

## 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 AA- by Fitch Ratings Limited (**Fitch**) and A2 by Moody's Investors Service Limited (**Moody's**). The Programme is expected to be rated AA- 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 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 SHIBOR, HIBOR, EIBOR, SAIBOR, BBSW, 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 ASX Benchmarks Limited, the Treasury Markets Association of Banks, Refinitiv Benchmark Services (UK) Limited, the Boursa Istanbul 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**

**Abu Dhabi Commercial Bank**

**BNP PARIBAS**

**Citigroup**

**Crédit Agricole CIB**

**First Abu Dhabi Bank**

**HSBC**

**MUFG**

**NATIXIS**

**SMBC Nikko**

**Société Générale Corporate & Investment Banking**

**Standard Chartered Bank**

The date of this Base Offering Circular is 15 July 2024.

## IMPORTANT INFORMATION

**This Base Offering Circular does not comprise a base prospectus for the purposes of either Regulation (EU) 2017/1129 (the Prospectus Regulation) 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 confirms that, 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 the 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 the 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 the 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 (as amended, 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 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, as amended from time to time). 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 Saudi Arabian Capital Market Authority (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 advisor.

## 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 2023 (the **2023 Financial Statements**); and
- the audited consolidated financial statements as at and for the year ended 31 December 2022 (the **2022 Financial Statements**) and, together with the 2023 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 the applicable requirements of UAE Federal Decree Law No. 32 of 2021. IFRS comprise accounting standards issued by the IASB as well as interpretations issued by the International Financial Reporting Interpretations Committee (IFRIC).

All financial information for 2023 included in this Base Offering Circular is derived from the 2023 Financial Statements and, save where otherwise stated, all financial information for each of 2022 and 2021 has been derived from the 2022 Financial Statements.

Masdar's financial year ends on 31 December and references in this Base Offering Circular to **2021**, **2022** and **2023** 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. See note 31.1 to the 2023 Financial Statements for tables showing the financial performance of, and the cash flows from, the discontinued operations in the first 11 months of 2022 and the assets and liabilities of the discontinued operations as at 30 November 2022.

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 32.1 to the 2023 Financial Statements.

### **Auditors**

The 2023 Financial Statements were audited by Ernst & Young Middle East (Abu Dhabi branch) (EY), independent auditors, in accordance with International Standards on Auditing, who issued an unqualified report on the 2023 Financial Statements.

The 2022 Financial Statements were audited by KPMG Lower Gulf Limited, independent auditors (KPMG), in accordance with International Standards on Auditing, who issued an unqualified report on the 2022 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 constitutes alternative performance measures for the purposes of the ESMA Guidelines on Alternative Performance Measures (APMs). 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 "*Financial review—Results of operations—Gross profit*" and is unaudited financial information which has been extracted without material adjustment from the Financial Statements or 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 they 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](http://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, 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 (which is 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**

In this Base Offering Circular, the most recent published financial information is as at, and for the year ended, 31 December 2023. Operational information in relation to the Group's projects has, however, generally been presented as at 31 March 2024, the most recent practicable date for presenting the information. In cases where projects are being referred to in conjunction with financial information, typically in "*Financial review*", the project information will be as at 31 December in the relevant year to ensure consistency and accuracy. A note on project developments since 31 December 2023 is set out in "*Financial review—Recent developments*".

As at 31 March 2024, the Group had ownership interests in 39 operational utility scale renewable energy generation projects, 12 utility scale renewable energy generation projects which are under construction and 32 utility scale renewable energy generation projects which it refers to as committed projects.

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

### **Operational projects**

Al Dhafrah PV	the 1,640 MW solar photovoltaic power ( <b>PV</b> ) project located approximately 13 kilometres ( <b>km</b> ) from Abu Dhabi city, UAE, and undertaken by Dhafrah PV2 Energy Company LLC (the <b>Al Dhafrah project company</b> ), in which the Group has an effective 20 per cent. shareholding through Dhafrah Solar Energy Holding Company LLC which is equity accounted as a joint venture.
Baynouna PV	the 200 MW PV project located near Tilal Al Rukban, Jordan and undertaken by Baynouna Solar Energy PSC (the <b>Baynouna project company</b> ), 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 PV + BESS	the 128 MW PV and 40 MW battery energy storage system ( <b>BESS</b> ) project located in Kern County, California, United States and undertaken by Big Beau Project Company (DE LLC) (the <b>Big Beau project company</b> ), in which the Group has an effective 50 per cent. shareholding through BigBeau Class B Holdco which is equity accounted as a joint venture.
Cibuk Wind <sup>(1)</sup>	the 158 MW wind power project located 47 km northeast of Belgrade, Serbia and undertaken by Vetroelektrane Balkana D.O.O. Beograd (the <b>Cibuk</b>

	<b>project company</b> ), 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.
Cirata Floating PV	the 145 MW floating PV project located in West Java province, Indonesia and undertaken by PT Pembangkitan Jawa Bali Masdar Solar Energi (the <b>Cirata project company</b> ), in which the Group has a direct 49 per cent. shareholding which is equity accounted as a joint venture.
Coyote Wind	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 PV	the 80 MW PV 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 PV + BESS	the 70 MW PV and 35 MW BESS project located at Riverside County, California, United States and undertaken by DH2 Project Company (the <b>Desert Harvest 2 project company</b> ), 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 3 PV	the 800 MW PV project located in the Emirate of Dubai, UAE and undertaken by Shuaa Energy 2 PSC (the <b>DEWA 3 project company</b> ), 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 Offshore Wind	the 402 MW wind power project off the Norfolk coast in England undertaken by Dudgeon Offshore Wind Limited (the <b>Dudgeon project company</b> ), in which the Group has an effective 35 per cent. shareholding which is equity accounted as a joint venture.
Dumat Al Jandal Wind	the 400 MW wind power project in Dumat al Jandal, Saudi Arabia and undertaken by Dumat Al Jandal Wind Company for Energy LLC (the <b>Dumat Al Jandal project company</b> ), in which the Group has an effective 34.3 per cent. shareholding which is equity accounted as a joint venture.
Garadagh PV	the 230 MW PV project located at Area 60, 9km northwest of the Atlat settlement in the Republic of Azerbaijan, and undertaken by Masdar Azerbaijan Energy LLC (the <b>Garadagh project company</b> ), in which the Group has a direct 100 per cent. shareholding through Masdar Azerbaijan LLC which is fully consolidated as a subsidiary.
Grajewo Wind	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 <b>Gallery Grajewo project company</b> ), 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 Floating Offshore Wind	the 30 MW floating offshore wind power project located off the coast of Aberdeenshire in Scotland and undertaken by Hywind (Scotland) Limited (the <b>Hywind project company</b> ), in which the Group has an effective 25 per cent. shareholding which is equity accounted as a joint venture.
Jeddah South PV	the 300 MW PV project located in Jeddah, Saudi Arabia and undertaken by South Jeddah Noor PV Energy Company (the <b>Jeddah South project company</b> ), in which the Group has a direct 35.7 per cent. shareholding 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. (the <b>Krnovo project company</b> ), in which the Group has a direct 49 per cent. shareholding which is equity accounted as a joint venture.
Las Majadas Wind	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 Offshore Wind	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 Offshore Wind project which is a consolidated unincorporated joint operation.
Maverick 1 PV	the 125 MW PV 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 PV	the 100 MW PV 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.
Mława Wind	the 37 MW wind power project located in Mława County in the Mazovian Voivodeship in northern Poland and undertaken by Pileus Energy sp. z o.o. (the <b>Mława project company</b> ), 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.
Nur Navoi PV	the 100 MW PV project located in the Navoi Region of Uzbekistan and undertaken by Nur Navoi Solar LLC (the <b>Nur Navoi project company</b> ) 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 is equity accounted as an associate. 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 Wind	the 149 MW wind power project located in Val Verde County, Texas, United States and undertaken by Rocksprings Val Verde Wind LLC (the <b>Rocksprings project company</b> ), 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 CSP	the 100 MW concentrated solar power ( <b>CSP</b> ) project in the Western Region of the Emirate of Abu Dhabi, UAE undertaken by Shams Power Company PJSC (the <b>Shams project company</b> ), in which the Group has a direct 51 per cent. shareholding which is equity accounted as a joint venture.
Sharjah WtE	the 30 MW multi-fuel conventional waste-to-energy ( <b>WtE</b> ) plant located in the Emirate of Sharjah, UAE and undertaken by Sharjah Waste to Energy Company LLC (the <b>Sharjah project company</b> ), in which the Group has a direct 50 per cent. shareholding 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 (the <b>Sterling project company</b> ), 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 <b>Tafila Wind project company</b> ), in which the Group has a direct 50 per cent. shareholding and which is equity accounted as a joint venture.
Infinity Platform	a portfolio of four operational utility scale solar power projects located in Egypt with a gross installed capacity of 202 MW and, through its ownership of 100 per cent. of Lekela, a portfolio of seven operational utility scale wind power projects with a gross installed capacity of 1,035 MW in South Africa, Egypt and Senegal held by Infinity Power Holding B.V. ( <b>IPH</b> ), in which the Group has a direct 49 per cent. shareholding and which is equity accounted as a joint venture.

### **Under construction projects**

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Al Henakiyah PV	the 1,100 MW PV project located in Al Madinah province, Saudi Arabia and undertaken by Sana Taibah for Renewable Energy LLC (the <b>Al Henakiyah project company</b> ), in which the Group has a 40 per cent. shareholding through Abu Dhabi Future Energy Holding Company LLC which is equity accounted a joint venture.
Amaala PV	the 418 MW PV project located on the Red Sea in Saudi Arabia and undertaken by AMAALA Sustainable Company for Energy LLC (the <b>Amaala project company</b> ), in which the Group has a 43 <sup>(2)</sup> per cent. shareholding which is equity accounted as a joint venture.
Bukhara PV + BESS	the 250 MW PV and 63 MW BESS project located in the Bukhara region of Uzbekistan and undertaken by "Nur Bukhara Solar PV" Foreign Enterprise

LLC (the **Bukhara project company**), in which the Group will have a 100 per cent. shareholding and which it will fully consolidate as a subsidiary.

Baltic Eagle Offshore Wind	the 476 MW offshore wind farm located near Rügen Island in the Baltic Sea, off the coast of Germany and undertaken by Baltic Eagle GmbH (the <b>Baltic Eagle project company</b> ), in which the Group has a 49 per cent. shareholding through Masdar Baltic Eagle Germany GmbH which is equity accounted as a joint venture.
DEWA 6 PV	the 1,800 MW PV project located in the Emirate of Dubai, UAE and undertaken by Shuaa Energy 4 PSC (the <b>DEWA 6 project company</b> ), in which the Group has a 40 per cent. shareholding which is equity accounted as a joint venture.
East Rockingham WtE	the 29 MW WtE 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 <b>East Rockingham project company</b> ), 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.
Jizzakh PV	the 220 MW PV project located in Jizzakh, Uzbekistan and undertaken by "Nur Jizzakh Solar PV" Foreign Enterprise LLC (the <b>Jizzakh project company</b> ), in which the Group has a direct 100 per cent. shareholding through Jizzak Holding RSC Limited which is fully consolidated as a subsidiary.
Royle Barn Road BESS	the 35 MW BESS project located in the north of England and being developed by Arlington Group Services Limited, in which the Group has a 95 per cent. shareholding which is consolidated as a subsidiary.
Samarkand PV	the 220 MW PV project located in Samarkand, Uzbekistan and undertaken by "Nur Samarkand Solar PV" Foreign Enterprise LLC (the <b>Samarkand project company</b> ), in which the Group has a direct 100 per cent. shareholding through Nur Samarkand Holding RSC Limited which is fully consolidated as a subsidiary.
Sherabad PV	the 457 MW PV project to be located in Sherabad, Uzbekistan and undertaken by "Nur Sherabad Solar PV" Foreign Enterprise LLC (the <b>Sherabad project company</b> ), in which the Group has a direct 100 per cent. shareholding through Nur Sherabad Holding RSC Limited which is fully consolidated as a subsidiary.
Welkin Road BESS	the 20 MW BESS project located in the north of England and being developed by Arlington Group Services Limited, in which the Group has a 95 per cent. shareholding which is consolidated as a subsidiary.
Zarafshan Wind	the 500 MW wind power project located in the Navoi Region of Uzbekistan and undertaken by Shamol Zarafshan Energy FE LLC (the <b>Zarafshan project company</b> ), in which the Group has a direct 100 per cent. shareholding through Shamol Zarafshan LLC which is fully consolidated as a subsidiary.

## Committed projects<sup>(3)</sup>

Al Ajban PV	the 1,500 MW PV project to be located in the Emirate of Abu Dhabi, UAE and undertaken by Al Ajban PV3 Energy LLC (the <b>Al Ajban project company</b> ), in which the Group will have a 60 per cent. shareholding and which it will consolidate as a subsidiary.
AYG-1 PV	the 200 MW PV project to be located between the Yerevan 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 (the <b>AYG-1 project company</b> ), in which the Group will have an 85 per cent. shareholding and which it will consolidate as a subsidiary.
Guzar PV + BESS	the 300 MW PV and 75 MW BESS project to be located in the Kashkadarya region of Uzbekistan and undertaken by “Nur Kashkadarya Solar PV” FE LLC (the <b>Guzar project company</b> ), in which the Group will have a 100 per cent. shareholding and which it will fully consolidate as a subsidiary.
Noor Midelt PV	the 400 MW PV project to be located at Midelt in Morocco and undertaken by Noor Midelt Solar Hybrid 1 Company, (the <b>Noor Midelt project company</b> ) in which the Group will have a 30 per cent. shareholding and which will be equity accounted as a joint venture.
Terra-Gen Platform	<p>a portfolio of:</p> <ul style="list-style-type: none"><li>• 18 utility-scale operational wind projects with a gross capacity of 1,136 MW located in California, United States (with the exception of one located in Texas);</li><li>• three utility-scale operational PV projects, each with co-located BESS, with a gross capacity of 2,006 MW located in California;</li><li>• four operational independent BESS projects with a gross capacity of 297 MW located in California;</li><li>• one operational utility-scale CSP project with a gross capacity of 80 MW located in California; and</li><li>• two under construction independent BESS projects with a gross capacity of 180 MW located in California,</li></ul> <p>all held by Terra-Gen Power Holdings II LLC (<b>Terra-Gen</b>). The Group has signed a binding agreement to acquire a 50 per cent. shareholding in Terra-Gen Power Holdings II, LLC (<b>Terra-Gen</b>) which will be equity accounted as a joint venture.</p>

### Notes:

- (1) Referred to in the Financial Statements as Tesla Wind.
- (2) The Group currently owns 50 per cent., although the sale of 7 per cent. has been agreed and the completion of the sale is subject only to formalities. The disclosure relation to the Amaala PV project in this document has been drafted on the basis that the sale has completed.
- (3) Committed projects include committed to develop projects (being projects which have been awarded and/or are at a late stage of development which the Group is responsible or jointly responsible for developing) and committed to purchase projects (being

operational and under construction projects which are subject to a binding acquisition agreement signed prior to 31 March 2024 which has not completed, as in the case of the Terra-Gen Platform). The Terra-Gen Platform also has its own committed projects which have not been included in the Group's committed projects.

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 or over-allotment 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

	<b>Page</b>
Overview of the Programme .....	1
Documents Incorporated by Reference .....	6
Risk Factors .....	7
Form of the Notes .....	46
Applicable Pricing Supplement .....	49
Terms and Conditions of the Notes .....	60
Use of Proceeds .....	105
Selected Financial Information.....	107
Financial Review.....	112
Description of the Group.....	143
Management and Employees.....	182
Taxation.....	190
Subscription and Sale .....	192
General Information .....	199

## 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):	213800BBECCR1I9FTPZ70
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 " <i>Risk Factors</i> ".
Description:	Euro Medium Term Note Programme
Arrangers:	Citigroup Global Markets Limited First Abu Dhabi Bank PJSC
Dealers:	Abu Dhabi Commercial Bank PJSC BNP Paribas Citigroup Global Markets Limited Crédit Agricole Corporate and Investment Bank First Abu Dhabi Bank PJSC HSBC Bank plc MUFG Securities EMEA plc Natixis 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 " <i>Subscription and Sale</i> ") 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 " <i>Form of the Notes</i> ". Registered Notes will not be exchangeable for Bearer Notes and <i>vice versa</i> .
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 <i>pari passu</i> 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 AA- 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 " <i>Subscription and Sale</i> ".

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*".

## DOCUMENTS INCORPORATED BY REFERENCE

The following documents which have previously been published shall be incorporated in, and form part of, this Base Offering Circular:

- (a) the auditors' report and audited consolidated financial statements of the Group as at and for the financial year ended 31 December 2022;
- (b) the auditors' report and audited consolidated financial statements of the Group as at and for the year ended 31 December 2023; and
- (c) the Terms and Conditions of the Notes contained on pages 57 to 100 (inclusive) in the Base Offering Circular dated 17 July 2023 (the **2023 Base Offering Circular**) prepared by the Issuer in connection with the Programme.

Any documents themselves incorporated by reference in the documents incorporated by reference in this Base Offering Circular shall not form part of this Base Offering Circular.

Only the specified parts of the 2023 Base Offering Circular are incorporated by reference in this Base Offering Circular. Any non-incorporated parts of a document referred to herein are either deemed not relevant for an investor or are otherwise covered elsewhere in this Base Offering Circular.

The Issuer will, in the event of any significant new factor, material mistake or material inaccuracy relating to information included in this Base Offering Circular prepare a supplement to this Base Offering Circular or publish a new Base Offering Circular for use in connection with any subsequent issue of Notes.



## **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 due to 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, including by way of dividends and 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 2023, Masdar had one fully consolidated operational project, Nur Navoi PV, and one operational project accounted as a joint operation, London Array Offshore Wind. Together, these projects accounted for all of its renewable power generation revenue in 2023, 2022 and 2021. The power purchase agreement (**PPA**) which sells the power in the UK day ahead market including a floor for the London Array Offshore Wind project expires on 1 November 2025 and the Group expects that the electricity generated by the project will be sold on a mix of short- and long-term hedging that will match Masdar's risk appetite. The project will continue to benefit from the United Kingdom government's incentive scheme until March 2033. Nevertheless, no assurance can be given that the London Array Offshore Wind project will, after the expiry of the PPA, generate revenue at levels similar to those currently generated as fluctuations in gas and power prices in the UK market will impact the project's revenue which is not derived under the incentive scheme. Any material deterioration in the results of operations, cash flows or financial condition of the London Array Offshore Wind project would have a material adverse effect on the Group's renewable power generation revenue.

As at 31 December 2023, Masdar also had 37 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 associates and joint ventures amounted to a loss of AED 48 million in 2023 and profit of AED 59 million in each of 2022 and 2021.

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.

Six of Masdar's consolidated and equity-accounted project companies, and financial investments, generated cash distributions equal to or more than AED 50 million to Masdar in 2023, compared to six in 2022 and three in 2021. These were the Dudgeon project company and the Shams project company (in all three years), the London Array Offshore Wind project (in 2023 and 2022), and the Zarafshan project company, the Sherabad project company and the Sharjah project company (in 2023 only). In 2022, the Zouk Charging Infrastructure Fund, the Cibuk project company and the DEWA 3 project company and, in 2021, the Nur Navoi project company also generated cash distributions in excess of AED 50 million to Masdar. As a result, any material deterioration in the results of operations, cash flows or financial condition of these project companies and investments could have a material adverse effect on the Group.

In each of 2023, 2022 and 2021, Masdar's operating cash inflow (comprising dividends, payments under shareholder loans, development fees, development cost recoveries and other payments) from its project companies and other cash income (including the proceeds of financial risk management activities, asset monetisations and fee income from special projects) totalling AED 1,233 million, AED 1,045 million and AED 561 million, respectively (in all cases capturing only those inflows individually in excess of U.S.\$1 million). These cash flows, which are described in more detail under "*Financial review—Liquidity and capital resources—Cash*" 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 supplies 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 CSP or 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 (**KPIs**), 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 project companies for the Blue Palm projects, 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 WtE plants (a small number of which the Group also operates) are a relatively new investment class, there is limited experience regarding any longer-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 Coyote Wind project experienced a collapsed turbine in December 2021 that needed to be replaced. Blade and main bearing issues continue to affect the operations of the project and the project company is working with the original equipment manufacturer (**OEM**) to overcome those problems. As a result of the main bearing failure on one of the turbines, 32 turbines were investigated and four were found to require blade realignment and seven to require blade replacements. The wind turbine with a major main bearing failure was returned to service in March 2024, but planned availability will continue to be impacted by supply chain delays and availability of specialised technicians in the short term across the OEM landscape;
- poor performance of counterparties, including suppliers and contractors;

- transmission system congestion; and
- labour issues, including workforce strikes.

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.

There have been concerns about failures of wind turbines manufactured by Siemens Gamesa, which resulted in a 37 per cent. fall in the share price of its parent company, Siemens Energy, on 23 June 2023. Of the Group's 3,040 wind turbines across all operational, under construction and committed projects as at 31 March 2024, 156, or 5.1 per cent., were manufactured by Siemens Gamesa, including 60 wind turbines at the Coyote Wind 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 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 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 2024, the Group had 12 projects under construction and a further four committed to develop projects (which it defines as projects which have been awarded 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 PV project in Morocco, which was originally tendered as a hybrid of CSP and PV technologies with 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 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 to meet cost overruns. While the project experienced delays, it successfully reached the commissioning stage, defaults under the financing were remedied or waived, lenders continued disbursing and replacement contractors were 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 under construction East Rockingham WtE 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 now operational Cirata Floating PV project in Indonesia was 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 granted an extension of the long-stop date and 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, if 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 Wind project in Saudi Arabia, the Group 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 have 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 3 PV project in Dubai benefits from a Dubai Department of Finance guarantee and the operational Dumat Al Jandal Wind and Jeddah South PV projects 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 2023, the Group had 12 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 WtE 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 PV and Jeddah South PV projects), 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 offtaker and the project company agree to extend the PPA. 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 factors that include 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 Wind 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 Offshore Wind 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 the risk 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) due to 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 Group's 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 cover those payments.

Moreover, Masdar's project companies have incurred, and will continue to incur in the future, substantial amounts of debt 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. 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, unless they are fully consolidated and apply IFRIC 12 accounting, will not generate revenue during the period when they are under construction. For example, in the case of solar PV plants and onshore wind plants (both depending on size) the construction period could be around 18 months, whereas for offshore wind plants the construction period could be around 24 to 36 months (depending on various factors). As at 31 December 2023, the Group's non-current bank borrowings amounted to AED 5,226 million and its current bank borrowings amounted to AED 1,160 million. These borrowings include consolidated non-recourse debt at the operating Garadagh PV, London Array Offshore Wind and Nur Navoi PV projects and the under construction Jizzakh PV, Samarkand PV, Sherabad PV and Zarafshan Wind projects, which amounted to AED 3,661 million as at 31 December 2023, and the remaining borrowings were under other facilities including the Programme. As at 31 December 2023, the Group's contingent liabilities in the form of corporate guarantees to support equity bridge loans in relation to the Dumat Al Jandal Wind, Nur Navoi PV, Al Dhafrah PV and Jeddah South PV 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 4,626 million as at 31 December 2023, capital commitments amounting to AED 1,710 million (excluding its share in the commitments of joint operations and equity-accounted investees which amounted to AED 81 million) and commitments towards financial investments of AED 105 million at the same date.

Masdar's principal sources of liquidity include dividends, development fees, development cost recoveries, 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 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 Wind 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 Wind and Jeddah South PV) 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 has in the past experienced technical defaults on its Sharjah WtE and Cirata Floating PV projects which were triggered by construction delays and were 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. In addition, as at 31 December 2023 the Group was in technical default under the financings for its three solar PV projects under construction in Uzbekistan due to O&M contracts not having been signed by the contractually-required date following delays obtaining lender approval. No assurance can be given that the Group will not experience other technical defaults in the future or that, if it does, it will be able 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 can 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 may restrict the ability of the relevant project company to pay dividends.

Should any of the Group's project companies be unable to pay dividends due to 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 2023 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 2023 would have decreased or increased, respectively, by AED 0 million (2022: AED 7 million). This reflects the fact that the Group manages its interest rate risk by having a balanced portfolio of fixed and variable rate loans and borrowings, with variable rate loans and borrowings substantially hedged against interest rate risk through derivative contracts. The Group's only borrowing at a fixed rate of interest is its U.S.\$750 million Notes due 2033 issued under the Programme in July 2023 (the **2023 Green Notes**) which amounted to AED 2,725 million, equal to 42.7 per cent. of its total borrowings, as at 31 December 2023.

***The Group was adversely affected by the COVID-19 pandemic and 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 as described in more detail below and 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 due to 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 Floating PV project, both of which experienced technical defaults. 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 agreed a settlement with the contractor in relation to its force majeure claims under which the contractor withdrew its claims against the project company and the project company waived its delay-related liquidated damages related to achieving the project completion. The delay in achieving project completion did, however, impact the expected internal rate of return of the Baynouna project company's shareholders; and
- the Dumat Al Jandal Wind 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 fully resolved.

***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 (including through its announced acquisitions of a 50 per cent. interest in Terra-Gen and a controlling shareholding in Terna Energy, see "*Financial review—Recent Developments*") the acquisition of, ownership interests in brownfield operational projects. Pursuing and completing acquisitions involves risks that include but are 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. 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, this competition has caused, and may cause in the future, reductions in prices contained in new power contracts and, in many cases, has 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 subject to anti-trust laws, which could 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 because 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.

The Group is exposed to currency risk on its transactions and investments that are denominated in foreign currencies, primarily pounds sterling and the euro. Based on a sensitivity analysis to a 10 per cent. increase in the dirham against each of these currencies (assuming the increase remained outstanding for the whole of 2023), the Group's loss for the year would have increased by AED 91 million (in the case of pounds sterling) and would have decreased by AED 40 million (in the case of euro). In the case of a 10 per cent. decrease in the dirham against each of these currencies (assuming the decrease remained outstanding for the whole of 2023), the Group's loss for the year would have decreased by AED 91 million (in the case of pounds sterling) and would have increased by AED 40 million (in the case of euro).

In certain markets where the Group is active, 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 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—Litigation—Rocksprings Wind project—3M cyber-attack*". The Group's insurance will not cover any loss arising from this fraud.

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 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, tsunamis, 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, tsunamis, 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 Wind 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. In addition, the Las Majadas Wind 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 PV + BESS 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. Furthermore, in April 2024 severe weather in the UAE caused damage to the DEWA 3 PV project, primarily to its solar panel arrays, which are expected to be replaced by a combination of spares and new equipment, with funding from the proceeds of the associated insurance claims.

The two contributors to the Group's revenue from renewable power generation in each of 2023, 2022 and 2021 were the London Array Offshore Wind project and the Nur Navoi PV 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 O&M services 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 its 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 political 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 negatively affect the willingness of potential investors 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 resulting from 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 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.

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 and its project companies may be unable to obtain or renew their 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, which could expose the Group 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 during 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 Group's results of operations could be materially adversely affected by changes in tax-related matters***

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 regarding 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.

Changes in laws and regulations in any jurisdiction in which the Group operates could affect the Group's tax charges, potentially materially, which could in turn adversely affect its business and results of operations. For



example, UAE Federal Decree Law No. 47 on the Taxation of Corporations and Businesses implemented a new corporate tax regime in the UAE which applies to accounting periods starting on or after 1 June 2023 and imposes a 9 per cent. rate of tax on taxable income exceeding AED 375,000. As of 1 January 2024, Masdar and its UAE subsidiaries are subject to this tax. In addition, the Group may also be impacted by the introduction of a global 15 per cent. minimum tax by European Union countries for multinational companies with effect from 1 January 2024 pursuant to the Pillar II directive approved by all member states in December 2022. Other countries have also implemented equivalent provisions.

***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 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***

Most of the Group's power generation assets use either PV or wind power technology. This concentration exposes the Group to any change in public attitude to 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 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 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 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. If 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.

***The Group is subject to risks associated with 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 3 PV 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.

***The Group is subject to risks related to potential impairment of goodwill***

The Group's acquisition of Arlington Group Services Ltd. (**Arlington**) resulted in goodwill of AED 179 million being recorded in the 2023 Financial Statements. Arlington is a leading BESS developer in the United Kingdom and has two BESS projects currently under construction, Welkin Road BESS and Royle Road BESS. 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.

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 or without 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 depository 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 Abu Dhabi 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 depository (the **Common Depository**) 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 depository for Euroclear and Clearstream, Luxembourg, and registered in the name of the nominee for the Common Depository 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 (as amended, 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. 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 (as amended, 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 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 15 July 2024 [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.]

[Terms used herein shall be deemed to be defined as such for the purposes of the Conditions (the **Conditions**) set forth in the Base Offering Circular dated [original date] [and the supplement[s] to it dated [date]] which are incorporated by reference in the Base Offering Circular dated [current date]. This document constitutes the Pricing Supplement of the Notes described herein and must be read in conjunction with the Base Offering Circular dated [current date] [and the supplement[s] to it dated [date] and [date]] (the **Base Offering Circular**) including the Conditions incorporated by reference in 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/CNH HIBOR/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 depository 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]

(viii) Singapore Sales to Institutional Investors and Accredited Investors only: [Applicable/Not Applicable]

*(Delete this line where Notes are not offered into Singapore.)*

*Include this line item where Notes are offered into Singapore. Indicate "Applicable" if Notes are offered to Institutional Investors and Accredited Investors in Singapore only. Indicate "Not Applicable" if Notes are also offered to investors other than Institutional Investors and Accredited Investors in Singapore.)*

## 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 depository 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<sub>a</sub>** 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<sub>o</sub>, 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<sub>i</sub>**, 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;

$r_{i-pBD}$  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<sub>c</sub>" is the number of calendar days from (and including) SOFR Index<sub>Start</sub> to (but excluding) SOFR Index<sub>End</sub> (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<sub>End</sub>** 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<sub>Start</sub>** 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<sub>Start</sub> or SOFR Index<sub>End</sub> 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 Index<sub>Start</sub> is determined to (but excluding) the day in relation to which SONIA Compounded Index<sub>End</sub> is determined;

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

**SONIA Compounded Index<sub>Start</sub>** 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<sub>End</sub>** 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:

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

where:

**Y<sub>1</sub>** is the year, expressed as a number, in which the first day of the Interest Period falls;

**Y<sub>2</sub>** is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

**M<sub>1</sub>** is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

**M<sub>2</sub>** is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

**D<sub>1</sub>** 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<sub>2</sub>** 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:

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

where:

**Y<sub>1</sub>** is the year, expressed as a number, in which the first day of the Interest Period falls;

**Y<sub>2</sub>** is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

**M<sub>1</sub>** is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

**M<sub>2</sub>** is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

**D<sub>1</sub>** is the first calendar day, expressed as a number, of the Interest Period, unless such number would be 31, in which case D<sub>1</sub> will be 30; and

**D<sub>2</sub>** 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 D<sub>2</sub> 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:

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

where:

**Y<sub>1</sub>** is the year, expressed as a number, in which the first day of the Interest Period falls;

**Y<sub>2</sub>** is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

**M<sub>1</sub>** is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

**M<sub>2</sub>** is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

**D<sub>1</sub>** 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 D<sub>1</sub> will be 30; and

**D<sub>2</sub>** 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 D<sub>2</sub> 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 depository, 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:

$$\text{Early Redemption Amount} = \text{RP} \times (1 + \text{AY})^y$$

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%20revamp/downloads/investors/masdar\\_green-finance\\_2023.pdf](https://masdar.ae/-/media/corporate%20revamp/downloads/investors/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 100gCO<sub>2</sub>e/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 with June 2022 Appendix 1 (<https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>) (the **GBP**). Moody's Investors Service has assessed the compliance of the Issuer's Green Finance Framework with the GBP and issued 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 has provided annual assurance on specified metrics within the Allocation and Impact Report for 2022 and 2023, as per the scope specified within Ernst & Young LLP's assurance report, which has also been published on the Issuer's website.

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". See also "Presentation of financial and other information" for a discussion of the sources of the financial information presented in this section.

### CONSOLIDATED STATEMENT OF FINANCIAL POSITION DATA

The table below shows the Group's consolidated statement of financial position data as at 31 December in each of 2023, 2022 and 2021.

	As at 31 December		
	2023	2022	2021
	<i>(AED thousand)</i>		
<b>ASSETS</b>			
<b>Non-current assets</b>			
Property, plant and equipment.....	1,781,770	1,415,001	1,346,934
Right-of-use assets.....	265,428	279,131	301,809
Intangible assets and goodwill.....	226,416	212,568	45,177
Investments in associates and joint ventures <sup>(1)</sup> .....	7,581,930	3,691,838	1,134,759
Other non-current financial assets.....	35,642	21,961	243,272
Finance lease receivables.....	47,033	47,957	—
Loans to related parties.....	573,020	236,808	207,440
Derivative financial assets.....	194,123	403,212	46,036
Contract assets.....	3,109,069	297,061	278,099
	<b>13,814,431</b>	<b>6,605,537<sup>(2)</sup></b>	<b>3,603,526<sup>(2)</sup></b>
<b>Current assets</b>			
Finance lease receivables.....	9,821	4,244	—
Loan to related parties.....	350,023	293,268	245,536
Due from related parties.....	151,991	94,236	173,102
Trade and other receivables.....	1,366,907	1,069,881 <sup>(3)</sup>	411,547 <sup>(3)</sup>
Contract assets.....	27,184	27,211	1,927
Cash and cash equivalents.....	2,479,634	3,150,649	716,497
Assets held for sale.....	—	—	4,094,229 <sup>(4)</sup>
	<b>4,385,560</b>	<b>4,639,489</b>	<b>5,642,838</b>
<b>Total assets</b> .....	<b>18,199,991</b>	<b>11,245,026<sup>(2)</sup></b>	<b>9,246,364<sup>(2)</sup></b>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
Share capital.....	8,000,000	8,000,000	8,000,000
Additional capital contribution <sup>(5)</sup> .....	4,393,038	1,083,683	—
Shareholder's account.....	—	—	(1,680,060)
Reserves.....	474,212	452,436	(170,405)
Accumulated losses.....	(3,059,912)	(3,016,830)	(1,165,842)
<b>Equity attributable to equity holders of the parent</b> .....	<b>9,807,338</b>	<b>6,519,289</b>	<b>4,983,693</b>
Non-controlling interest.....	(2,015)	(383)	—
<b>Total equity</b> .....	<b>9,805,323</b>	<b>6,518,906</b>	<b>4,983,693</b>
<b>Non-current liabilities</b>			
Bank borrowings.....	5,226,403	1,780,411	1,980,392
Lease liabilities.....	282,605	274,404	302,500
Other non-current liabilities.....	207,951	176,869	112,885
Deferred tax liabilities.....	177,411	148,082 <sup>(2)</sup>	85,573 <sup>(2)</sup>
	<b>5,894,370</b>	<b>2,379,766<sup>(2)</sup></b>	<b>2,481,350<sup>(2)</sup></b>

	<b>As at 31 December</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
	<i>(AED thousand)</i>		
<b>Current liabilities</b>			
Due to related parties .....	65,812	41,103	32,579
Bank borrowings .....	1,160,272	688,205	125,336
Lease liabilities .....	8,608	25,487	16,803
Trade and other payables .....	1,265,606	1,591,559	428,289
Liabilities directly associated with assets held for sale.....	—	—	1,178,314 <sup>(4)</sup>
	<b>2,500,298</b>	<b>2,346,354</b>	<b>1,781,321</b>
<b>Total liabilities</b> .....	<b>8,394,668</b>	<b>4,726,120<sup>(2)</sup></b>	<b>4,262,671<sup>(2)</sup></b>
<b>Total equity and liabilities</b> .....	<b>18,199,991</b>	<b>11,245,026<sup>(2)</sup></b>	<b>9,246,364<sup>(2)</sup></b>

Notes:

- (1) This line item was referred to as “Investments in equity accounted investees” in the 2022 Financial Statements.
- (2) In the 2022 Financial Statements, AED 107,993 thousand deferred tax assets and AED 256,075 thousand deferred tax liabilities were separately presented for 2022 and AED 146,112 thousand deferred tax assets and AED 231,685 thousand deferred tax liabilities were separately presented for 2021. In the 2023 Financial Statements, only the net AED 148,082 deferred tax liabilities were presented for in the comparative information for 2022. This revised presentation also impacts total non-current assets, total assets, total non-current liabilities, total liabilities and total equity and liabilities. The financial information for 2021 in the table has been adjusted to conform to the presentation in the 2023 Financial Statements.
- (3) In the 2022 Financial Statements, AED 87 thousand of inventories as at 31 December in each of 2022 and 2021 were separately presented and these figures were AED 1,069,794 thousand (2022) and AED 411,460 thousand (2021). The financial information for 2021 in the table has been adjusted to conform to the presentation in the 2023 Financial Statements.
- (4) See table below.
- (5) Referred to as ‘Contributed equity loan’ in the 2022 Financial Statements.

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.

	<b>As at 31 December 2021</b>
	<i>(AED thousand)</i>
<b>Assets</b>	
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 <sup>(1)</sup> .....	9,417
<b>Total assets</b> .....	<b>4,094,229</b>
<b>Liabilities</b>	
Trade and other payables .....	461,583
Other liabilities <sup>(2)</sup> .....	716,731
<b>Total liabilities</b> .....	<b>1,178,314</b>

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 COMPREHENSIVE INCOME DATA

The table below shows the Group's consolidated statement of comprehensive income data for each of 2023, 2022 and 2021. This was referred to as its consolidated statement of profit or loss and other comprehensive income in the 2022 Financial Statements.

	<b>2023</b>	<b>2022</b>	<b>2021</b>
		<i>(AED thousand)</i>	
<b>Continuing operations</b>			
Revenue .....	3,352,560	621,393	716,514
Direct costs <sup>(1)</sup> .....	(2,578,558)	(285,593)	(471,864)
<b>Gross profit</b> .....	<b>774,002</b>	<b>335,800</b>	<b>244,650</b>
Income from government grants .....	84,571	57,568	30,052
Other income .....	185,541	450,392	261,311
Research and development expenses .....	(1,774)	(2,921)	(3,414)
General and administrative expenses .....	(573,720)	(393,544)	(283,765)
Project expenses .....	(143,741)	(144,460)	(76,017)
Share of results of equity-accounted investees, net .....	(48,256)	58,667	58,736
Impairment loss on associates and joint ventures .....	(183,444)	—	—
Changes in fair value of financial assets carried at fair value through profit or loss .....	(2,265)	30,372	24,871
Reversal of expected credit losses on loans to related parties, net .....	26,606	38,524	13,950
Reversal of/(provision for) expected credit losses on trade and finance lease receivables .....	596	(883)	1,262
Provision for expected credit losses on contract assets .....	(32,188)	—	—
Change in fair value of derivatives <sup>(2)</sup> .....	5,077	155,984	16,099
Finance income .....	148,637	42,130	48,127
Finance expense .....	(230,219)	(120,478)	(106,109)
<b>Profit before tax from continuing operations</b> .....	<b>9,423</b>	<b>507,151</b>	<b>229,753</b>
Income tax .....	(54,137)	(47,621)	(49,041)
<b>(Loss)/profit after income tax from continuing operations</b> .....	<b>(44,714)</b>	<b>459,530</b>	<b>180,712</b>
Profit after income tax from discontinued operations .....	—	80,811	269,793
<b>(Loss)/profit for the year</b> .....	<b>(44,714)</b>	<b>540,341</b>	<b>450,505</b>
Attributable to:			
Equity holders of the parent <sup>(3)</sup> .....	(43,082)	540,724	—
Non-controlling interest <sup>(3)</sup> .....	(1,632)	(383)	—
	<b>(44,714)</b>	<b>540,341</b>	<b>450,505</b>
<b>(Loss)/profit for the year</b> .....	<b>(44,714)</b>	<b>540,341</b>	<b>450,505</b>
<b>Other comprehensive income</b>			
<i>Items that may be reclassified subsequently to profit or loss</i>			
Foreign currency translation differences for foreign operations .....	105,312	(43,536)	(23,389)
Share of movement in hedging reserves of equity-accounted investees .....	(20,835)	460,773	119,913
Other movement in hedging reserve, net .....	(86,676)	151,532	82,504
Share of other comprehensive income from equity-accounted investees .....	23,975	—	—
<b>Other comprehensive income for the year, net of income tax</b> .....	<b>21,776</b>	<b>568,769</b>	<b>179,028</b>
<b>Total comprehensive (loss)/income for the year</b> .....	<b>(22,938)</b>	<b>1,109,110</b>	<b>629,533</b>

	<b>2023</b>	<b>2022</b>	<b>2021</b>
		<i>(AED thousand)</i>	
Attributable to:			
Equity holders of the parent.....	(21,306)	1,109,493	—
Non-controlling interest.....	(1,632)	(383)	—
	<b>(22,938)</b>	<b>1,109,110</b>	<b>629,533</b>

Notes:

- (1) This line item was referred to as “Cost of sales” in the 2022 Financial Statements.
- (2) This line item was referred to as “Gain on derivatives, net” in the 2022 Financial Statements.
- (3) 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.

## CONSOLIDATED STATEMENT OF CASH FLOWS DATA

The table below summarises the Group's consolidated statement of cash flows data for each of 2023, 2022 and 2021.

	<b>2023</b>	<b>2022</b>	<b>2021</b>
		<i>(AED thousand)</i>	
Operating cash flows before changes in working capital ....	373,603	428,842 <sup>(1)</sup>	268,256
Working capital adjustments .....	(2,847,315)	302,445 <sup>(1)</sup>	(631,428)
Income tax and employees’ end of service benefit paid .....	(25,121)	(12,407)	(4,305)
Net cash (used in)/generated from operating activities.....	(2,498,833)	718,880 <sup>(1)</sup>	(367,477)
Net cash (used in)/generated from investing activities .....	(5,121,444)	(425,782) <sup>(1)</sup>	57,170
Net cash generated from/(used in) financing activities.....	6,970,599	2,172,389	(105,869)
Net (decrease)/increase in cash and cash equivalents.....	(649,678)	2,465,487	(416,176)
Cash and cash equivalents on 1 January .....	3,150,649	716,497	1,229,254
Net foreign exchange difference.....	(21,337)	(31,335)	(8,738)
Cash and cash equivalents at 31 December .....	2,479,634	3,150,649	804,340
Discontinued operations cash and bank balance at 31 December.....	—	—	(87,843)
Cash and cash equivalents at 31 December .....	2,479,634	3,150,649	716,497

Note:

- (1) These figures are derived from the comparative information for 2022 in the 2023 Financial Statements. In the 2022 Financial Statements, ‘Operating cash flows before changes in working capital’ was AED 429,391 thousand, ‘Working capital adjustments’ was AED 284,422 thousand and ‘Net cash generated from operating activities’ was AED 701,406 thousand, reflecting the fact that in the 2022 Financial Statements (i) trade and other receivables under ‘Working capital adjustments’ included AED 54,906 thousand which was re-presented as contract assets under ‘Operating cash flows before changes in working capital’ in the comparative information for 2022 in the 2023 Financial Statements, (ii) “Operating cash flows before changes in working capital” included finance lease income of AED 550 thousand which was represented within trade and other receivables under “Working capital adjustments” in the comparative information for 2022 in the 2023 Financial Statements and (iii) trade and other payables under ‘Working capital adjustments’ in 2022 included AED 17 million which was re-presented as ‘Acquisition of subsidiary, net of cash acquired’ under investing activities in the comparative information for 2022 in the 2023 Financial Statements.

## SELECTED APMS AND OTHER INFORMATION

The table below shows selected APMS and other information for Masdar as at, and for the years ended, 31 December in each of 2023, 2022 and 2021. See "*Presentation of financial and other information—Certain non-IFRS financial information*".

In the absence of standalone audited financial statements for Masdar, the table below contains a combination of (i) operating expenses in respect of the Group from the Financial Statements (as a proxy for operating cash outflows for Masdar) and (ii) distribution cash inflows to Masdar from management’s records, so as to provide appropriate visibility as to the net cash flow available to Masdar to service its recourse borrowings.



	<b>As at/year ended 31 December</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
	<i>(AED million, except where otherwise stated)</i>		
Masdar operating cash inflow <sup>(1)</sup> .....	1,233	1,045	561
Masdar operating expenditure <sup>(2)</sup> .....	(717)	(538)	(360)
<b>Masdar operating cash flow (MOCF)</b> .....	<b>516</b>	<b>507</b>	<b>201</b>
Recourse debt as at 1 January <sup>(3)</sup> .....	1,467	843	871
Discretionary cash as at 1 January <sup>(4)</sup> .....	(858)	(380)	(967)
<b>Net debt</b> <sup>(5)</sup> .....	<b>609</b>	<b>463</b>	<b>(96)</b>
Net debt/MOCF <sup>(6)</sup> .....	1.18x	0.91x	—

Notes:

- (1) Masdar operating cash inflow comprises the sum of (i) material distributions (capturing only those individually in excess of U.S.\$1 million) 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 the borrowings with recourse to Masdar as at 1 January in the relevant year (being the same as recourse debt as at 31 December in the preceding year) and its composition is shown in the table below.
- (4) Discretionary 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 2023, 2022, 2021 and 2020.

	<b>As at 31 December</b>			
	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>
	<i>(AED million)<sup>(1)</sup></i>			
Corporate guarantee -Dumat Al Jandal Wind equity bridge loan (EBL).....	255	255	255	255
Corporate guarantee -Nur Navoi PV EBL.....	312	312	312	312
Corporate guarantee -Al Dhafra PV EBL.....	171	171	171	171
Corporate guarantee -Jeddah South PV EBL.....	104	104	104	—
U.S. dollar revolving credit facility.....	—	37	—	132
AED revolving credit facility.....	—	55	—	—
Bridge-to-bond facilities.....	—	533	—	—
U.S.\$750 million Notes due 2033 <sup>(2)</sup> .....	2,755	—	—	—
<b>Total</b> .....	<b>3,598</b>	<b>1,467</b>	<b>843</b>	<b>871</b>

Notes:

- (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.
- (2) This figure represents the gross carrying value of the 2023 Green Notes before adjusting for the related transaction costs.

## 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 18 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 2024, the Group had 39 operational utility-scale renewable energy generation projects with a gross generation capacity of 9,792 MW, comprising:

- 17 solar power projects with a gross generation capacity of 4,295 MW;
- 20 wind power projects with a gross generation capacity of 3,590 MW;
- one waste-to-energy power project with a gross generation capacity of 30 MW; and
- geothermal-focused projects with a gross generation capacity of 1,877 MW, through its 15 per cent. investment in Pertamina Geothermal.

These projects are in the United States, Egypt, South Africa, the UAE, the United Kingdom, Indonesia, Jordan, Poland, Saudi Arabia, Montenegro, Azerbaijan, Senegal, Serbia and Uzbekistan.

In addition to its operational projects, as at 31 March 2024 the Group had ownership interests in 12 utility-scale renewable energy generation projects under construction with a gross generating capacity of 5,588 MW, comprising:

- seven solar power projects with a gross generation capacity of 4,528 MW;
- two wind power projects with a gross generation capacity of 976 MW;
- two BESS projects with a gross generation capacity of 55 MW; and
- one waste-to-energy power project with a gross generation capacity of 29 MW.

These projects are in Uzbekistan, Saudi Arabia, the United Kingdom, Australia, Germany and the UAE.

The Group also has ownership interests in four committed to develop 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 2,475 MW. These projects are in Armenia, Morocco, the UAE and Uzbekistan. In addition, the Group has committed to acquire a 50 per cent. shareholding in the Terra-Gen Platform, which comprises 26 operational and two under construction projects across solar power, wind power and energy storage technologies, with a total gross generation capacity of 3,699 MW which it also considers as committed projects. On 20 June 2024, the Group announced its acquisition, subject to regulatory approvals, of a controlling interest in Terna Energy, which has a portfolio of 36 utility-scale operational wind projects with aggregate gross capacity of 1,092 MW.

The total gross generation capacity of the Group's operational, under construction and committed utility-scale renewable energy generation projects was 21,554 MW and its proportionate share of the capacity of those projects was 9,950 MW as at 31 March 2024. The table below shows the number of the Group's projects and their gross generation capacity in MW as at 31 March 2024 by type and stage of the projects.

	<b>Operational</b>		<b>Under-construction</b>		<b>Committed</b>	
	No. of projects	MW	No. of projects	MW	No. of projects	MW
Solar PV .....	16	4,195	7	4,528	7	4,481
Solar CSP .....	1	100	—	—	1	80
Onshore wind.....	17	2,528	1	500	18	1,136
Offshore wind.....	3	1,062	1	476	—	—
Energy storage.....	—	—	2	55	6	477
Waste-to-energy .....	1	30	1	29	—	—
Geothermal .....	1	1,877	—	—	—	—
<b>Total.....</b>	<b>39</b>	<b>9,792</b>	<b>12</b>	<b>5,588</b>	<b>32</b>	<b>6,174</b>

The Group has a pipeline of opportunities at various stages of development with a gross generation capacity exceeding 10 GW, 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 Angola, Australia, Azerbaijan, Bahrain, Egypt, Ethiopia, Georgia, Germany, Greece, Guinea, Indonesia, Iraq, Israel, Jordan, Kazakhstan, Kyrgyzstan, Morocco, Oman, Poland, Republic of Congo, Romania, Saudi Arabia, Serbia, Spain, Tanzania, Turkey, Turkmenistan, Uganda, the UAE and the United Kingdom.

In addition, the Terra-Gen Platform has a pipeline of projects exceeding 9 GW of gross generation capacity, including 10 which have reached a FID representing 2.2 GW of gross generation capacity. The remaining projects are at advanced stage and moving towards a FID. Every project in Terra-Gen's pipeline is located in the United States.

The Group's strategy is to grow to 100 GW of gross 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.

## **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 2023 are managed by project companies which are either joint ventures or associates and are therefore accounted for as equity-accounted investees or are wholly-owned and consolidated in the Financial Statements. In addition, the London Array project 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 2023, 2022 and 2021 were driven predominantly by its consolidated projects. The majority of the Group's consolidated project companies 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 2023, together with details of the size of each project, the Group's effective ownership in the project company, and how the project company is recorded in the Financial Statements and the accounting methodology used by the project company.

<b>Project</b>	<b>Gross capacity (MW)</b>	<b>Group's effective shareholding in the project company (%)</b>	<b>Consolidated or equity accounted by the Group</b>	<b>Project company accounting methodology</b>
<b>Operational projects</b>				
Al Dhafrah PV .....	1,640	20	Equity accounted	IFRS
Baynouna PV .....	200	70	Equity accounted	IFRS
Big Beau PV + BESS .....	168	50	Equity accounted	US GAAP
Cibuk Wind .....	158	60	Equity accounted	IFRS
Cirata Floating PV .....	145	49	Equity accounted	IFRS
Coyote Wind <sup>(1)</sup> .....	243	50	Equity accounted	US GAAP
Desert Harvest 1 PV <sup>(2)</sup> .....	80	50	Equity accounted	US GAAP
Desert Harvest 2 PV + BESS <sup>(2)</sup> .....	105	50	Equity accounted	US GAAP
DEWA 3 PV .....	800	24	Equity accounted	IFRS
Dudgeon Offshore Wind .....	402	35	Equity accounted	UK GAAP
Dumat Al Jandal Wind .....	400	34.3	Equity accounted	IFRS
Grajewo Wind .....	14	50	Equity accounted	IFRS
Hywind Floating Offshore Wind .....	30	25	Equity accounted	UK GAAP
Jeddah South PV .....	300	35.7	Equity accounted	IFRS
Krnovo Wind .....	72	49	Equity accounted	IFRS
Las Majadas Wind <sup>(1)</sup> .....	273	50	Equity accounted	US GAAP
London Array Offshore Wind .....	630	20	Consolidated	UK GAAP
Maverick 1 PV <sup>(2)</sup> .....	125	50	Equity accounted	US GAAP
Maverick 4 PV <sup>(2)</sup> .....	100	50	Equity accounted	US GAAP
Mława Wind .....	37	50	Equity accounted	IFRS
Nur Navoi PV .....	100	100	Consolidated	IFRIC 12
Pertamina Geothermal <sup>(3)</sup> .....	1,877	15	Equity accounted	IFRS
Rocksprings Wind .....	149	50	Equity accounted	US GAAP
Shams CSP .....	100	51	Equity accounted	IFRS
Sharjah WtE .....	30	50	Equity accounted	IFRS
Sterling Wind .....	30	50	Equity accounted	US GAAP
Tafila Wind .....	117	50	Equity accounted	IFRS
Infinity Platform <sup>(4)</sup> .....	1,237	49	Equity accounted	IFRS
<b>Under construction projects</b>				
Al Henikiya PV .....	1,100	40	Equity accounted	IFRS
Amaala PV .....	418	43	Equity accounted	IFRS
Baltic Eagle Offshore Wind .....	476	49	Equity accounted	IFRS
DEWA 6 PV .....	1,800	40	Equity accounted	IFRS
East Rockingham WtE .....	29	36.67	Equity accounted	IFRS
Garadagh PV <sup>(5)</sup> .....	230	100	Consolidated	IFRS
Jizzakh PV .....	220	100	Consolidated	IFRIC 12
Royle Barne Road BESS .....	35	95	Consolidated	UK GAAP
Samarkand PV .....	220	100	Consolidated	IFRIC 12
Sherabad PV .....	457	100	Consolidated	IFRIC 12
Welkin Road BESS .....	20	95	Consolidated	UK GAAP
Zarafshan Wind .....	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) Comprises a 15 per cent. shareholding in Pertamina Geothermal Energy Tbk which has interests in 13 geothermal working areas and is being equity accounted as the contractual arrangements provide the Group with significant influence.
- (4) The equity-accounted investee in respect of the Infinity Platform projects held varying interests in four utility-scale PV projects and seven wind projects as at 31 December 2023, so Masdar's share in each Infinity Platform project does not always equal 49 per cent.
- (5) Since 31 December 2023, the Garadagh PV project became an operating project in February 2024.
- (6) In March 2024, the Group signed an agreement to acquire a 50 per cent. shareholding in Terra-Gen which will be equity accounted, and in June 2024, the Group signed an agreement to acquire a 67 per cent. shareholding in Terna Energy, to be followed by a mandatory tender offer for the remaining 33 per cent., which will be consolidated. See "*Recent developments*" below.

## **Factors affecting the Group's revenue**

The Group generates recurring revenue principally from the sale of the electricity generated by its consolidated projects engaged in renewable energy generation, being the London Array Offshore Wind project and, since 2022, the Nur Navoi PV project. The Group also generates concession revenue which varies from year to year and is discussed below and other less material sources of recurring 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 Offshore Wind 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 United Kingdom'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 Offshore Wind project.

The Group's service concession revenue (and its related service concession cost of sales) increased significantly in 2023 compared to 2022 which in turn had reduced significantly compared to 2021. This reflected the fact that the Group's revenue and direct costs recognition in relation to the construction services performed under its construction contracts is based on the stage of completion of the work performed. Construction on the Nur Navoi PV 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 of the Nur Navoi PV project, with the concession revenue recorded principally representing the contractually agreed fixed capacity charge in respect of the Nur Navoi project.

The Group has five other consolidated project companies which are currently managing the Bukhara PV + BESS, Jizzakh PV, Samarkand PV, Sherabad PV and Zarafshan Wind projects. Each of these projects is being accounted for as a service concession under IFRIC 12 and, reflecting the various stages of completion achieved in respect of each of these projects in 2023, the Group's concession revenue (and related service concession direct costs) increased significantly in 2023 compared to 2022. The Group anticipates that it will also record significant amounts of concession revenue (and related service concession cost of sales) in 2024. Each project is currently expected to achieve its COD in 2025, except for the Zarafshan Wind project which is expected to achieve its COD in 2026.

## **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 2023, the Group's other income principally comprised the receipt of dividends amounting to AED 99 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. The balance of the Group's other income in 2023 principally comprised development fees in relation to the Baynouna PV project, indemnity income relating to the Blue Palm projects, sponsorship income and income from the sale of renewable energy credits.

In 2022, the Group's other income principally comprised interest rate pre-hedge gains of AED 317 million from projects in Azerbaijan, Uzbekistan and the United States. In addition, the Group received dividends amounting to AED 85 million from the Dudgeon project company which were recognised in other income.

In 2021, the Group's other income principally comprised (i) the receipt of dividends amounting to AED 125 million from the Dudgeon project company which were recognised in other income and (ii) the transfer of its shareholding in a subsidiary in exchange for a 49 per cent. shareholding in Infinity which generated a gain of AED 28 million which was recorded in other income.

### 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 Nur Navoi PV, Zarafshan Wind, Jizzakh PV, Samarkand PV and Sherabad PV. On other projects, such as DEWA 3 PV, DEWA 6 PV, Jeddah South PV, Dumat Al Jandal Wind and Al Henakiyah PV, 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 2023, had received close-out payments totalling AED 441 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 December in each of 2023, 2022 and 2021, with a breakdown showing the valuation of each trade by project.

Project	31 December	31 December	31 December
	2023	2022	2021
		<i>(AED million)</i>	
Garadagh PV .....	—	30	2
Jizzakh PV .....	—	21	—
Samarkand PV .....	—	21	—
Sherabad PV .....	—	74	—
Bukhara PV + BESS.....	12	—	—
Zarafshan Wind .....	—	—	1
Other <sup>(1)</sup> .....	—	—	15
<b>Pre-hedge valuation</b> .....	<b>12</b>	<b>146</b>	<b>18</b>

Note:

- (1) This pre-hedge relates to a financing in respect of the Group's acquired US assets, including the Blue Palm projects, which did not proceed.

### **Factors affecting the profitability of the Group's equity-accounted investees**

As at 31 March 2024, of the Group's 39 operational and 12 under construction projects, 36 and five of these respectively are equity accounted. 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 statement of comprehensive income.

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.

In 2019, the Group acquired a 17.3 per cent. interest in Hero Future Energies Global Limited (**HFE**), which was later increased to a 21 per cent. interest. HFE operates 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 2021. On 21 September 2022, the Group entered into an agreement to dispose of its investment in HFE, which closed on 10 March 2023.

### **Other factors**

In 2023, the Group recorded impairment losses of AED 183 million on its associates and joint ventures and a provision for expected credit losses on contract assets of AED 32 million. No impairment losses were recorded on these assets in either 2022 or 2021. See "*—Results of operations—Impairment loss on associates and joint ventures*" and "*—Results of operations—Provision for expected credit loss on contract assets*" below.

In 2022, the Group recorded AED 156 million income on the change in fair value of derivatives, compared to AED 5 million in 2023 and AED 16 million in 2021. See "*—Results of operations—Change in fair value of derivatives*" below.

## **RECENT DEVELOPMENTS**

### **Acquisition of an interest in the project companies undertaking the development of the Dogger Bank South Offshore Wind project**

On 25 November 2023, the Group signed a sale and purchase agreement to acquire a 49 per cent. shareholding in RWE Renewables UK Dogger Bank South (East) Limited and RWE Renewables UK Dogger Bank South (West) Limited, the two project companies undertaking the development of the Dogger Bank South offshore wind project off the coast of the United Kingdom, from RWE Renewables UK Swindon Limited, a subsidiary of RWE AG (**RWE**). All the contractual conditions were met and the acquisition closed on 29 February 2024.

Dogger Bank South is one of world's largest offshore wind development projects and is set to power up to three million homes in the United Kingdom when it is completed.

Located over 100 kilometres off the northeastern coast of England, the project will be split across two sites, Dogger Bank South (East) and the Dogger Bank South (West). Each site will have the capacity for

approximately 1,500 GW and span 500 square kilometres. RWE, which has retained a 51 per cent. share, will remain in charge of development, construction and operation throughout the life cycle of the project.

This project is not currently considered to be a committed project since a FID is still pending, and will depend on the extent to which the Group and RWE are successful in securing contracts for difference (**CfD**) through the United Kingdom government's CfD auctions.

### **Signing of a binding agreement to acquire a stake in Terra-Gen**

On 18 March 2024, the Group signed a sale and purchase agreement to acquire a 50 per cent. stake in one of the largest independent renewable energy power producers in the United States, from Energy Capital Partners (**ECP**). ECP will fully exit its position in Terra-Gen in connection with the transaction. Igneo Infrastructure Partners will retain its existing 50 per cent. stake in Terra-Gen.

Terra-Gen has a portfolio of 18 utility-scale operational wind projects with aggregate gross capacity of 1,136 MW located in California (with the exception of one located in Texas), three utility-scale operational PV projects (each of which has co-located energy storage facilities) with aggregate gross capacity of 2,006 MW located in California, one operational CSP project with gross capacity of 80 MW located in California, four operational independent energy storage projects with aggregate gross capacity of 297 MW located in California, and two under construction independent energy storage projects with aggregate gross capacity of 180 MW located in California. Terra-Gen also has 10 utility-scale onshore wind, PV and energy storage projects with aggregate gross capacity of 2,192 MW which have reached a FID.

The transaction is expected to close around the end of 2024, subject to regulatory and other customary approvals, including approval from the Committee on Foreign Investment in the United States.

### **Signing of a binding agreement to acquire a shareholding in Terna Energy**

On 20 June 2024, the Group signed an agreement with GEK Terna SA and other shareholders of Terna Energy SA (**Terna Energy**), with the intention to acquire 67 per cent. of Terna Energy's outstanding shares at completion of the transaction at a price of €20 per share, subject to regulatory approvals and other conditions. After completion of the transaction, Masdar will launch an all-cash mandatory tender offer to acquire all the remaining outstanding shares of Terna Energy with the intention of reaching 100 per cent. The transaction and subsequent offer values Terna Energy' total equity at €2.4 billion with an enterprise value of €3.2 billion, making it the largest renewable energy transaction on the Athens Stock Exchange in the past decade, and one of the largest in the European renewables market.

The deal is expected to provide significant capital investment in Greece and other European countries, supporting Terna Energy's contribution to Greece's National Energy and Climate Plan and the EU's net zero by 2050 target. With a strong portfolio of projects in Greece and Europe, Terna Energy is the largest investor in the renewables energy sector in Greece.

Established in 1997, Terna Energy is a leading European clean energy platform, with a track record of more than 20 years of delivering innovative and sustainable projects.

Terna Energy has a portfolio of 36 utility-scale operational onshore wind projects with aggregate gross capacity of 1,092 MW located in Greece, Poland and Bulgaria, one operational utility-scale hydroelectric project with a gross capacity of 11 MW located in Greece, three utility-scale solar PV projects under construction with aggregate gross capacity of 101 MW located in Greece and one pumped storage project under construction with gross capacity of 680 MW located in Greece.

Terna Energy has recently announced its growth plan targeting operational capacity of 6 GW of renewable energy plants by 2030.



## MATERIAL ACCOUNTING POLICIES

The Financial Statements have been prepared in accordance with IFRS. For a discussion of the material accounting policies applied by the Group, see note 3 to the 2023 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 2023 Financial Statements, which identifies the following critical judgements and key sources of estimation uncertainty:

### Critical judgements in applying accounting policies

- **Government grants:** the Group is required to determine whether any future economic benefits are associated with its land grants from the Government, which impacts subsequent costs allocated to each grant and it must also determine whether the Government is acting as shareholder or a government in making the grants.
- **Financial assets from service concession arrangements:** the Group recognises financial assets arising from its service concession arrangements where it determines that it has an unconditional contractual right to receive cash from or at the direction of the grantor for the construction services provided, and the right to receive cash depends only on the passage of time.
- **Classification of investees as joint ventures:** For assessing joint control, the Group considers the contractual agreement of sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.
- **Significant influence over investments in associates:** Where the Group holds less than 20 per cent. of the of the voting power of an investee, it must consider whether there are any factors that give rise to significant influence. This judgement is particularly relevant to the classification of Pertamina Geothermal Energy Tbk as an equity accounted associate.
- **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.
- **Finance leases:** the Group exercised judgement in determining the classification of certain musataha lease arrangements.
- **Business combinations:** the Group uses judgement in determining the fair value of assets and liabilities acquired in business combinations, which often involves the use of significant estimates and assumptions.

- ***Uncertain tax positions:*** the Group makes estimations and uses judgement in assessing the recoverability of deferred income tax assets.

#### **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 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.
- ***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.
- ***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.
- ***Impairment of property, plant and equipment and capital work in progress:*** The Group uses judgement to assess the cash flows of individual cash-generating units when there is an indication that its property, plant and equipment or capital work in progress relating to those units may be impaired.
- ***Fair value measurement of financial instruments:*** the Group uses judgement in determining the fair value of financial assets and liabilities that cannot be determined by reference to quoted prices or observable markets.
- ***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.
- ***Service concession arrangements:*** The Group determines the standalone selling prices for the construction and operating components of its service concessions arrangements based on terms specific to the contracts and applicable market factors. It also estimates the significant financing component associated with its service concession arrangements using the discount rates implied in the respective contracts after considering the standalone selling prices for the construction and operating components.
- ***Impairment assessment of non-financial assets:*** The Group uses judgement to determine whether it is necessary to recognise any impairment loss on the carrying value of a non-financial asset or cash generating unit by comparing its estimated recoverable amount based on the higher of its fair value less costs of disposal and its value in use with its carrying amount.

## 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 2023, 2022 and 2021.

	<b>2023</b>	<b>2022</b>	<b>2021</b>
		<i>(AED thousand)</i>	
<b>Classification</b>			
Renewable power generation.....	442,976	482,592	415,401
Concession revenue.....	2,842,211	73,141	288,299
<i>of which:</i>			
<i>Revenue from construction</i> .....	2,833,969	60,799	286,764
<i>Revenue from operation</i> .....	8,242	12,342	1,535
Special projects.....	27,621	58,090	8,608
Trading income.....	23,230	—	—
Development fee income.....	12,009	3,466	2,658
<b>Revenue from contracts with customers</b> .....	<b>3,348,047</b>	<b>617,289</b>	<b>714,966</b>
Finance lease and rental income.....	4,513	4,104	1,548
<b>Total revenue</b> .....	<b>3,352,560</b>	<b>621,393</b>	<b>716,514</b>
<b>Geographic source of revenue from contracts with customers</b>			
United Kingdom.....	442,957	481,797	415,401
UAE.....	50,697	60,395	9,718
Uzbekistan.....	2,845,057	74,292	289,847
Serbia.....	2,716	—	—
Azerbaijan.....	5,205	—	—
Saudi Arabia.....	1,415	805	—
<b>Revenue from contracts with customers</b> .....	<b>3,348,047</b>	<b>617,289</b>	<b>714,966</b>
Finance lease and rental income.....	4,513	4,104	1,548
<b>Total revenue</b> .....	<b>3,352,560</b>	<b>621,393</b>	<b>716,514</b>

The Group's total revenue amounted to AED 3,353 million in 2023 compared to AED 621 million in 2022 and AED 717 million in 2021. The Group's revenue is principally derived from its consolidated entities that are operating completed projects or managing projects under construction.

### *2023 and 2022 compared*

The increase of AED 2,731 million, or 439.5 per cent., in total revenue in 2023 compared to 2022 principally reflected an increase of AED 2,769 million in concession revenue which was partly offset by a decrease of AED 40 million, or 8.2 per cent., in revenue from renewable power generation.

The increase in IFRIC 12 concession revenue principally reflected the fact that the Group had four wholly owned projects under construction in Uzbekistan which incurred significant capital expenditures during 2023. Each of these projects constitutes a service concession for accounting purposes and the significant increase in revenue in 2023 reflects the significant progress made on construction in that year compared to the more limited progress in 2022. The table below shows the progress of these projects as at 31 December in each of 2023 and 2022 and the service concession attributable to each project in those years.

<b>IFRIC 12 projects under construction in 2023</b>	<b>Start of construction</b>	<b>Per cent. complete as at 31 December 2022</b>	<b>Per cent. complete as at 31 December 2023</b>	<b>2022 concession revenue from construction</b>	<b>2023 concession revenue from construction</b>
		<i>(per cent.)</i>		<i>(AED million)</i>	
Jizzakh PV .....	18 May 2023	—	37	—	441
Samarkand PV .....	18 May 2023	—	42	—	425
Sherabad PV .....	18 May 2023	—	64	—	889
Zarafshan Wind .....	23 May 2022	14	59	61	1,079
				<b>61</b>	<b>2,834</b>

The decrease in renewable power generation revenue in 2023 compared to 2022 principally reflected the reduced wind yield of London Array Offshore Wind.

In addition, in 2023 Source Trading Company Limited (STC), a subsidiary of Masdar, commenced trading in the equipment required for the development of projects under construction from which it derived AED 23 million of trading income compared to no similar income in the 2022 and the Group's development fee income increased by AED 9 million, or 246.5 per cent., from AED 3 million in 2022 to AED 12 million, reflecting an increase in project delivery. These increases were substantially offset by an AED 30 million, or 52.5 per cent., decrease in special projects revenue, which comprises project management income for the oversight of government-funded projects both domestic and international, due to fewer special 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 United Kingdom in 2022 compared to 2021. The increase in special projects revenue 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 PV 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 PV project in 2022 and the concession revenue from operation recognised reflected the contractually agreed fixed capacity charge in respect of the Nur Navoi PV project in both 2021 (for the period during which the project was operational) and 2022.

#### **Direct costs**

The Group's direct costs principally comprise its service concession cost of sale - construction (related to its consolidated projects under construction in 2023), depreciation of property, plant and equipment (principally relating to the 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 Offshore Wind project infrastructure that was constructed, sold and leased back in accordance with applicable United Kingdom regulations.

The table below shows the breakdown of the Group's direct costs in each of 2023, 2022 and 2021.

	<b>2023</b>	<b>2022</b>	<b>2021</b>
		<i>(AED thousand)</i>	
Service concession cost of sales .....	2,406,269	64,178	282,651
<i>of which:</i>			
<i>Construction</i> .....	2,398,190	59,607	281,141
<i>Operation</i> .....	8,079	4,571	1,510
Depreciation of property, plant and equipment .....	85,328	84,108	89,051
Operation and maintenance .....	51,500	75,787	71,066
Depreciation of right of use assets.....	21,359	19,952	22,272
Others .....	14,102	41,568	6,824
	<b>2,578,558</b>	<b>285,593</b>	<b>471,864</b>

The Group's direct costs amounted to AED 2,579 million in 2023 compared to AED 286 million in 2022 and AED 472 million in 2021.

### ***2023 and 2022 compared***

The increase of AED 2,293 million in direct costs in 2023 compared to 2022 principally reflected an increase of AED 2,342 million in service concession cost of sales, reflecting the cost of the construction progress made on the Group's consolidated projects under construction. This increase was partly offset by:

- a decrease of AED 27 million, or 66.1 per cent., in other direct costs which was principally driven by lower direct costs incurred by STC (see "*—Other operations—STC*" below) and by the Group's Energy Services operations; and
- a decrease of AED 24 million, or 32.0 per cent., in operation and maintenance costs which was driven by lower maintenance costs on the London Array Offshore Wind project.

### ***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 PV project in Uzbekistan; and
- an increase of AED 35 million, or 509.1 per cent., in other direct costs, which principally comprised the cost of sales of STC.

### **Gross profit**

Reflecting the above factors, the Group's gross profit was AED 774 million in 2023 compared to AED 336 million in 2022 and AED 245 million in 2021, an increase of AED 438 million, or 130.5 per cent., in 2023 compared to 2022 and an increase of AED 91 million, or 37.3 per cent., in 2022 compared to 2021.

The Group's gross profit margins (calculated as its gross profit divided by its revenue) were 23.1 per cent. in 2023, 54.0 per cent. in 2022 and 34.1 per cent. in 2021. The decrease in gross profit margin in 2023 compared to 2022 reflected the increase in service concession revenue and direct costs in relation to those of the Group's projects under construction which are accounted for under IFRIC 12, the gross profit margin in relation to which was 15.3 per cent. in 2023. The Group expects that its gross profit margins in relation to these projects will be higher once they became operational. 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. Gross profit

margins are APMs, see “*Presentation of financial and other information—Certain non-IFRS financial information*”.

### **Other income**

The Group's other income (including its net income from government grants, which was nil in each of 2023 and 2022 and AED 3 million in 2021) amounted to AED 186 million in 2023, AED 450 million in 2022 and AED 264 million in 2021.

The decrease of AED 265 million, or 58.8 per cent., in the Group's other income in 2023 compared to 2022 principally reflected AED 317 million lower pre-hedge gains related to projects in 2023, partly offset by AED 14 million, or 16.1 per cent., higher dividend income from the Dudgeon project company, see “—*Principal factors affecting results of operations—Changes in the Group's other income*” above.

The increase of AED 186 million, or 70.54 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.

### **General and administrative expenses**

The Group's general and administrative expenses amounted to AED 574 million in 2023, AED 394 million in 2022 and AED 284 million in 2021.

The increase of AED 180 million, or 45.8 per cent., in general and administrative expenses in 2023 compared to 2022 was driven by:

- an AED 76 million, or 99.8 per cent., increase in expenditure on advertising, publicity and events which was driven by COP28;
- AED 63 million, or 24.8 per cent., 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; and
- an AED 29 million, or 49.4 per cent., increase in other general and administrative expenses, which principally relates to the expansion into new countries, including the cost of establishing local offices.

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 213.6 per cent., in advertising, publicity and events, which was due to both reduced marketing in 2021 during the COVID-19 pandemic and non-recurring expenses incurred in connection with the change in the Group's ownership.

### **Project expenses**

The Group's project expenses amounted to AED 144 million in each of 2023 and 2022 and AED 76 million in 2021.

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.

### **Share of results of equity accounted investees, net**

The Group's share of the results of its equity-accounted investees, net amounted to a loss of AED 48 million in 2023 compared to profit of AED 59 million in each of 2022 and 2021.

The Group's associates and joint ventures (together referred to as 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, 14 were considered to be material in 2023 in the 2023 Financial Statements and 12 were considered to be material in 2022 (nine in 2021) in the 2022 Financial Statements, with materiality being based solely on the carrying amount of the relevant investee. In the 2023 Financial Statements, the Group's share of the results of its equity-accounted investees amounted to a share of loss of AED 48 million in 2023 and a share of profit of AED 59 million in 2022.

In the 2022 Financial Statements, the Group's share of the results of its equity-accounted investees amounted to a share of profit of AED 59 million in each of 2022 and 2021.

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).

### **Impairment loss on associates and joint ventures**

In 2023, the Group recognised impairment of AED 183 million on its investments in associates and joint ventures. AED 150 million impairment was charged against Masdar Blue Palm Holdings LLC, AED 147 million impairment was charged against East Rockingham Holdco Pty Ltd and AED 33 million impairment was charged against Dumat Al Jandal Wind Energy Company LLC, with the investments in the East Rockingham and Dumat Al Jandal entities being fully impaired. Also in 2023, the Group reversed AED 147 million impairment losses previously charged against Rocksprings Val Verde Wind LLC. The Group did not recognise any impairment on its equity accounted investees in either 2022 or 2021.

### **Changes in fair value of financial assets carried at fair value through profit or loss (FVTPL)**

In 2023, the Group recorded an AED 2 million negative change in the fair value of its unquoted investment in the Zouk Charging Infrastructure Investment Fund (the **Skyfall Fund**) which invests in electric vehicle charging infrastructure and was the Group's only financial asset carried at FVTPL in 2023. The Skyfall Fund is fair valued on the basis of its net asset value.

In 2022, the Group recorded an AED 30 million gain in fair value of its FVTPL financial assets which reflected an AED 122 million share of profit from the Skyfall Fund, offset by negative changes in fair value of Hero Future Energies Private Limited (**HFEP**) (AED 68 million) which was sold during 2022 and the Skyfall Fund (AED 23 million).

In 2021, the Group recorded an AED 25 million gain in fair value of its FVTPL financial assets which comprised the gains recorded on irredeemable compulsory convertible preference shares (**CCPS**) in HFEP (the sale of which was agreed in 2021 and completed in 2022) and the Skyfall Fund. The CCPS were fair valued on the basis of discounted cash flows.

### **Reversal of expected credit losses on loans to related parties, net**

The Group's reversal of expected credit losses on loans to related parties, net amounted to AED 27 million in 2023, AED 39 million in 2022 and AED 14 million in 2021. These loans are made to equity-accounted project companies.

In 2023, the Group recorded a provision of AED 13 million and a reversal of provision of AED 39 million in respect of its loans to related parties.

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.

The net reversals in each year reflect improvements in credit profiles and scheduled repayments received from certain related parties.

### Provision for expected credit loss on contract assets

In 2023, the Group recognised a provision of AED 32 million for expected credit losses on its contract assets. The Group's contract assets reflect its service concession receivables from its wholly-owned IFRIC 12 projects and the provision in 2023 reflected the Group's assessment of the loss given default under shareholder loans granted to the relevant assets, in accordance with IFRS 9. The Group did not recognise any provision for expected credit losses on its contract assets in either 2022 or 2021 because it did not begin calculating expected credit losses on them until 2023.

### Change in fair value of derivatives

The Group's change in fair value of derivatives amounted to gains of AED 5 million in 2023 compared to AED 156 million in 2022 and AED 16 million in 2021. 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 fair value of derivatives 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.

### Finance income and finance expense

The Group's finance income comprises interest income from service concession arrangements, fixed deposits and loans made by it to related parties. The Group's finance expense comprises its interest expense on borrowings, bank charges, interest on lease liabilities and its net foreign exchange loss in each year under review.

The table below shows the breakdown of the Group's finance income and finance expense in each of 2023, 2022 and 2021.

	<u>2023</u>	<u>2022</u>	<u>2021</u>
	<i>(AED thousand)</i>		
<b>Finance income</b>			
Interest income from service concession arrangements.....	51,015	— <sup>(1)</sup>	— <sup>(1)</sup>
Interest income from fixed deposits .....	24,080	5,786 <sup>(1)</sup>	4,177 <sup>(1)</sup>
Interest income from related party loans .....	73,542	36,344 <sup>(1)</sup>	43,950 <sup>(1)</sup>
	<b>148,637</b>	<b>42,130</b>	<b>48,127</b>
<b>Finance expense</b>			
Interest expense on borrowings .....	(167,192)	(58,021)	(52,601)
Bank charges .....	(14,488)	(8,783)	(9,485)
Interest on lease liabilities .....	(13,590)	(13,327)	(14,468)
Net foreign exchange loss.....	(34,949)	(40,347)	(29,555)
	<b>(230,219)</b>	<b>(120,478)</b>	<b>(106,109)</b>
<b>Net finance expense .....</b>	<b>(81,582)</b>	<b>(78,348)</b>	<b>(57,982)</b>



Note:

- (1) The figures for 2022 have been derived from the 2023 Financial Statements. The figures for 2021 have been re-presented to match the presentation in the 2023 Financial Statements.

The Group's net finance expense was AED 82 million in 2023, AED 78 million in 2022 and AED 58 million in 2021.

### ***2023 and 2022 compared***

The AED 3 million, or 4.1 per cent., increase in net finance expense in 2023 compared to 2022 principally reflected an AED 110 million, or 91.1 per cent., increase in finance expense offset by an AED 107 million, or 252.8 per cent., increase in finance income.

The AED 110 million increase in finance expense almost entirely reflected an AED 109 million, or 188.2 per cent., increase in interest expense on borrowings, due to increases in consolidated borrowings in respect of the Group's consolidated projects under construction in Uzbekistan and its now operating Garadagh PV project and the Group's 2023 Green Notes issued under the Programme in July 2023.

The AED 107 million increase in finance income reflected (i) AED 51 million interest income from service concession arrangements in 2023 (which relates to the Group's projects in Uzbekistan accounted for under IFRIC 12) compared to no similar finance income in 2022, (ii) an AED 37 million, or 102.3 per cent., increase in interest income from related party loans in 2023 compared to 2022 principally reflecting the reclassification of a shareholder loan to IPH and (iii) an AED 18 million, or 316.2 per cent., increase in interest income from fixed deposits driven by higher interest rates and larger amounts of cash placed on interest-bearing fixed deposits.

### ***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 related party loans; and
- an AED 5 million, or 10.3 per cent., increase in interest expense on borrowings, which was driven by higher levels of borrowing.

### **Profit before tax from continuing operations**

Reflecting the above factors, the Group's profit before tax from continuing operations was AED 9 million in 2023 compared to AED 507 million in 2022 and AED 230 million in 2021, a decrease of AED 498 million, or 98.1 per cent., in 2023 compared to 2022 and an increase of AED 277 million, or 120.7 per cent., in 2022 compared to 2021.

### **Income tax**

The Group's income tax charge was AED 54 million in 2023, AED 48 million in 2022 and AED 49 million in 2021. Masdar operates in the UAE and was not subject to corporate income tax in the UAE in 2023, 2022 or 2021. The Group's net income tax expense in each of 2023, 2022 and 2021 arises as a result of income taxes associated with consolidated entities that operate in the United Kingdom, Azerbaijan and Uzbekistan. The

Group's deferred tax assets and liabilities are derived from its United Kingdom and Uzbekistan subsidiaries. Deferred tax assets primarily relate to taxable losses and the deferred tax liability relates to capital allowances in advance of depreciation.

Prior to 1 January 2024, the Group did not pay corporate tax on its UAE operations. However, on 3 October 2022, the UAE Ministry of Finance issued a Federal Decree Law to implement a new corporate tax regime in the UAE. This regime is applicable for accounting periods beginning on or after 1 June 2023 and accordingly will impact the Group's financial statements from 1 January 2024. Generally, UAE businesses will be subject to a 9 per cent. corporate tax rate, although certain entities will either be exempt or subject to a zero rate, depending on whether they satisfy the applicable conditions under the UAE tax law.

As at 31 December 2023, the UAE government has not substantively enacted Pillar Two income tax legislation. Certain multinational entities within the Group should be in the scope of Pillar Two based on the Pillar Two revenue threshold of EUR 750 million. Due to the uncertainties and on-going developments in relation to Pillar Two in the Middle East, the Group is not currently able to provide a reasonable estimate and is continuing to assess the impact of Pillar Two income tax legislation on its future financial performance. See also "Risk factors—Factors that may affect the Issuer's *ability to fulfil its obligations under Notes issued under Programme—The Group's results of operations could be materially adversely affected by changes in tax-related matters*".

#### **(Loss)/profit after income tax from continuing operations**

Reflecting the above factors, the Group's loss after income tax from continuing operations was AED 45 million in 2023 compared to profit after income tax from continuing operations of AED 460 million in 2022 and AED 181 million in 2021, a decrease of AED 504 million in 2023 compared to 2022 and an increase of AED 279 million, or 154.3 per cent., in 2022 compared to 2021.

#### **Profit after income tax from discontinued operations**

The Group's profit after income tax from discontinued operations was nil in 2023 compared to AED 81 million in 2022 and AED 270 million in 2021.

In each of 2022 and 2021, the Group's sustainable real estate business was classified as discontinued operations. See note 31 to the 2023 Financial Statements for further information on the results of operations, cash flows and assets and liabilities of this business.

#### **(Loss)/profit for the year**

Reflecting the above factors, the Group's loss for the year was AED 45 million in 2023 compared to profit for the year of AED 540 million in 2022 and AED 451 million in 2021, a decrease of AED 585 million in 2023 compared to an increase of AED 90 million, or 19.9 per cent., in 2022 compared to 2021.

#### **Other comprehensive income for the year, net of income tax**

The Group's other comprehensive income for the year, net of income tax, relates to movements in its and its equity-accounted investees hedging reserves, net, its share of other comprehensive income from equity accounted investees and foreign currency translation differences for foreign operations. These factors together generated other comprehensive income of AED 22 million in 2023, AED 569 million in 2022 and AED 179 million in 2021.

## Total comprehensive (loss)/income for the year

Reflecting the above factors, the Group's total comprehensive loss for the year was AED 23 million in 2023 compared to total comprehensive income for the year of AED 1,109 million in 2022 and AED 630 million in 2021, a decrease of AED 1,132 million in 2023 compared to 2022 and an increase of AED 480 million, or 76.2 per cent., in 2022 compared to 2021.

## 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 subsidiaries, 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 subsidiaries, 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 2023, the Group had total cash of AED 2,690 million. This principally comprised a combination of cash for special projects, cash held for the Zayed Sustainability Prize, COP28 and IRENA, cash held for the payment of consideration under acquisition agreements (including, as at 31 December 2022, 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, cash at STC, and discretionary 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 held in fixed term deposits (referred to as term deposits in note 14 to the 2023 Financial Statements and restricted cash in note 13 to the 2022 Financial Statements, respectively), as at 31 December in each of 2023, 2022 and 2021.

	As at 31 December		
	2023	2022	2021
		(AED million)	
<b>Non-discretionary cash</b>			
Special projects.....	285	414	316
Zayed Sustainability Prize .....	93	73	29
COP28 <sup>(1)</sup> .....	180	—	—
IRENA <sup>(2)</sup> .....	28	37	34
Held for acquisitions.....	—	1,030	—
Source Trading Company Limited <sup>(3)</sup> .....	119	475	22
Masdar City <sup>(4)</sup> .....	—	—	51
Other non-discretionary cash.....	522	281	49
<b>Discretionary cash</b>			

	<b>As at 31 December</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
Discretionary cash held in Group current accounts and short-term fixed deposits .....	1,463	858	380
<b>Total</b> .....	<b>2,690</b>	<b>3,168</b>	<b>880</b>

Notes:

- (1) These funds were received specifically for a COP28 project which Masdar is managing on behalf of the COP28 organising committee.
- (2) These funds were received specifically for an International Renewable Energy Agency (IRENA) project which Masdar is managing on behalf of the UAE Liaison Office to IRENA.
- (3) A wholly-owned subsidiary which may, from time to time, purchase equipment for projects and then on-sell it to the contractors.
- (4) Masdar City represents the sustainable real estate business that was split out of Masdar before shares in Masdar were sold to ADNOC and TAQA.

In 2023, the Group's consolidated and equity-accounted projects, and Masdar itself, generated material cash inflows of AED 1,233 million comprising (i) dividends, payments under shareholder loans, development fees, development cost recoveries and other payments from its project companies and (ii) other cash income (including the proceeds of financial risk management activities, asset monetisations and fee income from special projects) in pounds sterling, euro and U.S. dollars.

The table below shows a breakdown of Masdar operating cash inflows (capturing only those individually in excess of U.S.\$1 million) for each of 2023, 2022, and 2021 and the currency in which that cash was received.

	<i>(Currency)</i>	<b>2023</b>	<b>2022</b>	<b>2021</b>
		<i>(AED million)</i>		
London Array Offshore Wind .....	GBP	145	190	38
Dudgeon Offshore Wind .....	GBP	94	64	109
Hywind Floating Offshore Wind .....	GBP	22	25	34
Zouk Charging Infrastructure Fund <sup>(1)</sup> .....	GBP	—	122	37
Cibuk Wind .....	EUR	46	110	28
Shams CSP .....	USD	59	52	69
Tafila Wind .....	USD	20	5	16
DEWA 3 PV .....	USD	11	61	—
Jeddah South PV .....	USD	—	—	18
Nur Navoi PV .....	USD	—	—	72
Cirata Floating PV .....	USD	—	—	29
Baynouna PV .....	USD	30	—	—
Sharjah WtE .....	AED	50	—	—
Big Beau PV + BESS .....	USD	24	—	—
Blue Palm projects <sup>(2)</sup> .....	USD	20	—	—
Zarafshan Wind .....	USD	119	—	—
Garadagh PV .....	USD	32	—	—
Jizzakh PV .....	USD	33	—	—
Samarkand PV .....	USD	32	—	—
Sherabad PV .....	USD	68	—	—
Pertamina Geothermal Energy Tbk .....	IDR	13	—	—
Source Trading Company .....	USD	—	—	30
Energy Services .....	USD	11	—	—
Pre-hedge close-out proceeds .....	USD	114	317	10
HFE exit proceeds .....	USD	265	—	—
Carbon credit sales .....	EUR	—	19	52
Special projects fee income .....	USD	25	80	19
<b>Total</b> .....		<b>1,233</b>	<b>1,045</b>	<b>561</b>

Notes:

- (1) See "Description of the Group—Other operations—Skyfall Fund".

(2) See "Description of the Group—The Group's projects—Operational projects—Blue Palm projects".

In 2023, Masdar made no returns to its shareholders. In 2022, Masdar returned AED 387 million to MIC when it was still the sole shareholder and, in 2021, Masdar returned AED 352 million to MIC.

From time-to-time Masdar makes cash calls to its shareholders in order to fund the consideration payable under acquisition agreements. The table below shows the cash calls made in the three months ended 31 March 2024 and in each of 2023, 2022 and 2021, totalling AED 7.0 billion in aggregate. Masdar expects to make further cash calls of approximately AED 10.5 billion in 2024 in connection with the completion of its acquisitions of Terra-Gen and Terna Energy.

	Three months ended 31 March		Year ended 31 December	
	2024	2023	2022	2021
		(AED million)		
Lekela .....	—	239	1,084	—
Arlington .....	—	—	78	—
Pertamina Geothermal .....	—	1,359	—	—
Baltic Eagle Offshore Wind .....	—	1,635	—	—
Dogger Bank South Offshore Wind .....	2,571	—	—	—
<b>Total</b> .....	<b>2,571</b>	<b>3,233</b>	<b>1,162</b>	<b>—</b>

### 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.\$200 million and AED 92.5 million, respectively, as at 31 December 2023, and both were undrawn as at the same date. In addition, Masdar raised two U.S.\$250 million short-term bridge-to-bond facilities, in 2022 and in the first quarter of 2023 respectively, to reduce the cost of carry associated with issuing Notes under the Programme ahead of the Group's near-term funding needs. These bridge-to-bond facilities were fully drawn and then repaid with the proceeds of issuance of the 2023 Green Notes. In the final quarter of 2023, Masdar raised a separate U.S.\$500 million bridge-to-bond facility that was not utilised as at 31 December 2023 but, as at the date of this Base Offering Circular, U.S.\$440 million was drawn.

Non-recourse project finance lending across the Group's portfolio was U.S.\$7.7 billion in total as at 31 December 2023, of which the Group's share was U.S.\$3.8 billion.

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 data for each of 2023, 2022 and 2021.

	<b>2023</b>	<b>2022</b>	<b>2021</b>
		<i>(AED thousand)</i>	
Operating cash flows before changes in working capital .....	373,603	428,842 <sup>(1)</sup>	268,256
Working capital adjustments .....	(2,847,315)	302,445 <sup>(1)</sup>	(631,428)
Income tax and employees' end of service benefit paid .....	(25,121)	(12,407)	(4,305)
Net cash (used in)/generated from operating activities.....	(2,498,833)	718,880 <sup>(1)</sup>	(367,477)
Net cash (used in)/generated from investing activities .....	(5,121,444)	(425,782) <sup>(1)</sup>	57,170
Net cash generated from/(used in) financing activities.....	6,970,599	2,172,389	(105,869)
Net (decrease)/increase in cash and cash equivalents.....	(649,678)	2,465,487	(416,176)
Cash and cash equivalents on 1 January .....	3,150,649	716,497	1,229,254
Net foreign exchange difference.....	(21,337)	(31,335)	(8,738)
Cash and cash equivalents at 31 December .....	2,479,634	3,150,649	804,340
Discontinued operations cash and bank balance at 31 December..	—	—	(87,843)
Cash and cash equivalents at 31 December .....	2,479,634	3,150,649	716,497

Note:

- (1) These figures are derived from the comparative information for 2022 in the 2023 Financial Statements. In the 2022 Financial Statements, 'Operating cash flows before changes in working capital' was AED 429,391 thousand, 'Working capital adjustments' was AED 284,422 thousand and 'Net cash generated from operating activities' was AED 701,406 thousand, reflecting the fact that in the 2022 Financial Statements (i) 'Trade and other receivables' under working capital adjustments included contract assets of AED 54,906 thousand which was re-presented as contract assets under 'Operating cash flows before changes in working capital' in the comparative information for 2022 in the 2023 Financial Statements, (ii) "Operating cash flows before changes in working capital" included finance lease income of AED 550 thousand which was represented within trade and other receivables under "Working capital adjustments" in the comparative information for 2022 in the 2023 Financial Statements and (iii) trade and other payables under 'Working capital adjustments' in 2022 included AED 17 million which was re-presented as 'Acquisition of subsidiary, net of cash acquired' under investing activities in the comparative information for 2022 in the 2023 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 374 million in 2023, AED 429 million in 2022, and AED 268 million in 2021. This comprises the Group's profit before tax from continuing operations for the year adjusted to reflect non-cash items. The principal adjustments in each year under review relate to depreciation, finance expense, dividend income and share of results of equity-accounted investees, net (in all three years), finance income (in 2023), change in fair value of derivatives (in 2022) and changes in fair value of investment properties related to the SRE business (in 2021).

The AED 55 million, or 12.9 per cent., decrease in 2023 compared to 2022 principally reflected the Group's a lower profit before tax from continuing operations of AED 498 million in 2023 compared to 2022 and one non-cash adjustment which had a negative effect which were partially offset by four non-cash adjustments which had a positive effect. The non-cash adjustment which had a negative effect was an AED 107 million increase in finance income in 2023 compared to 2022. The non-cash adjustments which had a positive effect were (i) an AED 183 million impairment loss on associates and joint ventures in 2023 compared to no impairment in 2022, (ii) an AED 151 million positive change in fair value of derivatives in 2023 compared to 2022, (iii) an AED 110 million increase in finance expense in 2023 compared to 2022 and (iv) an AED 107 million positive change in share of results in equity accounted investees, net in 2023 compared to 2022.

The AED 161 million, or 60.1 per cent., increase in 2022 compared to 2021 principally reflected five non-cash adjustments which had a positive effect which were partially offset by one non-cash adjustment which had a negative effect. The non-cash adjustments which had a positive effect were (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. The non-cash adjustment which had a negative effect in 2022 compared to 2021 related to gain on derivatives, net which was AED 140 million higher in 2022 compared to 2021.

### ***Changes in working capital***

Changes in working capital relate to trade and other receivables, trade and other payables, finance lease receivables (in 2021), changes in amounts due to or from related parties and contract assets. The Group's net changes in working capital were AED 2,847 million negative in 2023, AED 302 million positive in 2022 (using the figure in the 2023 Financial Statements) and AED 284 million positive in 2022 (using the figure in the 2022 Financial Statements), and AED 631 million negative in 2021.

The AED 3,150 million movement from a positive change in 2022 (using the figure in the 2023 Financial Statements) to a negative change in 2023 principally reflects:

- an AED 2,760 million negative movement in relation to contract assets which related to the Group's consolidated IFRIC 12 projects in Uzbekistan;
- an AED 765 million negative movement in relation to trade and other payables; and
- an AED 137 million negative movement in relation to amounts due from related parties.

These negative adjustments were partly offset by a positive movement of AED 496 million in relation to trade and other receivables.

The AED 916 million movement from a negative change in 2021 to a positive change in 2022 (using the figure in the 2022 Financial Statements) 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 Wind project, plus receivables recorded for development fees and proceeds from the sale of HFE.

In 2023, the Group's net cash used in operating activities after changes in working capital and adjustments for income tax paid and employees' end of service benefits was AED 2,499 million compared to net cash generated of AED 719 million in 2022 (using the figure in the 2023 Financial Statements) and AED 701 million (using the figure in the 2022 Financial Statements), and net cash used of AED 367 million in 2021.

### ***Cash flows from investing activities***

The Group's net cash used in investing activities in 2023 was AED 5,121 million compared to AED 426 million in 2022 (using the figure in the 2023 Financial Statements) and AED 408 million in 2022 (using the figure in the 2022 Financial Statements) and net cash generated from investing activities of AED 57 million in 2021.

In 2023, the principal investing cash outflows were AED 4,238 million in investment in associates and joint ventures (principally the acquisitions of the Baltic Eagle Offshore Wind (AED 1,499 million), Pertamina Geothermal (AED 1,321 million) and Big Beau PV + BESS projects (AED 315 million) and contribution of new equity to existing equity-accounted investees, including IPH (AED 924.1 million)), AED 884 million in purchase of property, plant and equipment and AED 364 million in loans provided to related parties. The principal investing cash inflow in 2023 was AED 338 million in dividends from equity-accounted investees (including AED 49 million from the Shams project company, AED 50 million from the Sharjah project company and AED 45 million from the Cibuk project company).

In 2022 (using the figure in the 2023 Financial Statements), 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 IPH, the East Rockingham project company, Dudgeon Extension Limited and the DEWA 3 project company, the latter being the repayment of an equity bridge loan originally provided by Mubadala), AED 62 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 inflows in 2022 were AED 185 million in dividends received from equity-accounted investees (principally the Cibuk, Dudgeon and Shams project companies) and an AED 122 million distribution from the Skyfall Fund.

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 IPH, Dudgeon Extension Limited and the East Rockingham project company), 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 IPH, AED 214 million in dividends received from equity-accounted investees (principally the Shams and Dudgeon project companies) and AED 24 million in repayment of related party loans net of new loans given to related parties.

### ***Cash flows from financing activities***

The Group's net cash generated from financing activities in 2023 was AED 6,971 million compared to AED 2,172 million in 2022 and net cash used in financing activities of AED 106 million in 2021.

The Group's financing activities comprise borrowing and the repayment of borrowings, the payment of finance expense, the repayment of lease liabilities and, in 2023 and 2022, movements in funds from shareholders.

In 2023, the Group (i) borrowed a net AED 3,836 million (which principally reflected new loans secured by consolidated project companies and the 2023 Green Notes offset by loans repaid in 2023), (ii) received shareholders' contributions in the form of equity loans to finance investments of AED 3,309 million, (iii) paid finance expense of AED 142 million and (v) repaid lease liabilities of AED 33 million.

In 2022, the Group (i) borrowed a net AED 547 million (which principally reflected a bridge-to-bond facility that was repaid in 2023 using part of the proceeds of the 2023 Green Notes), (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.

## Borrowings

As at 31 December 2023, the Group's consolidated borrowings amounted to AED 6,387 million and comprised (i) eight loans borrowed at subsidiary level (London Array Offshore Wind project financing, Nur Navoi PV project financing, Nur Navoi equity bridge loan, Zarafshan Wind project financing, Garadagh PV project financing, Jizzakh PV project financing, Samarkand PV project financing and Sherabad PV project financing), (ii) three corporate loans and (iii) the 2023 Green Notes. As at the same date, Masdar had unutilised amounts under committed facilities, including two revolving credit facilities and a short-term bridge-to-bond facility, amounting to AED 2,664 million.

The table below shows the outstanding amount of the Group's borrowings and whether or not they are with recourse to Masdar as at 31 December in each of 2023, 2022 and 2021.

		As at 31 December		
		2023	2022	2021
		(AED thousand)		
Loan 1.....	Non-recourse	1,404,993	1,444,150	1,735,356
Loan 2.....	Recourse	—	532,658	—
Loan 3.....	Recourse	—	55,000	—
Loan 4.....	Recourse	—	36,734	—
Loan 5.....	Recourse	220,338	218,074	218,074
Loan 6.....	Non-recourse	173,710	182,000	152,297
Loan 7.....	Non-recourse	611,206	—	—
Loan 8.....	Non-recourse	226,655	—	—
Loan 9.....	Non-recourse	281,292	—	—
Loan 10.....	Non-recourse	272,618	—	—
Loan 11.....	Non-recourse	470,444	—	—
2023 Green Notes.....	Recourse	2,725,419	—	—
		<b>6,386,675</b>	<b>2,468,616</b>	<b>2,105,727</b>

### Loan 1

Loan 1 relates to the Group's stake in the London Array Offshore Wind 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, and the loan comprises a £395 million (AED 1,983 million) floating rate secured loan with a final maturity date in 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 2023 was AED 236 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.

### Loan 2

Masdar entered into a short-term bridge-to-bond term loan facility of U.S.\$250 million (AED 918 million) in 2022, of which U.S.\$145 million was outstanding as at 31 December 2022. The remaining U.S.\$105 million

was drawn in 2023 before the total outstanding was fully repaid in 2023 from the proceeds of the 2023 Green Notes, and the facility was then discontinued.

### ***Loan 3***

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. The facility was not utilised as at 31 December 2023.

### ***Loan 4***

This revolving credit facility is in the amount of U.S.\$200 million (AED 735 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. The facility was not utilised as at 31 December 2023.

### ***Loan 5***

Loan 5 comprises a U.S.\$59 million (AED 218 million) equity bridge loan facility from the European Bank for Reconstruction and Development (**EBRD**) obtained in 2020 for the Nur Navoi PV 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.

Both the loan and the swap are supported by a corporate guarantee from Masdar.

### ***Loan 6***

Loan 6 comprises U.S.\$53 million (AED 194 million) senior, non-recourse debt facilities borrowed by the Nur Navoi project company. 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 (AED 164 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.

### ***Loan 7***

In 2023, 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 and comprise (i) floating rate loans totalling U.S.\$137.5 million (AED 505 million) with a rate of interest of SOFR plus a margin, (ii) a floating rate loan of U.S.\$37 million

(AED 136 million) with a rate of interest of SOFR plus a margin and (iii) floating rate loans totalling U.S.\$102 million (AED 375 million) with a rate of interest of SOFR plus a margin.

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.

### ***Loan 8***

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 and comprise (i) floating rate loans totalling U.S.\$39 million (AED 143 million) with a rate of interest of SOFR plus a margin, (ii) a floating rate loan of U.S.\$19 million (AED 71 million) with a rate of interest of SOFR plus a margin and (iii) a floating rate loan of U.S.\$50 million (AED 184 million) with a rate of interest of SOFR plus a margin.

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.

### ***Loan 9***

In 2023, the Jizzakh project company, a wholly-owned subsidiary, secured U.S.\$102 million (AED 375 million) senior debt facilities from the ADB, the EBRD, the Asia Infrastructure Investment Bank (**AIIB**) and the European Investment Bank (**EIB**). The facilities are repayable in semi-annual instalments from January 2026 to July 2044 and comprise (i) floating rate loans totalling U.S.\$26.5 million (AED 97 million) with a rate of interest of SOFR plus a margin, (ii) a floating rate loan of U.S.\$20 million (AED 75 million) with a rate of interest of SOFR plus a margin, (iii) a floating rate loan of U.S.\$35 million (AED 128 million) with a rate of interest of SOFR plus a margin and (iv) a floating rate loan of U.S.\$20 million (AED 75 million) with a rate of interest of SOFR plus a margin.

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.

### ***Loan 10***

In 2023, the Samarkand project company, a wholly-owned subsidiary, secured U.S.\$99 million (AED 364 million) senior debt facilities from the ADB, the EBRD, the AIIB and the EIB. The facilities are repayable in semi-annual instalments from January 2026 to July 2044 and comprise (i) floating rate loans totalling U.S.\$26 million (AED 94 million) with a rate of interest of SOFR plus a margin, (ii) a floating rate loan of U.S.\$20 million (AED 72 million) with a rate of interest of SOFR plus a margin, (iii) a floating rate loan of U.S.\$34 million (AED 125 million) with a rate of interest of SOFR plus a margin and (iv) a floating rate loan of U.S.\$20 million (AED 72 million) with a rate of interest of SOFR plus a margin.

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.

### ***Loan 11***

In 2023, the Sherabad project company, a wholly-owned subsidiary, secured U.S.\$187 million (AED 687 million) senior debt facilities from the ADB, the EBRD, the AIIB and the EIB. The facilities are repayable in semi-annual instalments from January 2026 to July 2044 and comprise (i) floating rate loans totalling U.S.\$48 million (AED 175 million) with a rate of interest of SOFR plus a margin, (ii) a floating rate loan of U.S.\$42 million (AED 153 million) with a rate of interest of SOFR plus a margin, (iii) a floating rate loan of U.S.\$56

million (AED 205 million) with a rate of interest of SOFR plus a margin and (iv) a floating rate loan of U.S.\$42 million (AED 153 million) with a rate of interest of SOFR plus a margin.

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.

### **2023 Green Notes**

On 25 July 2023, Masdar issued U.S.\$750 million 4.875 per cent. Notes due 2033. This was the Group's first issue of Notes under the Programme.

### **Others**

During 2023, Masdar entered into additional short-term bridge-to-bond term loan facilities of:

- U.S.\$250 million (AED 918 million) with a club of commercial banks which was fully drawn before being fully repaid from the proceeds of the 2023 Green Notes, and the facility was then discontinued; and
- U.S.\$500 million (AED 1,837 million) with one commercial bank which was not utilised as at 31 December 2023.

### **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 2023.

	<b>As at 31 December 2023</b>	
	<i>(AED thousand)</i>	<i>(per cent.)</i>
Within one year .....	147,991	2.3
Between 1 and 2 years .....	138,160	2.2
Between 2 and 5 years .....	706,614	11.1
More than 5 years .....	5,393,910	84.5
	<b>6,386,675</b>	<b>100.0</b>

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.

During 2023, the Group experienced a minor technical breach related to loan covenants associated with working capital loans secured from a consortium of lenders on its solar PV projects under construction in Uzbekistan as at 31 December 2023. The breach relates to the fact that O&M agreements in relation to those projects were not signed by their due date, as they had not been approved by the lenders as at that date. As a result, the loan balances associated with the projects amounting to AED 1,012 million were reclassified from non-current to current as at 31 December 2023. The technical default was subsequently resolved.

### **Commitments and contingencies**

#### **Commitments**

As at 31 December 2023, the Group had capital commitments of AED 1,710 million, together with a commitment to invest AED 105 million in financial investments, an AED 79 million share in the commitments of its equity-accounted investees and an AED 2 million share in the commitments of its joint operation. 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 2024.

As at 31 December 2023, the Group also had operating commitments amounting to AED 9 million repayable within one year.

### ***Contingencies***

As at 31 December 2023, 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 Wind project, the Al Dhafrah PV project and the Jeddah South PV project. 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 PV project for the amount of AED 312 million. The Group has also issued performance guarantees amounting to AED 4,626 million in respect of various projects as at 31 December 2023.

In addition, as at 31 December 2023, the Group has procured bank guarantees and letters of credit under a number of uncommitted trade finance facilities amounting to AED 2,317 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 its 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 2023, Masdar incurred AED 46 million in salaries and other benefits to its key management personnel.

Further information on the Group's related party transactions in 2023, 2022 and 2021 is set out in note 12 to each of the Financial Statements.

### **DISCLOSURES ABOUT FINANCIAL RISK MANAGEMENT**

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, risk and compliance 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 7,262 million as at 31 December 2023; and
- financial liabilities not carried at fair value which amounted to AED 7,291 million as at 31 December 2023.

### **Currency risk**

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 and investments that are denominated in foreign currencies, primarily in euro and pounds sterling. 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.

Based on a sensitivity analysis to a 10 per cent. increase in the dirham against each of pounds sterling and the euro (assuming the increase remained outstanding for the whole of 2023), the Group's loss for the year would have increased by AED 91 million (in the case of pounds sterling) and would have decreased by AED 40 million (in the case of euro). In the case of a 10 per cent. decrease in the dirham against each of these currencies (assuming the decrease remained outstanding for the whole of 2023), the Group's loss for the year would have decreased by AED 91 million (in the case of pounds sterling) and would have increased by AED 40 million (in the case of euro).

### **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 had been held constant, the Group's profit for 2023 would have decreased or increased, respectively, by AED 0 million (2022: AED 7 million). This reflects the fact that the Group manages its interest rate risk by having a balanced portfolio of fixed and variable rate loans and borrowings, with variable rate loans and borrowings substantially hedged against interest rate risk by virtue of interest rate swaps under which it agrees to exchange, at specified intervals, the difference between fixed and variable rate interest amounts calculated by reference to an agreed-upon notional principal amount. The fair value of these interest rate swaps is determined by discounting the future cash flows using the curves at the relevant reporting date and the credit risk inherent in the contract. The notional amounts of these swaps are disclosed in note 13 to the 2023 Financial Statements.

The Group's borrowings at fixed rates of interest, in the form of the 2023 Green Notes, amounted to AED 2,725 million, equal to 42.7 per cent. of its total borrowings, at 31 December 2023. The Group had no borrowings at fixed rates of interest as at 31 December 2022.

The Group designates its interest rate swaps as cash flow hedging instruments under a fair value hedge accounting model. Where such hedging is determined to be effective, any change in fair value is booked in other comprehensive income and does not affect profit or loss. In certain cases, the hedging has been determined to be ineffective and, in these cases, any change in fair value is booked through profit and 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 2023, 83.0 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 2023, the Group assessed its maximum exposure to credit risk at AED 7,456 million. This principally related to contract assets (AED 3,136 million as at 31 December 2023), cash and bank balances (AED 2,480 million as at 31 December 2023), loans to related parties (AED 923 million as at 31 December 2023) and trade and other receivables (AED 515 million as at 31 December 2023).

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 an 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.

	<b>As at 31 December 2023</b>					
	<b>Within one year</b>	<b>One to two years</b>	<b>Two to five years</b>	<b>More than five years</b>	<b>Total</b>	<b>Carrying amount</b>
	<i>(AED thousand)</i>					
Bank borrowings .....	453,566	509,651	1,872,538	7,033,666	<b>9,869,421</b>	6,386,675
Due to related parties .....	65,812	—	—	—	<b>65,812</b>	65,812
Trade and other payables .....	547,416	—	—	—	<b>547,416</b>	547,416
Lease liabilities .....	36,616	34,077	90,520	215,382	<b>376,595</b>	291,213
	<b><u>1,103,410</u></b>	<b><u>543,728</u></b>	<b><u>1,963,058</u></b>	<b><u>7,249,048</u></b>	<b><u>10,859,244</u></b>	<b><u>7,291,116</u></b>

For further information of the Group's financial instruments, see note 34 to the 2023 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 18 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 2024, the Group had 39 operational utility-scale renewable energy generation projects with a gross generation capacity of 9,792 MW, comprising:

- 17 solar power projects with a gross generation capacity of 4,295 MW;
- 20 wind power projects with a gross generation capacity of 3,590 MW;
- one waste-to-energy project with a gross generation capacity of 30 MW and
- geothermal-focused projects with a gross generation capacity of 1,877 MW, through its 15 per cent. investment in Pertamina Geothermal.

These projects are in the United States, Egypt, South Africa, the UAE, the United Kingdom, Indonesia, Jordan, Poland, Saudi Arabia, Azerbaijan, Montenegro, Senegal, Serbia and Uzbekistan.

In addition to its operational projects, as at 31 March 2024 the Group had ownership interests in 12 utility-scale renewable energy generation projects under construction with a gross generation capacity of 5,588 MW, comprising:

- seven solar power projects with a gross generation capacity of 4,528 MW
- two wind power projects with a gross generation capacity of 976 MW;
- two BESS projects with a gross generation capacity of 55 MW; and
- one waste-to-energy power project with a gross generation capacity of 29 MW.

These projects are in Uzbekistan, Saudi Arabia, the United Kingdom, Australia, Germany and the UAE.

The Group also has ownership interests in four committed to develop utility scale-solar power generation projects with a gross generation capacity of 2,475 MW. These projects are in Armenia, Morocco, the UAE and Uzbekistan. In addition, the Group has committed to acquire a 50 per cent. shareholding in the Terra-Gen Platform, which comprises 26 operational and two under-construction projects across solar power, wind power and energy storage technologies with total gross generation capacity of 3,699 MW, which it also considers as committed projects. On 20 June 2024, the Group announced its acquisition, subject to regulatory approvals, of a controlling interest in Terna Energy, which has a portfolio of 36 utility-scale operational wind projects with aggregate gross capacity of 1,092 MW.

The total gross generation capacity of the Group's operational, under construction and committed utility-scale renewable energy generation projects was 21,554 MW and its proportionate share of the capacity of those projects was 9,950 MW as at the same date.

The table below shows the number of the Group's projects and their gross generation capacity in MW as at 31 March 2024 by type and stage of the projects.

	<b>Operational</b>		<b>Under-construction</b>		<b>Committed</b>	
	No. of projects	MW	No. of projects	MW	No. of projects	MW
Solar PV .....	16	4,429	7	4,528	7	4,481
Solar CSP .....	1	100	—	—	1	80
Onshore wind.....	17	3,356	1	500	18	1,136
Offshore wind.....	3	1,062	1	476	—	—
Energy storage.....	—	—	2	55	6	477
Waste-to-energy .....	1	30	1	29	—	—
Geothermal .....	1	1,877	—	—	—	—
<b>Total</b> .....	<b>39</b>	<b>9,792</b>	<b>12</b>	<b>5,588</b>	<b>32</b>	<b>6,174</b>

The Group has a pipeline of opportunities at various stages of development with a gross generation capacity exceeding 10 GW, 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 Angola, Australia, Azerbaijan, Bahrain, Egypt, Ethiopia, Georgia, Germany, Greece, Guinea, Indonesia, Iraq, Israel, Jordan, Kazakhstan, Kyrgyzstan, Morocco, Oman, Poland, Republic of Congo, Romania, Saudi Arabia, Serbia, Spain, Tanzania, Turkey, Turkmenistan, Uganda, the UAE and the United Kingdom.

In addition, the Terra-Gen Platform has a pipeline of projects exceeding 9 GW of gross generation capacity, including 10 which have reached a FID representing 2.2 GW of gross generation capacity. The remaining projects are at an advanced stage of development and are moving towards a FID. Every project in Terra-Gen's pipeline is located in the United States.

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 2023, the Group had total assets of AED 18,200 million and recorded a loss for the year of AED 45 million.

## HISTORY

Masdar was incorporated by an Emiri decree in 2007 with Mamoura Diversified Global Holding PJSC (**Mubadala**), which is now wholly owned by 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 2013 Masdar inaugurated the world's largest concentrated solar plant at the time, Shams CSP. Masdar was also involved in the development of one of the world's largest offshore wind farms, London Array Offshore Wind, which was inaugurated in 2013. Masdar has been at the forefront of innovation, participating in pioneering projects such as Hywind Floating Offshore Wind 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 MIC's 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 become a leading producer of green hydrogen 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 Bonds, Loans and Sukuk Middle East Awards – ESG Bond Deal of the Year 2023 for its 2023 Green Notes;
- the IJ Global Awards Asia-Pacific Portfolio Financing Deal of the Year award for its Sherabad PV, Jizzakh PV and Samarkand PV projects in 2023;
- the IJ Global Awards MENA Solar Deal of the Year for its DEWA 6 PV project in 2023;
- 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 Wind 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 PV project in 2021;
- the IJ Global Awards APAC Renewables Solar – Frontier Market Deal of the Year award for its Nur Navoi PV project in 2021;
- the IJ Global Awards Europe Refinancing Renewables Offshore Wind Deal of the Year award for its London Array Offshore Wind project in 2021; and
- 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 Floating PV project in 2021.

## **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 become a leading producer of green hydrogen 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 strategic priorities in 2024 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), and (ii) capacity to pursue projects that ensure conservation of the environment, respect for the local community and compliance with governance best practices;
- 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; and
- bring corporate governance and financial governance policies and procedures up to publicly listed company levels.

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 United Kingdom 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 has U.S.\$302 billion of assets under management and its business 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 oil and gas 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 2024, the Group's utility-scale operating, under construction and committed to develop projects comprised 83 assets in 18 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 (32, of which 30 are PV and two are CSP), wind power plants (40, of which four are offshore and 36 are onshore), standalone energy storage facilities (eight), waste-to-energy plants (two) and geothermal-focused plants (through Masdar's shareholding in Pertamina Geothermal) (as at 31 March 2024);
- **operating mix:** operational (46.0 per cent.), under construction (26.2 per cent.) and committed (28.2 per cent.) (by gross project capacity as at 31 March 2024); and
- **geography:** the UAE (27.6 per cent.), the United States (22.1 per cent.), Uzbekistan (10.3 per cent.), Indonesia (9.5 per cent.), Saudi Arabia (8.5 per cent.) and the United Kingdom (5.2 per cent.), and 12 other countries comprising the remaining 16.8 per cent. (by gross project capacity as at 31 March 2024).

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—The 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 March 2024.

<b>Project</b>	<b>Project status</b>	<b>Number of turbines</b>	<b>OEM</b>	<b>Turbine capacity (MW)</b>
Rocksprings Wind	Operational	69	General Electric	2.16 <sup>(1)</sup>
Sterling Wind	Operational	13	General Electric	2.3
	Operational		Siemens	
Coyote Wind		60	Gamesa <sup>(2)</sup>	4.0
Las Majadas Wind	Operational	125	Vestas	2.2
Dudgeon Offshore Wind	Operational	67	Siemens Wind	6.0
London Array Offshore Wind	Operational	175	Siemens Wind	3.6
Hywind Floating Wind	Operational	5	Siemens Wind	6.0
Tafila Wind	Operational	38	Vestas	3.0
Grajewo Wind	Operational	7	Vestas	2.125
Mława Wind	Operational	17	Vestas	2.125
Krnovo Wind	Operational	26	General Electric	2.75
Dumat Al Jandal Wind	Operational	99	Vestas	4.2
Cibuk Wind	Operational	57	General Electric	2.75
Lakela – Noupoot	Operational	35	Siemens Wind	2.346
Lakela – Loerisfontein	Operational	61	Siemens Wind	2.346
Lakela – Khobab	Operational	61	Siemens Wind	2.346
Lakela – Kangnas	Operational	61	Siemens Wind	2.346
Lakela – Perdekraal East	Operational	48	Siemens Wind	2.346
Lakela – Taiba N'Daiye	Operational	46	Vestas	3.45
Lakela – West Bakr	Operational	96	Siemens Gamesa	2.625
Zarafshan	Under construction	111	Goldwind	4.5
Baltic Eagle	Under construction	50	Vestas	9.5
Alite Wind	Committed to acquire <sup>(3)</sup>	8	Vestas	3.0

<b>Project</b>	<b>Project status</b>	<b>Number of turbines</b>	<b>OEM</b>	<b>Turbine capacity (MW)</b>
Alta Oak Realty	Committed to acquire <sup>(3)</sup>	33	NEG Micon	0.7
Cabazon Wind	Committed to acquire <sup>(3)</sup>	62	Vestas	0.66
Voyager II (CalTex)	Committed to acquire <sup>(3)</sup>	54	Vestas	3.6 <sup>(1)</sup>
Texas Big Spring (CalTex)	Committed to acquire <sup>(3)</sup>	46	Vestas	0.66 <sup>(1)</sup>
Palm Springs (CalWinds)	Committed to acquire <sup>(3)</sup>	30	Vestas	3.6 <sup>(1)</sup>
PW Oasis Alta (CalWinds)	Committed to acquire <sup>(3)</sup>	4	Vestas	3.6
Oasis Power Partners	Committed to acquire <sup>(3)</sup>	17	Vestas	3.6 <sup>(1)</sup>
Cameron Ridge	Committed to acquire <sup>(3)</sup>	100	Micon	0.7 <sup>(1)</sup>
Difwind 6	Committed to acquire <sup>(3)</sup>	162	Micon	0.11
Mojave 16 17 18	Committed to acquire <sup>(3)</sup>	295	Mitsubishi	0.25
Mojave 3 4 5	Committed to acquire <sup>(3)</sup>	268	Mitsubishi	0.25
Pacific Crest	Committed to acquire <sup>(3)</sup>	71	Vestas	0.66
Ridgetop	Committed to acquire <sup>(3)</sup>	165	PS, Vestas, Micon, & Nordtank	0.15 <sup>(1)</sup>
San Gorgonio	Committed to acquire <sup>(3)</sup>	222	Micon	0.7 <sup>(1)</sup>
TG Mojave	Committed to acquire <sup>(3)</sup>	97	Mitsubishi & Danwin	0.6 <sup>(1)</sup>
Voyager I	Committed to acquire <sup>(3)</sup>	38	Vestas	3.45
Whitewater Hill	Committed to acquire <sup>(3)</sup>	41	General Electric	1.5
		<b>3,040</b>		

Note:

- (1) Average turbine capacity calculated based on individual capacities of multiple turbine types.
- (2) 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).
- (3) This project is part of Terra-Gen.

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.

As at 31 March 2024, the average remaining life of the Group's operational asset portfolio was relatively high, with in excess of 70 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 9,792 MW as at 31 March 2024 to 21,554 MW when the Terra-Gen acquisition has closed and the remaining projects are completed and brought into operation. In addition, the completion of the announced acquisition of Terna Energy, which is subject to regulatory approvals, will further increase the Group's total gross power generation capacity, by 1,092 MW.

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 10 GW, where exclusive development rights have been secured and/or development expenditure has been allocated and the opportunities are moving towards a FID.

The Group is also set to acquire, subject to regulatory approvals, a 50 per cent. shareholding in Terra-Gen which has a pipeline of projects at various stages of development exceeding 9 GW of gross generation capacity, including 10 which have reached a FID representing 2.2 GW of gross generation capacity.

### **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 30 bids and been successful in 14 of them, securing Bukhara PV + BESS, Guzar PV + BESS, DEWA 6 PV, Al Henakiyah PV and Amaala PV through competitive tender processes in 2023.

The Group has also pioneered new technologies, for example it was a sponsor in the Hywind Floating Offshore Wind project, the first of its kind in the world. This project was coupled with a BESS of 1.3 MWh, named Batwind, relying on the electricity produced by the Hywind Floating Offshore Wind project. 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 the Shams CSP project 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 outstanding holding company debt, as at 31 December 2023, was the 2023 Green Notes. As at the same date, Masdar also has a U.S.\$500 million short-term bridge-to-bond loan facility, and two revolving credit facilities of U.S.\$200 million and AED 92.5 million maturing on 9 December 2026, none of which were utilised. As at 31 December 2023, the Group's proportional share of non-recourse project finance loan facilities across its portfolio was approximately AED 14 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 million against equity bridge loans outstanding as at 31 December 2023 of U.S.\$188 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 190 years' combined experience in diverse fields, with six members having significant experience in energy, utilities and renewables and the remaining members having experience in financial and internal auditing, financial management, strategy, law and consulting. The Group's senior management team has more than 80 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 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 and Armenia), as a controlling or jointly controlling shareholder in partnership with other investors (for example its 20 per cent. interest in the London Array Offshore Wind project) or as a non-controlling shareholder (for example its 25 per cent. interest in the Hywind Floating Offshore Wind 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 IPH and its commitment to acquire a 50 per cent. interest in the Terra-Gen Platform in the United States).

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 Board's sustainability, strategy and investment committee (the **SSIC**) 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.

The SSIC 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 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 HFE 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, selective asset monetisations and the issue of debt securities under the Programme 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 four 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, see "*—Other operations—STC*" below;
- **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 "*—Other operations—Asset Management and Technical Services*" below;

- **Energy Services (Special Projects and Distributed Generation)**, 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, see "*—Other operations—Energy Services (Special Projects and Distributed Generation)*" below; and
- **Masdar Specialized Technical Services**, which provides O&M services through MSTs, see "*—Other operations—MSTs*" below.

Following the change in ownership and the Group's ambitious new growth objectives, changes to the existing organisational structure have been implemented to better orient the business towards meeting those objectives. The Group has introduced the role of a Chief Investment Officer and has made 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 is 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.

As at 31 March 2024, the Group had 39 operational utility-scale renewable energy generation projects with a gross generation capacity of 9,792 MW. In addition to its operational projects, as at 31 March 2024, the Group had ownership interests in 12 utility-scale renewable energy generation projects under construction with a gross generation capacity of 5,588 MW. The Group also has ownership interests in four committed to develop utility scale-solar power generation projects with a gross generation capacity of 2,475 MW. These projects are in Armenia, Morocco, the UAE and Uzbekistan.

In addition, the Group has committed to acquire a 50 per cent. shareholding in the Terra-Gen Platform, which comprises 26 operational and two under-construction projects across solar power, wind power and energy storage technologies with total gross generation capacity of 3,699 MW, which it also considers as committed projects.

As at 31 March 2024, the total gross generation capacity of the Group's operational, under construction and committed utility-scale renewable energy generation projects was 21,554 MW and its proportionate share of the capacity of those projects was 9,950 MW.

The table below shows the number of the Group's projects and their gross generation capacity in MW as at 31 March 2024 by type and stage of the projects.

	<b>Operational</b>		<b>Under-construction</b>		<b>Committed</b>	
	No. of projects	MW	No. of projects	MW	No. of projects	MW
Solar PV .....	16	4,195	7	4,528	7	4,481
Solar CSP .....	1	100	—	—	1	80
Onshore wind .....	17	2,528	1	500	18	1,136
Offshore wind.....	3	1,062	1	476	—	—
Energy storage.....	—	—	2	55	6	477
Waste-to-energy .....	1	30	1	29	—	—
Geothermal .....	1	1,877	—	—	—	—
<b>Total</b> .....	<b>39</b>	<b>9,792</b>	<b>12</b>	<b>5,588</b>	<b>32</b>	<b>6,174</b>

The Group also has a pipeline of opportunities at various stages of development with a gross generation capacity exceeding 10 GW, where exclusive development rights have been secured and/or development expenditure has been allocated and the opportunities are moving towards a FID. In addition, Terra-Gen has a pipeline of projects exceeding 9 GW of gross generation capacity, including 10 which have reached a FID representing 2.2 GW of gross generation capacity.

The Group's strategy is to grow to 100 GW of gross 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.

## Operational projects

The table below provides an overview of each of the Group's operational utility-scale projects as at 31 March 2024.

Project	Location	Contracted power capacity (MW)	Group's direct and indirect ownership interest (%)	Commercial operations date (COD)	Offtake arrangement <sup>(1)</sup>	Approximate remaining offtake contract life <sup>(2)</sup>
Rocksprings Wind	USA	149	50 <sup>(3)</sup>	11 September 2017	Merchant	8 years
Sterling Wind	USA	30	50 <sup>(3)</sup>	13 August 2017	Merchant	8 years
Maverick 1 PV	USA	125	50 <sup>(3)</sup>	10 December 2020	Merchant	12 years
Maverick 4 PV	USA	100	50 <sup>(3)</sup>	10 December 2020	Merchant	12 years
Desert Harvest 1 PV	USA	80	50 <sup>(3)</sup>	10 December 2020	Merchant	17 years
Desert Harvest 2 PV + BESS	USA	105	50 <sup>(3)</sup>	10 December 2020	Merchant	22 years and 9 years (for the energy hedge arrangements)
Coyote Wind	USA	243	50 <sup>(3)</sup>	31 March 2021	Merchant	9 years
Las Majadas Wind	USA	273	50 <sup>(3)</sup>	26 February 2021	Merchant	9 years
Big Beau PV + BESS	USA	168	50% <sup>(3)</sup>	28 January 2022 (solar PV plant) and 12 December 2022 (battery storage)	Merchant	9 years
Shams CSP	UAE	100	51	5 September 2013	PPA	14 years
DEWA 3 PV	UAE	800	24	5 May 2018 (Phase A); 18 August 2019 (Phase B) and 1 April 2020 (Phase C)	PPA	19 years (Phase A); 20 years (Phase B) and 21 years (Phase C)
Sharjah WtE	UAE	30	50	1 May 2023	PPA	25 years
Al Dhafrah PV	UAE	1,640	20	30 June 2023	PPA	29 years
Dudgeon Wind	Offshore UK	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	8 years (phase 1 and 2) and 9 years (for phase 3)
London Array Offshore Wind	UK	630	20	Final WTG installed on 13 December 2012. 10 September 2017, being the first date that electrical output was delivered to the connection point	ROC and Merchant	1 year
Hywind Floating Wind	UK	30	25	Minority investment in entity involved in multiple projects in different capacities, see below.	ROC and merchant	13 years
Pertamina Geothermal	Indonesia	1,877 <sup>(4)</sup>	15	13 November 2023	PPA	25 years
Cirata Floating PV	Indonesia	145	49			

Project	Location	Contracted power capacity (MW)	Group's direct and indirect ownership interest (%)	Commercial operations date (COD)	Offtake arrangement <sup>(1)</sup>	Approximate remaining offtake contract life <sup>(2)</sup>
Baynouna PV	Jordan	200	70	1 December 2020	PPA	18 years
Tafila Wind	Jordan	117	50	16 September 2015	PPA	11 years
Grajewo Wind	Poland	14	50	1 April 2022	PPA and merchant	6 years
Mława Wind	Poland	37	50	1 April 2022	PPA and merchant	6 years
Dumat Al Jandal Wind	Saudi Arabia	400	34.3	1 July 2022	PPA	18 years
Jeddah South PV	Saudi Arabia	300	35.7	27 July 2023	PPA	24 years
Garadagh PV	Azerbaijan	230	100	6 February 2024	PPA 23 years	
Krnovo Wind	Montenegro	72	49	2 November 2017	PPA and merchant	6 years
Cibuk Wind	Serbia	158	60	15 October 2019	PPA and merchant	8 years
Nur Navoi PV	Uzbekistan	100	100	10 December 2021	PPA	23 years
Infinity Platform	Africa	1,237	33	Various <sup>(5)</sup>	PPA	Various <sup>(5)</sup>
		<b>9,792</b>				

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 2024.
- (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.
- (5) See the Infinity Platform discussion below.

### ***United States projects***

The Group has nine operational projects in the United States comprising four solar projects (Maverick 1 PV, Maverick 4 PV, Desert Harvest 1 PV, Desert Harvest 2 PV + BESS), two wind projects (Coyote Wind and Las Majadas Wind) (together known as the Blue Palm projects); one further solar project (and Big Beau PV + BESS) and two further wind projects (Rocksprings Wind and Sterling Wind).

#### ***Rocksprings Wind***

The Group acquired its 50 per cent. shareholding in the Rocksprings Wind project in May 2019. The project achieved its COD on 11 September 2017. The Rocksprings Wind project is a 149 MW wind power generation facility in Val Verde County, Texas.

There is one offtake agreement for the Rocksprings Wind 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 Wind project is structured between Class A and Class B membership interests. The Group's 50 per cent. equity participation in the Rocksprings 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 Rocksprings 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 Wind project benefit from different O&M agreements which have different terms.

The Rocksprings Wind 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 Sterling 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 Sterling 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 PV + BESS achieved its COD for the BESS in November 2021. The two Blue Palm wind projects achieved their COD on 26 February 2021 (Las Majadas Wind) and 31 March 2021 (Coyote Wind), 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 PV, 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 PV, 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 PV, 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 PV + BESS, 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 Desert Harvest 2 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 BESS; and
- for Coyote Wind and Las Majadas Wind, the offtake arrangements are structured through hedging arrangements which continue until 3 December 2032 and provide (i) for the relevant 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 relevant 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 BESS.

#### *Big Beau PV + BESS*

The Group acquired its 50 per cent. shareholding in the Big Beau PV + BESS project 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 BESS). The Big Beau PV + BESS project is a 128 MW solar power generation facility and a 40 MW BESS located in Kern County, California.

The ownership of the Big Beau PV + BESS project is structured between Class A and Class B membership interests. The Group's 50 per cent. equity participation in the Big Beau PV+ BESS 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 Big Beau project company. In return, the Class A member receives almost all of the tax benefits from the structure.

The offtaker is a subsidiary of the Class B holding company, in consequence, the project is fully merchant from a Class B standpoint. These 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 O&M agreement for the Big Beau PV + BESS 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.

The Big Beau project company is involved in litigation, see "*Litigation*" below.

## *UAE projects*

The Group has three operational solar projects (Shams CSP, DEWA 3 PV and Al Dhafrah PV) and one operational waste-to-energy project (Sharjah WtE) in the UAE.

### *Shams CSP*

The Group was one of the initial sponsors of the Shams CSP project, which is a 100 MW solar power generation facility in the Western Region of the Emirate of Abu Dhabi, and is the majority shareholder in the project company. The Shams CSP 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 (EWEC) 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 Shams 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 CSP project are managed, administered and performed by the project company.

### *DEWA 3 PV*

The Group was one of the initial sponsors of the DEWA 3 PV project, which is an 800 MW solar power generation facility in the Emirate of Dubai, and is one of three shareholders in the project company. The DEWA 3 PV 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 DEWA 3 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 3 PV 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.

### *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. The Group has a 50 per cent. shareholding in the project company with Bee'ah holding the remaining 50 per cent. The Sharjah WtE project achieved its COD on 1 May 2023.

The offtake agreement is with Sharjah Electricity and Water Company PJSC 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 Sharjah 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.



### *Al Dhafrah PV*

The Al Dhafrah PV project is a 1,640 MW solar power generation facility located in Al Dhafrah in the Emirate of Abu Dhabi. The Group has a 20 per cent. shareholding in the Al Dhafrah project company. The remaining shares in the project company are held by the developer and another UAE company. The Al Dhafrah PV project achieved its COD on 30 June 2023.

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.

### *United Kingdom projects*

The Group is involved in three operational wind projects in the United Kingdom, Dudgeon Offshore Wind, London Array Offshore Wind and Hywind Floating Offshore Wind.

#### *Dudgeon Offshore Wind*

The Group was one of the initial sponsors of the Dudgeon Offshore Wind project, which is a 402 MW wind power generation facility off the North Norfolk coast, and is one of three shareholders in the Dudgeon project company. The Dudgeon Offshore Wind 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 Dudgeon project company entered into three contracts for differences with the United Kingdom 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 United Kingdom government pays the project the difference and if the actual market price is above the strike price, the project pays the difference to the United Kingdom government.

The Group owns 35 per cent. of the Dudgeon 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 Offshore Wind project are principally performed by an Equinor group company.

#### *London Array Offshore Wind*

The Group was one of the initial sponsors of the London Array Offshore Wind project, which is a 630 MW wind power generation facility 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 Offshore Wind project was installed on 13 December 2012.

The London Array Offshore Wind project benefits from a supportive incentive regime with an allocation of two renewable obligation certificates (**ROCs**) 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 has a 20 per cent. stake in the joint operations of the project 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 Offshore Wind project were principally performed by a Siemens group company until February 2023 and are now being performed by an RWE group company.

The London Array Offshore Wind project is involved in litigation, see "*—Litigation*" below.

#### *Hywind Floating Offshore Wind*

The Group was one of the initial sponsors of the Hywind Floating Offshore Wind project, which is a 30 MW wind power generation facility off the coast of Aberdeenshire in Scotland, and is one of two shareholders in the project company. The Hywind Floating Offshore Wind project began operating in September 2017.

The offtaker for the Hywind Floating Offshore Wind 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 Hywind project company with an Equinor group company holding 75 per cent. The operations and maintenance activities for the Hywind Floating Offshore Wind project are principally performed by an Equinor group company with a Siemens group company providing operations and maintenance services to the wind turbine generators.

#### *Indonesia projects*

The Group is involved in a Floating PV project in Indonesia and geothermal-focused projects through its minority investment in Pertamina Geothermal Energy (**PGE**).

#### *Cirata Floating PV*

The Group is one of the initial project sponsors of the Cirata Floating PV project, which is a 150 MW solar power generation facility located in the West Java province in Indonesia. The Group owns a 49 per cent. interest in the Cirata 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 are 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 Cirata Floating PV project, respectively.

During the construction period, the Cirata project company requested, and Persero granted, an extension of 303 days on the basis of force majeure events relating to, among other matters, a shortage of materials and a lack of local manufacturing capacity needed to satisfy local content requirements. As a result, the project achieved its COD on the required commercial operation date under the PPA, being 13 November 2023.

### *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.

### *Jordan projects*

The Group is involved in two operational projects in Jordan, one solar project (Baynouna PV) and one wind project (Tafila Wind).

#### *Baynouna PV*

The Group was one of the initial sponsors of the Baynouna PV project, which is a 200 MW solar power generation facility located near Tilal Al Rukban, and is the majority shareholder in the Baynouna project company. The Baynouna PV 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 Baynouna 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 power generation facility located near Tafila, and is one of two shareholders in the Tafila Wind 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 Tafila Wind 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 (Grajewo Wind and Mława Wind).

#### *Grajewo Wind and Mława Wind*

Grajewo Wind is a 14 MW wind power generation facility located in Grajewo County in north-eastern Poland. Mława Wind is a 37 MW wind power generation facility located in Mława County in northern Poland. In 2020, the Group acquired a 50 per cent. shareholding in both project companies from the same seller, which also holds the remaining 50 per cent. shareholding in each project. The Grajewo Wind project achieved its COD on 1 April 2022 and the Mława Wind project achieved its COD on 1 April 2022.

Each project benefits from a statutory guaranteed tariff per MWh for up to 333,900 MWh (in the case of Grajewo Wind) and 861,900 MWh (in the case of Mława Wind) 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 project will be subject to merchant risk thereafter.

Both 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 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 Mława 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 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.

### ***Saudi Arabia projects***

The Group is involved in two operational projects in Saudi Arabia (Dumat Al Jandal Wind and Jeddah South PV).

#### *Dumat Al Jandal Wind*

The Group was one of the initial sponsors of the Dumat Al Jandal Wind project, which is a 400 MW wind power generation facility located in the Al Jouf Region, and is one of three shareholders in the Dumat Al Jandal project company. The Dumat Al Jandal Wind 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 Dumat Al Jandal 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 Wind project are provided by Dumat Wind Contracting Company LLC.

The construction of the Dumat Al Jandal Wind project was significantly delayed and this has resulted in a number of delay-related claims as follows:

#### *PPA-related claim*

The Dumat Al Jandal 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 Dumat Al Jandal 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 Dumat Al Jandal 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 Dumat Al Jandal 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 Dumat Al Jandal 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 Dumat Al Jandal 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 Dumat Al Jandal 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.

#### *Jeddah South PV*

The Group was one of the initial sponsors of the Jeddah South PV project, which is a 300 MW solar power generation facility located near Jeddah, and is the majority shareholder in the Jeddah South project company. The Group owns 35.7 per cent. of the Jeddah South project company with an EDF group company holding 34.3 per cent. and a Saudi Arabian company holding the remaining 30 per cent. The Jeddah South PV project achieved its COD on 27 July 2023.

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 is being performed by the EPC contractor. An O&M agreement for the remaining term of the PPA has been entered into.

The EPC contractor to the project has submitted claims to the Jeddah South project company with a combined value of U.S.\$51 million. These include claims for extensions to milestone dates in the project schedule and additional costs relating to COVID-19. The Jeddah South project company is considering these claims, which are expected to be settled in consideration for the waiver of the Jeddah South project company's counter claims for delay liquidated damages and certain remedial works to the project.

#### *Azerbaijan project*

##### *Garadagh PV*

The Group is the sole sponsor of the Garadagh PV project, which is a 230 MW solar power generation facility that covers an area of 550 hectares near Gobustan and the Alat settlement in Azerbaijan. The Group owns 100 per cent. of the Garadagh project company. The Garadagh PV project achieved its COD on 6 February 2024.

The offtake agreement is with Azerenerji OJSC and lasts for 23 years from the COD. The tariff is a fixed energy charge payable from the COD until expiry of the PPA 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 long-term O&M activities are managed, administered and performed by MSTS as the O&M contractor for the term of the project, in compliance 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 Garadagh project company's obligations in the PPA.

### ***Montenegro project***

#### *Krnovo Wind*

The Krnovo Wind project is a 72 MW wind power generation facility 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 Krnovo 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.

### ***Serbia project***

#### *Cibuk Wind*

The Group was one of the initial sponsors of the Cibuk Wind project, which is a 158 MW wind power generation facility located to the north east of Belgrade, and is the majority shareholder in the Cibuk project company. The Cibuk 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 Cibuk 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 Cibuk project company will sell the power produced in the merchant market.

The Group owns 60 per cent. of the Cibuk 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 PV*

The Group is the sole sponsor of the Nur Navoi PV project, which is a 100 MW solar power generation facility located in the Navoi region of Uzbekistan. The Nur Navoi PV 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 Nur Navoi project company. The long-term operations and maintenance activities for the Nur Navoi PV project are managed, administered and performed by MSTs as the O&M contractor for the term of the project in compliance 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.

### ***The Infinity Platform***

In 2020, the Group entered into a joint venture with Infinity Energy S.A.E. 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, IPH.

In March 2023, IPH acquired 100 per cent. of Lekela, 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 IPH one of the largest renewable energy companies in Africa.

The Infinity Platform consists of (i) four operational utility-scale PV 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 and (ii) through Lekela, a portfolio of seven operational utility-scale wind projects, five located in South Africa, one located in Senegal and one located in Egypt.

IPH 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 due course. This project is expected to achieve its COD in mid-2025. Through IPH, the Group has direct and indirect ownership of 51 per cent. of the project company.

The table below provides details of the utility scale Infinity Platform PV projects, which have a total gross capacity of 202 MW:

<b>Project</b>	<b>IPH ownership (%)</b>	<b>Group's indirect ownership (%)</b>	<b>Gross capacity (MW)</b>	<b>COD</b>
Infinity MMID PV	69.98	34.00	32	4 February 2019
Infinity IBPSE PV	69.90	35.00	55	8 April 2019
Infinity Phoenix PV	73.48	29.00	55	6 May 2019
Infinity INF 50 PV	100.00	49.00	60	23 February 2018
			<b>202</b>	

The table below provides details of the Infinity Platform wind projects, which have a total gross capacity of 1,035 MW:

<b>Project</b>	<b>Location</b>	<b>IPH ownership (%)</b>	<b>Group's indirect ownership (%)</b>	<b>Gross capacity (MW)</b>	<b>COD</b>
Khobab Wind	South Africa	40	20	143	December 2017
Loeriesfontein 2 Wind	South Africa	40	20	143	December 2017
Noupoort Wind	South Africa	40	20	82	July 2016
Kangnas Wind	South Africa	55	27	143	November 2020
Perdekraal East Wind	South Africa	55	27	113	October 2020
West Bakr Wind	Egypt	100	49	252	November 2021
Taiba N'Daiye Wind	Senegal	92	45	159	July 2021
				<b>1,035</b>	

### Projects under construction

The table below provides an overview of each of the Group's 12 projects under construction as at 31 March 2024.

<b>Project</b>	<b>Location</b>	<b>Gross capacity (MW)</b>	<b>Group's ownership (%)</b>	<b>Scheduled COD</b>	<b>Offtake arrangement</b>
Bukhara PV + BESS	Uzbekistan	313	100	2025	PPA
Jizzakh PV	Uzbekistan	220	100	2025	PPA
Samarkand PV	Uzbekistan	220	100	2025	PPA
Sherabad PV	Uzbekistan	457	100	2026	PPA
Zarafshan Wind	Uzbekistan	500	100	2025	PPA
Al Henakiyah PV	Saudi Arabia	1,100	36	2025	PPA
Amaala PV	Saudi Arabia	418	43	2025	PPA
Royle Barn Road BESS	UK	35	90	2024	To be determined
Welkin Road BESS	UK	20	90	2024	To be determined
East Rockingham WtE	Australia	29	37	2023	PPA
Baltic Eagle Offshore Wind	Germany	476	49	2024	PPA
DEWA 6 PV	UAE	1,800	40	2025	PPA
		<b>5,588</b>			

### Uzbekistan projects

#### *Bukhara PV + BESS*

The Group owns 100 per cent. of the project company for the Bukhara PV + BESS project, which is a 250 MW solar power generation facility and 63 MW BESS in the Bukhara region of Uzbekistan. The project is scheduled to achieve its COD in 2025.

A PPA has been entered into with JSC NEGU and is valid for 25 years from the COD. The tariff is a fixed total energy charge.

MSTS will provide O&M services to the project.

#### *Jizzakh PV*

The Group owns 100 per cent. of the project company for the Jizzakh PV project, which is a 220 MW solar power generation facility 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 O&M responsibilities for the remaining term of the PPA.

#### *Samarkand PV*

The Group owns 100 per cent. of the project company for the Samarkand project, which is a 220 MW solar power generation facility 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 O&M responsibilities for the remaining term of the PPA.

#### *Sherabad PV*

The Group owns 100 per cent. of the project company for the Sherabad PV project, which is a 457 MW solar power generation facility in the Surkhandarya 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 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 O&M responsibilities for the remaining term of the PPA.

#### *Zarafshan Wind*

The Group owns 100 per cent. of the project company for the Zarafshan Wind project, which is a 500 MW wind power generation facility in the Navoi 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 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 O&M responsibilities for the remaining term of the PPA. A long-term service agreement has also been entered into with the EPC contractor.

#### ***Saudi Arabia projects***

##### *Al Henakiyah PV*

The Al Henakiyah PV project entails developing, financing, constructing and operating a 1,100 MW solar power generation facility to be located in the Al Henakiyah region of Saudi Arabia. A consortium led by Masdar was awarded the project after a successful tender process run by SPPC. The Al Henakiyah PV project is scheduled to achieve its COD in 2026.

The Group owns 40.0 per cent. of the project company with an EDF group company and a Saudi Arabian company (NESMA company) holding the remaining 60 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.

#### *Amaala PV*

AMAALA is a carbon neutral luxury resort which is sponsored by Saudi Arabia's sovereign wealth fund, the Public Investment Fund. It promotes sustainable tourism on the shores of the Red Sea.

The Group and its partners, including an EDF group company, have been awarded the right to develop the utility system for AMAALA on a build, own, operate and transfer basis, under a concession agreement with a term of 25 years. The utility system consists of a central PV plant to power the electricity requirements for the resort, which will be completely off-grid, a battery energy storage system, internal combustion engines (ICE) which will run on biofuels, transmission lines, high voltage substations, a reverse osmosis water system and sewage treatment plants, as well as ancillary marine works including water transmission lines and tanks. The gross generation and energy storage capacity of the project will be 418 MW, comprising the PV plant (248 MW), battery storage (162 MW) and ICE (40 MW).

The Group owns 43 per cent. in the project company which has been established to develop the utility system, with an EDF group company, a Korean company and a Suez company holding 43 per cent., 10 per cent. and 3 per cent., respectively, of the shares in the project company.

The Amaala PV project is scheduled to achieve its COD in 2026, with early power and water anticipated in 2025 which will contribute to the construction of the resort.

#### ***United Kingdom projects***

##### *Royle Barn Road BESS and Welkin Road BESS*

Masdar acquired Arlington, a leading BESS developer in the United Kingdom, 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.

The Royle Barn Road BESS and Welkin Road BESS projects are located in the north of England (in Rochdale and Stockport, respectively) and have a combined energy storage capacity of 55 MW and are expected to achieve their respective CODs in the third and second quarters of 2025, respectively.

The Group has a 95 per cent. shareholding in each project with the Arlington founders holding the remaining 5 per cent. Each of these projects will supply a mix of ancillary services to the National Grid as well as merchant participation in various markets via revenue stacking (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.

#### ***Australian project***

##### *East Rockingham WtE*

The East Rockingham WtE project is a 29 MW waste-to-energy and materials recovery facility located near Perth and was scheduled to achieve its COD in December 2022. The EPC contractor engaged on the East Rockingham WtE project has experienced delays in construction, and the COD has been delayed as a

consequence. A precise date for the COD is presently unknown, but is currently expected to be in early 2025. 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 EPC contractor engaged on the East Rockingham WtE project is a consortium, comprising related entities of the two 10 per cent. shareholders in the project company. The project company has entered into various long-term contracts, including an O&M agreement with EROC Energy Pty Limited to operate and maintain the facility, various local councils in relation to waste supply to the project, and an off-take agreement in relation to, among other things, electricity, capacity credits and large-scale generation certificates through a PPA with Talison Lithium Australia Pty Ltd (**Talison**) for the supply of electricity generated by the project to Talison's lithium mineral mine located near the project. The project company continues to manage its relationships with each of the relevant project stakeholders in connection with the delays to the completion of the project, and is seeking to ensure that the project reaches its COD as soon as reasonably practicable.

As a result of the ongoing issues which the East Rockingham WtE project is facing, an AED 147 million impairment was charged against East Rockingham Holdco Pty Ltd in the 2023 Financial Statements.

### ***Germany project***

#### *Baltic Eagle Offshore Wind*

The Baltic Eagle Offshore Wind project is a joint venture between Masdar and Iberdrola, involving the construction of a 476 MW offshore wind farm located near Rügen Island in the Baltic Sea, off the coast of Germany. The Group acquired its 49 per cent. shareholding in the project company in November 2023 and Iberdrola owns the remaining 51 per cent.

The Baltic Eagle Offshore Wind project will have 50 Vestas wind turbines, each with a capacity of 9.5 MW, built on monopile foundations, and will be linked to the German high-voltage grid via the Ostwind 2 grid connection. The project will have a gross generation capacity of 476 MW and has a minimum regulated tariff of EUR 64.6/MWh for the first 20 years. In addition, the project company has sold all of its production under long-term contracts.

In March 2024, the Group successfully closed a EUR 488 million non-recourse financing of its minority interest stake in the Baltic Eagle Offshore Wind project, which is scheduled to achieve its COD in late 2024.

### ***UAE project***

#### *DEWA 6 PV*

Masdar is developing, building, financing and will operate the 1,800 MW sixth phase of the Mohammed bin Rashid Al Maktoum Solar Park in the Emirate of Dubai, using PV panels based on the Independent Power Producer model. The DEWA 6 PV project will cover an area of 20 square kilometres.

The offtake agreement is with DEWA and lasts for 30 years for each of the three project phases from the COD for the relevant phase. The Group owns 40 per cent. of the project company for the DEWA 6 PV project, with a DEWA subsidiary holding 60 per cent. The long-term O&M activities for the DEWA 6 PV project will be managed, administered and performed by MSTs.

The CODs for the three phases of the DEWA 6 PV project are scheduled for October 2024 (Phase A: 600 MW), August 2025 (Phase B: 400 MW) and February 2027 (Phase C: 800 MW).

## Committed projects

The table below provides details of the Group's four committed to develop projects and its committed to acquire projects as at 31 March 2024.

<b>Project name</b>	<b>Location</b>	<b>Group ownership (%)</b>	<b>Gross capacity (MW)</b>	<b>Offtake arrangement(s)</b>
AYG-1 PV <sup>(1)</sup>	Armenia	85	200	PPA
Noor Midelt PV <sup>(1)</sup>	Morocco	30	400	PPA
Al Abjan PV <sup>(1)</sup>	UAE	60	1,500	PPA
Guzar PV + BESS <sup>(1)</sup>	Uzbekistan	100	375	PPA
Terra-Gen Projects <sup>(2)</sup>	United States	50	3,699	PPA
			<b>6,174</b>	

Notes:

- (1) These projects have been awarded and PPAs have been signed.  
(2) A binding sale and purchase agreement has been signed to acquire a 50 per cent. stake in Terra-Gen. Only Terra-Gen's 25 operational and two under construction projects are counted as committed.

### *Committed to develop projects*

The Group has four committed to develop projects, one each in Armenia, Morocco, the UAE and Uzbekistan. All of the projects are PV projects. The largest is a 1,500 MW PV project in the UAE and the smallest is a 200 MW PV project in Armenia. Together, the four projects total 2,475 MW, of which the Group's proportionate share is 1,565 MW. All of the projects have a PPA which has been signed.

### *Committed to acquire projects*

The Group has signed a binding agreement to acquire a 50 per cent. stake in Terra-Gen, one of the largest integrated and independent renewable energy power producers in the United States. Closing under this agreement is expected to occur in late 2024, subject to regulatory approvals. Terra-Gen's operational and under-construction projects are considered as committed to acquire, and have a total gross generation capacity of 3,699 MW, bringing the Group's total committed projects to 6,174 MW, of which the Group's proportionate share is 3,415 MW.

The table below provides details of Terra-Gen's operational and under-construction projects as at 31 March 2024. Terra-Gen's operational portfolio has a weighted average of six years since COD, based on gross capacity.

<b>Project name</b>	<b>Status</b>	<b>Technology</b>	<b>Gross capacity (MW)</b>	<b>COD</b>
Alite Wind	Operational	Onshore wind	24	2008
Alta Oak Realty	Operational	Onshore wind	31	2014
Cabazon Wind	Operational	Onshore wind	41	2002
Voyager II	Operational	Onshore wind	193.5	2018
Texas Big Spring	Operational	Onshore wind	32.7	1999
Palm Springs	Operational	Onshore wind	108	2020
PW Oasis Alta	Operational	Onshore wind	78.9	2021
Oasis Power Partners	Operational	Onshore wind	60.3	2021
Cameron Ridge	Operational	Onshore wind	59	2015
Difwind 6	Operational	Onshore wind	17	1986
Mojave 16 17 18	Operational	Onshore wind	88	1989
Mojave 3 4 5	Operational	Onshore wind	67	1990
Pacific Crest	Operational	Onshore wind	47	1999
Ridgetop	Operational	Onshore wind	25	1986/1994
San Gorgonio	Operational	Onshore wind	43	1999

<b>Project name</b>	<b>Status</b>	<b>Technology</b>	<b>Gross capacity (MW)</b>	<b>COD</b>
TG Mojave	Operational	Onshore wind	28	1999
Voyager I	Operational	Onshore wind	131	2019
Whitewater Hill	Operational	Onshore wind	62	2002
SEGS IX	Operational	CSP	80	1990
Edwards Sanborn 1A	Operational	PV + BESS	889	2021-2023
Edwards Sanborn 1B	Operational	PV + BESS	912	2021-2023
Tehachapi 1A	Operational	BESS	17	2020
Tehachapi 1B	Operational	BESS	61	2020
Valley Center	Operational	BESS	139	2021
Lockhart I & II	Operational	PV + BESS	205	2023
Sagebrush A	Operational	BESS	80	2022
Canyon Country	Under-construction	BESS	80	—
Sagebrush B	Under-construction	BESS	100	—
			<b>3,699</b>	

## OTHER OPERATIONS

### Energy Services (Special Projects and Distributed Generation)

Masdar's Energy Services business unit:

- offers 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**). Where applicable, BESS may also be installed along with the solar PV solutions; and
- manages the delivery 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 EDF. Emerge now owns and carries on the ESCO business.

The ESCO business comprises 23 projects, five of which are operational, eleven are under construction and seven 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 100 per cent. of the output of the ADAC Project for a 25-year term;
- 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 100 per cent. of the output of the Miral Project for a 30-year term;
- a 1 MW solar PV power plant (the **ACS Project**) installed at the American Community School on Saadiyat Island, Abu Dhabi for the American Community School of Abu Dhabi, which has agreed to purchase 100 per cent. of the output of the ACS Project for a 30-year term;

- a 0.5 MW solar PV power plant (the **YBSCP Project**) installed at Yas Bay for Miral Asset Management LLC, which has agreed to purchase 100 per cent. of the output of the YBSCP Project for a 30-year term; and
- a total of 3 MW of solar PV power plants (the **ADNOC Distribution Dubai Project**) installed as ADNOC Distributions stations across Dubai for Abu Dhabi National Oil Company for Distribution PJSC - ADNOC Distribution, which has agreed to purchase 100 per cent. of the output of the ADNOC Distribution Dubai Project for a 25-year term.

The Group's 10 ESCO projects under construction range in size from 1.0 MW to 60 MW and are all located within the premises of businesses based in the UAE. In nine of the projects, the owners of the premises have agreed to purchase the electricity generated over a 25-year period and, in the remaining one, the agreed term is 30 years.

The Group's nine committed ESCO projects range in size from 0.6 MW to 110 MW and are located within the premises of businesses based in the UAE and Saudi Arabia. In five of the projects, the owners of the premises have agreed to purchase the electricity generated over a 25-year period, in two projects, the agreed term is 10 years and, in the two remaining projects, 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, Yemen, Fiji and the UAE. 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.

#### **MASDAR SPECIALIZED TECHNICAL SERVICES**

The Masdar Specialized Technical Services business unit provides O&M services through MSTS, which was established in 2017 as a wholly-owned subsidiary. MSTS provides O&M services to five operational utility scale Group projects (four solar and one wind, located in the UAE (DEWA 3 PV), Jordan (Baynouna PV), Serbia (Cibuk Wind), Uzbekistan (Nur Navoi PV) and Azerbaijan (Garadagh PV)) and is mobilising to operate one of the world's largest solar PV projects, DEWA 6 PV. Further, MSTS is expected to be contracted to supply O&M services to five utility-scale projects under construction (the Bukhara PV + BESS, Jizzakh PV, Samarkand PV, Sherabad PV and Zarafshan Wind projects in Uzbekistan) as at 31 March 2024. 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 PV and Garadagh PV and the five 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**

The Asset Management and Technical Services business unit is engaged in collaboration projects in relation to new technology initiatives. These include:

- 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.

## STC

STC was established 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 2024, STC had been involved in the Nur Navoi PV, Garadagh PV, Jizzakh PV, Samarkand PV, Sherabad PV, DEWA 6 PV, Al Henakiyah PV, Amaala PV and Bukhara PV + BESS projects as well as the Al Dhafrah Wind programme described below.

### Al Dhafrah Wind programme

Masdar oversaw the Abu Dhabi wind programme, which is a non-commercial special project with capital costs of approximately U.S.\$171 million (all of which was 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, is performing O&M services 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.

<b>Project site</b>	<b>Number of wind turbines</b>	<b>MW capacity</b>
Sir Bani Yas.....	10	45
Delma .....	6	27
Sila.....	6	27
Al Hala <sup>(1)</sup> .....	1	4.5
	<b>23</b>	<b>103.5</b>

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.

Masdar is working to accelerate investment in green hydrogen in support of the UAE's strategy to become a leading producer and supplier in the low-carbon hydrogen market by 2031 and strengthening its position on the international stage through partnerships and agreements around the world. It has adopted a 'smart early-mover' approach by developing and investing in strategic projects and building scalable platforms in key markets and is focusing 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 Group has publicly announced the following green hydrogen agreements:

- an agreement with VERBUND Green Hydrogen GmbH, to explore developing a green hydrogen plant in central Spain, with a view to decarbonising sectors such as steel production, fertilisers, chemicals, heavy transportation and aviation;
- a Strategic Supply Partnership with CMA CGM Group, a global player in sea, land, air and logistics solutions, to explore entering long-term green maritime offtake contracts to supply CMA CGM vessels;
- an agreement with Daimler Truck AG, one of the world's leading commercial vehicle manufacturers, to explore the feasibility of establishing a value chain for supplying green liquid hydrogen from Abu Dhabi to Europe;
- an agreement with Japanese energy companies INPEX, Tokyo Gas and Osaka Gas, to explore the production of e-methane in Abu Dhabi;
- an agreement with Emirates Steel Arkan to develop an innovative green hydrogen project to decarbonise the steel sector. Rising global demand for green steel presents growth potential for the UAE's steel industry in decarbonising the global steel value chain;
- an agreement with Hy24 to explore development and investment in projects along the Power-to-X value chain, focusing on projects in key regional hubs across Europe, the Americas, Asia Pacific and the MENA region;
- in partnership with Hassan Allam Utilities and IPH, Masdar has 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; and
- Masdar is seeking to develop 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 Fund**

Masdar was the cornerstone limited partnership investor in the Skyfall Fund with a commitment of £35 million. The Skyfall Fund raised a total of £420.3 million, half of which came from the United Kingdom government directly, to invest in public electric vehicle charging infrastructure in the United Kingdom. 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 four years left to run before it has to



fully divest and return investor capital. As at 31 March 2024, the Skyfall Fund has drawn down £18.2 million out of Masdar's £35 million commitment. The Skyfall Fund sold its investment in Instavolt to EQT, a European private equity firm, in February 2022 resulting in AED 121.8 million of distributions to the Group. The Group also received a net distribution from its investment in the Skyfall Fund of AED 37.5 million in 2021.

The Skyfall Fund's active investments include:

- Believ, a joint venture between multinational telecommunications company Liberty Global (owner of Virgin Media) and the Skyfall Fund. Believ is using the infrastructure deployment capabilities of Virgin Media to roll out on-street residential Electric Vehicle (EV) chargers in United Kingdom towns and cities. The company also acts as a charge point operator, installing, owning and operating EV charging infrastructure that can be used by EV drivers parking on street. Believ receives payment for each kWh sold. The Skyfall Fund has a 50 per cent. shareholding and had invested £21.3 million as at 31 December 2023.
- char.gy, founded in 2016 with the goal of providing on-street parking capability for the 40 per cent. of estimated EV users who will not have direct access to off-street parking. The company has its own hardware and software solution. The smart charge points (3.7–22 kw) can be installed on, or connected to, lamp posts on almost any residential street, making use of existing infrastructure and reducing the need for additional clutter on streets and new electrical connections. In addition to the lamp post charge points, char.gy has developed a full range of bollard units to allow for installation in a wide variety of locations. The Skyfall Fund has an 84 per cent. shareholding and had invested £34 million as at 31 December 2023.
- Zest, founded in August 2021 by the Skyfall Fund in cooperation with a highly experienced senior management team. Zest is a charge point operator with a strategic focus on EV charging in destinations such as shopping centres, sports/entertainment venues, hotels, commercial town-centre car parks and residential areas. The Skyfall Fund has a 100 per cent. shareholding and had invested £35 million as at 31 December 2023.

## **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 through the formation of the Group's ERM team, which is dedicated to defining risk management across the organisation and adapting the risk strategy to be in line with the Group's highly ambitious portfolio growth strategy.

In 2023, the Group's ERM team defined Masdar's risk operating environment, which highlights specific risks which the Group is exposed to and assigns responsibilities within the relevant divisions to integrate the management of these risks throughout the Group's entire value chain under a centralised One Masdar ERM policy. In accordance with this policy, 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.

The Group's ERM policy aims to reinforce a robust risk culture across the Group and ensure consistency in the identification, assessment, prioritisation, management, and reporting of risks. 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 mitigation actions are reviewed on a regular basis to ensure that risk management is a continuous and iterative process.

The Group's ERM team is responsible for maintaining the ERM policy and for ensuring that its implementation across the organisation is supported by the right people. Day-to-day responsibility for ERM lies with the Group's ERM team, with guidance and support provided by senior executive management, including the CEO, as well as by the Board's audit, risk and compliance committee (ARCC) and the Board. The ARCC 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.

## 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.

Health and safety is managed through an integrated management system (IMS) for Quality, Health, Safety and the Environment (QHSE). The QHSE IMS is aligned with the ISO Standards. Masdar has full certification of its systems covering quality (ISO 9001:2015), occupational health and safety (ISO 45001:2018 and environmental (ISO 14001:2015).

Masdar has created 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. Assurance is conducted in the form of regular internal and external audits, as well as local self-assessment, monitoring and auditing within the Group's projects and assets. The Group also has emergency response plans which are documented, trained and regularly exercised.

## 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.

On 17 April 2024, Masdar obtained an ESG entity rating of 2 from Sustainable Fitch, on a scale of 1-5 where 1 is the strongest. The underlying score of 71 out of 100 and the detailed report from Sustainable Fitch highlight several areas for improvement, including with respect to the transparency of the Group's corporate sustainability reporting.

Following this, on 23 May 2024, the Group made a commitment to the United Nations Global Compact (UNGC), highlighting the Group's support for the Ten Principles of the UNGC on human rights, labour, environment and anti-corruption. The Group has expressly committed to making the UNGC and its principles part of its strategy, culture and day-to-day operations, and to engaging in collaborative projects which advance the broader development goals of the United Nations, particularly the Sustainable Development Goals (UNSDGs).

The Group's letter of commitment to the UNGC can be found here: <https://unglobalcompact.org/what-is-gc/participants/164634-Abu-Dhabi-Future-Energy-Company-PJSC-Masdar-Masdar->. This letter and website are not incorporated by reference in this Base Offering Circular.

### Environment

Masdar was the region's first large-scale sustainability and renewable energy initiative. Since its inception, the Group has spent 18 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 2023, 2022 and 2021.

	2023	2022	2021
Indicative clean source generation <sup>(1)</sup> (GWh).....	74,000	57,000	N/R
Actual clean source generation <sup>(2)</sup> (GWh).....	26,700	18,000	15,000
Indicative avoided CO <sup>2</sup> (million tons).....	37	30	N/R
Actual avoided CO <sup>2</sup> (million tons).....	14.0	10.0	7.5

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.
- (3) Indicative CO<sup>2</sup> avoided by the Group's total production capacity from projects in operation, under construction and committed.
- (4) Approximate CO<sup>2</sup> actually avoided from the Group's operational projects owned or committed to acquire as at 31 December in each year.

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 due to 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 does not currently have cyber risk insurance in place to mitigate damages in case of a cyber attack, but is actively exploring such insurance.

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**

### **Rocksprings Wind project**

The Rocksprings project company is involved in two disputes 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 to avoid penalties and late fee charges. The court date for the appeal is set for November 2024, but could be heard before that time.

#### ***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 Wind 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, however, initial settlement discussions have commenced. To date, no formal claim or commencement of action against the Rocksprings project company has occurred.

### **Big Beau PV + BESS**

Community Choice Clean Energy (**3CE**) and Silicon Valley Clean Energy (**SVCE**) filed a lawsuit against BigBeau Solar, LLC (the **defendant**) with respect to the Big Beau PV + BESS project challenging the defendant's right to terminate the PPAs with 3CE and SVCE related to the project. This matter is pending

before the Courts of California at first instance and is in discovery. On 31 May 2024, the Court granted the defendant's motion for summary judgment. 3CE and SVCE have a right to appeal.

### **London Array Offshore Wind project**

The London Array operating company (an unincorporated joint operation) and the companies invested in that joint venture filed a claim in the Competition Appeal Tribunal (the **Tribunal**) in the United Kingdom against one of the suppliers to the London Array Offshore Wind 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 initial estimated quantum of damages will undergo revision following disclosure and will be the subject of expert evidence and determination by the Tribunal as to the amount of compensation during trial. This claim has been acknowledged and the claim process continues, with a timetable set for a trial to take place between April and May 2025.

A separate claim has also been brought in relation to the cartel on behalf of consumers asserting that the increased costs of the cables due to the cartel were passed on to consumers in the price of electricity. The Tribunal will determine this question of where the loss was suffered at the same time. A judgment is anticipated to be handed down during the second half of 2025.

In addition, the companies invested in the London Array joint venture have submitted certain insurance claims. In respect of the most significant of these, there are time-limited standstill agreements that have been executed with insurers and which are coming to the end of their term. If they are not renewed then a claim will be brought in August 2024 for a value in the region of £61.5 million (of which Masdar's share is £12.3 million).

### **East Rockingham WtE project**

The EPC contractor engaged on the East Rockingham WtE project has been experiencing delays in construction, and the COD has been delayed as a consequence.

In connection with these delays, the East Rockingham project company is currently involved in two sets of court proceedings, before the Federal Court of Australia, in relation to disputes with the EPC contractor:

- The first proceeding relates to site access issues, arising out of the EPC contractor's conduct in February 2023, when the EPC contractor denied the East Rockingham project company's personnel from accessing the construction site for around five weeks. The project company seeks (amongst other things) declarations from the court regarding the proper construction of the EPC contract, breach by the EPC contractor, and damages or compensation in connection with the EPC contractor's conduct. Programming orders were made in May 2024 for the exchange of witness statements and documents to occur over the coming months, before the next procedural hearing which is listed for 9 August 2024.
- The second proceeding relates to the EPC contractor's failure to issue replacement bank guarantees (valued at approximately A\$38 million) in favour of the East Rockingham project company. These proceedings commenced in April 2024, and have been progressed on an expedited basis. The project company seeks (amongst other things) declarations from the court regarding breach by the EPC contractor, and mandatory relief compelling the EPC contractor to issue the replacement bank guarantees to the project company. The East Rockingham project company made an application for summary judgment, which was heard by the court on 28 May 2024. A decision from the court is currently pending.

## 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.

<u>Name</u>	<u>Position</u>	<u>Appointing shareholder</u>
H.E. Dr. Sultan Al Jaber.....	Chairman	TAQA
Jasim Thabet.....	Deputy Chairman	TAQA
Farid Al Awlaqi.....	Director	TAQA
Dr. Franck Possmeier .....	Director	TAQA
Dr. Michele Fiorentino .....	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, the UAE's special envoy for climate and President of COP28. 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.

In 2013, Dr. Al Jaber was made an honorary Commander of the Most Excellent Order of the British Empire by Her Majesty Queen Elizabeth II. In 2019, he received a lifetime achievement award from the prime minister of India, Narendra Modi.



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.

***Jasim Thabet, Deputy Chairman***

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.

***Dr. Franck Possmeier, Director***

Dr. Possmeier serves as Chief Business Development Officer for TAQA's generation business, a position he has held since September 2023. In this role, he is responsible for driving business growth across TAQA's portfolios.

Dr. Possmeier previously held several positions at German energy company, Uniper, between 2016 and 2023, most recently as CEO of Uniper Renewables. During this period, he was also a board member at Eneva, one of the largest integrated energy operators in Brazil. Prior to joining Uniper, Dr. Possmeier had served as Eneva's Executive Vice President and Co-CEO, based in Rio de Janeiro.

Previously, Dr. Possmeier spent 12 years at E.ON, Europe's largest energy networks operator. He served in a number of senior management roles including Deputy CEO and CFO of E.ON International Energy, and Senior Vice President, Global Head of Mergers & Acquisitions.

Dr. Possmeier holds both Master's and PhD degrees in Economics from the Westfaelische Wilhelms-Universitat, Muenster, Germany.

***Dr. Michele Fiorentino Khaled Salmeen, Director***

Dr. Fiorentino is the Executive Vice President of Low Carbon Solutions and Business Development at ADNOC's Low Carbon Solutions & International Growth Directorate.

Dr. Fiorentino has 20 years' experience in strategic business development in energy, manufacturing and chemicals. He is passionate about developing deep commercial relationships and creating a high-achieving, innovative and diverse culture and leads ADNOC's efforts in developing and implementing low-carbon strategies while overseeing its portfolio of international assets and partnerships.

Dr. Fiorentino holds a Ph.D. in Chemical Engineering from the University of Naples in Italy and a Master's degree in Finance from the London 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*

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), Dr. Michele Fiorentino, 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, Dr. Michele Fiorentino and Dr. Franck Possmeier.

### *Audit Risk and Compliance Committee*

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 Dr. Franck Possmeier (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), Adel Louahem, Muqet Bawa and Olivier Chazalmartin.

## Senior management

The table below identifies the members of Masdar's senior management team and their positions within Masdar.

<b>Name</b>	<b>Position</b>
Mohamed Jameel Al Ramahi .....	Chief Executive Officer
Mazin Khan .....	Chief Financial Officer
Abdulaziz Al Obaidli.....	Chief Operating Officer
Chloe Truong.....	Acting General Counsel
Fawaz Al Muharrami.....	Deputy Chief Operating Officer
Hamad Almenhal.....	Acting Executive Director
Dr. Lamyia 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 24 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 16 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.

### ***Mazin Khan, Chief Financial Officer***

Mr. Khan has more than 20 years' experience in the utilities and renewable energy sectors.

Prior to joining Masdar, Mr. Khan held several senior finance positions, including roles at TAQA, PwC Canada, and Ernst & Young Middle East. During his tenure at these organisations, Mazin helped shape financial strategies, manage corporate and project financing, and oversee financial and risk management initiatives.

Mr. Khan is a qualified Chartered Accountant of the Institute of Chartered Accountants in England and Wales. He is also a fellow member of the Association of Chartered Certified Accountants.

### ***Abdulaziz Al Obaidli, Chief Operating Officer***

Mr. Al Obaidli has more than 16 years' experience in the energy and utilities sectors, including renewables.

Before joining Masdar, Mr. Al Obaidli 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 Obaidli 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.

***Chloe Truong, Acting General Counsel***

Ms. Truong has more than 20 years' experience in top-tier private practice and in-house legal roles in large private and multinational organisations.

Prior to joining Masdar, Ms. Truong was the Deputy General Counsel of UAE Investments, one of the largest business platforms in Mubadala covering a portfolio of UAE-led assets in multiple sectors, including renewables.

Ms. Truong trained at international law firm, Baker and McKenzie, in Australia and continued her career in the United Kingdom at Linklaters LLP in the London and Abu Dhabi offices. Ms Truong has broad industry experience, including advising on major projects and domestic and international transactions, managing organisational transformational change and establishing legal, governance and compliance functions.

***Fawaz Al Muharrami, Deputy Chief Operating Officer***

Mr. Al Muharrami has more than 24 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.

***Hamad Almenhali, Acting Executive Director, Internal Audit***

Mr. Almenhali has 20 years' financial and internal audit experience in the private sector, including in telecommunications, banking and aerospace logistics.

Mr Almenhali joined Masdar in 2011 and spent three years in the finance function before moving to internal audit in 2014. He has experience in internal audit assurance and advisory services, corporate risk management, accounting, finance and banking.

Mr Almenhali holds a Bachelor of Business Administration with a major in finance, graduating magna cum laude from Abu Dhabi University. He also has an Executive MBA with distinction from Zayed University.

***Dr. Lamya Nawaf Fawwaz, Executive Director, Brand & Strategic Initiatives***

Dr. Fawwaz has over 25 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 close to 20 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, People & Corporate Services***

Mr. Al Qubali has more than 20 years' experience in the oil and gas and renewable energy sectors. He currently leads the Group's People & 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 2023, the Group had 267 employees compared to 214 as at 31 December 2022 and 209 as at 31 December 2021. These employees represent 35 different nationalities.

Masdar prioritises employee development, training and well being 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 approximately 95 per cent. in 2023.

Employee engagement is 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 2023.

Growing the skills, abilities and knowledge of its people is essential to Masdar's continued success. In 2023, 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 2023, Masdar's Emiratisation ratio was 48.19 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 the 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 15 July 2024, 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 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, as amended.

## **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 any 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 3-6-2024 dated 17 January 2024 (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 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 who has a minimum net worth (either singly or jointly with their spouse) of U.S.\$1,000,000 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;
- (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);  
or
- (d) any other entity which is an "accredited investor" as defined in the Central Bank of Bahrain Rulebook.

### **Singapore**

Unless the applicable Pricing Supplement in respect of any Notes specifies "Singapore Sales to Institutional Investors and Accredited Investors only" as "Not Applicable", 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 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 of Singapore, as modified or amended from time to time (the **SFA**)) pursuant to Section 274 of the SFA or (ii) to an accredited investor (as defined in Section 4A of the SFA) pursuant to and in accordance with the conditions specified in Section 275 of the SFA.

If the applicable Pricing Supplement specifies "Singapore Sales to Institutional Investors and Accredited Investors only" as "Not Applicable", 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 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 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 to 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) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

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 and update of the Programme and the issue of Notes have been duly authorised by resolutions of the Board of Directors of the Issuer dated 13 June 2023 and in June 2024.

### 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 2023.

## **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 current auditors of the Issuer are Ernst & Young Middle East (Abu Dhabi branch) (**EY**), independent auditors, who have audited the 2023 Financial Statements in accordance with International Standards on Auditing, as stated in their audit report incorporated by reference in this Base Offering Circular. EY have no material interest in the Issuer.

The 2022 Financial Statements have been audited by KPMG Lower Gulf Limited (**KPMG**) in accordance with International Standards on Auditing, as stated in their audit report incorporated by reference 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.

**ISSUER**

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**REGISTRAR**

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*as to English law and UAE law*

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## AUDITORS

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*For the financial period  
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## ARRANGERS

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