	**49%**	-
PT Masdar Mitra Solar Radiance	Indonesia	Renewable energy	**47.50%**	-
Masdar Tribe Australia Holdings Ltd	UAE	Renewable energy	**50%**	-
Masdar Tribe Australia PTY Ltd	Australia	Renewable energy	**50%**	-
Infinity 50 for Renewable Energy SAE	Egypt	Renewable energy	**48%**	-
Masdar Armenia 1 CJSC	Armenia	Renewable energy	**85%**	-
Dudgeon Extension Limited	UK	Renewable energy	**35%**	35%
Joint operations				
London Array Project (unincorporated)	UK	Renewable energy	**20%**	20%
Batwind Project (unincorporated)	UK	Renewable energy	**50%**	50%

The Group does not have any material partly owned subsidiaries.

The Group's investments in associates and joint ventures are accounted for using the equity method of accounting.

The summarised financial information of material equity-accounted investees is disclosed in note 9 to the consolidated financial statements.

6 PROPERTY, PLANT AND EQUIPMENT

	Land and buildings AED '000	*Plant and machinery AED '000*	*Fixtures, fitting and equipment AED '000*	*Capital work in progress AED '000*	*Total AED 000*
2021					
Cost:					
1 January 2021	**16,739**	**2,510,722**	**50,119**	**71,931**	**2,649,511**
Additions, net	**-**	**(9,059)**	**4,950**	**25,593**	**21,484**
Assets Held for Sale	**(9,845)**	**(373,173)**	**(12,350)**	**(64,732)**	**(460,100)**
Disposal	**-**	**-**	**-**	**(8,943)**	**(8,943)**
Effect of movement in exchange rates	**(70)**	**(20,779)**	**(1)**	**(14)**	**(20,864)**
31 December 2021	**6,824**	**2,107,711**	**42,718**	**23,835**	**2,181,088**
Accumulated depreciation and impairment:					
1 January 2021	**8,779**	**923,314**	**39,618**	**27,500**	**999,211**
Charge for the year	**550**	**105,608**	**8,731**	**-**	**114,889**
Assets Held for Sale	**(5,995)**	**(225,335)**	**(12,350)**	**(27,500)**	**(271,180)**
Effect of movement in exchange rates	**(37)**	**(8,729)**	**-**	**-**	**(8,766)**
31 December 2021	**3,297**	**794,858**	**35,999**	**-**	**834,154**
Carrying amount:					
31 December 2021	**3,527**	**1,312,853**	**6,719**	**23,835**	**1,346,934**

6 PROPERTY, PLANT AND EQUIPMENT continued

	Land and buildings AED '000	*Fixtures, Plant and machinery AED '000*	*Capital fitting and equipment AED '000*	*work in progress AED '000*	*Total AED 000*
2020					
Cost:					
1 January 2020	16,531	2,485,571	47,657	291,115	2,840,874
Additions, net	-	14,740	2,457	1,757	18,954
Transfers to inventories (note 14)	-	-	-	(101,353)	(101,353)
Transfers to investment properties, net (note 7)	-	-	-	(101,093)	(101,093)
Disposal	-	(55,483)	-	(18,542)	(74,025)
Effect of movement in exchange rates	208	65,894	5	47	66,154
31 December 2020	16,739	2,510,722	50,119	71,931	2,649,511
Accumulated depreciation and impairment:					
1 January 2020	8,204	798,876	30,826	27,500	865,406
Charge for the year	306	107,335	8,956	-	116,597
Relating to disposal	-	(9,311)	-	-	(9,311)
Other transfers	169	-	(169)	-	-
Relating to write off	-	1,763	-	-	1,763
Effect of movement in exchange rates	100	24,651	5	-	24,756
31 December 2020	8,779	923,314	39,618	27,500	999,211
Carrying amount:					
31 December 2020	7,960	1,587,408	10,501	44,431	1,650,300

Land includes plots received as government grants with established future economic benefits (note 24) which are recorded as at 31 December 2021 at a nominal value of 1 *(2020: AED 1)*.

Included in plant and machinery is a decommissioning liability relating to the London Array Project amounting to AED 87.53 million as at 31 December 2021 *(2020: AED 95.7 million)* (note 21).

CWIP is mainly related with General Service office Renovation works and ICT Hardware and Software under clearing A/c AED 11 million, Energy Service project AED 13 million.

Depreciation charge has been allocated to cost of sales and general and administrative expenses as follows:

	2021 AED '000	*2020 AED '000*
Cost of sales	**89,051**	87,091
General and administrative expenses (note 26)	**25,838**	29,506
	114,889	116,597

7 INVESTMENT PROPERTIES

	2021 AED '000	*Restated 2020 AED '000*
Investment properties		
At 01 January	**2,526,937**	1,583,981
Additions	**-**	1,523
Change in fair value of investment properties	**106,947**	(83,904)
Transfer in from Investment properties under development	**-**	1,025,337
At 31 December	**2,633,884**	2,526,937

7 INVESTMENT PROPERTIES continued

	2021 *AED '000*	*Restated 2020* *AED '000*
Investment properties under development		
At 01 January	**42,899**	869,430
Additions	**58,916**	64,455
Transfers from inventory	**10,516**	33,258
Allocation from Capital Accruals	**37,227**	-
Transfer from PPE	**-**	101,093
Transfer to Investment Properties	**-**	(1,025,337)
At 31 December	**149,558**	42,899
Total	**2,783,442**	2,569,836
Held for Sale Assets	**(2,783,442)**	-
Total	**-**	2,569,836

Details of the Group's investment properties and information about the fair value hierarchy are as follows:

	Level 3 ***AED '000***	***Fair value*** ***AED '000***
2021:		
IRENA Headquarters building and land	**472,165**	**472,165**
Siemens building and land	**331,850**	**331,850**
Incubator building and land	**113,260**	**113,260**
Etihad building and land	**538,405**	**538,405**
Accelerator building	**63,070**	**63,070**
MI Neighbourhood	**966,400**	**966,400**
Visitors centre	**77,988**	**77,988**
Accelerator 2	**70,746**	**70,746**
	2,633,884	**2,633,884**
2020:		
IRENA Headquarters building and land	460,720	460,720
Siemens building and land	225,807	225,807
Incubator building and land	111,310	111,310
Etihad building and land	557,230	557,230
Accelerator building	57,620	57,620
MI Neighbourhood	969,710	969,710
Visitors centre	77,939	77,940
Accelerator 2	66,600	66,600
	2,526,936	2,526,937

7 INVESTMENT PROPERTIES continued

Investment properties under construction are measured at cost until either its fair value becomes reliably determinable, or construction is completed.

Breakup of cost is as follows:

	AED '000
2021:	
B-02	**58,956**
MC square	**67,460**
Innovation hub	**23,142**
	149,558
2020:	
B-02	42,899

*During the year, certain plots of land were transferred from inventories to investment properties for the purpose of new rental properties. Accordingly, the net cost of the land plots amounting to AED 10.5 million was transferred to investment properties.

Sensitivity to significant changes in unobservable inputs

For investment properties categorised into Level 3 of the fair value hierarchy, the following information is relevant as at 31 December 2021:

Investment property	**Valuation techniques**	**Significant unobservable input**	**Sensitivity**
IRENA Headquarters office building and land	Fair Market Value	Yield rate of 9.25% *	a) AED 60.9 million – AED 304.6 million.
		Market rent at an average of AED 1,635 per sq.m per annum **	b) AED 4.7 million – 23.6 million.
Siemens office building and land	Fair Market Value	Yield rate of 9.25% *	a) AED 42.8 million – AED 214.1 million.
		Market rent at an average of AED 1,588 per sq.m per annum **	b) AED 3.3 million – AED 16.6 million.
Incubator office building and land	Fair Market Value	Yield rate of 9.50% *	a) AED 14.2 million – AED 70.8 million.
		Market rent at an average of AED 1,836 per sq.m per annum **	b) AED 1.1 million – AED 5.7 million.
Etihad residential land and building	Fair Market Value	Yield rate of 8.75% *	a) AED 70.1 million – AED 350.5 million.
		Market rent at an average of AED 743 per sq.m per annum **	b) AED 5.4 million – AED 26.9 million.

7 INVESTMENT PROPERTIES continued

Sensitivity to significant changes in unobservable inputs continued

Investment property	Valuation techniques	Significant unobservable input	Sensitivity
Accelerator building	Fair Market Value	Yield rate of 9.50% *	a) AED 7.9 million – AED 39.4 million.
		Market rent at an average of AED 1,492 per sq.m per annum **	b) AED 0.6 million – AED 3.2 million.
MI Neighbourhood	Fair Market Value	Yield rate of 8.92% *	a) AED 128.5 million to AED 642.6 million
		Market rent at an average of AED 1,160 per sq.m per annum **	b) AED 9.7 million – AED 48.3 million.
Visitors Center	Fair Market Value	Yield rate of 9.50% *	a) AED 9.7 million – AED 48.7 million.
		Market rent at an average of AED 1,356 per sq.m per annum **	b) AED 0.8 million – AED 3.9 million.
Accelerator 2	Fair Market Value	Yield rate of 9.50% *	a) AED 8.8 million – AED 44.2 million.
		Market rent at an average of AED 1,236 per sq.m per annum **	b) AED 0.7 million – AED 3.5 million.

*Taking into account the capitalisation of rental income potential, prevailing market conditions, covenant strength of the tenant, and risks and investors' intentions.

**Taking into account the comparable investment and rental transactions, evidence of demand within the vicinity, size, location, terms, covenant and other material factors.

a) An increase/decrease of 1% - 5% in the market yield would result in a decrease/increase in fair value of
b) An increase/decrease of 1% - 5% in the market rent used would result in an increase/decrease in fair value of

7 INVESTMENT PROPERTIES continued

Sensitivity to significant changes in unobservable inputs continued

For investment properties categorised into Level 3 of the fair value hierarchy, the following information is relevant as at 31 December 2020:

Investment property	Valuation techniques	Significant unobservable input	Sensitivity
IRENA Headquarters office building and land	Investment method	Yield rate of 7.75% *	a) AED 59.4 million – AED 297.2 million.
		Market rent at an average of AED 1,694 per sq.m per annum **	b) AED 4.6 million – 23 million.
Siemens office building and land	Investment method	Yield rate of 7.75% *	a) AED 41.2 million – AED 205.9 million.
		Market rent at an average of AED 1,542 per sq.m per annum **	b) AED 3.2 million – AED 16 million.
Incubator office building and land	Investment method	Yield rate of 8.00% *	a) AED 13.9 million – AED 69.6 million.
		Market rent at an average of AED 1,765 per sq.m per annum **	b) AED 1.1 million – AED 5.6 million.
Etihad residential land and building	Investment method	Yield rate of 7.25% *	a) AED 72.6 million – AED 362.8 million.
		Market rent at an average of AED 743 per sq.m per annum **	b) AED 5.6 million – AED 27.9 million.
Accelerator building	Investment method	Yield rate of 8.00% *	a) AED 7.2 million – AED 36.0 million.
		Market rent at an average of AED 1,506 per sq.m per annum **	b) AED 0.6 million – AED 2.9 million.
MI Neighbourhood	Investment method	Yield rate of 7.77% *	a) AED 129 million to AED 644.8 million
		Market rent at an average of AED 1,160 per sq.m per annum **	b) AED 9.7 million – AED 48.5 million.
Visitors Center	Investment method	Yield rate of 8.00% *	a) AED 9.7 million – AED 48.7 million.
		Market rent at an average of AED 1,356 per sq.m per annum **	b) AED 0.8 million – AED 4.0 million.
Accelerator 2	Investment method	Yield rate of 8.00% *	a) AED 8.3 million – AED 41.6 million.
		Market rent at an average of AED 1,200 per sq.m per annum **	b) AED 0.7 million – AED 3.3 million.

7 INVESTMENT PROPERTIES continued

Sensitivity to significant changes in unobservable inputs continued

*Taking into account the capitalisation of rental income potential, prevailing market conditions, covenant strength of the tenant, and risks and investors' intentions.

**Taking into account the comparable investment and rental transactions, evidence of demand within the vicinity, size, location, terms, covenant and other material factors.

a) An increase/decrease of 1% - 5% in the market yield would result in a decrease/increase in fair value of
b) An increase/decrease of 1% - 5% in the market rent used would result in an increase/decrease in fair value of

8 INTANGIBLE ASSETS

	Software AED '000	*Licenses AED '000*	*Total AED '000*
2021			
Cost:			
1 January 2021	**21,969**	**150,499**	**172,468**
Addition	**1,880**	**-**	**1,880**
Held for Sale Assets	**(2,700)**	**-**	**(2,700)**
Effect of movement in exchange rates	**-**	**(707)**	**(707)**
31 December 2021	**21,149**	**149,792**	**170,941**
Accumulated amortisation and impairment:			
1 January 2021	**18,903**	**103,733**	**122,636**
Charge for the year	**2,838**	**2,936**	**5,774**
Held for Sale Assets	**(2,361)**	**-**	**(2,361)**
Effect of movement in exchange rates	**-**	**(285)**	**(285)**
31 December 2021	**19,380**	**106,384**	**125,764**
Carrying amount:			
31 December 2021	**1 769**	**43 408**	**45 177**
2020			
Cost:			
1 January 2020	21,124	148,384	169,508
Addition	845	-	845
Effect of movement in exchange rates	-	2,115	2,115
31 December 2020	21,969	150,499	172,468
Accumulated amortisation and impairment:			
1 January 2020	18,269	100,200	118,469
Charge for the year	634	2,744	3,378
Effect of movement in exchange rates	-	789	789
31 December 2020	18,903	103,733	122,636
Carrying amount:			
31 December 2020	3,066	46,766	49,832

9 EQUITY – ACCOUNTED INVESTEES

Summarised financial information in respect of the Group's material equity-accounted investees, not adjusted for the percentage ownership held by the Group, is set out below.

The summarised financial information below represents amounts shown in the equity-accounted investees' financial statements prepared in accordance with IFRSs.

	Classification	*Current assets AED'000*	*Non-current assets AED'000*	*Current Liabilities AED'000*	*Non-current Liabilities AED'000*	*Net assets/ liabilities AED'000*	*Revenue AED'000*	*Profit (loss) for the year AED'000*	*Other Comprehensive income/(loss) for the year AED'000*	*Total comprehensive income/(loss) for the year AED'000*
2021										
Shams Power Company PJSC	Joint venture	**158,106**	**1,812,765**	**128,689**	**1,697,926**	**144,256**	**374,356**	**85,965**	**106,830**	**192,795**
Dudgeon Offshore Wind Ltd	Joint venture	**485,043**	**5,677,754**	**555,810**	**7,087,167**	**1,480,181**	**1,235,455**	**409,068**	**67,250**	**476,318**
Jordan Wind Power Company PJSC	Joint venture	**119,912**	**701,117**	**107,236**	**600,671**	**113,122**	**154,177**	**32,424**	**26,640**	**59,064**
Hywind Scotland Ltd	Joint venture	**89,920**	**1,120,004**	**1,688**	**130183**	**1,078,054**	**178,880**	**59,877**	**-**	**59,877**
Hero Future Energies Global Limited	Associate	**938,787**	**4,855,081**	**1,595,585**	**4,791,309**	**(593,026)**	**720,924**	**(289,925)**	**-**	**(289,925)**
2020										
Shams Power Company PJSC	Joint venture	196,694	1,913,009	127,235	1,911,912	70,556	349,377	58,183	(84,866)	(26,683)
Dudgeon Offshore Wind Ltd	Joint venture	468,885	6,066,770	618,936	7,539,071	(1,622,352)	1,491,866	678,593	(45,664)	633,288
Jordan Wind Power Company PJSC	Joint venture	135,256	754,257	104,122	731,333	54,058	161,824	10,486	(23,684)	(13,198)
Hywind Scotland Ltd	Joint venture	75,878	1,198,447	1,654	103,450	1,169,221	136,453	10,292	-	10,292
Hero Future Energies Global Limited	Associate	953,592	4,911,874	1,762,112	4,406,455	(303,101)	690,473	(304,002)	-	(304,002)

Reconciliation of the summarised financial information to the carrying amount of the Group's interest in material equity-accounted investee recognised in the consolidated financial statements:

	Ownership interest	*Profit (loss) for the year AED'000*	*Group's share of results AED'000*	*Net assets/ liabilities AED'000*	*Group's share of net assets AED'000*	*Intangible assets AED'000*	*Carrying amount AED'000*
2021							
Shams Power Company PJSC	**51%**	**83,553**	**42,612**	**144,256**	**73,571**	**24,341**	**97,912**
Dudgeon Offshore Wind Ltd	**35%**	**409,068**	**-**	**(1,480,181)**	**-**	**-**	**-**
Jordan Wind Power Company PJSC	**50%**	**25,022**	**12,511**	**113,122**	**56,561**	**50,891**	**107,452**
Hywind Scotland Ltd	**25%**	**59,877**	**13,725**	**1,078,054**	**269,513**	**33,214**	**302,727**
Hero Future Energies Global Limited	**20.65%**	**(289,925)**	**(59,869)**	**(593,869)**	**(122,460)**	**297,192**	**174,732**
2020							
Shams Power Company PJSC	51%	58,183	29,673	70,556	35,983	25,521	61,504
Dudgeon Offshore Wind Ltd	35%	678,953	-	(1,622,352)	-	-	-
Jordan Wind Power Company PJSC	50%	10,486	5,243	54,058	27,029	54,592	81,621
Hywind Scotland Ltd	25%	10,292	2,573	1,169,221	292,305	34,948	327,253
Hero Future Energies Global Limited	20 65%	(304,002)	(58,541)	(303,101)	(62,477)	297,078	234,601

9 EQUITY – ACCOUNTED INVESTEES continued

The movement in investment in equity-accounted investees is set out below:

	Associates AED '000	*Joint ventures AED '000*	*Total AED '000*
At 1 January 2021	**238,435**	**638,714**	**877,149**
Investments during the year (i)	-	**293,562**	**293,562**
Share of results of equity-accounted investees	**(59,868)**	**118,604**	**58,736**
Disposal of a joint venture (29.3)	-	**(55,259)**	**(55,259)**
Dividends received (ii)	-	**(89,246)**	**(89,246)**
Share of movement in hedge and other reserves	-	**119,913**	**119,913**
Share of movement in foreign exchange reserves	**(39)**	**(18,046)**	**(18,085)**
Masdar City discontinued operations held for sale		**(2,932)**	**(2,932)**
Reclassification (iii)	-	**(49,079)**	**(49,079)**
At 31 December 2021	**178 528**	**956 231**	**1 134 759**
At 1 January 2020	243,137	826,660	1,069,797
Investments during the year (i)	-	97,803	97,803
Additional contributions during the year	53,724	2,571	56,295
Share of results of equity-accounted investees	(58,224)	55,530	(2,694)
Disposal of a joint venture (iii)	-	(298,022)	(298,022)
Dividends received (iv)	-	(33,709)	(33,709)
Share of movement in hedge and other reserves	-	(98,087)	(98,087)
Share of movement in foreign exchange reserves	115	37,878	37,993
Reclassification (v)	(317)	48,090	47,773
At 31 December 2020	238,435	638,714	877,149

(i) During the year, the Group has made the following significant investments:

- 49% ownership interest in Infinity Power Holdings BV for a consideration of USD 55.8 million (AED 204.98)
- 35% ownership interest in Dudgeon Extension Limited for a consideration of GBP 2.6 million (AED 13.2 million).
- 33.67% ownership interest in East Rockingham for a consideration of AUD 15.1 million (AED 41.2 million).

(ii) During the year, the Group received dividends amounting to AED 60.6 million from a joint venture, Shams Power Co. and AED 28.6 million (GBP 5.6 million) from a joint venture, Hywind Scotland Limited. The dividend received from Dudgeon of AED 125.23 million (GBP 25.2 million) being in excess of its carrying amount has been recognised in the consolidated statement of comprehensive income.

(iii) Reclassification comprises of reclassification of balances from loans to related parties to investments in Krnovo, Sharjah W2E and Baynouna.

10 OTHER NON CURRENT FINANCIAL ASSETS

	2021 AED '000	*2020 AED '000*
Financial assets at fair value through profit or loss		
Unquoted convertible investments		
Hero Future Energies Private Limited	**208,369**	192,636
Unquoted equity investments		
Zouk Charging Infrastructure Investment Fund LP	**34,903**	67,185
	243,272	259,821

During the year, the Group invested an additional AED Nil *(2020: AED 38.2 million)* in irredeemable compulsory convertible preference shares ("CCPS") of Hero Future Energies Private Limited ("HFEP"). The CCPS carries no voting rights and are convertible into ordinary shares upon redemption.

Management has estimated the fair value of the CCPS at AED 208.37 million as at 31 December 2021 (2020: AED 192.63 million). A fair value gain of AED 19.05 million *(2020: fair value loss of AED 9.65 million)* has been recognised in the consolidated statement of profit or loss on the CCPS.

During the year, the Group received net distribution of AED 37.48 million *(2020: AED 63.22 million)* from Zouk Charging Infrastructure Investment Fund LP ("Zouk"). The Group also received AED 42.83 million from Zouk as distribution from the fund.

The fund is unquoted and a fair value gain of AED 5.82 million *(2020: loss AED 2.32 million)* has been recognised in the consolidated statement of profit or loss for the year ended 31 December 2021.

11 FINANCE LEASE RECEIVABLES

	2021 AED '000	*2020 AED '000*
Finance lease receivables:		
Gross receivables	**408,760**	331,320
Less: provision for expected credit losses	**(15,924)**	(14,278)
	392 836	317,042
Non-current	**308,887**	262,263
Current	**83,949**	54,779
Held for Sale Assets	**(392,836)**	-
	-	317,042

The movement in the provision for expected credit losses is as follows:

	2021 AED '000	*2020 AED '000*
At 1 January	**14,278**	11,670
Provision for expected credit losses	**1,646**	2,608
Reversal of expected credit losses	**-**	-
At 31 December	**15,924**	14,278

Past due finance lease receivables as at 31 December 2021 amounted to AED 27.78 *(2020: AED 30.11 million)*.

11 FINANCE LEASE RECEIVABLES continued

11.1 Leasing agreements

The Group has entered into Musataha lease agreements for certain plots of land in Masdar City and Jebel Al Dannah which are accounted for as finance lease arrangements. All leases are denominated in AED. The average term of finance leases is 50 to 99 years.

11.2 Amounts receivable under finance leases

	Minimum lease payments	
	2021	*2020*
	AED '000	*AED '000*
Less than one year	**70,904**	54,779
One to two years	**24,995**	25,720
Two to three years	**25,614**	26,357
Three to four years	**26,249**	27,010
Four to five years	**26,899**	27,680
Later than five years	**2,394,047**	1,989,169
Total	**2,568,708**	2,150,175
Less: unearned finance income	**(2,159,948)**	(1,819,395)
Present value of minimum lease payments	**408 760**	331,320

The interest rate inherent in the leases is fixed at the contract date for the entire lease term. The average effective interest rate contracted is approximately 5.9% to 8.9% (2020: 5.9% to 8.9%) per annum.

12 RELATED PARTIES

Related parties represent the Government of Abu Dhabi and related departments and institutions (owner of the Parent Company), associated companies, joint ventures, shareholders, directors and key management personnel of the Group, management entities engaged by the Group, and entities controlled, jointly controlled or significantly influenced by such parties. Pricing policies and terms of these transactions are approved by the Group's management.

The Group enters into transactions with Government-owned entities and other related parties in the ordinary course of business at mutually agreed terms. The Group also maintains significant balances with the Parent Company and other related parties which arise from commercial transactions.

Balances with related parties included in the consolidated statement of financial position are as follows:

12.1 Loans to related parties

Loans to related parties are classified as follows:

	2021	*2020*
	AED '000	*AED '000*
Gross receivables	**573,231**	582,804
Less: provision for expected credit losses	**(120,255)**	(144,060)
	452 976	438,744
Non-current	**146,363**	249,356
Current	**306,613**	189,388
	452,976	438,744

12 RELATED PARTIES continued

12.1 Loans to related parties continued

	2021	*2020*
	AED '000	*AED '000*
Equity Accounted Investees		
Shams Power Company PJSC ("Shams")	**42,884**	43,744
Jordan Wind Project Company PJSC ("JPWC")	**9,430**	32,184
Sharjah Waste to Energy LLC ("SW2E")	**92,461**	57,094
Baynouna Holdings B.V. ("Baynouna")	**69,637**	57,119
Krnovo Energy d.o.o. ("Krnovo")	**97,921**	91,117
PT Pembangkitan Jawa Bali Masdar Solar Energi ("Cirata")	-	5,628
Infinity 50 for Renewable Energy S.A.E ("Infinity 50")	-	41,258
Contino Omikron Sp. Z.O.O ("Contino") *	**11,327**	5,102
Pileus Energy SP. Z.O.O ("Pileus") *	**24,712**	11,221
Fonnes Sp. Z.o.o	**30,597**	**-**
Cirata	**7,746**	**-**
Masdar Tribe Australia Holding Ltd	**898**	**-**
Tesla Vetroelektrane Balkana d.o.o. ("Tesla")	**65,363**	94,277
	452 976	438,744

* Loans to related parties, Contino and Pileus, are pledged to a commercial bank against the related parties' borrowings.

The movement in the provision for expected credit losses is as follows:

	2021	*2020*
	AED '000	*AED '000*
At 1 January	**144,060**	124,514
Provision for expected credit losses	**2,525**	20,524
Reversal of provision for expected credit losses **	**(16,475)**	(8,747)
Other Movement	**(5,097)**	**-**
Effect of movement in exchange rates	**(4,758)**	7,769
At 31 December	**120,255**	144,060

** The reversal of provision for expected credit losses relates to improvement in credit profiles and scheduled repayments received from certain related parties, net P&L impact is credit AED 13.95 M.

Other movement of AED 5.097 million is related with disposal of subsidiary Vis Solar 1 B.V.

Summarised below are the key terms of the loan to related parties as at 31 December:

Parties	*Currency*	*Nominal interest rate*	*Year of maturity*	***2021 AED '000***	*2020 AED '000*
Shams	AED	-	2038	**42,884**	43,745
JWPC	USD	9%	On demand	**9,430**	32,184
SW2E	AED	6.13%	2022	**92,461**	57,094
Baynouna	USD	-	On demand	**69,637**	57,119
Krnovo	EUR	8.45%	2038	**97,921**	91,117
Cirata	USD	2.50%	2022	**7,746**	5,628
Infinity 50	USD	10%	2035	-	41,258
Contino	EUR	4%	2030	**11,327**	5,102
Fonnes Sp Z.o.o	EUR	3%	2031	**30,597**	**-**
Pileus	EUR	4%	2030	**24,712**	11,221
Masdar Tribe Australia Holding	AUD	-	On demand	**898**	-
Tesla	EUR	4.25%	On demand	**65,363**	94,277
Total				**452,976**	438,745

12 RELATED PARTIES continued

12.1 Loans to related parties continued

Loan to Baynouna and Shams have been recognised at fair value, which is equal to the present value of the expected future cash flows discounted using the average rate of interest applicable to internal borrowings.

Loan to related parties are unsecured. The loan to related parties have been provided at mutually agreed interest rates.

12.2 Due from related parties

Due from related parties are classified as follows:

	2021 *AED '000*	*2020* *AED '000*
Non-current	**-**	-
Current	**173,102**	133,094
	173,102	133,094
Current:		
Government of Abu Dhabi		
The Government of Abu Dhabi (see below)**	-	1,720
Entities under common control		
Khalifa University	-	7,122
Etihad Airways PJSC	-	27,673
National Media Council	-	2,554
Ministry of Foreign Affairs	**700**	50
Daman Insurance	-	13
Crown Price Court	**44**	-
Department of Finance	**1,655**	
Ministry of Finance Corporate Governance	-	1,836
Mohammed Bin Zayed University of Artificial Intelligence	-	776
96th Investment Company	**8,005**	**-**
Mubadala Treasury Holding Company	**92,760**	-
Sub-total	**103,164**	40,024
Equity Accounted Investees		
Emerge Limited	**9,983**	-
Dumat Al Jundal	**579**	-
Infinity 50 for Renewal Energy S.A.E	**35**	-
Shams Power Company PJSC	**731**	1,063
Tesla Vetroelektrane Balkanan D.O.O	**436**	30,969
Baynouna Holdings B.V.	**9,771**	9,147
Dudgeon Offshore Wind UK Limited	**40,866**	45,735
The Catalyst Limited	-	351
Noor Midelt	**3,795**	2,051
Emirates Solar Power Company LLC	**1,995**	542
Sharjah Waste to Energy	**444**	444
Shuaa Energy 2 PSC	**1,303**	466
Others	-	582
Sub-total	**69,938**	91,350
Total	**173,102**	133,094

12 RELATED PARTIES continued

12.2 Due from related parties continued

	2021 AED '000	2020 AED '000
****Due from the Government of Abu Dhabi**		
Department of Finance	-	**1,565**
Abu Dhabi Water and Electricity Company	-	**155**
	-	**1,720**

The balance due from the Department of Finance relating to the green subsidy on the 10 MW power plant as at 31 December comprises of:

	2021 AED '000	2020 AED '000
10 MW power plant subsidy	-	**1,565**
Less: Provision for expected credit losses	-	-
	-	**1 565**

12.3 Due to related parties

	2021 AED '000	2020 AED '000
The Parent Company	**398**	2,136
The Government of Abu Dhabi*	**29,542**	20,541
Entities under common control		
Abu Dhabi National Oil Company	**14**	-
MDC General Services Holding Company L.L.C.	**1,254**	1,429
MDC Business Management Services L.L.C.	**472**	2,574
Mubadala Treasury Holding Company	-	258,887
Emirates Telecommunications Corporation – Etisalat	**750**	860
Abu Dhabi National Hotel Company	**149**	142
MDC Finance 1 L.P.	-	1,226
	32,579	287,795

*The balance due to the Government pertains to unutilised government grants (note 24).

12.4 Other related party balances

	2021 AED '000	2020 AED '000
Cash and bank balances**	**604,091**	1,077,446
Interest receivable**	-	928
Restricted cash**	-	80,000
Deferred income*	**11,788**	2,495
Project advances (note 22)*	**248,427**	76,015

Cash and bank balances and restricted cash comprise call, current, and deposit accounts and term deposits with a government-owned entity.

*Fund received from Government of Abu Dhabi for Energy Services project developments.
** Balance with Entities under common control being First Abu Dhabi Bank and Abu Dhabi Commercial Bank

12. RELATED PARTIES continued

12.5 Transactions with related parties

Significant transactions with related parties during the year were as follows:

	2021 *AED '000*	*2020* *AED '000*
Funds received from the Parent Company	**-**	68,356
	-	
Funds remitted to Mubadala Treasury Holding Company	**351,647**	1,042,106
Recharge of costs to Shams Power Company PJSC	**885**	1,679
Recharge of costs from MDC General Services Holding Company	**9,069**	6,900
Recharge of costs from MDC Business Management Services L.L.C.	**9,803**	9,482
Interest charged to related parties	**39,411**	38,484
Other income	**35,053**	34,573
Facilities management & Rental revenue	**141,269**	149,242

- Other Income is mainly related with Abu Dhabi Fund for Development, Sharjah Waste to Energy, Dudgeon and The Catalyst.
- Facility Management and Rental revenues are mainly related with Etihad Airways, Mohammed Bin Zayed University of Artificial Intelligence, Emirates Nuclear Energy Company, Khalifa University and Tabreed.

Key management personnel compensation is as follows:

	2021 *AED '000*	*2020* *AED '000*
Salaries and other benefits	**30,763**	30,649
Terminal benefits	**4,766**	4,792

Terms and condition of transactions with related parties

Outstanding balances at the financial year end are interest free and repayable on demand. There have been no guarantees provided or received for any related party receivables or payables. For the year ended 31 December 2021, the Group has not recorded any impairment of receivables relating to amounts owed by a related party (2020: nil). This assessment is undertaken each financial year through examining the financial position of the related parties and the market which the related parties operate.

13 TRADE AND OTHER RECEIVABLES

	2021 *AED '000*	*2020* *AED '000*
Non-current portion:		
Trade receivables under payment plan (note 13.1)	**603**	12,291
Service Concession Receivable (13.3)	**277,496**	-
Other receivables (note 29.1)	**-**	39,510
	278,099	51,801
Current portion:		
Trade receivables under payment plan (note 13.1)	-	15,975
Other trade receivables (note 13.1)	**30,711**	32,016
Service Concession Receivable	**1,927**	266
Accrued income	**117,972**	167,794
Restricted cash	**163,868**	167,480
Short term advances	**5,820**	67,772
Staff receivables	**16,084**	18,823
Tax receivables	**17,971**	3,646
Other receivables	**46,639**	44,149
Prepayments	**12,395**	11,975
	413,387	529,896

13 TRADE AND OTHER RECEIVABLES continued

13.1 Trade receivables

Trade receivables mainly represent amounts due from sales of land, renewable power generation and lease rentals. The average credit period on sale of goods or services is 60 days. No interest is charged on trade receivables.

The Group has adopted a policy of dealing with only creditworthy counterparties. Adequate assessment is made before accepting an order from a counterparty. Of the trade receivables balance at the end of the year, AED 5.65 million *(2020: AED 27.7 million)* representing 18% *(2020: 46%)* of total trade receivables is due from two major customer *(2020: one)*. Management considers this customer to be reputable and creditworthy and is confident that this concentration of credit risk will not result in any significant loss to the Group.

Included in the Group's trade receivables balance are unimpaired debts with a carrying amount of AED 14.6 million as at 31 December 2021 *(2020: AED 44.8 million)* which are past due at the reporting date but there has not been a significant change in the credit quality of the customers and the amounts are still considered recoverable.

	2021	*2020*
	AED '000	*AED '000*
Ageing of trade receivables:		
Not past due	**16,747**	15,479
Past due but not impaired:		
Due for 61 to 120 days	**7,489**	31,555
Due for 121 to 360 days	**6,058**	552
Due for more than 360 days	**1,056**	12,696
	14,603	44,803
	31 350	60,282

The Group recognises lifetime expected credit loss (ECL) for trade receivables other than trade receivables under payment plan using the simplified approach. Management considers factors that are specific to the debtors, general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money, where appropriate.

The movement in the provision for expected credit losses on trade receivables is as follows:

	2021	*2020*
	AED '000	*AED '000*
At 1 January	**12,631**	8,838
Provision for expected credit losses	**(1,262)**	4,387
Reversal during the year	-	(124)
Write off	-	(470)
	11,369	12,631
Asset Held for Sale transfer	**(11,141)**	-
As 31 December	**228**	12,631

13.2 Receivable from WinWindOY, net

	2021	*2020*
	AED '000	*AED '000*
Receivable from WinWindOY	**356,285**	356,285
Less: provision for impairment loss	**(356,285)**	(356,285)
	-	-

13 TRADE AND OTHER RECEIVABLES continued

13.2 Receivable from WinWindOY, net continued

WinWindOY is in default under the terms of the settlement agreement. In December 2014, the Group filed arbitration proceedings with the London Court of International Arbitration. In October 2015, the Group received an arbitration award of approximately AED 380.5 million (EUR 95 million) in damages for the principal amount of the receivable and interest, recovery of arbitration and legal costs and 5% interest from the date of the arbitration award. Management has applied for the recognition of the arbitration award in the courts of India, where Siva, the obligor of WinWindOY is domiciled. However, during 2017, the Group recognised an additional impairment loss against the carrying value of the loan amounting to AED 42.6 million due to the significant decline in the creditworthiness of Siva and limited visibility over Siva's unencumbered assets to be pursued for legal action.

During 2019, Masdar became aware that one of the entities against which Masdar had a claim, Siva Industries and Holdings Limited, was undergoing an insolvency resolution process in India and an independent interim resolution professional had been appointed to oversee this process in line with requirements under Indian law. During that year, as per insolvency proceeding settlement submission in January 2021 relating to Siva Industries and Holdings Limited, Masdar was expected to receive USD 1.44 million in two instalments as a final settlement for the claim, however, later on a settlement proposal was submitted by the promoters of Siva to the Committee of Creditors, which was approved by the COC in April 21, this approval along with the application to withdraw the insolvency proceedings filed thereafter was dismissed by the National Company Law Tribunal, Chennai in Aug. 21, rejected the Settlement Proposal and dismissed the application for withdrawal of the corporate insolvency resolution proceedings. the NCLT allowed the application filed by the Resolution Professional for liquidation of SIHL and appointed a liquidator to carry out the liquidation process. Currently on account of the Settlement Proposal, the creditors are entitled to receive the settlement amount as per the Settlement Proposal And Masdar had agreed to receive as full and final settlement, INR 10.52 crores USD 1.35 million (AED 4.95 million) at a conversion of USD 1 = INR 77.76 as of June 7, 2022), in two tranches, and all debts owed to Masdar by SIHL and Siva Skylink Global Limited shall stand discharged. Therefore, Masdar may expect to be paid the settlement amount in two tranches, (i) between 3rd June to 3rd July 2022 USD 0.20 million (AED 0.73 million) (ii) between 3rd June to 30 November 2022 USD 1.150 million (AED 4.22 million).

13.3 Service Concession Receivable

Service Concession Receivable related with Nur Navoi Solar FE, Uzbekistan is as follows:

	2021	*2020*
	AED '000	*AED '000*
Non-current receivable	**277,496**	-
Current Receivable	**1,927**	266
	279,423	266

14 INVENTORIES

	2021	*2020*
	AED '000	*AED '000*
Opening	**413,981**	814,904
Transfer to Investment Properties	**(10,516)**	(33,258)
Transfer from PPE	**-**	101,353
Sales	**(25,713)**	(7,889)
Transaction with Shareholders	**-**	(467,976)
Addition	**-**	6,847
	377,752	413,981
Transfer to Held for Sale	**(377,665)**	- -
	87	413,981

	2021	*2020*
	AED '000	*AED '000*
Land held for sale	**-**	413,894
Finished goods	**87**	87
	87	413,981

Land held for sale in inventories are located in the United Arab Emirates.

During 2020, the Group transferred parcels of land from property, plant and equipment to inventory for an intended transfer to the Government. Subsequently, by virtue of the Executive Council resolution no. 140 of 2020, parcels of land with a total cost of AED 468 million was transferred to the Government of Abu Dhabi for a consideration of AED 2,817 million settled through the shareholder's account. The transfer resulted in a gain of AED 1,267 million calculated after accruing AED 1,076 million against infrastructure cost. The gain was directly recognised in retained earnings.

The cost of inventories recognised as expense during the year was AED 51.91 million *(2020: AED 7.89)*. No write-downs of inventory to net realisable value or reversal of previously recognised write-downs were recognised during 2021 and 2020.

15 CASH AND CASH EQUIVALENTS

	2021	*2020*
	AED '000	*AED '000*
Call and current accounts	**716,407**	1,228,794
Cash in hand	**90**	460
	716 497	1,229,254

Deposit and call accounts are placed with commercial banks and are short-term in nature. Deposit and call accounts earn interest at prevailing market rates.

Geographical concentration of cash and term deposits is as follows:

	2021	*2020*
	AED '000	*AED '000*
Within UAE	**508,753**	935,223
Outside UAE	**207,744**	294,031
	716 497	1,229,254

16 SHARE CAPITAL

Share capital comprises 8,000,000 *(2020: 8,000,000)* authorised, issued and fully paid up ordinary shares with a par value of AED 1,000 each.

During 2020, all the legal formalities in relation to conversion of AED 7,632 million of additional shareholder contribution) into share capital were completed and the Company's share capital has been increased to AED 8,000 million, comprising of 8 million authorised, issued and fully paid up ordinary shares with a par value of AED 1,000 each.

17 SHAREHOLDER'S ACCOUNT

Shareholder's account represents a current account to record transactions with the Parent Company in its capacity as a shareholder of the Group. There are no contractual obligations to settle the balance in shareholder's account. Therefore, this balance is more akin to equity instruments rather than liabilities, and accordingly, have been presented within equity.

During the year 2020, portions of land held by the Group were transferred to the Government of Abu Dhabi for a consideration of AED 2,817 million settled through the shareholder's account. The gain of AED 1,267 million resulting from the transaction with the shareholder was directly recognised in retained earnings. During 2021, a further adjustment of AED 33 million was made in the earlier recognized gain in retained earnings.

18 RESERVES

Investment reserve
Investment reserve reflects funds received by the Group from the Parent Company and disbursed to Masdar Clean Tech Fund for investment purposes. This reserve is in the nature of a non-distributable capital reserve which is funded by the Government of Abu Dhabi through a government grant.

Statutory reserve
As required by the UAE Federal Law No. (2) of 2015, 10% of the profit for the year has been transferred to statutory reserve. The statutory reserve is not available for distribution.

Other reserves
Other reserves include the Group's share of hedging reserves and foreign currency translation reserves ("FCTR") of equity-accounted investees.

19 BANK BORROWINGS

	2021	*2020*
	AED '000	*AED '000*
Secured – at amortised cost		
Current	**125,336**	244,382
Non-current:	**2,010,212**	1,916,842
Less: deferred financing costs	**(29,820)**	(30,125)
	1,980,392	1,886,717
	2,105,728	2,131,099

The movement in the bank borrowings is as follows:

	2021	*2020*
	AED '000	*AED '000*
At 1 January	**2,131,099**	654,016
Repayments during the year	**(244,725)**	(986,921)
Loan obtained during the year	**232,957**	2,326,251
Amortisation of deferred financing costs	**3,916**	2,100
Foreign exchange fluctuations	**(17,519)**	135,653
At 31 December	**2,105,728**	2,131,099

19 BANK BORROWINGS continued

Loan 1
London Array offshore wind farm project refinanced debt amount is GBP 395 million with a maturity date of December 2032. The loan facility refinancing is secured by pledge of Masdar Energy UK Limited shares and also subject to various covenants as stipulated in the loan facility agreement. Masdar Energy UK Limited's bank borrowings are repayable in 26 semi-annual instalments starting March 2020.

Masdar Energy UK Limited entered into an interest rate swap for the full value and tenure of the term loan. The derivative is designated as a hedge and has been determined as effective and so changes in fair value amounting to AED 71.74 million *(2020: AED 37 million)* are recognised in other comprehensive income. As at 31 December 2021,

the fair value of the derivative recognised amounted to an asset of AED 42.04 million *(2020: Liability AED 70.19 million)* and the notional principal amount is AED 1,764.80 million *(2020: AED 1,895.31 million)*.

Loan 2
During the year, the revolving credit facility has increased from USD 75 million *(AED 275.5 million)* to USD 125 million (AED 459.20 million) and it is unutilized as on 31st December 2021.

Loan 3
Group availed a USD 59.36 million (AED 218.06 million) term loan facility from European Bank for Construction and Development for Nur Navoi project in Uzbekistan. The facility is payable after five years as a bullet payment.

Loan 4
During the year, Group availed under Nur Navoi Solar FE Uzbekistan project the senior debt facilities of USD 41.47 million (AED 152.34 million) for from Asian Development Bank and International Financial Corporation, the aggregate amount of loan in USD 52.54 million (AED 193 million), the loan is repayable in semi-annual instalments from June 2022 to December 2040, the rate of interest on the senior loan facility is margin + 6 month LIBOR.

Lender	*Currency*	*Interest rate*	*Security*	***2021 AED '000***	*2020 AED '000*
Bank loan (1)	GBP	LIBOR + margin	Secured	**1,735,356**	1,865,308
Revolving credit (2)	USD	LIBOR + 0.48%	Unsecured	**-**	132,128
Bank loan (3)	USD	LIBOR + 1%	Unsecured	**218,074**	133,663
Bank loan (4)	USD	6 month LIBOR + Margin	Senior Debt	**152,297**	-
				2,105,727	2,131,099

1. Syndicate bank loan from lenders ; Banco Santander, S.A., London Branch - BNP Paribas Fortis SA/NV - MUFG Bank, Ltd. - Siemens Bank GmbH - Societe Generale, London Branch - Standard Chartered Bank - Sumitomo Mitsui Banking Corporation, London Branch, at interest rate LIBOR + 1.35% until 31st December 2025 and thereafter LIBOR + 1.50%, Secured against shares held in operator and other requirements per loan agreement.

2. Revolving corporate credit facility from group of banks; First Abu Dhabi Bank, BAML, BNPP, CACIB, Citibank, DNS, Intesa, JPM, Mizuho, Natizis, SCB, Societe Generale, Sumitomo Mitsui Banking Corporation, UniCredit Banks.

3. Bank loan from European Bank for Construction and Development it is supported by parent company guarantee.

4. Senior loan facility from Asian Development Bank and International Financial Corporation, repayable in semi-annual instalments from June 2022 to December 2040 at the rate of margin + 6 month LIBOR.

19 BANK BORROWINGS continued

Consolidated agreed-upon instalment schedule for the above-mentioned bank borrowings is as follows:

	2021 ***AED '000***	*2020* *AED '000*
Within 1 year	**172,984**	244,382
Between 1 – 2 years	**176,414**	119,906
Between 2 – 5 years	**781,297**	428,203
More than 5 years	**1,266,685**	1,369,756
	2 397 380	2,162,247

20 RIGHT-OF-USE ASSETS AND LEASE LIABILITIES

Set out below are the carrying amounts of the Group's right-of-use assets and lease liabilities and the movements during the year:

Right-of-use assets

	2021 ***AED '000***	*2020* *AED '000*
At 1 January	**327,080**	338,751
Depreciation expense	**(22,345)**	(21,097)
Foreign exchange impact	**(2,926)**	9,426
At 31 December	**301,809**	327,080

Lease Liabilities

	2021 ***AED '000***	*2020* *AED '000*
At 1 January	**339,366**	345,028
Interest expense	**14,468**	13,836
Payments	**(32,015)**	(29,402)
Foreign exchange impact	**(2,516)**	9,904
At 31 December	**319 303**	339,366

Lease liabilities are disclosed in the consolidated statement of financial position as:

	2021 ***AED'000***	*2020* *AED'000*
Current	**16,803**	17,061
Non-current	**302,500**	322,305
	319 303	339,366

Maturity analysis of lease liabilities is disclosed in note 31.3.

20 RIGHT-OF-USE ASSETS AND LEASE LIABILITIES continued

The following are the amounts recognised in the consolidated statement of profit or loss:

	2021	*2020*
	AED'000	*AED'000*
Depreciation charge on right-of-use assets	**22,345**	21,097
Interest expense on lease liabilities	**14,468**	13,836
Expense relating to short term or low value leases	**832**	1,085
Total amount recognised in profit or loss	**37,645**	36,018

Depreciation on right of use assets in the consolidated statement of profit and loss for the year ended 31 December 2021 is as follows:

	2021	*2020*
	AED'000	*AED'000*
Cost of sales	**22,272**	20,882
General and administrative expenses	**73**	215
	22,345	21,097

21 OTHER NON-CURRENT LIABILITIES

	2021	*2020*
	AED '000	*AED '000*
Capital accrual (note 21.1)	-	815,475
Decommissioning liability (note 21.2)	**87,530**	95,693
Provision for employees' end of service benefit (note 21.3)	**25,355**	39,211
	112,885	950,379

Non-current liabilities related with Masdar City discontinued operation Capital Accruals related with ADQ future AED 716.17 million and Provision for employees' end of service benefits AED 16.16 million are transferred to Liabilities directly associated with assets held for sale.

21.1 Capital accrual

Represents the obligation of the Group to construct city wide infrastructure on the plots of land within Masdar city transferred to the Government of Abu Dhabi (note 6).

21.2 Decommissioning liability

	2021	*2020*
	AED '000	*AED '000*
At 1 January	**95,693**	82,555
Reversal/(Charge) for the year	**(7,179)**	1,053
Effect of movement in exchange rates	**(984)**	12,085
At 31 December	**87,530**	95,693

A provision has been recognised for the decommissioning costs related to the London Array project. The costs are expected to be incurred from 2037. However, there is a possibility that the decommissioning will not take place until after that date.

The undiscounted and unescalated amount of the expected cash flows required to settle the decommissioning liability is estimated to be AED 64.6 million as at 31 December 2021 *(2020: AED 65.3 million)*. The liability for the expected cash flows, as reflected in the consolidated financial statements, has been inflated at 2% *(2020: 2%)* and discounted using a risk free rate of 1.15% *(2020: 0.58%)*. Abandonments are expected to occur from 2037 and related costs will be funded mainly from the cash generated by the operating activities of MEUK.

21 OTHER NON-CURRENT LIABILITIES continued

21.3 End of Service Benefit

Movement in the provision for employees end of service benefit is as follows:

	2021	*2020*
	AED '000	*AED '000*
Balance at 1 January	**39,211**	34,628
Charge for the year	**6,610**	7,847
Held for Sale liabilities	**(16,161)**	-
Paid during the year	**(4,305)**	(3,264)
Balance at 31 December	**25,355**	39,211

22 TRADE AND OTHER PAYABLES

	2021	*2020*
	AED '000	*AED '000*
Trade payables	**12,307**	25,187
Project advances	**248,427**	76,015
Deferred income	**15,919**	42,256
Retentions	**2,126**	8,169
Accrued expenses	**99,083**	408,396
Other payables	**50,427**	97,490
	428 289	657 513

The average credit period on trade payables is 31 days. No interest is charged on trade payables. The Group has financial risk management policies in place to ensure that all payables are paid within the pre-agreed credit terms.

23 REVENUE AND OTHER OPERATING INCOME

	2021	*Restated 2020*
	AED '000	*AED '000*
Revenue from contracts with customers	**714,966**	373,920
Others	**1,548**	-
	716 514	373,920
Disaggregation of revenue from contracts with customers:		
Renewable power generation	**415,401**	325,124
Concession Revenue	**288,299**	26,756
Special projects	**8,608**	9,219
Development fee income	**2,658**	12,821
	714,966	373,920
Geographical markets		
United Kingdom	**415,401**	324,877
United Arab Emirates	**9,718**	19,049
Uzbekistan	**289,847**	26,756
Kingdom of Saudi Arabia	**-**	3,238
	714,966	373,920
Timing of revenue recognition:		
Over time	**288,299**	26,756
At a point in time	**426,667**	347,164
	714,966	373,920

Revenue from related parties is disclosed in note 12.

23.1 COST OF SALES

	2021 AED '000	Restated 2020 AED '000
Service Concession Cost of Sale	**282,651**	26,491
Depreciation	**89,051**	87,092
Operation and Maintenance	**71,066**	57,656
Right of Use Asset Depreciation	**22,272**	20,703
Others	**6,824**	12,574
	471 864	204,516

24 GOVERNMENT GRANTS

24.1 Grant income

	2021 AED '000	Restated 2020 AED '000
Income from government grants	**30,052**	77,648
Expenses incurred in relation to government grants	**(27,522)**	(57,677)
	2,530	19,971

Income from government grants mainly represents the annual budgetary grants related to income for operation of the IRENA and Zayed Sustainability Prize. Grants related to assets or activities which are yet to be undertaken are included within deferred government grants.

24.2 Land grants

The Group has received the following parcels of land by way of government grants, which have been classified into the 'future economic benefits established', 'no future economic benefits' and 'future economic benefits uncertain' categories. Where future economic benefit has been established, land is recognised as either property, plant and equipment ("PPE"), investment property ("IP"), land held under finance lease arrangements ("FL") or inventory ("INV").

Land identification	*Granted year*	*Area in square ft*	***Cost as at 31 December 2021 AED '000***	*Cost as at 31 December 2020 AED '000*	*Recognised as*
Future economic benefits established					
Masdar City Phase 1	2008	5,907,593	89,545	126,678	INV
Masdar City Phase 2	2008	5,869,798	131,367	131,558	INV
Masdar City Phase 3	2008	-	-	-	INV
Masdar City Phase 4	2008	1,064,504	1,065	1,050	INV
Masdar City Phase 5	2008	12,050,811	155,688	154,608	INV
Etihad	2014	418,738	97,900	97,900	IP
IRENA Headquarters	2008	126,861	48,320	48,320	IP
Siemens	2010	69,176	35,746	35,746	IP
Incubator	2010	36,438	24,985	24,985	IP
Madinat Zayed	2008	26,909,776	-	-	PPE
Hai Al Dawoody	2009	1,076	-	-	PPE
Hamran	2009	1,076	-	-	PPE
10 MW Power Plant	2008	2,283,359	-	-	PPE
Ryan	2008	296,632	-	-	FL
Khazna	2008	592,796	88,670		FL
GEMS	2014	457,520	68,041	-	FL
Visitor centre	2016	70,429	-	-	PPE
MI Neighbourhood	2016	609,656	98,121	98,121	IP
Eco Villa	2016	25,205	-	-	PPE
Accelerator	2016	133,892	5,425	5,425	IP
Accelerator II	2019	144,096	3,331	3,331	IP
Siadah	2019	122,769	31,398	33,523	FL
Reportage Hospitality	2019	95,648	24,309	21,340	FL
B-02	2020	223,106	33,750	2,025	IP
J-02	2021	576,181	74,574	-	FL
M - 10b	2021	64,584	4,643	-	IP
MC 2	2021	311,313	43,102	-	IP

24 GOVERNMENT GRANTS continued

24.2 Land grants continued

Land identification	*Granted year*	*Area in square ft*	***Cost as at 31 December 2021 AED '000***	*Cost as at 31 December 2020 AED '000*	*Recognised as*
Future economic benefits uncertain					
Madinat Zayed	2008	116,202,049	-	-	PPE
Transferred properties					
Mohamed Bin Zayed University	2008	356,817	-	-	-
No future economic benefits					
Masdar City Land	2008	15,753,053	-	-	PPE

Future economic benefits established
The portion of Masdar City land relating to Phases 1, 2, 4 and 5 have been recognised as inventories as at 31 December 2021 upon approval of the respective detailed master plans.

The portion of land relating to the Etihad, IRENA Headquarters, Siemens building, Incubator building, Accelerator building, MI Neighbourhood, B02, Visitor centre and Accelerator II which are used as commercial real estate have been recognised as investment properties and have been fair valued as at 31 December 2021.

The part of the Madinat Zayed land that has been identified and used for the purpose of construction and operation of a solar power station has been recorded as property, plant and equipment at nominal value. The remainder of the land has been classified as future economic benefit uncertain as discussed below.

The Hai Al Dawoody and Hamran land have been identified for the purpose of testing of solar radiation in relation to solar plants projects and, accordingly, have been recorded as property, plant and equipment at nominal value.

Musataha leases have been signed for Reef, Ryan, Khazna, GEMS, Reportage, GRDI, Siadah and Jebel Al Dannah land, which are accounted for as finance lease arrangements.

Further, additional portions of land have been recognised as property, plant and equipment based on their use.

Future economic benefits uncertain
The Group is of the view that the future economic benefits from the use of the remaining Madinat Zayed land is uncertain as the future use of this land is unknown and the Group will not comply with the conditions attaching to them or there is a possibility that it will not be used for commercial purposes and may, possibly, revert to the Government. Accordingly, it is uncertain that future economic benefits will flow to the Group from the ownership of the Madinat Zayed land, and therefore, such properties have not been recognized in the books of the Group.

Transferred properties
Construction of MIST building is complete and the building has been handed over to Mohamed Bin Zayed University of Artificial Intelligence. The legal title to the building is in the process of being transferred to the University as at 31 December 2021. There are no envisaged future economic benefits accruing to the Group from the underlying land and accordingly, this parcel of land has been reclassified to the 'no future economic benefits' category.

No future economic benefits
The Group has in recent years continued to review the Masdar City Project (the "Project") master plan and under the reassessed development strategy for the Project, the Group, whilst developing a small number of key assets itself, will also act as the master developer for the Project providing all infrastructures and delivering serviced plots for development by third parties. With the revisions to the master plan and overall development strategy, it is difficult to reliably determine the future overall development cost and associated income streams of the Project. In addition, as the economic viability of each individual plot will have to be determined before commencement of construction work, the overall economic benefit to be derived from the Project and the timing thereof, cannot be reasonably determined at the end of the reporting period.

25 OTHER INCOME

	2021 *AED '000*	*Restated 2020* *AED '000*
Gain on disposal of investment in jointly controlled entity (note 9)	**28,119**	311,834
Dividend income from a joint venture (i)	**125,239**	167,641
Others	**107,953**	45,998
	261,311	525,473

(i) During the year, the Group received dividend amounting to AED 89.25 million (GBP 17.95 million) *(2020: AED 167.64 million (GBP 35.7 million)* from a joint venture, Dudgeon Offshore Wind UK Limited. The amount of dividend received, being in excess of the carrying amount of the investment in joint venture, has been recognised in the consolidated statement of comprehensive income.

26 GENERAL AND ADMINISTRATIVE EXPENSES

	2021 *AED '000*	*Restated 2020* *AED '000*
Staff costs	**244,602**	**166,714**
Advertising, publicity and events	**26,040**	**37,443**
Depreciation (note 6 and note 20)	**8,095**	**6,301**
Amortization (note 8)	**3,968**	**2,895**
Others	**1,060**	**28,883**
	283,765	**242,236**

Staff costs capitalised during the year as part of project costs amounted to AED 21.76 million *(2020: AED 19.10 million).*

General and administrative expenses during the year included AED 27.84 million *(2020: AED 57.67 million)* charged as part of expenses incurred in relation to government grants (note 24).

From total Depreciation expenses AED 25.84 million, SRE Held for Sale Depreciation AED 17.74 million are excluded leaving balance of AED 8.095 million under General and Administrative expenses.

26.1 PROJECT EXPENSES

	2021 *AED '000*	*Restated 2020* *AED '000*
Project Expenses	**76,017**	46,032
	76 017	46,032

Project expenses are related with Legal, Technical, Financial and Tax consultancies for upcoming projects.

27 FINANCE COSTS

	2021 *AED '000*	*Restated 2020* *AED '000*
Interest expense on borrowings	**52,601**	45,251
Bank charges	**9,485**	28,783
Interest on lease liabilities (note 20)	**14,468**	13,836
Net foreign exchange gain/loss	**29,555**	(18,363)
	106,109	69,507

27.1 FINANCE INCOME

	2021 *AED '000*	*Restated 2020* *AED '000*
Interest income on loans and receivables (including bank balances)	**48 127**	41,333

28 INCOME TAXES RELATING TO CONTINUING OPERATIONS

28.1 Income tax recognised in consolidated statement of profit or loss

	2021 *AED '000*	*2020* *AED '000*
Tax expense		
Income tax	**(5,839)**	108
Deferred tax	**(43,202)**	(11,944)
Total income tax expense recognised in the current year relating to continuing operations	**(49 041)**	(11,836)

The Company operates in the UAE and, accordingly, is not subject to tax. The Group's net income tax expense of AED 49 million *(2020: AED 11.8 million)* is a result of income taxes associated with Masdar Energy UK Limited and Masdar Offshore Wind UK Limited, subsidiaries that operate in the United Kingdom and Nur Navoi Solar FE, a subsidiary located in Uzbekistan. The Group's deferred tax assets and liabilities are derived from Masdar Energy UK Limited. Deferred tax assets primarily relate to taxable losses and the deferred tax liability relates to the capital allowances.

The income tax expense for the year can be reconciled to the accounting profit as follows:

	2021 *AED '000*	*2020* *AED '000*
Profit before income tax from continuing operations	**229,753**	407,982
Profit subject to tax	179,284	73,317
Income tax expense	**(34,064)**	(13,930)
Effect of previously unrecognised and unused tax losses and deductible temporary differences now recognised as deferred tax assets	**(6,997)**	(885)
Effect of temporary differences arising from other assets	**6,224**	3,622
Effect of difference in applicable tax rates	**(14,204)**	(2,594)
Prior year adjustment	**-**	1,951
Income tax expense recognised in consolidated statement of profit or loss	**(49,041)**	(11,836)

The tax rate used for the 2021 and 2020 reconciliations above is the corporate tax rate of 19% *(2020: 19%)* of Masdar Energy UK Limited on taxable profits under tax laws in the United Kingdom.

Deferred tax assets and liabilities as at 31 December 2021 have been calculated at 25% *(2020: 19%)* being the substantively enacted tax rate at the end of reporting period.

Current tax movement

	2021 *AED '000*	*2020* *AED '000*
Opening balance	**1,850**	2,435
Current year (credit) / charge	5,839	(108)
Tax paid	**(14,512)**	(477)
Effect of movement in foreign exchange	**1,003**	-
Income tax (recoverable) / payable	**(5,821)**	1,850

28 INCOME TAXES RELATING TO CONTINUING OPERATIONS continued

28.2 Deferred tax balances

The following is the analysis of deferred tax assets (liabilities) presented in the consolidated statement of financial position:

	2021 ***AED '000***	*2020* *AED '000*
Deferred tax assets	**146,112**	149,735
Deferred tax liabilities	**(231,685)**	(173,924)
	(85,573)	(24,189)

	At 1 January *AED '000*	*Recognised in profit or loss* *AED '000*	*Recognised in other reserves* *AED '000*	*Effect of movement in exchange rate* *AED '000*	*At 31-December* *AED '000*
2021:					
Deferred tax liabilities in relation to:					
Property, plant and equipment	**(173,923)**	**(53,616)**	**-**	**2,938**	**(224,601)**
Other liabilities	**-**	**-**	**(6,889)**	**(195)**	**(7,084)**
Deferred tax assets in relation to:					
Tax losses	**127,126**	**11,652**	**-**	**(3,301)**	**135,477**
Other assets	**22,608**	**(1,238)**	**(10,493)**	**(242)**	**10,635**
	(24,189)	**(43,202)**	**(17,382)**	**800**	**(85,573)**
2020:					
Deferred tax liabilities in relation to:					
Property, plant and equipment	(146,117)	(19,475)	-	(8,331)	(173,923)
Deferred tax assets in relation to:					
Tax losses	113,805	7,433	-	5,888	127,126
Other assets	11,986	99	8,706	1,817	22,608
	(20,326)	(11,943)	8,706	(626)	(24,189)

29 DISPOSAL OF A SUBSIDIARY AND DISCONTINUED OPERATION

29.1 Discontinued operation

29.1.1 Sustainable Real Estate as discontinued operation

During the year, following the guidance of His Highness Sheikh Mohammed bin Zayed Al Nahyan, an announcement was made by the shareholder to sell a majority interest in the Company. The transaction involves the sale of the Clean Energy (CE) business and the shareholder would retain the Sustainable Real Estate (SRE) business. The SRE business will be structured through a separate legal entity and this legal entity will then be wholly owned by the existing shareholder. The transaction was not completed at the year end and the SRE business is classified as Held For Sale (HFS) in the consolidated statement of financial position and as discontinued operations in the consolidated statement of comprehensive income.

29 DISPOSAL OF A SUBSIDIARY AND DISCONTINUED OPERATION continued

29.1 Discontinued operation continued

29.1.1 Sustainable Real Estate as discontinued operation continued

Financial performance:

	2021 *AED '000*	*Restated 2020* *AED 000*
Revenue	**423,959**	289,020
Cost of sales	**(146,239)**	(71,436)
Gross profit	**277,720**	217,584
Other Income	**3,880**	5,272
Share of Results of Equity accounted investees	**(2,843)**	(2,846)
Provision for Expected credit losses on trade receivable, net	-	(4,263)
Government Grant Income	**17,712**	22,395
Change in Fair value of Investment Properties	**106,947**	(83,904)
General expenses	**(133,623)**	(136,391)
Profit / (loss) after tax from SRE	**269,793**	17,847
Profit from MCCCL (29.1.b)	**-**	33,170
Profit after tax from discontinued operations	**269 793**	51,017

The significant classes of assets and liabilities in the consolidated financial statements on the date of disposal were as follows:

	2021 *AED '000*
Assets	
Property, plant and equipment	**188,920**
Investment Properties	**2,783,442**
Finance Lease Receivable	**392,836**
Intangibles	**339**
Inventories	**377,665**
Cash and Bank	**87,842**
Due from Related Parties	**27,130**
Investment in Equity accounted investees	**2,932**
Non-current Trade Receivables	**6,146**
Trade and other receivables	**226,977**
Total assets	**4,094,229**
Liabilities	
Due to Related Parties	**561**
Other non-current liabilities	**716,170**
Trade and other payables	**461,583**
Total liabilities	**1 178 314**

29 DISPOSAL OF A SUBSIDIARY AND DISCONTINUED OPERATION continued

29.1 Discontinued operation continued

29.1.1 Sustainable Real Estate as discontinued operation continued

Cash Flows from Discontinued Operation

	2021 ***AED '000***	*2020* *AED '000*
Cash (used)/generated in operations	**(86,523)**	207,190
Cash (used)/generated in investing activities	**(191,953)**	85,889
Cash generated (used) in Financing	**-**	-
Net (decrease) / increase in cash and cash equivalents	**(278,476)**	293,079

29.1.2 Masdar City Cooling Company Limited as discontinued operation

During 2019, the Group entered into a Share Purchase Agreement (the "SPA") with a third party to sell its entire ownership interest in its fully owned subsidiary, Masdar City Cooling Company Limited ("MCCCL") together with the related distribution network of the cooling business. The sale was not completed as of 31 December 2019 as certain key conditions precedents were not satisfied as that date and therefore, the assets and liabilities of the subsidiary were classified as 'held for sale' in accordance with the requirements of IFRS 5 "Non-current assets held for sale and discontinued operations". In November 2020, all the conditions precedents were satisfied and accordingly, the Group recognized the disposal of MCCCL.

Financial performance:

	2021 ***AED '000***	*2020* *AED '000*
Revenue	**-**	12,153
Cost of sales	**-**	(6,833)
Gross profit	**-**	5,320
General expenses	**-**	(494)
Net profit for the year from discontinued operation	**-**	4,826
Gain on disposal of MCCL (ii)	**-**	28,344
Profit after tax from discontinued operation	**-**	33,170

29 DISPOSAL OF A SUBSIDIARY AND DISCONTINUED OPERATION continued

29.1 Discontinued operation continued

29.1.2 Masdar City Cooling Company Limited as discontinued operation continued

The significant classes of assets and liabilities in the consolidated financial statements on the date of disposal were as follows:

	2021 ***AED '000***	*2020* *AED '000*
Assets		
Property, plant and equipment	-	43,635
Trade and other receivables	-	2,908
Total assets	-	46,543
Liabilities		
Trade and other payables	-	1,770
Total liabilities	-	1,770
Net assets of MCCCL disposed	-	44,773
Carrying value of the distribution network	-	64,715
Net assets derecognised as part of MCCCL disposal	-	109,488
Sale consideration*	-	(137,832)
Gain on disposal	-	28,344

*Sale consideration consists of cash consideration amounting to AED 98.32 million and fair value of contingent consideration amounting to AED 39.51 million. Fair value of the contingent consideration has been estimated based on the expected future cashflows from utilisation of additional cooling capacity as stipulated in the SPA. Contingent consideration has been classified under Other receivables.

29.2 Restatement of Year 2020 Financial Statements

29.2.A Correction of errors

During the current year, management identified below mentioned errors, impacting financial statements of 2020 as explained below:

- Investment property under construction (IPUD) was fair valued in the prior year based on the residual approach valuation method. The valuation method was not appropriate given the current condition of the property. Since it has been established by the Group that the fair value is not reliably determinable and is to be carried at cost till the earlier of fair value being reliably determinable or completion of the property, the fair value loss recognized in the prior year has been reversed and retrospectively adjusted from prior year 2020; and

- Nur Navoi FE Uzbekistan, a subsidiary of the Company, was incorporated in the year 2020. Financial information for Nur Navoi FE Uzbekistan was erroneously not consolidated in the 2020 consolidated financial statements. It has been consolidated in the 2021 group financial statements, restating the 2020 balances.

29.2.B Presentation on account of IFRS 5 (Non-current assets held for sale and discontinued operations)

Current year consolidated financial statements have been represented with respect to discontinued operations. Refer note 29.1 for further details.

29 DISPOSAL OF A SUBSIDIARY AND DISCONTINUED OPERATION continued

29.2 Restatement of Year 2020 Financials continued

Adjusted Consolidated Statement of Comprehensive Income with restatement and SRE discontinued operations

	2020	Adjustment	SRE Discontinued Operation	2020 Restated
		Note 29.2.A	*Note 29.2.B*	
	AED 000	AED 000	AED 000	AED 000
Continuing operations				
Revenue and other operating income	636,183	26,757	(289,020)	373,920
Cost of sales	(249,461)	(26,491)	71,436	(204,516)
GROSS PROFIT	**386,722**	**266**	**(217,584)**	**169,404**
Income from government grants	77,648	-	(22,395)	55,253
Other income	530,745	-	(5,272)	525,473
Research and development expenses	(3,546)	-	-	(3,546)
Project expenses	(49,487)	-	3,455	(46,032)
General and administrative expenses	(369,661)	-	127,425	(242,236)
Profit from operating activities	**572,421**	**266**	**(114,371)**	**458,316**
Change in fair value of investment properties	(124,778)	40,874	83,904	-
Change in fair value of financial assets carried at fair value through profit or loss	(11,972)	-	-	(11,972)
Share of results of equity-accounted investees, net	(2,694)	-	2,846	152
Gain on derivatives, net	1,437	-	-	1,437
(Provision for) reversal of expected credit losses on finance lease receivables, net	(2,608)	-	2,608	-
Provision for expected credit losses on trade receivables, net	(4,263)	-	4,263	-
(Provision for) reversal of expected credit losses on loans to related parties, net	(11,777)	-	-	(11,777)
Finance costs, net	(31,077)	-	2,903	(28,174)
Profit before income tax from continuing operations	**384,689**	**41,140**	**(17,847)**	**407,982**
Income tax	(11,836)	-	-	(11,836)
Profit after income tax from continuing operations	372,853	-	-	396,146
Profit after income tax from discontinued operations	33,170	-	17,847	51,017
Profit for the year	**406,023**	**41,140**	**-**	**447,163**
Other comprehensive loss				
Items that may be reclassified subsequently to profit or loss	(83,714)	-	-	(83,714)
Share of movement in hedging reserves of equity-accounted investees				
Foreign currency translation differences for foreign operations	(46,671)	-	-	(46,671)
Other comprehensive loss for the year, net of income tax	**(130,385)**	**-**	**-**	**(130,385)**
Total comprehensive income for the year	**275,638**	**41,140**	**-**	**316,778**

29 DISPOSAL OF A SUBSIDIARY AND DISCONTINUED OPERATION continued

29.2 Restatement of Year 2020 Financials continued

Restated Consolidated Statement of Financial Position

	2020 AED 000	Adjustment AED 000	2020 Restated AED 000
Non-current assets			
Property, plant and equipment	1,650,300	-	1,650,300
Right-of-use assets	327,080	-	327,080
Investment properties	2,528,962	40,874	2,569,836
Intangible assets	49,832	-	49,832
Investment in equity-accounted investees	877,149	-	877,149
Other non-current financial assets	259,820	-	259,820
Finance lease receivables	262,263	-	262,263
Loans to related parties	249,356	-	249,356
Trade and other receivables	51,801	-	51,801
Deferred tax assets	149,735	-	149,735
Current assets	**6,406,298**	**40,874**	**6,447,172**
Finance lease receivables	54,779	-	54,779
Loan to related parties	189,388	-	189,388
Due from related parties	133,094	-	133,094
Trade and other receivables	529,630	266	529,896
Inventories	413,981	-	413,981
Cash and bank balances	1,229,254	-	1,229,254
	2,550,126	**266**	**2,550,392**
Assets held for sale	-	-	-
TOTAL ASSETS	**8,956,424**	**41,140**	**8,997,564**
EQUITY AND LIABILITIES			
Equity			
Share capital	8,000,000	-	8,000,000
Shareholder's account	(1,680,060)	-	(1,680,060)
Reserves	(398,596)	-	(398,596)
Accumulated losses	(1,575,188)	41,140	(1,534,049)
Total equity	**4,346,156**	**41,140**	**4,387,296**
Non-current liabilities			
Bank borrowings	1,886,717	-	1,886,717
Lease liabilities	322,305	-	322,305
Derivative financial liability	70,193	-	70,193
Other non-current liabilities	950,379	-	950,379
Deferred tax liabilities	173,924	-	173,924
Current liabilities	**3,403,518**	-	**3,403,518**
Due to related parties	287,795	-	287,795
Bank borrowings	244,382	-	244,382
Lease liabilities	17,061	-	17,061
Trade and other payables	657,512	-	657,512
	1,206,750	-	**1,206,750**
Liabilities directly associated with assets as held for sale	-	-	-
Total liabilities	4,610,268	-	-
TOTAL EQUITY AND LIABILITIES	**8,956,424**	**41,140**	**8,997,564**

There is no impact on the opening consolidated financial position as at 1 January 2020 and no impact on total operating, investing or financing cashflows for the year ended 31 December 2020.

29 DISPOSAL OF A SUBSIDIARY AND DISCONTINUED OPERATION continued

29.3 Disposal of a Subsidiary

In December 2021, the Company transferred its investment in subsidiary Vis Solar 1 B.V for a 49% stake in Infinity Power Holding B.V. This disposal of subsidiary and subsequent recognition of Investment in Joint Venture was valued at USD 31.3 million (AED 114.77 million)

	2021 ***AED 000***
Sales proceeds	**114,773**
Cost of Equity Accounted Investee	**(55,259)**
Other Movement	**(31,395)**
Gain / loss on Disposal	**28,119**

Other movement pertains to the offset of loan receivable to Vis Solar 1 B.V. balance of USD 9.3 million (AED 34.19 million) and derecognition of reserves in Vis Solar 1 B.V. of AED 2.8 million.

30 COMMITMENTS AND CONTINGENCIES

Capital commitments

Capital commitments at the end of the reporting period are as follows:

	1 year or less AED '000	*More than 1 year AED '000*	*Total AED '000*
2021:			
Capital commitments	**843,613**		**843,613**
Group's share in the commitments of its equity-accounted investees	**22,786**		**22,786**
Commitments towards Financials Investment FVTP&L	**135 356**		**135 356**
Group's share in the commitments of its joint operations	**863**		**863**
2020:			
Capital commitments	559,624	5,243	564,867
Group's share in the commitments of its equity-accounted investees	112,989	-	112,989
Commitments towards Financials Investment FVTP&L	101,926	-	101,926
Group's share in the commitments of its joint operations	884	-	884

30 COMMITMENTS AND CONTINGENCIES continued

Capital commitments continued

Operating commitments
As at 31 December 2021, the Group has operating commitments amounting to AED 25.74 *million (2020: AED 19.44 million)* repayable within one year from the end of the reporting period.

Guarantees
As at 31 December 2021, the Group has issued bank guarantees amounting to AED 1,331 million *(2020: AED 1,045 million)* against various projects. The Group has also issued performance guarantees amounting to AED 1,965 million against Dumat Al Jundal, Nur Navoi and Al Dhafra PV2 projects as at 31 December 2021 *(2020: 1,158 million).*

Leases – Group as a lessor
The Group has entered into operating leases on its investment properties portfolio consisting of residential, commercial and mixed used buildings (note 7). These leases have terms of between 5 to 20 years. The future minimum rentals under non-cancellable operating leases are as follows:

	2021 ***AED '000***	*2020* *AED '000*
Within one year	**70,904**	**190,547**
After one year but not more than five years	**103,759**	**828,493**
More than five years	**2,394,045**	**1,127,864**
Total	**2,568,708**	**2,146,904**

31 FINANCIAL INSTRUMENTS

31.1 Capital management

The policy of the Board of Directors is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board of Directors monitors the return on capital.

The Company and its subsidiaries incorporated in the UAE are subject to certain capital requirements of the UAE Federal Law No. (2) of 2015, which they are compliant with. Neither the Company nor any of its subsidiaries are subject to externally imposed capital requirements.

The capital structure of the Group consists of net debt (bank borrowings offset by cash and bank balances, excluding restricted cash) and equity of the Group (comprising issued capital, share capital under issuance, reserves and additional shareholder contribution offset by accumulated losses as detailed in notes 16 to 18).

Gearing ratio
The gearing ratio as at 31 December is as follows:

	2021 ***AED '000***	*2020* *AED '000*
Debt (i)	**2,105,728**	2,131,099
Cash and bank balances	**(716,497)**	(1,229,254)
Net debt	**1,389,231**	901,845
Equity (ii)	**4 983 693**	4,387,295
Net debt to equity ratio	**27.88%**	20.55%

(i) Debt comprises bank borrowings (note 19).

(ii) Equity includes all capital and reserves of the Group that are managed as capital.

31 FINANCIAL INSTRUMENTS continued

31.2 Categories of financial instruments

	2021 *AED '000*	*2020* *AED '000*
Financial assets		
Loans and receivables carried at amortised cost (including cash and cash equivalents)	**1,897,874**	2,520,062
Financial assets carried at fair value through profit or loss	**243,272**	259,821
Other financial assets	**46,036**	-
	2,187,182	2,779,883
Financial liabilities		
Amortised cost	**2,621,553**	3,297,502
Other financial liabilities	-	70,193
	2 621 553	3,367,695

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: currency risk, interest rate risk and credit risk.

31.3 Financial risk management

Currency risk
Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. The Group is exposed to currency risk on its transactions, investments that are denominated in a currency other than the respective functional currencies of Group entities, primarily the EUR and GBP. There is no significant impact on the USD as the UAE Dirham is pegged to the USD.

The carrying amounts of the Group's foreign currency denominated monetary assets and liabilities at the end of the reporting period are as follows:

	Assets		***Liabilities***	
	2021 ***AED '000***	*2020* *AED '000*	***2021*** ***AED '000***	*2020* *AED '000*
GBP (a)	**266,361**	104,058	**312,267**	289,195
EUR (b)	**166,267**	94,047	**35,379**	51,087

Based on the sensitivity analysis to a 10% increase/decrease in the AED against the relevant foreign currencies (assumed outstanding for the full year):

(a) There is AED 4.6 million (2020: AED 18.51 million) net revaluation gain/loss on the GBP outstanding balances.
(b) There is AED 13.1 million (2020: AED 4.30 million) net revaluation gain/loss on the EUR outstanding balances.

Interest rate sensitivity analysis
Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's variable rate borrowings.

The sensitivity analyses below have been determined based on the exposure to interest rates for both derivatives and non-derivative instruments at the end of the reporting period. For floating rate liabilities, the analysis is prepared assuming the amount of the liability outstanding at the end of the reporting period was outstanding for the whole year. A 100 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents Group's assessment of the reasonably possible change in interest rates.

31 FINANCIAL INSTRUMENTS continued

31.3 Financial risk management continued

Interest rate sensitivity analysis continued
If interest rates had been 100 basis points higher/lower and all other variables were held constant, the Group's profit for the year ended 31 December 2021 would decrease/increase by AED 19 million (2020: AED 18 million).

Interest rate swap contracts
Under interest rate swap contracts, the Group agrees to exchange the difference between the fixed and floating rate interest amounts calculated on agreed notional principal amounts. Such contracts enable the Group to mitigate the risk of changing interest rates on the fair value of issued fixed rate debt and the cash flow exposures on the issued variable rate debt.

The fair value of interest rate swaps at the end of the reporting period is determined by discounting the future cash flows using the curves at the end of the reporting period and the credit risk inherent in the contract. The average interest rate is based on the outstanding balances at the end of the reporting period.

The Group does not designate derivatives (interest rate swaps) as hedging instruments under a fair value hedge accounting model. Therefore, a change in interest rates would not affect profit or loss.

Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. Credit risk arises principally from the Group's trade and other receivables and cash and bank balances.

The Group has adopted a policy of only dealing with creditworthy counterparties. The Group attempts to control credit risk by monitoring credit exposures and continually assessing the creditworthiness of third parties. Balances with banks are assessed to have low credit risk of default since these banks are highly regulated by the central banks in the country of operation.

Concentration of credit risk arises when a number of counterparties are engaged in similar business activities, or activities in the same geographic region, or have similar economic features that would cause their ability to meet contractual obligations to be similarly affected by changes in economic, political or other conditions. Concentration of credit risk indicates the relative sensitivity of the Group's performance to developments affecting a particular industry or geographic location. The Group is exposed to credit risk on cash and bank balances, trade and other receivables, due from related parties, loans to related parties and finance lease receivables.

The amount that best represents the maximum credit risk exposure on financial assets at the end of the reporting period, in the event of counterparties failing to perform their obligations generally approximates their carrying value. Trade and other receivables and balances with banks are not secured by any collateral.

Maximum exposure to credit risk without taking into account any collateral or bilateral netting agreements:
The table below shows the maximum exposure to credit risk for the components of the statement of financial position. The maximum exposure is shown gross, before the effect of mitigation through the use of bilateral netting and collateral agreements.

	2021 ***AED '000***	*2020* *AED '000*
Finance lease receivables (note 11)	-	317,042
Loan to related parties (note 12)	**452,976**	438,745
Due from related parties (note 12)	**173,102**	133,094
Trade and other receivables (note 13)	**555,299**	401,927
Cash and bank balances (note 15)	**716,497**	1,229,254
Total credit risk exposure	**1 897 874**	2,520,062

Where financial instruments are recorded at fair value the amounts shown above represent the current credit risk exposure but not the maximum risk exposure that could arise in the future as a result of changes in values.

31 FINANCIAL INSTRUMENTS continued

31.3 Financial risk management continued

Credit risk continued

Credit quality per class of financial assets

The Group's credit risk rating systems and processes differentiate exposures in order to highlight those with greater risk factors and higher potential severity of loss. The credit quality of financial assets is reported by the Group using internal credit ratings.

	31 December 2021				*31 December 2020*			
	Stage 1 12-month ECL AED'000	***Stage 2 Lifetime ECL Not credit-impaired AED'000***	***Stage 3 Lifetime ECL Credit-impaired AED'000***	***Total AED'000***	*Stage 1 12-month ECL AED'000*	*Stage 2 Lifetime ECL Not credit-impaired AED'000*	*Stage 3 Lifetime ECL Credit-impaired AED'000*	*Total AED'000*
Finance lease receivables	-	**408,760**	-	**408,760**		331,320	-	331,320
Provision for expected credit losses	-	**(15,924)**	-	**(15,924)**	-	(14,278)	-	(14,278)
Held for Sale reclass	-	**(392,836)**	-	**(392,836)**	-	-	-	-
Total carrying amount	-	-	-	-	-	317,042	-	317,042
Loan to related parties	**301,106**	**272,125**	-	**573,231**	284,284	298,520	-	582,804
Provision for expected credit losses	**(26,015)**	**(94,240)**	-	**(120,255)**	(40,700)	(103,360)	-	(144,060)
Total carrying amount	**275 092**	**177 885**	-	**452 976**	243,584	195,160	-	438,744
Due from related parties	**173,102**	-	-	**173,102**	133,094	-	-	133,094
Provision for expected credit losses	-	-	-	-	-	-	-	
Total carrying amount	**173,102**	-	-	**173,102**	133,094	-	-	133,094
Receivables under payment plan	**84,540**	-	-	**84,540**	27,708	-	-	27,708
Provision for expected credit losses	**(142)**	-	-	**(142)**	(83)	-	-	(83)
Held for Sale	**(84,398)**	-	-	**84,398**	-	-	-	-
Total carrying amount	-	-	-	-	27 625	-	-	27 625
Finance lease receivables								
At the beginning of the year	-	**14,278**	-	**14,278**	-	11,670	-	11,670
ECL recognised under IFRS 9	-	**2,534**	-	**2,534**	-	2,608	-	2,608
Reversal on cancellation	-	**(888)**	-	**(888)**	-	-	-	-
Held for Reclass		**(15,924)**		**(15,924)**	-	-	-	-
Total carrying amount	-	-	-	-	-	14 278	-	14 278
Loan to related parties								
At the beginning of the year	**41,473**	**102,587**	-	**144,060**	20,075	104,439		124,514
ECL recognised under IFRS 9	-	-	-	-	-	-	-	-
At the beginning of the year (as per IFRS 9)	**41,473**	**102,587**	-	**144,060**	20,075	104,439	-	124,514
Transfer from stage 2 to stage 1					-	-	-	-
Allowances for impairment								
made during the year	**2,525**	-	-	**2,525**	20,424	100	-	20,524
Reversal on recoveries during the year	**(11,073)**	**(5,402)**	-	**(16,475)**	(320)	(8,427)	-	(8,747)
Other	**(5,097)**	-	-	**(5,097)**				
Effect of movement in exchange rates	**(1,044)**	**(3,714)**	-	**(4,758)**	1,294	6,475	-	7,769
Total carrying amount	**26,784**	**93,471**	-	**120,255**	41,473	102,587	-	144,060
Receivables under payment plan								
At the beginning of the year	**83**	-	-	**83**	208	-	-	208
ECL recognised under IFRS 9					-	-	-	-
At the beginning of the year (as per IFRS 9)	**83**	-	-	**83**	208	-	-	208
Allowances for impairment								
made during the year	**59**	-	-	**59**	-	-	-	-
Reversal on cancellation during the year					(125)	-	-	(125)
Held for Sale	**(142)**	-	-	**(142)**	-	-	-	-
Write-offs					-	-	-	-
Total carrying amount	-	-	-	-	83	-	-	83

The loss allowance for other trade receivables is measured at an amount equal to lifetime expected credit losses under simplified approach as presented in note 13 to the Group's consolidated financial statements.

31 FINANCIAL INSTRUMENTS continued

31.3 Financial risk management continued

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group ensures that it has sufficient cash and liquid assets on demand to meet its expected operational expenses; this excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters. The Group maintains adequate amount of its cash resources in bank and in short term deposits.

The Group has significant future capital commitments (note 30) for which it relies completely on funding from the Parent Company.

The following tables detail the Group's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The tables have been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The tables include both interest and principal cash flows and excluding the impact of netting arrangements. To the extent that interest flows are floating rate, the undiscounted amount is derived from interest rate curves at the end of the reporting period.

The contractual maturity is based on the earliest date on which the Group may be required to pay

	Within 1 year AED '000	*Between 1 -2 years AED '000*	*Between 2 - 5 years AED '000*	*More than 5 years AED '000*	*Total AED '000*
2021					
Bank borrowings	**172,984**	**176,414**	**781,297**	**1,266,685**	**2,397,380**
Due to related parties	**32,579**	**-**	**-**	**-**	**32,579**
Lease liabilities	**30,916**	**46,637**	**69,956**	**287,367**	**434,876**
Trade and other payables	**428,289**	**-**	**-**	**-**	**428,289**
	664 768	**223 051**	**851 253**	**1 554 052**	**3 293 124**
2020					
Bank borrowings	290,038	160,531	510,484	1,471,200	2,432,253
Due to related parties	287,795	-	-	-	287,795
Lease liabilities	31,172	29,800	89,399	318,293	468,664
Trade and other payables	539,241	-	-	-	539,241
	1,148,246	190,331	599,883	1,789,493	3,727,953

The amount included above for variable interest rate instruments for non-derivative financial liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period.

The following table details the Group's liquidity analysis for its interest rate swaps. The table has been drawn up based on the undiscounted contractual net cash inflows and outflows on derivative instruments that settle on a net basis.

	Within 1 year AED '000	*Between 1 - 2 years AED '000*	*Between 2 - 5 years AED '000*	*Total AED '000*	*Carrying amount AED '000*
2021					
Interest rate swaps	**12,872**	**11,976**	**35,447**	**60,295**	**(46,036)**
2020					
Interest rate swaps	13,849	13,003	33,306	60,158	70,193

31 FINANCIAL INSTRUMENTS continued

31.3 Financial risk management continued

Financing facilities

The Group has access to financing facilities as described in note 19, of which AED 852.72 million were unused at the end of the reporting period (2020: AED 586 million). The Group expects to meet its other obligations from operating cash flows and proceeds of maturing financial assets.

31.4 Fair value measurements

The following analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

- Level 1 – quoted prices in active markets for assets and liabilities
- Level 2 – inputs other than quoted prices included within Level 1 are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
- Level 3 – inputs for the asset or liability that are not based on observable market data (unobservable inputs)

Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis

Some of the Group's financial assets and financial liabilities are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation technique(s) and inputs used).

	Fair value as at		*Fair value hierarchy*	*Valuation technique(s) and key input(s)*
	2021 ***AED'000***	*2020* *AED'000*		
Financial liabilities				
Derivative financial liabilities	**(46,036)**	70,193	Level 2	Future cash flows are estimated based on forward interest rates (from observable yield curves at the end of the reporting period)
Financial assets carried at fair value through profit or loss				
Debt investment – HFEP	**208,369**	192,636	Level 3	Discounted cash flow
Equity investment – Zouk	**34,903**	67,184	Level 3	Net Asset Value

The fair values of the financial assets and financial liabilities included in the level 2 category above have been determined in accordance with generally accepted pricing models based on a discounted cash flow analysis, with the most significant observable inputs being the discount rate that reflects the credit risk of counterparties.

The fair values of the financial assets and financial liabilities included in the level 3 category above have been determined based on a discounted cash flow analysis and net asset values.

As at 31 December 2021 and 2020, the Group considers that the carrying amounts of financial assets and financial liabilities recognised in the consolidated financial statements approximate their fair values.

ISSUER

Abu Dhabi Future Energy Company PJSC – Masdar
Masdar City, Khalifa A City,
opposite the Presidential Airport
P.O. Box 54115
Abu Dhabi
United Arab Emirates

PRINCIPAL PAYING AGENT AND TRANSFER AGENT

Citibank N.A., London Branch
Citigroup Centre
Canada Square
Canary Wharf
London E14 5LB
United Kingdom

REGISTRAR

Citibank Europe plc
1 North Wall Quay
Dublin
Ireland

LEGAL ADVISERS

To the Issuer
as to English law and UAE law

Allen & Overy LLP
11th Floor, Burj Daman Building
Al Mustaqbal Street
Dubai International Financial Centre
P.O. Box 506678
Dubai, United Arab Emirates

To the Arrangers and Dealers
as to English law and UAE law

Clifford Chance LLP
ICD Brookfield Place, Level 32
Dubai International Financial Centre
P.O. Box 506698
Dubai, United Arab Emirates

AUDITORS

KPMG Lower Gulf Limited
Level 19, Nation Tower 2
Abu Dhabi Corniche
Abu Dhabi
United Arab Emirates

ARRANGERS

Citigroup Global Markets Limited
Citigroup Centre
Canada Square
Canary Wharf
London E14 5LB
United Kingdom

First Abu Dhabi Bank PJSC
FAB Building
Khalifa Business Park – Al Qurm District
P.O. Box 6316
Abu Dhabi
United Arab Emirates

DEALERS

BNP Paribas
16, boulevard des Italiens
75009 Paris
France

Citigroup Global Markets Limited
Citigroup Centre
Canada Square
Canary Wharf
London E14 5LB
United Kingdom

First Abu Dhabi Bank PJSC
FAB Building
Khalifa Business Park – Al Qurm District
P.O. Box 6316
Abu Dhabi
United Arab Emirates

HSBC Bank plc
8 Canada Square
London E14 5HQ
United Kingdom

SMBC Nikko Capital Markets Limited
100 Liverpool Street
London EC2M 2AT
United Kingdom

Société Générale
29 boulevard Haussmann
75009 Paris
France

Standard Chartered Bank
7th Floor Building One, Gate Precinct
Dubai International Financial Centre
P.O. Box 999
Dubai
United Arab Emirates