

**STRICTLY CONFIDENTIAL—DO NOT FORWARD**

**IMPORTANT: You must read the following disclaimer before continuing.** The following disclaimer applies to the offering memorandum following this page. You are therefore advised to read this disclaimer carefully before reading, accessing or making any other use of the following offering memorandum. In accessing the following offering memorandum, you agree to be bound by the following terms and conditions, including any modifications to them from time to time, each time you receive any information from us as a result of such access.

**Confirmation of Your Representation:** You have accessed the attached offering memorandum on the basis that you have confirmed your representation to Barclays Capital Inc., BNP Paribas Securities Corp., BofA Securities, Inc., Credit Agricole Securities (USA) Inc., Deutsche Bank Securities Inc., J.P. Morgan Securities LLC, Mizuho Securities USA LLC, Morgan Stanley & Co. LLC, MUFG Securities Americas Inc., Santander US Capital Markets LLC, SG Americas Securities, LLC, SMBC Nikko Securities America, Inc., Standard Chartered Bank AG and Wells Fargo Securities, LLC (together, the “**Initial Purchasers**”) that (1) either (i) you are outside the United States and not a U.S. person, as defined in Regulation S under the U.S. Securities Act of 1933, as amended (the “**Securities Act**”), nor acting on behalf of a U.S. person and, to the extent you purchase the securities described in the attached offering memorandum, you will be doing so pursuant to Regulation S under the Securities Act, and the electronic mail address to which the attached offering memorandum has been delivered is not located in the United States, **OR** (ii) you are acting on behalf of, or you are, a “qualified institutional buyer” as defined in Rule 144A under the Securities Act, **AND** (2) you consent to delivery of the attached offering memorandum and any amendments or supplements thereto by electronic transmission.

The attached offering memorandum has been made available to you in electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of transmission and consequently none of the issuer of the securities, the Initial Purchasers or any person controlling any of them, or any of their respective directors, officers, employees, representatives, agents or affiliates accepts any liability or responsibility whatsoever in respect of any discrepancies between the offering memorandum distributed to you in electronic format and the hard copy version. We will provide a hard copy version to you upon request.

**Restrictions:** The attached document is a “red herring” offering memorandum and is being furnished in connection with an offering exempt from registration under the Securities Act solely for the purpose of enabling a prospective investor to consider the purchase of the securities described therein. You are reminded that the information in the attached document is not complete and may be changed. Nothing in this electronic transmission constitutes an offer of securities for sale in the United States or to any U.S. person.

**THE SECURITIES HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE SECURITIES ACT, OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR OTHER JURISDICTION, AND MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS SUCH TERMS ARE DEFINED IN REGULATION S UNDER THE SECURITIES ACT), EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND ANY APPLICABLE STATE OR LOCAL SECURITIES LAWS.**

The distribution of the attached offering memorandum and the offer, sale or solicitation of an offer to buy the securities described therein is restricted by law in certain jurisdictions. The attached offering memorandum may not be used for, or in connection with, and does not constitute, any offer to sell or solicitation of an offer to buy the securities by anyone in any jurisdiction or under any circumstance in which such offer or solicitation is not authorized or is unlawful. Persons into whose possession the attached offering memorandum may come are required to inform themselves about and to observe such restrictions. Further information with regard to restrictions on offers, sales and deliveries of the securities and the distribution of the attached offering memorandum and other offering material relating to the securities is set out under “*Plan of Distribution*” in the attached offering memorandum.

**This communication does not contain or constitute an invitation, inducement or solicitation to invest.** No action has been or will be taken in any jurisdiction that would, or is intended to, permit a public offering of the securities, or possession or distribution of the offering memorandum (in preliminary, proof or final form) or any other offering or publicity material relating to the securities, in any country or jurisdiction where action for that purpose is

required. Except with respect to eligible investors in jurisdictions where such offer is permitted by law, nothing in this electronic transmission constitutes an offer or an invitation by or on behalf of either the issuer of the securities or the Initial Purchasers to subscribe for or purchase any of the securities described in the following offering memorandum, and access has been limited so that it shall not constitute a general advertisement or solicitation in the United States or elsewhere. If a jurisdiction requires that the offering be made by a licensed broker or dealer and any of the Initial Purchasers or any affiliate of the Initial Purchasers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by the Initial Purchasers or such affiliate on behalf of the issuer in such jurisdiction.

The securities 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. 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 UK domestic law by virtue of the European Union (Withdrawal) Act 2018 (“**EUWA**”); or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (the “**FSMA**”) and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of UK domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of the Prospectus Regulation as it forms part of UK domestic law by virtue of the EUWA. Consequently, no key information document required by Regulation (EU) No 1286/2014 as it forms part of UK domestic law by virtue of the EUWA (the “**UK PRIIPs Regulation**”) for offering or selling the securities or otherwise making them available to retail investors in the United Kingdom has been prepared and therefore offering or selling the securities or otherwise making them available to any retail investor in the United Kingdom may be unlawful under the UK PRIIPs Regulation.

In addition, the communication of this offering memorandum and any other document or materials relating to the issue of the securities offered hereby is not intended to be, and has not been approved by, an “authorised person” within the meaning of Section 21(1) of the FSMA. As a consequence, the offering memorandum is being distributed to and is only directed at persons who (i) are located outside of the United Kingdom, (ii) are investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the “**Order**”), or (iii) are high net worth entities and other persons to whom it may be lawfully communicated falling within Article 49(2)(a) to (d) of the Order (all such persons mentioned in paragraphs (i), (ii) and (iii) collectively being referred to as “**Relevant Persons**”). The securities are directed only at Relevant Persons and no invitation, offer or agreements to subscribe, purchase or acquire the securities referred to in this offering memorandum may be proposed or made other than with Relevant Persons. Any person other than a Relevant Person may not act or rely on this offering memorandum or any information contained herein.

No person may 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 the securities other than in circumstances in which Section 21(1) of the FSMA does not apply to us.

Any distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the “**UK MiFIR Product Governance Rules**”) (for the purposes of this paragraph, a “**distributor**”) subsequently offering, selling or recommending the Notes is responsible for undertaking its own target market assessment in respect of the Notes and determining the appropriate distribution channels. Neither the Issuer nor any of the Initial Purchasers make any representations or warranties as to a distributor’s compliance with the UK MiFIR Product Governance Rules.

With respect to the European Economic Area (the “**EEA**”), the attached offering memorandum is only being distributed to and is only directed at, and any offer subsequently made may only be directed at persons who are “qualified investors” as defined in Article 2(e) of the Regulation (EU) 2017/1129 (as amended, the “**Prospectus Regulation**”). In particular, the securities 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 2016/97/EU (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 securities or otherwise making them available to retail investors in the EEA,

and no Prospectus Regulation compliant prospectus subject to the approval of the French *Autorité des Marchés Financiers* (the “AMF”) or any other EEA member state’s regulator have been or will be prepared and therefore offering or selling the securities or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation and the Prospectus Regulation.

Each Initial Purchaser has represented and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any securities to any retail investor in the EEA, and in particular to any investor that is not a qualified investor within the meaning of the Prospectus Regulation.

Each person located in a member state of the EEA (a “Member State”) to whom any offer of securities is made, or who receives any communication in respect of an offer of securities, or who initially acquires any securities, or to whom the securities are otherwise made available, will be deemed to have represented, warranted, acknowledged and agreed to and with each Initial Purchaser and the Issuer that it is a qualified investor within the meaning of the Prospectus Regulation.

**MiFID II product governance / Professional investors and eligible counterparties only target market –** Solely for the purposes of 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 MiFID II; and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (for the purposes of this paragraph, a “distributor”) should take into consideration the manufacturers’ 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 manufacturers’ target market assessment) and determining appropriate distribution channels.

**This Transmission is Personal to You and Must Not Be Forwarded.** You are reminded that you have accessed the following offering memorandum on the basis that you are a person into whose possession this offering memorandum may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not, nor are you authorized to, deliver this document, electronically or otherwise, to any other person, or to disclose any of its contents, whether orally or in writing, to any other person. If you have gained access to this transmission contrary to the foregoing restrictions, you will be unable to purchase any of the securities described therein.

**Actions that You May Not Take:** You should not reply by e-mail to this announcement, and you may not purchase any securities by doing so. Any reply e-mail communications, including those you generate by using the “Reply” function on your e-mail software, will be ignored or rejected.

**THE ATTACHED OFFERING MEMORANDUM IS BEING PROVIDED TO YOU ON A CONFIDENTIAL BASIS FOR INFORMATIONAL USE SOLELY IN CONNECTION WITH YOUR CONSIDERATION OF THE PURCHASE OF THE SECURITIES REFERRED TO THEREIN. YOU ARE NOT AUTHORIZED TO, AND YOU MAY NOT, FORWARD OR DELIVER THE ATTACHED OFFERING MEMORANDUM, ELECTRONICALLY OR OTHERWISE, TO ANY OTHER PERSON OR REPRODUCE SUCH OFFERING MEMORANDUM IN ANY MANNER WHATSOEVER. ANY FORWARDING, DISTRIBUTION OR REPRODUCTION OF THIS DOCUMENT AND THE FOLLOWING OFFERING MEMORANDUM IN WHOLE OR IN PART IS UNAUTHORIZED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS.**

**You are responsible for protecting against viruses and other destructive items.** Your use of this e-mail is at your own risk and it is your responsibility to take precautions to ensure that it is free from viruses and other items of a destructive nature.



**EDF S.A.**

**\$3,000,000,000**

consisting of

**\$1,000,000,000 5.700% Fixed Rate Notes due May 23, 2028**

**\$1,000,000,000 6.250% Fixed Rate Notes due May 23, 2033**

**\$1,000,000,000 6.900% Fixed Rate Notes due May 23, 2053**

The 5.700% fixed rate notes due May 23, 2028 (the “**Five-Year Fixed Rate Notes**”) will bear interest at a rate of 5.700% per annum, the 6.250% fixed rate notes due May 23, 2033 (the “**Ten-Year Fixed Rate Notes**”) will bear interest at a rate of 6.250% per annum and the 6.900% fixed rate notes due May 23, 2053 (the “**Thirty-Year Fixed Rate Notes**” and together with the Five-Year Fixed Rate Notes and the Ten-Year Fixed Rate Notes, the “**Notes**”) will bear interest at a rate of 6.900% per annum. Interest on the Notes will be payable semi-annually in arrears on May 23 and November 23 of each year with the first such interest payment date on November 23, 2023. See “*Description of Notes—Principal, Maturity and Interest.*”

EDF S.A. (the “**Issuer**”) may redeem the Notes prior to maturity, in whole or in part, at any time or from time to time at a make-whole redemption price, as described under “*Description of Notes—Redemption—Optional Redemption.*” The Issuer may also, at any time or from time to time, during a period of one to six months preceding the applicable maturity date, as the case may be, redeem, in whole or in part, the relevant series of Notes at par plus any accrued and unpaid interest as described under “*Description of Notes—Redemption—Residual Maturity Call Option.*” In addition, the Issuer may, at its option, elect to redeem the Notes in whole, but not in part, at a price equal to their principal amount plus accrued and unpaid interest, if any, upon the occurrence of certain changes in applicable tax law as described under “*Description of Notes—Redemption—Tax Redemption.*”

The Notes will be the Issuer’s senior obligations and will rank equally in right of payment with all of our existing and future senior unsecured indebtedness (save for certain mandatory exceptions provided by French law).

The Issuer has applied to list the Notes on the Official List of the Luxembourg Stock Exchange and admit them to trading on the Luxembourg Stock Exchange’s Euro MTF Market (the “**Euro MTF Market**”). The Euro MTF Market is not a regulated market pursuant to the provisions of Directive 2014/65/EU (as amended, “**MiFID II**”). This offering memorandum constitutes a prospectus for the purposes of Part IV of the Luxembourg Law on prospectuses for securities dated July 16, 2019.

**Investing in the Notes involves risks.** You should consider carefully the information under “*Risk Factors*” beginning on page 32 of this offering memorandum before deciding whether to invest in the Notes.

**The Notes have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the “Securities Act”) or the securities laws of any other jurisdiction, and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons (as defined in Regulation S under the Securities Act) except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. In the United States, the offering is being made only to “qualified institutional buyers” (as defined in Rule 144A under the Securities Act) in reliance on Rule 144A under the Securities Act. Prospective purchasers that are qualified institutional buyers are hereby notified that the initial purchasers of the Notes may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A thereunder. Outside the United States, the offering is being made in reliance on Regulation S under the Securities Act. See “*Notice to Investors*” and “*Transfer Restrictions*” for additional information about eligible offerees and transfer restrictions.**

**Price of the Five-Year Fixed Rate Notes: 99.850% plus accrued interest, if any, from May 23, 2023**

**Price of the Ten-Year Fixed Rate Notes: 99.897% plus accrued interest, if any, from May 23, 2023**

**Price of the Thirty-Year Fixed Rate Notes: 99.323% plus accrued interest, if any, from May 23, 2023**

It is expected that the Notes will be delivered to purchasers in book entry form through The Depository Trust Company (“**DTC**”) and through Euroclear and Clearstream (as participants in DTC) on or about May 23, 2023.

*Joint Global Coordinators*

**BofA Securities**  
**SOCIETE GENERALE**

**J.P. Morgan**  
**Wells Fargo Securities**

*Joint Bookrunners*

**Barclays**  
**Credit Agricole CIB**  
**MUFG**

**Deutsche Bank Securities**  
**Santander**

**Mizuho**  
**SMBC Nikko**

**BNP PARIBAS**  
**Morgan Stanley**  
**Standard Chartered Bank AG**

**May 17, 2023**

**You should rely only on the information contained or incorporated by reference in this offering memorandum. We have not, and the Initial Purchasers (as defined below) have not, authorized anyone to provide you with any other information. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information appearing in this offering memorandum is accurate only as of the date on the front cover of this offering memorandum or, with respect to documents incorporated by reference, as of the date of such documents. Our business, financial condition, results of operations and prospects may have changed since the date of this offering memorandum or, with respect to documents incorporated by reference, since the date of such documents. See “*Information Incorporated by Reference.*”**

This offering memorandum is strictly confidential. You are authorized to use this offering memorandum solely for the purpose of considering the purchase of the Notes described in this offering memorandum. You may not reproduce or distribute this offering memorandum, in whole or in part, and you may not disclose any of the contents of this offering memorandum or use any information herein for any purpose other than considering a purchase of the Notes. You agree to the foregoing by accepting delivery of this offering memorandum.

The Issuer accepts responsibility for the offering memorandum and confirms that the information contained therein is, to the best of its knowledge, in accordance with the facts and makes no omission likely to affect its import.

**We and Barclays Capital Inc., BNP Paribas Securities Corp., BofA Securities, Inc., Credit Agricole Securities (USA) Inc., Deutsche Bank Securities Inc., J.P. Morgan Securities LLC, Mizuho Securities USA LLC, Morgan Stanley & Co. LLC, MUFG Securities Americas Inc., Santander US Capital Markets LLC, SG Americas Securities, LLC, SMBC Nikko Securities America, Inc., Standard Chartered Bank AG and Wells Fargo Securities, LLC (together, the “Initial Purchasers”) reserve the right to withdraw the offering of the Notes at any time or to reject any offer to purchase, in whole or in part, for any reason, or to sell less than all of the Notes offered hereby. This offering memorandum is personal to each offeree and does not constitute an offer to any other person or to the public generally to subscribe for or otherwise acquire securities.**

**Each investor in the Notes will be deemed to make certain representations, warranties and agreements regarding the manner of purchase and subsequent transfers of the Notes. These representations, warranties and agreements are described in the section of this offering memorandum entitled “*Transfer Restrictions.*”**

The Initial Purchasers have not independently verified any of the information contained herein (financial, legal or otherwise) and make no representation or warranty, express or implied, as to the accuracy or completeness of the information contained or incorporated by reference in this offering memorandum, and nothing contained in this offering memorandum is, or shall be relied upon as, a promise or representation by the Initial Purchasers. In making an investment decision, prospective investors must rely on their own examination of the Issuer and the terms of the offering, including the merits and risks involved. Neither we, nor the Initial Purchasers, nor any of our or their respective representatives make any representation to any offeree or purchaser of the Notes offered hereby regarding the legality of an investment by such offeree or purchaser under applicable legal investment or similar laws. You should consult with your own advisors as to legal, tax, business, financial and related aspects of a purchase of the Notes.

In this offering memorandum, including the information incorporated by reference herein, we rely on and refer to information and statistics regarding our industry. We obtained this market data from internal surveys, estimates, reports and studies, where appropriate, as well as independent industry publications or other publicly available information. External industry studies generally state that the information contained therein has been obtained from sources believed to be reliable but that the accuracy and completeness of such information is not guaranteed. Although we believe that the external sources are reliable, we have not verified, and make no representations as to, the accuracy and completeness of such information. Similarly, internal surveys, estimates, reports and studies, while believed to be reliable, have not been independently verified, and neither we nor the Initial Purchasers make any representations as to the accuracy of such information.

In connection with the issue of the Notes, one or more of Barclays Capital Inc., BNP Paribas Securities Corp., BofA Securities, Inc., Credit Agricole Securities (USA) Inc., Deutsche Bank Securities Inc., J.P. Morgan Securities LLC, Mizuho Securities USA LLC, Morgan Stanley & Co. LLC, MUFG Securities Americas Inc., Santander US

Capital Markets LLC, SG Americas Securities, LLC, SMBC Nikko Securities America, Inc., Standard Chartered Bank AG and Wells Fargo Securities, LLC (the “**Stabilizing Manager(s)**”) (or persons acting on behalf of any Stabilizing Manager(s)) 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, there is no assurance that the Stabilizing Manager(s) (or persons acting on behalf of a Stabilizing Manager) will undertake stabilization action. Any stabilization action may begin on or after the date on which adequate disclosure of the final terms of the offer of the Notes is made and, if begun, may be ended at any time, but must end no later than the earlier of 30 days after the issue date of the Notes and 60 days after the date of the allotment of the Notes. Any stabilization action or over-allotment must be conducted by the relevant Stabilizing Manager(s) (or person(s) acting on behalf of any Stabilizing Manager(s)) in accordance with all applicable laws and rules.

**IN CONNECTION WITH THIS OFFERING, THE INITIAL PURCHASERS ARE NOT ACTING FOR ANYONE OTHER THAN THE ISSUER AND WILL NOT BE RESPONSIBLE TO ANYONE OTHER THAN THE ISSUER FOR PROVIDING THE PROTECTIONS AFFORDED TO THEIR CLIENTS NOR FOR PROVIDING ADVICE IN RELATION TO THE OFFERING.**

## NOTICE TO INVESTORS

The distribution of this offering memorandum and the offering and sale of the Notes in certain jurisdictions may be restricted by law. We and the Initial Purchasers require persons into whose possession this offering memorandum comes to inform themselves about and to observe any such restrictions. This offering memorandum may not be used for, or in connection with, and does not constitute, any offer to sell or solicitation of an offer to purchase the Notes by anyone in any jurisdiction or under any circumstance in which such offer or solicitation is not authorized or is unlawful.

### NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED STATES

The Notes have not been, and will not be, registered under the Securities Act, or the securities laws of any state of the United States or any other jurisdiction, and may not be offered or sold in the United States or to, or for the account or benefit of, U.S. Persons (as such terms are defined in Regulation S under the Securities Act), except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and any applicable state or local securities laws.

In the United States, the offering is being made only to “qualified institutional buyers” (as defined in Rule 144A under the Securities Act) in reliance on Rule 144A under the Securities Act. Prospective purchasers that are qualified institutional buyers are hereby notified that the Initial Purchasers of the Notes may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A thereunder. For a description of these and certain other restrictions on offers, sales and transfers of the Notes and the distribution of this offering memorandum, see “*Plan of Distribution*,” and “*Transfer Restrictions*.”

**Neither the U.S. Securities and Exchange Commission (“SEC”) nor any state securities commission has approved or disapproved of these securities or determined if this offering memorandum is truthful or complete. Any representation to the contrary is a criminal offense.**

The Notes are subject to restrictions on transferability and resale and may not be transferred or resold except as permitted under the Securities Act and any applicable state securities laws pursuant to registration or exemption therefrom. As a prospective purchaser, you should be aware that you may be required to bear the financial risks of this investment for an indefinite period of time. Please refer to the sections in this offering memorandum entitled “*Plan of Distribution*” and “*Transfer Restrictions*.”

### NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED KINGDOM

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. 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 UK domestic law by virtue of the European Union (Withdrawal) Act 2018 (“EUWA”); or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (the “FSMA”) and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of UK domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of the Prospectus Regulation as it forms part of UK domestic law by virtue of the EUWA. Consequently, no key information document required by Regulation (EU) No 1286/2014 as it forms part of UK 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 United Kingdom has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the United Kingdom may be unlawful under the UK PRIIPs Regulation

In addition, the communication of this offering memorandum and any other document or materials relating to the issue of the securities offered hereby is not intended to be, and has not been approved by, an “authorised person” within the meaning of Section 21(1) of the FSMA. As a consequence, the offering memorandum is being distributed to and is only directed at persons who (i) are located outside of the United Kingdom, (ii) are investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the “**Order**”), or (iii) are high net worth entities and other persons to whom it may be lawfully

communicated falling within Article 49(2)(a) to (d) of the Order (all such persons mentioned in paragraphs (i), (ii) and (iii) collectively being referred to as “**Relevant Persons**”). The Notes are directed only at Relevant Persons and no invitation, offer or agreements to subscribe, purchase or acquire the Notes referred to in this offering memorandum may be proposed or made other than with Relevant Persons. Any person other than a Relevant Person may not act or rely on this offering memorandum or any information contained herein.

No person may 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 the securities other than in circumstances in which Section 21(1) of the FSMA does not apply to us.

### **NOTICE TO INVESTORS REGARDING THE PRIIPS REGULATION, THE PROSPECTUS REGULATION AND THE PROHIBITION OF SALES TO EEA RETAIL INVESTORS**

With respect to the European Economic Area (the “**EEA**”), this offering memorandum is only being distributed to and is only directed at, and any offer subsequently made may only be directed at persons who are “qualified investors” as defined in Article 2(e) of the Regulation (EU) 2017/1129 (as amended, the “**Prospectus Regulation**”). In particular, 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 2016/97/EU (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, and no Prospectus Regulation compliant prospectus subject to the approval of the French *Autorité des Marchés Financiers* (the “**AMF**”) or any other EEA member state’s regulator have been or will be 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 and the Prospectus Regulation.

This offering memorandum has been prepared on the basis that any offer of Notes in any member state of the EEA (each, a “**Member State**”) will be made pursuant to an exemption under the Prospectus Regulation from the requirement to publish a prospectus for offers of Notes. This offering memorandum is not a prospectus for the purposes of the Prospectus Regulation in relation to such offer. The Notes have not been and will not be offered or sold or caused to be offered or sold, directly or indirectly, to retail investors in France or in any other Member State and neither this offering memorandum, nor any other offering material or information contained therein relating to the Notes, has been submitted to the approval of the AMF or of any competent authority of another Member State. Neither this offering memorandum, nor any other offering material or information contained therein relating to the Notes has been or will be released, issued or distributed or caused to be released, issued or distributed, directly or indirectly, to retail investors in France or any other Member State, or used in connection with any offer for subscription, exchange or sale of the Notes to retail investors in France or any other Member State. Neither the Issuer nor the Initial Purchasers have authorized, nor do they authorize, the making of any offer of Notes in circumstances in which an obligation arises for the Issuer or the Initial Purchasers to publish a Prospectus Regulation compliant prospectus for such offer.

The Issuer has not authorized and does not authorize the making of any offer of Notes through any financial intermediary, other than offers made by the Initial Purchasers with a view to the final placement of the Notes as contemplated in this offering memorandum. Accordingly, no purchaser of the Notes, other than the Initial Purchasers, is authorized to make any further offer of the Notes on behalf of the Issuer or the Initial Purchasers.

### **MIFID II PRODUCT GOVERNANCE/PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET**

Solely for the purposes of 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 MiFID II; and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (for the purposes of this paragraph, a “distributor”) should take into consideration the manufacturers’ 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 manufacturers' target market assessment) and determining appropriate distribution channels.

### **NOTICE TO PROSPECTIVE INVESTORS IN LUXEMBOURG**

This offering memorandum constitutes a prospectus for the purpose of Part IV of the Luxembourg law of July 16, 2019 on prospectuses for securities (the “**Luxembourg Prospectus Act**”). This offering memorandum has not been approved by, and will not be submitted for approval to, the Luxembourg Financial Services Authority (*Commission de Surveillance du Secteur Financier*) (the “**CSSF**”) for purposes of a public offering or sale in the Grand Duchy of Luxembourg (“**Luxembourg**”). Accordingly, the Notes may not be offered or sold to the public in Luxembourg, directly or indirectly, and neither this offering memorandum nor any other circular, prospectus, form of application, advertisement, communication or other material may be distributed, or otherwise made available in or from, or published in Luxembourg, except for the sole purpose of the listing on the Official List of the Luxembourg Stock Exchange and the admission to trading of the Notes on the Euro MTF Market and except in circumstances which do not constitute an offer of securities to the public which benefits from an exemption to or constitutes a transaction not subject to, the requirement to publish a prospectus in accordance with the Luxembourg Prospectus Act and the EU Prospectus Regulation.

### **NOTICE TO PROSPECTIVE INVESTORS IN 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**”). The Notes may not be offered or sold, directly or indirectly, in Japan or to or for the benefit of any resident of Japan (including any person resident in Japan or any corporation or other entity organized under the laws of Japan) or to others for reoffering or resale, directly or indirectly, in Japan or to or for the benefit of any 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.

### **NOTICE TO PROSPECTIVE INVESTORS IN HONG KONG**

The Notes may not be offered or sold in Hong Kong by means of any document other than (i) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (“**Securities and Futures Ordinance**”) and any rules made thereunder, or (ii) in other circumstances which do not result in the document being a “prospectus” as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) (“**Companies (Winding Up and Miscellaneous Provisions) Ordinance**”) or which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to the Notes may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in 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” in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

### **NOTICE TO PROSPECTIVE INVESTORS IN SINGAPORE**

**Notification under Section 309B(1)(c) of the Securities and Futures Act 2001 (2020 Revised Edition) of Singapore** (the “**SFA**”) - In connection with Section 309B of the SFA and the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore (the “**CMP Regulations 2018**”), the Issuer has determined the classification of the Notes as prescribed capital markets products (as defined in the CMP 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).

This offering memorandum has not been and will not be registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the offering memorandum and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes will not be circulated or distributed, nor will the Notes

be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons 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 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.

Where the Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is: (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except: (a) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(c)(ii) of the SFA; (b) where no consideration is or will be given for the transfer; (c) where the transfer is by operation of law; (d) as specified in Section 276(7) of the SFA; or (e) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018 of Singapore.

#### **NOTICE TO PROSPECTIVE INVESTORS IN CANADA**

The Notes may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this offering memorandum (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to Section 3A.3 of National Instrument 33-105 Underwriting Conflicts ("NI 33-105"), the Initial Purchasers are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

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## CERTAIN DEFINITIONS

In this offering memorandum, unless otherwise noted or the context otherwise requires:

- all references to “**AMF**” refer to the *Autorité des marchés financiers*;
- all references to “**EDF**,” the “**Company**,” the “**Issuer**” and “**Electricité de France**” refer to EDF S.A.;
- all references to “**EDF Group**,” “**EDF group**,” “**the Group**,” “**we**,” “**us**” and “**our**” refer to EDF S.A. and its subsidiaries and affiliates;
- all references to “**RTE**” refer to Réseau de Transport d’Électricité, a regulated subsidiary of EDF managed independently within the meaning of the French *Code de l’énergie* and accounted for using the equity method;
- all references to “**Enedis**” refer to Enedis S.A., a regulated subsidiary of EDF managed independently within the meaning of the French *Code de l’énergie* and fully consolidated;
- all references to “**Framatome**” refer to Framatome S.A.S., a fully consolidated subsidiary of EDF, since the acquisition by EDF of 75.5% of its capital and voting rights on December 31, 2017;
- all references to “**Euroclear**” refer to Euroclear Bank S.A./N.V., as operator of the Euroclear System;
- all references to “**Clearstream**” refer to Clearstream Banking, *société anonyme*;
- all references to “**Fitch**” refer to Fitch Ratings Ltd;
- all references to “**Moody’s**” refer to Moody’s Investors Service Ltd.;
- all references to “**Standard & Poor’s**” refer to S&P Global Ratings Europe Limited;
- all references to the “**U.S.**” and “**United States**” are to the United States of America;
- all references to the “**UK**” are to the United Kingdom;
- all references to “**€**” and “**euro**” are to the lawful currency of the European Monetary Union;
- all references to “**U.S. dollar**,” “**U.S.\$**” or “**\$**” are to the lawful currency of the United States of America;
- all references to “**£**,” “**sterling**” and “**pence**” are to the lawful currency of the United Kingdom; and
- all references to “**Noteholder**” refer to the bearer of any Note.

## **INDUSTRY AND MARKET DATA**

This offering memorandum contains information regarding the Group's business and the industry in which it operates and competes. This information has been obtained from various third party sources and the Group's own internal estimates. In certain cases, this offering memorandum contains statements on the basis of information obtained from third-party sources that the Group believes are reliable, but it has not independently verified these third-party sources and cannot guarantee their accuracy or completeness. The Issuer accepts responsibility only for the correct extraction and accurate reproduction of such information, but not for the accuracy of such information. As far as the Issuer is aware and is able to ascertain from the information published by these third-party sources, no facts have been omitted which would render the reproduced information inaccurate or misleading.

In addition, this offering memorandum contains statements regarding the Group's industry and its position in the industry based on its experience and its own evaluation of general market conditions. No assurance can be given that the assumptions used in evaluating such statements are accurate or correctly reflect the Group's position in the industry, and none of its internal surveys or information has been verified by any independent sources. Prospective investors are cautioned not to place undue reliance on such statements.

## INFORMATION INCORPORATED BY REFERENCE

In addition to the information contained in this offering memorandum, we incorporate by reference herein the documents listed below:

- EDF’s Press Release, dated April 28, 2023, reporting the financial information of EDF at March 31, 2023 (the “**Q1 2023 Financial Information**”);
- the English translation of EDF’s *Document d’Enregistrement Universel* for the year ended December 31, 2022 filed with the AMF on March 21, 2023 under number D.23-0122 (the “**2022 Document d’Enregistrement Universel**”), with the exception of (i) Section 8.1 “*Person responsible for the Universal Registration Document and the Certification*” of the 2022 Document d’Enregistrement Universel and (ii) Section 6.7 “*Information relating to the allocation of funds raised through Green Bonds issued by EDF*” of the 2022 Document d’Enregistrement Universel, which are hereby explicitly excluded from the scope of the incorporation by reference into this offering memorandum; the 2022 Document d’Enregistrement Universel includes:
  - (i) an English translation of the audited consolidated financial statements of the EDF Group for the year ended December 31, 2022 (the “**2022 Consolidated Financial Statements**”); and
  - (ii) an English translation of the statutory auditors’ report on the 2022 Consolidated Financial Statements (the “**2022 Statutory Auditors’ Report**”);

and incorporates by reference therein:

- (i) an English translation of the audited consolidated financial statements of the EDF Group for the year ended December 31, 2021 (the “**2021 Consolidated Financial Statements**”);
- (ii) an English translation of the statutory auditors’ report on the 2021 Consolidated Financial Statements (the “**2021 Statutory Auditors’ Report**”);
- (iii) an English translation of the audited consolidated financial statements of the EDF Group for the year ended December 31, 2020 (the “**2020 Consolidated Financial Statements**”);
- (iv) an English translation of the statutory auditors’ report on the 2020 Consolidated Financial Statements (the “**2020 Statutory Auditors’ Report**”);
- the English version of the tender offer document (*note d’information*) approved by the AMF on November 22, 2022 under *visa* no. 22-464 (the “**Offer Document**”);
- the English version of EDF’s response document approved by the AMF on November 22, 2022 under *visa* no. 22-465 (the “**Response Document**”);
- the English version of the additional information regarding EDF’s legal, financial and accounting characteristics filed with the AMF on November 22, 2022, which supplements the Response Document (“**Other Information of EDF**”), with the exception of the Appendix to the Other Information of EDF; and
- the English translation of EDF’s *Document d’Enregistrement Universel* for the year ended December 31, 2021 filed with the AMF on March 17, 2022 under number D.22-0110 (the “**2021 Document d’Enregistrement Universel**”), with the exception of (i) Section 8.1 “*Person responsible for the Universal Registration Document and the Certification*” of the 2021 Document d’Enregistrement Universel, (ii) the paragraph entitled “*For 2023*” included in Section 5.5 “*Outlook*” of the 2021 Document d’Enregistrement Universel, (iii) Section 6.7 “*Information relating to the allocation of funds raised through Green Bonds issued by EDF*” of the 2021 Document d’Enregistrement Universel and (iv) Section 6.8 “*Information relating to the allocation of funds raised in the framework of Social Bonds issued by EDF*” of the 2021 Document

d'Enregistrement Universel, which are hereby explicitly excluded from the scope of the incorporation by reference into this offering memorandum.

The documents incorporated by reference herein are available on EDF's website ([www.edf.com](http://www.edf.com)) and may be obtained free of charge during normal business hours at EDF's registered office (22-30 avenue de Wagram, 75008, Paris, France, +33 (0)1 40 42 22 22). The information incorporated by reference herein is considered to be part of this offering memorandum and should be read with the same care. No materials from EDF's website or any other source other than those specifically identified above are incorporated by reference into this offering memorandum. If documents that are incorporated by reference herein themselves incorporate any information or other documents therein, either expressly or implicitly, such information or other documents will not form part of this offering memorandum except where such information or other documents are specifically incorporated by reference herein. Where reference is made to a website (including EDF's website) in this offering memorandum or in any documents incorporated by reference herein, these references are for the readers' convenience only and the contents of such website do not form part of this offering memorandum, unless otherwise stated.

Each document incorporated by reference herein is current only as of the date of such document, and the incorporation by reference of such document shall not create any implication that there has been no change in our affairs since the date thereof or that the information contained therein is current as of any time subsequent to its date. Any statement contained in the documents incorporated by reference herein will be modified or superseded for all purposes to the extent that a statement contained in this offering memorandum modifies or is contrary to that previous statement. Any statement so modified or superseded will not be deemed a part of this offering memorandum except as so modified or superseded.

## PRESENTATION OF FINANCIAL INFORMATION

The 2022 Consolidated Financial Statements, the 2021 Consolidated Financial Statements and the 2020 Consolidated Financial Statements, incorporated by reference in this offering memorandum were prepared in accordance with International Financial Reporting Standards as adopted by the European Union (“IFRS”).

In this offering memorandum, we present or incorporate by reference certain “non-GAAP” financial measures, or alternative performance measures, including the following:

- “**EBITDA**” refers to operating profit before depreciation and amortization, impairment, net changes in fair value on Energy and Commodity derivatives (excluding trading activities) and other income and expenses;
- “**EBIT**” refers to operating profit;
- “**net income excluding non-recurring items**” refers to the Group’s share of net income (EDF net income) excluding non-recurring items, net changes in the fair value of energy and commodity derivatives (excluding trading activities), and net changes in the fair value of debt and equity securities, net of tax;
- “**non-recurring items**”<sup>1</sup> refers to items such as impairments, other operating income and expenses and tax litigation;
- “**operating cash flow**,” “**Funds From Operations**” or “**FFO**” refer to net cash flow from operating activities, changes in working capital after adjustment where relevant for the impact of non-recurring effects, net investments (excluding Group disposals 2020-2022 and including HPC and Linky), and other items, including dividends received from associates and joint ventures;
- “**Group cash flow**” refers to the operating cash flow less asset disposals, income taxes paid, net financial expenses disbursed, net allocations to dedicated assets, and dividends paid in cash;
- “**liquid assets**” refers to financial assets consisting of funds or securities with initial maturity of over three months that are readily convertible into cash and are managed according to a liquidity-oriented policy;
- “**net indebtedness**” refers to total loans and financial liabilities, less cash and cash equivalents and liquid assets<sup>2</sup>; and
- “**net investments**” refers to operating investments and financial investments for growth, net of disposals. They also include net debts acquired or transferred in acquisitions or disposals of securities, investment subsidies received, and non-Group partner investments. They do not include the Group disposals for 2020-2022.

Such alternative performance measures generally have no standardized meaning and therefore may not be comparable to similarly labelled measures used by other companies. These alternative performance measures are not recognized under IFRS and should not be considered in isolation from, or as a substitute for, figures determined in accordance with IFRS and included in our audited and unaudited consolidated financial statements.

We urge you to review the reconciliations of the alternative performance measures to the closest IFRS financial measures and other financial information contained in this offering memorandum or incorporated herein by reference. We also urge you not to rely on any single financial measure to evaluate our business but instead to form your view on our business with reference to our audited annual consolidated financial statements and our unaudited interim

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<sup>1</sup> There is no assurance that items we have identified as non-recurring will not recur in the future or that similar items will not be incurred in the future. The term “non-recurring” shall not be construed as being used in accordance with the criteria as set forth in Item 10(c) of Regulation S-K under the U.S. Securities Exchange Act.

<sup>2</sup> The Group’s net indebtedness also comprises of derivatives used to hedge liabilities, derivative hedging assets and net indebtedness of assets held for sale, as applicable. See Note 19.2 “Net indebtedness” of the 2022 Consolidated Financial Statements.



consolidated financial statements incorporated by reference herein and the other information we present in this offering memorandum.

## AVAILABLE INFORMATION

EDF is not required to file periodic reports under Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”). For so long as any of the Notes remain outstanding and are “restricted securities” within the meaning of Rule 144(a)(3) under the Securities Act and during any period in relation thereto during which the Issuer is neither subject to Sections 13 or 15(d) of the Exchange Act, nor exempt from reporting thereunder pursuant to Rule 12g3-2(b), the Issuer will make available to each holder in connection with any resale thereof and to any prospective purchaser of such Notes from such holder, in each case upon request, the information specified in, and meeting the requirements of, Rule 144A(d)(4) under the Securities Act.

As a company listed on the regulated market of Euronext in Paris (“**Euronext Paris**”), EDF is required to file annual reports and certain other information in French with the AMF. These documents will be available on the website of the AMF ([www.amf-france.org](http://www.amf-france.org)) and/or on the website of EDF ([www.edf.com](http://www.edf.com)). **Except as provided above, information contained on the Issuer’s website does not constitute a part of this offering memorandum.**

As noted in the “*Recent Developments*” section of this offering memorandum, the simplified public tender offer (the “**Offer**”) initiated by the French State for the equity securities of EDF opened on November 24, 2022 and closed on February 3, 2023, pending the decision of the Paris Court of Appeal on the claim brought by the employee shareholding fund *Actions EDF* and the non-profit organizations *Energie En Actions* and the *Association pour la Défense des Actionnaires Minoritaires*. On May 2, 2023, the Paris Court of Appeal confirmed the AMF’s clearance decision. Accordingly, the Offer reopened on May 4, 2023 and closed on May 17, 2023 (inclusive). The reopening of the Offer will be followed by a squeeze-out (in order to acquire the Company’s shares and/or bonds convertible into and/or exchangeable for new and/or existing EDF shares due 2024 (the “**OCEANEs**”) not tendered to the Offer). The implementation of this procedure would result in the delisting of the Company’s shares from the regulated market of Euronext Paris and OCEANEs from the multilateral trading facility of Euronext Access. For additional information about the Offer and delisting and the risks associated therewith, please see the “*Recent Developments*” and “*Risk Factors*” sections of this offering memorandum.

A copy of the Fiscal Agency Agreement is available to Noteholders upon request, at no charge, from Citibank, N.A., London Branch, Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB.

## FORWARD-LOOKING STATEMENTS

This offering memorandum including, without limitation, “*Recent Developments*,” “*Risk Factors*,” the section titled “*2023 objectives confirmed*” of the Q1 2023 Financial Information, Section 1.3 “*Group strategy and objectives*” of the 2022 Document d’Enregistrement Universel, Chapter 5 “*The Group Financial Performance and Outlook*” of the 2022 Document d’Enregistrement Universel, Section 1.3 “*Group strategy and objectives*” of the 2021 Document d’Enregistrement Universel, and Chapter 5 “*The Group Financial Performance and Outlook*” of the 2021 Document d’Enregistrement Universel, contains certain forward-looking statements and information relating to the Issuer that are based on beliefs of its management, as well as assumptions made by and information currently available to the Issuer on the date of this offering memorandum or, if included in any document incorporated by reference herein, on the date of such document. When used in this offering memorandum, words such as “anticipate,” “believe,” “could,” “should,” “seeks,” “estimate,” “expect,” “intend,” “might,” “plan,” “project,” “outlook,” “target,” “objective,” “ambition” and similar expressions, as they relate to the Issuer and/or its management, and the Group’s strategy, plans or intentions, are intended to identify forward-looking statements. Such statements reflect the current views of the Issuer with respect to future events and are subject to certain risks, uncertainties and assumptions. Many factors, a number of which are outside of our control, could cause the actual results, performance or achievements of the Group to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements, including, among others, risks relating to the regulation of energy markets; changes in the economic and commercial environment; risks relating to the transformation of the Group; risks relating to the debt management strategy of the Group; risks relating to the overall performance of the Group; risks relating to the nuclear activities of the Group; changes in applicable laws and regulations; as well as changes with respect to the factors set forth under “*Risk Factors*” in this offering memorandum. Any forward-looking statements are qualified in their entirety by reference to these factors. Should one or more of these or other risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in this offering memorandum as anticipated, believed, estimated, expected, intended, planned, targeted or projected, and therefore the Issuer cautions you against relying on any of these forward-looking statements. The Issuer does not intend or assume any obligation to update or revise these forward-looking statements after the date of this offering memorandum in light of developments which differ from those anticipated. The Issuer does not undertake any obligation to update or revise the forward-looking statements included in this offering memorandum or incorporated by reference herein, whether as a result of new information, future events or otherwise. The Issuer cautions you that the foregoing list of important factors may not contain all of the material factors that are important to you.

## SUMMARY

*This summary highlights some information presented elsewhere in this offering memorandum including in the Q1 2023 Financial Information and the 2022 Document d'Enregistrement Universel, which are incorporated by reference herein. This summary may not contain all of the information that is important to you. You should read the following summary together with the more detailed information regarding the Issuer and the Notes presented in this offering memorandum, including in the documents incorporated by reference herein. The Group draws the attention of prospective investors to the fact that, except as otherwise indicated, all of the information contained in this summary is provided as of December 31, 2022.*

### GENERAL INTRODUCTION TO THE EDF GROUP

As a major player in the energy transition, the EDF Group is an integrated energy company active in all businesses: generation, transmission, distribution, energy trading, energy sales and energy services. EDF Group is a world leader in low-carbon energy, having developed a diverse production mix based mainly on nuclear and renewable energy (including hydropower). It is also investing in new technologies to support energy transition.

EDF's *raison d'être* is to build a net zero energy future with electricity and innovative solutions and services, to help save the planet and drive well-being and economic development. The Group is involved in supplying energy and services to approximately 40.3 million customers<sup>3</sup>, of whom 30.3 million are located in France<sup>4</sup>.

The Group has one of the largest power generation fleets in the world, with some of the lowest CO<sub>2</sub> emissions, thanks to the share of nuclear and renewable energy in its energy mix. The Group intends to greatly accelerate the development of renewable energy in France and worldwide, with the goal of achieving 60GW net in 2030. The Group is also preparing for the nuclear energy of the future with European Pressurized Water Reactors ("EPRs") and through the development of Small Modular Reactors ("SMRs").

For the year ended December 31, 2022, the Group's consolidated sales amounted to €143.5 billion, while the Group's net income (EDF Group share) was €(17.9) billion and the Group's operating profit before depreciation and amortization was €(4.99) billion. As of the date of this offering memorandum, the Company's long-term debt was assigned the following ratings: BBB+ (with stable outlook) (Fitch), BBB (with stable outlook) (S&P) and Baa1 (with negative outlook) (Moody's).

Shares of EDF have been listed on the regulated market of Euronext Paris since November 21, 2005. Pursuant to Article L. 111-67 of the French *Code de l'énergie*, the French State is EDF's main shareholder and must hold more than 70% of its share capital. As of March 31, 2023, the French State owns 95.94% of EDF's share capital.<sup>5</sup>

The simplified public tender offer (the "Offer") initiated by the French State for the equity securities of EDF opened on November 24, 2022 and closed on February 3, 2023, pending the decision of the Paris Court of Appeal on the claim brought by the employee shareholding fund *Actions EDF* and the non-profit organizations *Energie En Actions* and the *Association pour la Défense des Actionnaires Minoritaires*.<sup>6</sup> On May 2, 2023, the Paris Court of Appeal confirmed the AMF's clearance decision. Accordingly, the Offer reopened on May 4, 2023 and closed on May 17, 2023 (inclusive). The reopening of the Offer will be followed by a squeeze-out (in order to acquire the Company's shares and/or bonds convertible into and/or exchangeable for new and/or existing EDF shares due 2024 (the "OCEANES") not tendered to the Offer). The implementation of this procedure would result in the delisting of the Company's shares from the regulated market of Euronext Paris and OCEANES from the multilateral trading facility

<sup>3</sup> Consolidated data. Since 2018, customers are counted per delivery site. A customer can have two delivery points: one for electricity and another one for gas.

<sup>4</sup> Including ÉS (Électricité de Strasbourg) and SEI (Island Energy Systems).

<sup>5</sup> Including Bpifrance.

<sup>6</sup> For additional information, see "Decision of the Paris Court of Appeal dismissing the claim lodged by minority shareholders seeking the annulment of the AMF clearance decision – Reopening of the simplified public tender offer for the equity securities of EDF" and "Update on the timing of the simplified public tender offer for the equity securities of EDF" in the "Recent Developments" section of this offering memorandum.

of Euronext Access. See “*Recent Developments*” of this offering memorandum for additional information with respect to the Offer.

For a discussion of the EDF Group’s strategy, see Section 1.3 “*Group strategy and objectives*” of the 2022 Document d’Enregistrement Universel. For a discussion of the EDF Group’s outlook, including debt management strategy ambitions for 2023, see “*Recent Developments*” of this offering memorandum, the section titled “*2023 objectives confirmed*” of the Q1 2023 Financial Information and Section 5.1.5 “*Financial Outlook*” of the 2022 Document d’Enregistrement Universel.

## MANAGEMENT

Since November 20, 2004, EDF has been a French *société anonyme* with a Board of Directors.

In accordance with Order no. 2014-948 of August 20, 2014 regarding governance and trading in French State-owned companies (*Ordonnance n° 2014-948 du 20 août 2014 relative à la gouvernance et aux opérations sur le capital des sociétés à participation publique*) (the “**2014 Order**”), EDF is administered by a Board of Directors consisting of three to eighteen members, including members appointed by the shareholders’ meeting, others appointed upon recommendation of the French State in accordance with Article 6 of the 2014 Order, a French State Representative chosen by the Minister for the Economy from the Civil Service in accordance with Article 4 of the 2014 Order, and one third employee representatives elected in accordance with the provisions of the law of July 26, 1983.<sup>7</sup>

On the date of this offering memorandum, the Board of Directors comprises eighteen members: eleven directors appointed by the shareholders’ meeting (five of which on the recommendation of the French State), one director acting as the representative of the French State and six directors elected by the employees.

In accordance with the 2014 Order, the Chairman of the Board of Directors and Chief Executive Officer (*Président-Directeur général*) of the Company is appointed by decree of the President of the Republic of France on the recommendation of the Board of Directors (*Conseil d’administration*) of the Company.

The Chairman of the Board of Directors (*Président du Conseil d’administration*) of the Company, Mr. Luc Rémont, who currently holds the title of Chairman of the Board of Directors and Chief Executive Officer (*Président-Directeur général*) of the Company, was appointed on the recommendation of the Board of Directors of the Company by decree of the President of the Republic of France dated November 23, 2022. In a press release dated November 23, 2022, EDF announced the resignation of Mr. Jean-Bernard Lévy from his functions as Chairman and member of the Board of Directors and Chief Executive Officer of EDF, and recommended the appointment of Mr. Luc Rémont as Chairman of the Board of Directors and Chief Executive Officer of EDF, effective November 23, 2022, in accordance with article 19 of the 2014 Order, as amended. See the “*Recent Developments*” section of this offering memorandum for additional information.

On March 14, 2023, EDF announced that Mr. Brice Bohuon is expected to join the EDF Group’s Executive Committee on April 10, 2023 as Group General Secretary, subject to the approval of the High Authority for Transparency in Public Life, and to take over the role from Mr. Pierre Todorov, who has fulfilled these duties since 2015 and has opted to exercise his right to retirement. See the “*Recent Developments*” section of this offering memorandum for additional information.

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<sup>7</sup> The employee representatives referred to in Paragraph I of Article 7 of the Order of August 20, 2014 are subject, for their election and their status, to the same provisions as those applicable to employee representatives of companies subject to the law of July 26, 1983 (chapters II and III of section II of the law).

## THE OFFERING

The following summary of the offering contains basic information about the Notes. It is not intended to be complete and it is subject to important limitations and exceptions. For a more complete understanding of the Notes, including certain definitions of terms used in this summary, please refer to the "Description of Notes" section of this offering memorandum.

<i>Issuer</i> .....	EDF S.A.
<i>Notes Offered</i> .....	<p>\$1,000,000,000 aggregate principal amount of 5.700% fixed rate notes due May 23, 2028 (the "<b>Five-Year Fixed Rate Notes</b>").</p> <p>\$1,000,000,000 aggregate principal amount of 6.250% fixed rate notes due May 23, 2033 (the "<b>Ten-Year Fixed Rate Notes</b>").</p> <p>\$1,000,000,000 aggregate principal amount of 6.900% fixed rate notes due May 23, 2053 (the "<b>Thirty-Year Fixed Rate Notes</b>").</p>
<i>Maturity Date</i> .....	<p>The Five-Year Fixed Rate Notes will mature on May 23, 2028.</p> <p>The Ten-Year Fixed Rate Notes will mature on May 23, 2033.</p> <p>The Thirty-Year Fixed Rate Notes will mature on May 23, 2053.</p> <p>Each series of Notes will be payable at 100% of the face amount thereof upon redemption at maturity.</p>
<i>Denominations</i> .....	The Notes of each series will be issued in denominations of \$200,000 and integral multiples of \$1,000 in excess thereof.
<i>Interest Rate</i> .....	<p>The Five-Year Fixed Rate Notes will bear interest at a rate equal to 5.700% per annum.</p> <p>The Ten-Year Fixed Rate Notes will bear interest at a rate equal to 6.250% per annum.</p> <p>The Thirty-Year Fixed Rate Notes will bear interest at a rate equal to 6.900% per annum.</p>
<i>Interest Payment Dates</i> .....	Interest on the Notes will be payable semi-annually in arrears on May 23 and November 23, commencing on November 23, 2023, to holders of record on May 8 and November 8 immediately preceding the related interest payment date. The first interest payment will be for interest accrued from and including May 23, 2023 up to, but excluding, November 23, 2023.
<i>Interest Amount</i> .....	<p>Interest on the Notes will be calculated on the basis of a 360-day year of twelve 30-day months.</p> <p>If the due date for any payment in respect of any Note is not a Business Day (as defined below), the holder thereof will not be entitled to payment of the amount due until the next succeeding Business Day, and will not be entitled to any further interest or other payment as a result of any such delay.</p>

<i>Business Day</i> .....	The term “ <b>Business Day</b> ” means a day other than a Saturday, Sunday or other day on which commercial banking institutions are authorized or required by law to close in New York City, United States, or Paris, France.
<i>Ranking</i> .....	The Notes will be the Issuer’s senior unsecured obligations, ranking equally in right of payment with all of the Issuer’s existing and future senior unsecured debt (save for certain mandatory exemptions provided by French law). The Notes will rank equally with each other.
<i>Limitations on Liens</i> .....	<p>So long as any of the Notes remain outstanding, the Issuer has agreed that it will not create or have outstanding any mortgage, charge, pledge or other security interest upon the whole or any part of its undertaking, revenues or assets, present or future, in order to secure any Indebtedness (as defined below), or any guarantee or indemnity in respect of any Indebtedness except for any mortgage, charge, pledge or other security interest granted by the Issuer on property purchased by the Issuer as security for all or part of the purchase price thereof or on nuclear fuel owned by it as security for the financing of the cost of acquisition and/or processing thereof, without at the same time according to the Notes the same security.</p> <p>For purposes of the Notes, “<b>Indebtedness</b>” means any indebtedness of the Issuer which, in each case, is in the form of or represented by any bond, note, debenture, debenture stock, loan stock, certificate or other instrument which is, or is capable of being, listed, quoted or traded on any stock exchange or in any securities market (including, without limitation, any over-the-counter market).</p>
<i>Additional Amounts</i> .....	All payments in respect of the Notes will be made without withholding or deduction for any taxes or other governmental charges, except to the extent required by French law. If withholding or deduction is required by law, subject to certain exceptions, the Issuer will pay additional amounts (the “ <b>Additional Amounts</b> ”) so that the net amount Noteholders receive is no less than the amount that Noteholders would have received in the absence of such withholding or deduction.
<i>Redemption</i> .....	The Issuer may redeem the Notes before their stated maturity as stated under “ <i>Description of Notes—Redemption—Optional Redemption</i> ,” “ <i>Description of Notes—Redemption—Residual Maturity Call Option</i> ” or “ <i>Description of Notes—Redemption—Tax Redemption</i> .”
<i>Optional Redemption</i> .....	Prior to the Par Call Date (as defined under “ <i>Description of Notes—Redemption—Residual Maturity Call Option</i> ” below), the Issuer may redeem the Notes at its option, in whole or in part, at any time and from time to time, at a redemption price (expressed as a percentage of principal amount and rounded to three decimal places) equal to the greater of:

- (1) (a) the sum of the present values of the remaining scheduled payments of principal and interest thereon discounted to the redemption date (assuming the Notes matured on the Par Call Date) on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus (i) 35 basis points with respect to the Five-Year Fixed Rate Notes, (ii) 45 basis points with respect to the Ten-Year Fixed Rate Notes and (iii) 50 basis points with respect to the Thirty-Year Fixed Rate Notes, in each case less (b) interest accrued to the date of redemption, and
  - (2) 100% of the principal amount of the Notes to be redeemed,
- plus, in either case, accrued and unpaid interest thereon to the redemption date.

“**Treasury Rate**” means, with respect to any redemption date, the yield determined by the Issuer in accordance with the following two paragraphs.

The Treasury Rate shall be determined by the Issuer after 4:15 p.m., New York City time (or after such time as yields on U.S. government securities are posted daily by the Board of Governors of the Federal Reserve System), on the third business day preceding the redemption date based upon the yield or yields for the most recent day that appear after such time on such day in the most recent statistical release published by the Board of Governors of the Federal Reserve System designated as “Selected Interest Rates (Daily) - H.15” (or any successor designation or publication) (“**H.15**”) under the caption “U.S. government securities–Treasury constant maturities–Nominal” (or any successor caption or heading) (“**H.15 TCM**”). In determining the Treasury Rate, the Issuer shall select, as applicable: (1) the yield for the Treasury constant maturity on H.15 exactly equal to the period from the redemption date to the Par Call Date (the “**Remaining Life**”); or (2) if there is no such Treasury constant maturity on H.15 exactly equal to the Remaining Life, the two yields – one yield corresponding to the Treasury constant maturity on H.15 immediately shorter than and one yield corresponding to the Treasury constant maturity on H.15 immediately longer than the Remaining Life – and shall interpolate to the Par Call Date on a straight-line basis (using the actual number of days) using such yields and rounding the result to three decimal places; or (3) if there is no such Treasury constant maturity on H.15 shorter than or longer than the Remaining Life, the yield for the single Treasury constant maturity on H.15 closest to the Remaining Life. For purposes of this paragraph, the applicable Treasury constant maturity or maturities on H.15 shall be deemed to have a maturity date equal to the relevant number of months or years, as applicable, of such Treasury constant maturity from the redemption date.

If on the third business day preceding the redemption date H.15 TCM is no longer published, the Issuer shall calculate the Treasury Rate based on the rate per annum equal to the semi-annual equivalent yield to maturity at 11:00 a.m., New York City time, on the second business day preceding such redemption date of the United States Treasury security maturing on, or with a maturity that is closest to, the Par Call Date, as applicable. If there is no United States Treasury security maturing on the Par Call Date but there are two or more United States Treasury securities with a maturity date equally distant from the Par Call Date, one with a maturity date preceding the Par Call Date and one with a maturity date following the Par Call Date, the Issuer shall select the United States Treasury security with a maturity date preceding the Par Call Date. If there are two or more United States Treasury securities maturing on the Par Call Date or two or more United States Treasury securities meeting the criteria of the preceding sentence, the Issuer shall select from among these two or more United States Treasury securities the United States Treasury security that is trading closest to par based upon the average of



the bid and asked prices for such United States Treasury securities at 11:00 a.m., New York City time. In determining the Treasury Rate in accordance with the terms of this paragraph, the semi-annual yield to maturity of the applicable United States Treasury security shall be based upon the average of the bid and asked prices (expressed as a percentage of principal amount) at 11:00 a.m., New York City time, of such United States Treasury security, and rounded to three decimal places.

The Issuer's actions and determinations in determining the redemption price shall be conclusive and binding for all purposes, absent manifest error.

Notice of any redemption will be mailed or electronically delivered (or otherwise transmitted in accordance with the depository's procedures) at least 10 days but not more than 60 days before the redemption date to the Fiscal Agent and each Holder of the Notes to be redeemed. The Issuer shall also notify the Fiscal Agent of the final redemption amount due to be paid no later than two Business Days prior to the relevant redemption date.

If the Issuer decides to redeem fewer than all of the outstanding Notes (a partial redemption) and the Notes to be redeemed are Global Notes then held by DTC, the Notes shall be redeemed on a pro rata pass through distribution of principal basis. In the case of a partial redemption in which the Notes to be redeemed are not Global Notes then held by DTC, the selection of the Notes for redemption will be made pro rata, by lot or by such other method as the Fiscal Agent in its sole discretion deems appropriate and fair. No Notes of a principal amount of less than \$200,000 will be redeemed in part. If any Note is to be redeemed in part only, the notice of redemption that relates to the Note will state the portion of the principal amount of the Note to be redeemed. In the case of certificated Notes only, a new Note in a principal amount equal to the unredeemed portion of the Note will be issued in the name of the Holder of the Note upon surrender for cancellation of the original Note. For so long as the Notes are held by DTC (or another depository), the redemption of the Notes shall be done in accordance with the policies and procedures of the depository.

Unless the Issuer defaults in payment of the redemption price, on and after the redemption date interest will cease to accrue on the Notes or portions thereof called for redemption.

*Residual Maturity Call Option*

The Issuer may, on giving not less than 15 nor more than 30 days' irrevocable notice to each Holder of the Notes of such series with a copy to the Fiscal Agent, at any time or from time to time from and including the date that is the specified number of months prior to the applicable Maturity Date as set out below (the "**Par Call Date**"), redeem, in whole or in part, the relevant series of Notes at par plus any accrued and unpaid interest accrued to, but excluding, the date fixed for redemption.

- Five-Year Fixed Rate Notes: 1 month prior to maturity
- Ten-Year Fixed Rate Notes: 3 months prior to maturity
- Thirty-Year Fixed Rate Notes: 6 months prior to maturity

All Notes in respect of which any such notice is given shall be redeemed on the date specified in such notice.

In the case of a partial redemption, the redemption will be effected in accordance with the process provided under “*Description of Notes—Redemption—Optional Redemption.*”

<i>Tax Redemption</i> .....	The Issuer may redeem, in whole but not in part, all of any series of the Notes at a redemption price of 100% of the aggregate principal amount thereof, plus accrued and unpaid interest thereon, if any, to (but excluding) the redemption date, if the Issuer or any surviving entity would become obligated to pay certain Additional Amounts, as described above, as a result of certain changes in tax laws or certain other circumstances.
<i>Transfer Restrictions</i> .....	The Notes have not been registered under the Securities Act and are subject to restrictions on transferability and resale. See “ <i>Transfer Restrictions.</i> ”
<i>Form of Notes</i> .....	The Notes sold in the United States pursuant to Rule 144A will be represented by one or more global certificates in registered form (together the “ <b>Rule 144A Global Note</b> ”). The Notes sold outside the United States pursuant to Regulation S will be represented by one or more global certificates in registered form (together the “ <b>Regulation S Global Note</b> ” and, together with the Rule 144A Global Note, the “ <b>Global Notes</b> ”). The Global Notes will be registered in the name of a nominee of, and will be deposited with a custodian for, The Depository Trust Company, New York (“ <b>DTC</b> ”) on the issue date. It is expected that delivery of the Notes will be made only in book-entry form through the facilities of DTC and its participants, including Euroclear and Clearstream.
<i>No Prior Market</i> .....	The Notes will be new securities for which there is currently no market. Accordingly, the Issuer cannot assure you that a liquid market for the Notes will develop or be maintained.
<i>Use of Proceeds</i> .....	The Issuer intends to use the net proceeds of this offering for general corporate purposes. See section “ <i>Use of Proceeds</i> ” herein.
<i>Listing</i> .....	The Issuer has applied to list the Notes on the Official List of the Luxembourg Stock Exchange and to admit them to trading on the Euro MTF Market.
<i>Governing Law</i> .....	The Fiscal Agency Agreement and the Notes will be governed by, and construed in accordance with, the laws of the State of New York.  The Issuer has submitted to the non-exclusive jurisdiction of and venue in any federal or state court in the Borough of Manhattan in the City of New York, County and State of New York, United States of America, in any suit or proceeding based on or arising out of or under or in connection with the Notes or the Fiscal Agency Agreement.
<i>Fiscal Agent</i> .....	Citibank, N.A., London Branch Citigroup Centre, Canada Square Canary Wharf, London E14 5LB
<i>Paying Agent and Transfer Agent</i> .....	Citibank, N.A., London Branch Citigroup Centre, Canada Square Canary Wharf, London E14 5LB
<i>Registrar</i> .....	Citibank, N.A., London Branch Citigroup Centre, Canada Square

	Canary Wharf, London E14 5LB
<i>Luxembourg Listing Agent</i> .....	Walkers Listing Services Limited 5th Floor, The Exchange George's Dock, IFSC Dublin 1, D01 W3P9
<i>CUSIPs</i> .....	Five-Year Fixed Rate Notes Rule 144A: 28504D AB9 Five-Year Fixed Rate Notes Regulation S: F29416 AB4  Ten-Year Fixed Rate Notes Rule 144A: 28504D AC7 Ten-Year Fixed Rate Notes Regulation S: F29416 AC2  Thirty-Year Fixed Rate Notes Rule 144A: 28504D AD5 Thirty-Year Fixed Rate Notes Regulation S: F29416 AD0
<i>ISINs</i> .....	Five-Year Fixed Rate Notes Rule 144A: US28504DAB91 Five-Year Fixed Rate Notes Regulation S: USF29416AB40  Ten-Year Fixed Rate Notes Rule 144A: US28504DAC74 Ten-Year Fixed Rate Notes Regulation S: USF29416AC23  Thirty-Year Fixed Rate Notes Rule 144A: US28504DAD57 Thirty-Year Fixed Rate Notes Regulation S: USF29416AD06
<i>Common Codes</i> .....	Five-Year Fixed Rate Notes Rule 144A: 259495130 Five-Year Fixed Rate Notes Regulation S: 259494915  Ten-Year Fixed Rate Notes Rule 144A: 262880192 Ten-Year Fixed Rate Notes Regulation S: 262880176  Thirty-Year Fixed Rate Notes Rule 144A: 262880249 Thirty-Year Fixed Rate Notes Regulation S: 262880214
<i>Issuer's Long-Term Debt Ratings</i> .....	BBB+ (stable outlook) / BBB (stable outlook) / Baa1 (negative outlook) (Fitch/Standard & Poor's/Moody's)

## SUMMARY CONSOLIDATED FINANCIAL DATA

*The following summary consolidated financial data is derived from and must be read in conjunction with (i) the Q1 2023 Financial Information, (ii) the 2022 Consolidated Financial Statements, the 2021 Consolidated Financial Statements and the 2020 Consolidated Financial Statements, (iii) Section 5.1 “Review of the financial situation and results 2022” of the 2022 Document d’Enregistrement Universel and (iv) Section 5.1 “Review of the financial situation and results 2021” of the 2021 Document d’Enregistrement Universel.*

Pursuant to Regulation (EC) No. 1606/2002 of July 19, 2002 on the application of international accounting standards, as amended from time to time, the 2022 Consolidated Financial Statements, the 2021 Consolidated Financial Statements and the 2020 Consolidated Financial Statements were prepared under the international financial reporting standards published by the International Financial Reporting Standards as issued by the International Accounting Standards Board and approved by the European Union (“IFRS”) for application at their respective dates.

The selected consolidated financial data presented below for the years ended December 31, 2022, December 31, 2021 and December 31, 2020 were derived from the 2022 Consolidated Financial Statements, the 2021 Consolidated Financial Statements and the 2020 Consolidated Financial Statements, which have been audited by our statutory auditors.

The accounting and valuation methods applied by the Group in the 2022 Consolidated Financial Statements and the 2021 Consolidated Financial Statements are identical to those used in the 2020 Consolidated Financial Statements, with the exception of a few changes, which did not have a significant impact on such consolidated financial statements.<sup>8</sup>

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<sup>8</sup> See Note 1.2 “Changes in accounting standards” of the 2020 Consolidated Financial Statements, the 2021 Consolidated Financial Statements and the 2022 Consolidated Financial Statements.

## Extracts from the consolidated income statements

	For the financial year ended December 31,		
(in millions of euros)	2022	2021	2020
<b>Sales</b>	<b>143,476</b>	<b>84,461</b>	<b>69,031</b>
Fuel and energy purchases	(121,010)	(44,299)	(32,425)
Other external expenses <sup>(1)</sup>	(9,420)	(8,595)	(8,461)
Personnel expenses	(15,236)	(14,494)	(13,957)
Taxes other than income taxes	(3,163)	(3,330)	(3,797)
Other operating income and expenses	367	4,262	5,783
<b>Operating profit before depreciation and amortization (“EBITDA”)</b>	<b>(4,986)</b>	<b>18,005</b>	<b>16,174</b>
Net changes in fair value on energy and commodity derivatives, excluding trading activities	(849)	(215)	(175)
Net depreciation and amortization	(11,079)	(10,789) <sup>(2)</sup>	(10,838) <sup>(2)</sup>
(Impairment) / reversals	(1,762)	(653)	(799)
Other income and expenses	(687)	(1,123)	(487)
<b>Operating profit / (loss) (“EBIT”)</b>	<b>(19,363)</b>	<b>5,225</b>	<b>3,875</b>
<b>Income before taxes of consolidated companies</b>	<b>(22,916)</b>	<b>5,585</b>	<b>1,293</b>
<b>EDF net income</b>	<b>(17,940)</b>	<b>5,113</b>	<b>650</b>

<sup>(1)</sup> Other external expenses are reported net of capitalized production costs.

<sup>(2)</sup> Including net increases in provisions for renewal of property, plant and equipment operated under concessions.

## Consolidated balance sheets

(in millions of euros)	December 31, 2022	December 31, 2021	December 31, 2020
<b>ASSETS</b>			
Goodwill	9,513	10,945	10,265
Other intangible assets	10,619	10,221	9,583
Property, plant and equipment used in generation and other assets owned by the Group, including right-of-use assets	101,126	98,237	92,600
Property, plant and equipment operated under French public electricity distribution concessions	63,966	62,132	60,352
Property, plant and equipment operated under concessions for other activities	6,816	6,881	6,858
Investments in associates and joint ventures	9,421	8,084	6,794
Non-current financial assets	48,512	55,609	47,615
Other non-current receivables	2,165	2,092	2,015
Deferred tax assets	8,696	1,667	1,150
<b>Non-current assets</b>	<b>260,834</b>	<b>255,868</b>	<b>237,232</b>
Inventories	17,661	16,197	14,738
Trade receivables	24,844	22,235	14,521
Current financial assets	58,033	39,937	23,532
Current tax assets	497	544	384
Other current receivables	15,165	16,197	6,918
Cash and cash equivalents	10,948	9,919	6,270
<b>Current assets</b>	<b>127,148</b>	<b>105,029</b>	<b>66,363</b>
<b>Assets classified as held for sale</b>	<b>150</b>	<b>69</b>	<b>2,296</b>
<b>TOTAL ASSETS</b>	<b>388,132</b>	<b>360,966</b>	<b>305,891</b>
<b>EQUITY AND LIABILITIES</b>			
Capital	1,944	1,619	1,550
EDF net income and consolidated reserves	32,396	48,592	44,083
<b>Equity (EDF share)</b>	<b>34,340</b>	<b>50,211</b>	<b>45,633</b>
Equity (non-controlling interests)	12,272	11,778	9,593
<b>Total Equity</b>	<b>46,612</b>	<b>61,989</b>	<b>55,226</b>
Provisions related to nuclear generation – back-end of the nuclear cycle, plant decommissioning and last cores	56,021	62,067	58,333

Provisions for employee benefits	16,231	21,716	22,130
Other provisions	4,671	5,442	5,374
<b>Non-current provisions</b>	<b>76,923</b>	<b>89,225</b>	<b>85,837</b>
Special French public electricity distribution cession liabilities	49,459	48,853	48,420
Non-current financial liabilities	71,058	56,543	55,899
Other non-current liabilities	4,968	4,816	4,874
Deferred tax liabilities	1,533	2,401	3,115
<b>Non-current liabilities</b>	<b>203,941</b>	<b>201,838</b>	<b>198,145</b>
Current provisions	7,943	6,836	5,827
Trade payables	23,284	19,565	11,900
Current financial liabilities	71,844	45,014	17,609
Current tax liabilities	967	446	215
Other current liabilities	33,504	25,248	16,861
<b>Current liabilities</b>	<b>137,542</b>	<b>97,109</b>	<b>52,412</b>
<b>Liabilities related to assets classified as held for sale</b>	<b>37</b>	<b>30</b>	<b>108</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>388,132</b>	<b>360,966</b>	<b>305,891</b>

### *Extracts from the consolidated cash flow statements*

<i>(in millions of euros)</i>	For the financial year ended December 31,		
	2022	2021 <sup>(1)</sup>	2020 <sup>(2)</sup>
Net cash flow from operating activities	(7,425)	12,648	12,942
Net cash flow from investing activities	(25,085)	(14,577)	(12,967)
<i>Of which investments in intangible assets and property, plant and equipment</i>	(18,324)	(17,606)	(16,007)
Net cash flow from financing activities	33,943	4,973	2,591
<i>Of which dividends paid by parent company</i>	(72)	(84)	-
Net increase/(decrease) in cash and cash equivalents	1,433	3,044	2,566

<sup>(1)</sup> Other non-monetary changes include €281 million resulting from reclassification at January 1, 2021 of debit positions on margin calls relating to derivatives, which were previously netted and included in other financial liabilities (see the "Other changes" line in Note 18.3.2.1 "Changes in loans and other financial liabilities" of the 2021 Consolidated Financial Statements).

<sup>(2)</sup> The published figures for 2020 include a €79 million reclassification from "Net financial expenses disbursed" to "Changes in financial assets."

### *Breakdown by operating segment*

Segment reporting presentation complies with IFRS 8, "Operating segments." Segment reporting is presented before inter-segment eliminations. Intersegment transactions take place at market prices. In accordance with IFRS 8, the breakdown used by the EDF Group corresponds to the operating segments as regularly reviewed by the Management Committee (the Group's chief operating decision-maker).

As at the date of this offering memorandum, the Group uses the following segments:

- "France – Generation and Supply": EDF SA's energy production and sales activities. This segment also includes entities operating on the downstream sectors (B2B and B2C, aggregation) and all EDF Invest's shareholdings;
- "France – Regulated activities": Enedis and Électricité de Strasbourg's distribution activities, and EDF's island activities;
- "Framatome": the entities of the Framatome subgroup;
- "United Kingdom": the entities of the EDF Energy subgroup;
- "Italy": Edison entities and TdE SpA;
- "Other international": EDF International and the entities located in continental Europe, the United States, Latin America and Asia;
- "EDF Renewables": the entities of the EDF Renewables subgroup;

- “**Dalkia**”: the entities of the Dalkia subgroup; and
- “**Other activities**”: comprising in particular EDF Trading and EDF Investissements Groupe.

<b>For the financial year ended December 31, 2022</b> <i>(in millions of euros)</i>	<b>France – Generation and Supply</b>	<b>France – Regulated activities</b>	<b>Framatome</b>	<b>UK</b>	<b>Italy</b>	<b>Other international</b>	<b>EDF Renewables</b>	<b>Dalkia</b>	<b>Other activities<sup>(1)</sup></b>	<b>Inter-segment eliminations</b>	<b>Total</b>
External sales	46,787	17,888	2,099	16,085	29,278	5,369	1,404	5,825	18,741	-	143,476
Inter-segment sales	1,899	194	2,023	13	24	290	754	838	983	(7,018)	-
<b>Total sales</b>	<b>48,686</b>	<b>18,082</b>	<b>4,122</b>	<b>16,098</b>	<b>29,302</b>	<b>5,659</b>	<b>2,158</b>	<b>6,663</b>	<b>19,724</b>	<b>(7,018)</b>	<b>143,476</b>
Operating profit before depreciation and amortization (EBITDA)	(23,144)	6,723	589	1,325	1,115	336	909	333	7,089	(261)	(4,986)
Operating profit (EBIT)	(28,739)	3,142	271	(1,166)	481	(40)	179	120	6,650	(261)	(19,363)

<sup>(1)</sup> Sales by the “Other activities” segment include the €7,038 million trading margin realized by EDF Trading.

<b>For the financial year ended December 31, 2021</b> <i>(in millions of euros)</i>	<b>France – Generation and Supply</b>	<b>France – Regulated activities</b>	<b>Framatome</b>	<b>UK</b>	<b>Italy</b>	<b>Other international</b>	<b>EDF Renewables</b>	<b>Dalkia</b>	<b>Other activities<sup>(1)</sup></b>	<b>Inter-segment eliminations</b>	<b>Total</b>
External sales	31,532	17,483	1,862	10,103	11,166	3,148	1,203	4,503	3,461	-	84,461
Inter-segment sales	1,650	81	1,500	11	46	205	564	693	444	(5,194)	-
<b>Total sales</b>	<b>33,182</b>	<b>17,564</b>	<b>3,362</b>	<b>10,114</b>	<b>11,212</b>	<b>3,353</b>	<b>1,767</b>	<b>5,196</b>	<b>3,905</b>	<b>(5,194)</b>	<b>84,461</b>
Operating profit before depreciation and amortization (EBITDA)	7,394	5,992	584	(21)	1,046	267	815	378	1,824	(274)	18,005
Operating profit (EBIT)	2,394	2,610	265	(2,016)	608	(475)	241	217	1,655	(274)	5,225

<sup>(1)</sup> Sales by the “Other activities” segment include the €1,518 million trading margin realized by EDF Trading.

<b>For the financial year ended December 31, 2020</b> <i>(in millions of euros)</i>	<b>France – Generation and Supply</b>	<b>France – Regulated activities</b>	<b>Frameatome</b>	<b>UK</b>	<b>Italy</b>	<b>Other international</b>	<b>EDF Renewables</b>	<b>Dalkia</b>	<b>Other activities<sup>(1)</sup></b>	<b>Inter-segment eliminations</b>	<b>Total</b>
External sales	27,112	16,178	1,900	9,041	5,937	2,242	1,069	3,729	1,823	-	69,031
Inter-segment sales	1,249	50	1,395	-	30	178	513	483	304	(4,202)	-
<b>Total sales</b>	<b>28,361</b>	<b>16,228</b>	<b>3,295</b>	<b>9,041</b>	<b>5,967</b>	<b>2,420</b>	<b>1,582</b>	<b>4,212</b>	<b>2,127</b>	<b>(4,202)</b>	<b>69,031</b>
Operating profit before depreciation and amortization (EBITDA)	7,412	5,206	534	823	683	380	848	290	261	(263)	16,174
Operating profit (EBIT)	2,270	1,893	269	(947)	134	98	354	(32)	99	(263)	3,875

<sup>(1)</sup> Sales by the “Other activities” segment include the €912 million trading margin realized by EDF Trading.

## RECENT DEVELOPMENTS

### ***Subsequent events.***

In 2022, the markets were affected by strong inflationary pressure and the realization by central banks and the markets that bold measures, particularly interest rate rises, would be necessary to prevent de-anchoring of inflation expectations.<sup>9</sup> The Group is exposed to the risk of fluctuations in interest rates that can affect the value of its loans and financial liabilities, its assets (liquid assets and dedicated assets) and its future financial expenses.<sup>10</sup>

In March 2023, the banking sector in the United States and globally came under pressure following the bank failures of certain regional banks in the United States and the takeover of Credit Suisse Group AG by UBS Group AG in a government-brokered deal. The Group relies on various financial markets participants and counterparties in connection with the financing and operation of its business. Volatility in the financial sector or changes to the financial condition of counterparties may impact the Group's ability to obtain loans or adversely affect our financial condition.<sup>11</sup>

### ***The EDF Group launches Agregio Solutions for an enhanced offer of flexibility and renewable energy management.***

On May 16, 2023, EDF announced that as part of its drive to integrate renewable energy sources into the electricity system, the EDF group has set up Agregio Solutions, derived from the merger of two pre-existing subsidiaries: Agregio and EDF Store&Forecast. Agregio Solutions is a fully-owned subsidiary of EDF. It aggregates over 6 GW of decentralized energy assets, which represents 5,000 sites of green electricity production (wind, solar and biogas), consumption (deletion) and storage.

Reducing carbon emissions calls for the rapid development of renewable energies, which generate electricity intermittently. Agregio Solutions helps its customers manage this intermittency and make the most of these energy sources. The subsidiary is also working on solutions to compensate for their variability by means of demand-side flexibility (consumption deletion) and of electricity storage systems.

Agregio Solutions is one of the leaders in aggregating decentralized energy resources in France. The subsidiary aims to become one of the leaders in Europe.

Agregio Solutions products target renewable energy producers (mainly wind and solar) by increasing the value of their electricity production:

- Their output can be sold in the wholesale electricity market, by managing the risks associated with differences between planned and actual power generation.
- Their output can also be sold direct to an end consumer, in either the industrial or the service sector, through a contract referred to as a Corporate Power Purchase Agreement.

To offset the variability in renewable energy production, Agregio Solutions is also developing a range of electricity flexibility products in order to monitor consumption practices or to store electricity in batteries.

Agregio Solutions also has consumption deletion offers for industrial and service sector businesses. Companies can be compensated to postpone or adjust their power usage when the supply-demand balance is under strain, thus helping balance the electricity system.

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<sup>9</sup> For additional information, see Note 15.1.2.3 "Changes in dedicated assets in 2022" of the 2022 Consolidated Financial Statements.

<sup>10</sup> For additional information, see Note 18.7.2 "Interest rate derivatives" of the 2022 Consolidated Financial Statements and the risk factor "Interest rate risk" in the "Risk factors related to the Issuer's business, financial position and future results" section of this offering memorandum.

<sup>11</sup> For additional information on the counterparty risk to which the Group is exposed, see the risk factor "Counterparty risk" in the "Risk factors related to the Issuer's business, financial position and future results" section of this offering memorandum.



Lastly, Agregio Solutions supports investors with storage project development by either:

- Installing “Storbox”, a stationary battery energy storage system, capable of storing dozens of megawatts. Thanks to the smart Energy Management System, customers can optimize their energy usage, for example by increasing self-consumption of their own solar-generated electricity; or
- Proposing solutions for the most efficient use of large-scale batteries connected to the power system.

***Decision of the Paris Court of Appeal dismissing the claim lodged by minority shareholders seeking the annulment of the AMF clearance decision – Reopening of the simplified public tender offer for the equity securities of EDF.***

On May 2, 2023, the Paris Court of Appeal dismissed the claim brought by the employee shareholding fund *Actions EDF* and the non-profit organizations *Energie En Actions* and *Association de Défense des Actionnaires Minoritaires* seeking the annulment of the clearance decision of the French Financial Markets Authority, the *Autorité des Marchés Financiers* (the “AMF”) on the simplified public tender offer initiated by the French State for the equity securities of EDF (the “Offer”).

Subsequently, the AMF indicated in a notice released on May 2, 2023 that, in accordance with the French State’s undertakings<sup>12</sup>, the Offer will be reopened for a period of 10 trading days from May 4, 2023 to May 17, 2023 (inclusive).

Following this period, the French State will request the implementation of a squeeze-out procedure for EDF shares and OCEANEs, as the legal and regulatory conditions for such implementation will be met.

***Update on the timing of the simplified public tender offer for the equity securities of EDF.***

As described in a press release dated January 26, 2023, on January 25, 2023, the AMF announced that the Offer filed by the French State for the equity securities of EDF would close on February 3, 2023, subject to its reopening in accordance with the undertakings of the French State described below.

Pending the decision of the Paris Court of Appeal<sup>13</sup> on the claim brought by the employee shareholding fund *Actions EDF* and the non-profit organizations *Energie En Actions* and the *Association pour la Défense des Actionnaires Minoritaires* seeking the annulment of the clearance decision on the Offer, the French State made the following undertakings:

- not to implement a squeeze-out procedure prior to the Paris Court of Appeal’s decision on the claim on the merits;
- in the event that the Paris Court of Appeal confirms the AMF’s clearance decision, the French State undertakes:
  - to request the AMF to reopen the Offer for a period of 10 trading days after the decision of the Paris Court of Appeal on the claim on the merits;
  - to proceed with the squeeze-out if the conditions are met;<sup>14</sup>
- in the event that the Paris Court of Appeal annuls or amends the AMF’s clearance decision, the French State undertakes:
  - to return the securities acquired in the Offer (both in the context of the semi-centralized Offer and through market acquisitions) to former shareholders and/or holders of OCEANEs who so request;
  - in the event that the French State decides to file an amended draft simplified public tender offer (followed by a squeeze-out) at a more favorable price as a result and following the decision of

<sup>12</sup> See Note 2.2.9 “Simplified public tender offer” of the 2022 Consolidated Financial Statements for additional information on the Offer.

<sup>13</sup> On May 2, 2023, the Paris Court of Appeal dismissed the claim. See “*Decision of the Paris Court of Appeal dismissing the claim lodged by minority shareholders seeking the annulment of the AMF clearance decision – Reopening of the simplified public tender offer for the equity securities of EDF*” above.

<sup>14</sup> On February 8, 2023, the AMF published the result of the Offer, pursuant to which it was announced that the conditions for implementing a squeeze-out procedure for EDF shares and OCEANEs were met.

the Paris Court of Appeal, to pay an additional price to shareholders and/or holders of OCEANEs (having tendered their securities in the semi-centralized Offer or having sold it on the market within the Offer) who have not requested the return of their securities but who request payment of the additional price.

Information and documents relating to the Offer are available as follows:

- The Offer Document prepared by the French State, which received AMF visa no. 22-464 on November 22, 2022, as well as the information relating to, notably, the legal, financial and accounting characteristics of the French State, can be consulted on the websites of the AMF, the *Agence des Participations de l'Etat* and EDF;

The Response Document prepared by EDF, which received AMF visa no. 22-465 on November 22, 2022, as well as the information relating to, notably, the legal, financial and accounting characteristics of EDF can be consulted on the websites of the AMF and EDF.

***Clarification on the stress corrosion phenomenon detected on parts of the auxiliary circuits of the main primary circuit of several nuclear reactors.***

On March 10, 2023, EDF proposed a change in its stress control strategy to the French Nuclear Safety Authority (*Autorité de sûreté nucléaire*) (the “ASN”). EDF is accelerating the inspection of the concerned welds of the safety injection circuit (“RIS”) and shutdown reactor cooling circuit (“RRA”) systems, in order to take into account the elements identified in the repaired weld at Penly 1.

On March 16, 2023, the ASN announced that it had taken note of this change in the strategy and is continuing its technical dialogue with EDF to ensure the planned schedule is appropriate.

On April 25, 2023, the ASN announced that it considered the schedule proposed by EDF for inspection of priority welds to be appropriate.

As of April 25, 2023, the estimate of nuclear output in France for 2023 remains in the range 300-330TWh.<sup>15</sup>

***Creation of NUWARD subsidiary to boost the development of EDF’s small modular reactor now entering the basic design phase.***

On March 30, 2023, EDF announced the creation of NUWARD, a new subsidiary, which highlights EDF’s willingness to strengthen the development of its NUWARD™ small modular reactor (“SMR”). In line with its objective to achieve First Nuclear Concrete in 2030 for its reference plant in France, after finalizing the conceptual design phase of the project, NUWARD now shifts to the basic design phase with the support of EDF Group and its partners.

NUWARD™ is set to become the European leader in SMR technology, delivering low carbon, reliable and affordable energy to the world’s market.

NUWARD™ SMR conceptual design phase consolidated the design architecture of the NUWARD™ SMR. NUWARD will now proceed with the basic design activities to progress design maturity, leveraging the expertise and experience of EDF Group’s nuclear engineering teams, while also benefitting from the support of an international network of industrial partners.

In accordance with the French nuclear licensing process, the Design and Safety options file is scheduled to be submitted to the ASN in July 2023. NUWARD will also engage with the French State’s authorities to assess and select possible sites for the reference plant in France. Together with EDF, NUWARD will further pursue development of

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<sup>15</sup> For additional risks in connection with these developments, see the risk factor “*Failure to comply with the objectives for operation and/or extending the operating life of nuclear power plants (France and United Kingdom)*” in the “*Risk factors related to the Issuer’s business, financial position and future results*” section of this offering memorandum.

cooperation arrangements and commitments with international prospects who are considering deploying the NUWARD™ SMR as part of their energy transition or who aspire to join the NUWARD™ SMR supply chain.

To make this happen, the NUWARD subsidiary workforce is expected to ramp up to approximately 150 employees in the core team by 2024 while the total workforce contributing to the development of the NUWARD™ SMR technology is expected to grow to more than 600 highly skilled engineers and experts, including EDF Group and partners' staff contributing to the project.

The NUWARD subsidiary will continue to work with NUWARD™'s historic partners (CEA, TechnicAtome, Naval Group) and new partners onboarded last year: Framatome and Tractebel.

***EDF Renewables and Maple Power awarded the fourth offshore wind tender launched by the French State, securing a one-gigawatt project off the coast of Normandy, France.***

On March 27, 2023, following the fourth offshore wind tender launched in January 2021, the French Ministry of Energy Transition chose *Eoliennes en Mer Manche Normandie*, the project company owned by the EDF Renewables and Maple Power consortium, to design, build, operate and decommission the future offshore wind farm called "Centre Manche 1" (Normandy). This new offshore wind project is expected to provide France with competitive and renewable electricity, contributing to the country's carbon neutrality objective.

The future Centre Manche 1 offshore wind farm will be located more than 32 km off the coast of the departments of Manche and Calvados in the region of Normandy, France. With an expected installed capacity of approximately 1GW, it will supply the equivalent of the annual consumption of more than 1.5 million people, approximately half of the electricity needs of the population of the Normandy region.

This is the fifth offshore wind project in France and the third in Normandy developed by EDF Renewables together with Maple Power and its shareholders – Enbridge Inc. and Canada Pension Plan Investment Board – as part of the fixed bottom offshore wind tenders launched by the French State since 2011.

Leaders in offshore wind in France, EDF Renewables together with Maple Power and its shareholders, have developed and built France's first offshore wind farm off the coast of Saint-Nazaire with a capacity of 480MW, in operation since late 2022. In parallel, they are building Fécamp (500MW) and Calvados (450MW) offshore wind farms, and the Provence Grand Large floating offshore pilot project (25MW). Finally, EDF Renewables and Enbridge are pursuing the development of the Dunkirk offshore wind farm (600MW).

The Centre Manche 1 project is part of the French government's ambitious objective to commission around 50 offshore wind farms by 2050, amounting to a capacity of 40GW.

EDF Renewables and Maple Power are committed to continuing close dialogue and consultation, ensuring local integration throughout the development of the project and during the construction and operation phases, with all the stakeholders concerned (including the French State, local authorities, industrial companies, fishermen and environmental associations). The wind farm is expected to be commissioned by around 2030.

***EDF, Edison, Ansaldo Energia and Ansaldo Nucleare have signed a letter of intent for new nuclear development.***

On March 6, 2023, Ansaldo Energia, Ansaldo Nucleare, EDF and Edison announced that they had signed a letter of intent to collaborate on the development of new nuclear power in Europe and to promote its deployment, particularly in Italy, over the long term. The aim of the agreement is to immediately leverage the expertise of the Italian nuclear power sector, headed by Ansaldo Nucleare, to support the development of EDF's new nuclear projects and, at the same time, to initiate a reflection on the possible role of new nuclear power in Italy's energy transition. In particular, the parties undertook to explore potential industrial cooperation, drawing on their respective skills:

- Ansaldo Energia Group, as a developer of engineering components and service provider for the energy and nuclear industry;
- EDF, as the world's largest nuclear energy producer, involved in new nuclear projects based on its portfolio of technologies, namely (i) the NUWARD™ SMR (EDF and Ansaldo Nucleare have recently

- also signed a first contract for provision of engineering studies for NUWARD™), (ii) the mid-size reactor EPR1200 and (iii) the large-size reactor EPR; and
- Edison, as a leading Italian energy player, fully committed to Italy's energy transition.

Ansaldo Energia Group, EDF and Edison will also assess the potential for the development and implementation of new nuclear power in Italy given the growing need for energy security and independence of the Italian electricity system.

According to the parties, nuclear power complements renewable sources, guaranteeing stability and contributing to the environmental sustainability of the electricity system, considering Europe's and Italy's ambitious decarbonization targets that set 2050 as the deadline for achieving climate neutrality. Indeed, nuclear power generation is one of the lowest CO<sub>2</sub> emitting energy sources, ensures reduced land footprint per unit of installed capacity and provides for optimal production programmability. Furthermore, new reactors, such as the SMRs, benefit from safety features, require limited investments and can be used to produce both electricity and heat, thereby meeting the needs of the energy system and territories in a flexible way.

***EDF and the Andorran Government extend their cooperation agreement for the Principality of Andorra's energy transition, paving the way for further collaboration.***

On January 27, 2023, Sílvia Calvó, Minister for the Environment, Agriculture and Sustainable Development of the Principality of Andorra, and Luc Rémont, Chairman and Chief Executive Officer of EDF, renewed their collaboration by signing a cooperation agreement for the Principality of Andorra's energy transition. The EDF Group and the Principality of Andorra thus reaffirmed their joint commitment to building a responsible, low-carbon energy model.

The partnership provides a framework for cooperation between the EDF Group and the Principality of Andorra in the drive to fight climate change, replace fossil-fuels with low-carbon energy and thereby decarbonize the economy and the region. It enables the EDF Group and FEDA (*Forces Elèctriques d'Andorra*) to continue working towards the following strategic objectives:

- Signature of a long-term procurement contract for the import of electricity, and implementation of a power purchase agreement;
- Development of cogeneration and heat networks;
- Development of local renewable energy production;
- Renovation and heavy maintenance of hydroelectric power stations;
- Review of a project of an additional hydroelectric power station at the *Hospitalet-près-l'Andorre* site;
- Roll-out of the smart metering program;
- Development of the energy efficiency strategy.

***EDF reinforces its nuclear offer to Poland and signs with Respect Energy a specific exclusive cooperation agreement for the development of nuclear power projects in Poland based on NUWARD™ SMR technology.***

On January 13, 2023, during a dedicated event organized at the French Embassy in Poland and in the presence of H.E. Frédéric Billet, Ambassador of France to Poland, EDF and Respect Energy announced the signature of a cooperation agreement to jointly develop nuclear power projects in Poland based on NUWARD™ SMR technology on specific sites.

This agreement marks EDF's and Respect Energy's firm intention to jointly proceed with the development of SMR projects in Poland and confirms the strong interest in NUWARD™ technology, which has been selected by Respect Energy to expand its footprint in the nuclear energy field. EDF and Respect Energy will now jointly start the process of evaluating specific new greenfield sites that are the subject of exclusive cooperation and continue to work on preparing the business and financing plans for this endeavor.

This partnership between EDF, the largest nuclear operator worldwide and developer of NUWARD™ SMR, and Respect Energy, a leading European operator and trader of renewable energy based in Poland, is proof of EDF's commitment to deploying a new nuclear strategy in Europe, with its European NUWARD™ SMR technology supplementing its EPR family portfolio.

EDF has recently reaffirmed its offer based on the EPR technology to support the ambitions of the Polish Nuclear Power Program to deliver up to 9GWe of nuclear output by 2043. With its EPR family portfolio (large and mid-size reactors) complemented by its NUWARD™ SMR technology, EDF is able to offer and deliver a complete European offering to help decarbonize the Polish economy and enhance the country's energy security.

***The EDF Group expands in the energy renovation market through the acquisition of the “Les ECO-Isolateurs” group.***

On December 20, 2022, the EDF Group announced that, on November 30, 2022, it acquired the “Les ECO-Isolateurs” group, a specialist in domestic insulation and energy renovation.

This acquisition will enable EDF Group to strengthen its position in the energy renovation market. This transaction will add external thermal insulation to the range of services offered by IZI by EDF. It will also now be possible for IZI by EDF to offer multi-faceted, complete energy renovation, combining heating, hot water, ventilation and insulation of all types.

With 130 employees and a 2021 turnover of €49 million, the “Les ECO-Isolateurs” group is a recognized player in the field.

## RISK FACTORS

*An investment in the Notes involves a high degree of risk. Before investing, we urge you to carefully review the following risk factors, and other information included or incorporated by reference herein, in their entirety and carefully consider the risks and considerations relevant to an investment in the Notes.*

*These risks are, on the date hereof, the risks that the Group believes could have a material adverse effect on its business, financial condition, results of operations, growth and prospects, and cause the value of the Notes offered hereunder to decline. Investors could lose all or part of their investment. All of these factors are contingencies which may or may not occur and the Group is not in a position to express a view on the likelihood of any such contingencies occurring. Moreover, if and to the extent that any of the risks described below materialize, they may occur in combination with other risks, which would compound the adverse effect of such risks on the Group's business, financial condition, results of operations and prospects. The occurrence of one or more of these risks, alone or in combination with other circumstances, may prevent the Issuer from being able to pay interest, principal or other amounts on the Notes when due and you could lose all or part of your investment. There may be other risks that the Group has not yet identified or does not consider as of the date hereof likely to have a material adverse effect on its business, financial condition, results of operations or growth. The risks described below may relate to the Issuer or any of its subsidiaries.*

*The sequence in which the risk factors are presented below is not indicative of their likelihood of occurrence or of the potential magnitude of their financial consequences.*

*Prospective investors should consult their own financial and legal advisers about risks associated with investment in the Notes and the suitability of investing in the Notes in light of their particular circumstances.*

### **RISK FACTORS RELATED TO THE ISSUER'S BUSINESS, FINANCIAL POSITION AND FUTURE RESULTS**

The Group operates in a fast-changing environment that entails numerous risks of various kinds: they may be regulatory, strategic or operational. Some are exogenous; others are endogenous and inherent to the Group's business lines. Their consequences may affect the Group's operating results, the Group's financial position and its ability to finance its strategy or development. They may also affect its internal or external stakeholders or environment, or its reputation.

The Group describes hereinafter the specific risks to which it considers itself exposed, without overriding the managerial independence of regulated infrastructure operators. For non-specific risks, the absence of a risk description in this section does not exclude their being taken into account.

The risks must be read in their entirety, as some of them may be interdependent.

**As discussed in the “Recent Developments” section of this offering memorandum, the simplified public tender offer (the “Offer”) initiated by the French State for the equity securities of EDF opened on November 24, 2022 and closed on February 3, 2023, pending the decision of the Paris Court of Appeal on the claim brought by the employee shareholding fund *Actions EDF* and the non-profit organizations *Energie En Actions* and the *Association pour la Défense des Actionnaires Minoritaires*.<sup>16</sup> On May 2, 2023, the Paris Court of Appeal confirmed the AMF's clearance decision. Accordingly, the Offer reopened on May 4, 2023 and closed on May 17, 2023 (inclusive). The reopening of the Offer will be followed by a squeeze-out (in order to acquire the Company's shares and/or bonds convertible into and/or exchangeable for new and/or existing EDF shares due 2024 (the “OCEANes”) not tendered to the Offer). The implementation of this procedure would result in the delisting of the Company's shares from the regulated market of Euronext Paris and OCEANes from the multilateral trading facility of Euronext Access. There can be no assurance that the reopening of the Offer, the squeeze-out or the**

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<sup>16</sup> For additional information, see “Decision of the Paris Court of Appeal dismissing the claim lodged by minority shareholders seeking the annulment of the AMF clearance decision – Reopening of the simplified public tender offer for the equity securities of EDF” and “Update on the timing of the simplified public tender offer for the equity securities of EDF” in the “Recent Developments” section of this offering memorandum.

delisting will be completed successfully or in accordance with the stated price or timeline. The Offer and squeeze-out procedure may become subject to further litigation, the outcome of which is inherently unpredictable. Furthermore, litigation with respect to the Offer or other circumstances may further delay or impede the completion of the Offer, squeeze-out and delisting for an unknown amount of time. Should the Company's shares be successfully delisted from the regulated market of Euronext Paris, EDF will not be subject to the same disclosure requirements as it currently is today. Investors may therefore have access to less information on the Group. The Company may experience significant negative impacts with respect to its ability to operate its business or access financing at an acceptable cost, or on its financial position or future prospects in connection with the Offer or the above-mentioned risks. In addition, the Company's business, financial position and future results may be negatively impacted by measures the French State will or plans to take with respect to the Company, its strategy or its management. The Group has no visibility into the French State's plans with respect to the Company other than what is disclosed publicly by the French State, including in the Offer Document dated November 22, 2022 prepared by the French State.

**Risks are divided into five categories**, described in Risks 1 through 5, respectively.

Risk 1 "Market regulation, political and legal risks" describes the risks related to changes in public policy and regulation in the countries and territories where the Group operates, as well as the legal risks to which the Group is exposed.

Risk 2 "Financial and market risks" describes the risks arising from exposure to the energy markets in which the Group operates, as well as risks related to changes in the financial markets and the reliability of the related information.

Risk 3 "Group transformation and strategic risks" describes the risks related to the Group's ability to adapt, particularly in terms of strategy and skills, in response to the needs for transformation brought about by climate change, new competition, and technological and societal changes.

Risk 4 "Risks related to operational performance" describes the risks related to the control of the Group's operating activities across its various industrial projects and activities. In particular, this section describes the Group's risk relating to current and/or future EPR projects, which is a major risk.

Risk 5 "Specific risks related to nuclear activities" supplements Risk 4 for activities relating to the Group's nuclear activities (nuclear safety, operation, fuel cycle and long-term commitments).

The risks are outlined in detail in each of the relevant sections for their respective category. They are numbered to make it easier to connect the summary table and the detailed descriptions that follow.

The aftermath of the Covid-19 crisis, and the consequences of current geopolitical tensions, particularly the Ukraine conflict, drive inflation and cause disruption on the various markets. These factors are treated as factors aggravating the following risks:

- Energy market risk (Risk 2A): increased volatility, upward pressure on prices and reduced liquidity and the impact on regulatory changes (Risk 1A);
- Operational continuity of supply chains and of contractual relationships (Risk 4B): inflationary pressures, disruption of industrial supply chains for products or equipment from countries affected by the conflict, disruption of contracts with companies affected by economic sanctions against Russia;
- Financial risks in Risk 2 "Financial and market risks," particularly the liquidity risk; and
- Damage to assets including cyber-attacks (Risk 4D): increase in cyber threats.

**All the risks identified in this document have been selected because they are significant** in terms of the materiality of their estimated impact on the Group. In addition, they are prioritized based on a qualitative assessment of their criticality, taking into account simultaneously the significance of the potential impact for the Group, the probability of their occurrence and the level of control, in light of the actions undertaken. This prioritization produces a three-level scale for all risks: the criticality can be considered strong, intermediate or moderate. The categories are not ordered hierarchically.

**As a general rule, the scope of exposure** is France, Belgium, Italy, the United Kingdom and all countries in which the Group is present. Where the scope of exposure is more restrictive, it is specified in the table and in the risk description.

Exposure to risk may vary according to duration. The potential impact of these risks may produce effects at very different time horizons, ranging from very short term (less than a year), to medium term (up to a few years) to very long term (up to several decades or more), given the nature of the relevant industrial activities which may span centuries.

Additional provisions for taking into account certain risks related to Corporate Social Responsibility (“CSR”) are set out in chapter 3 of the 2022 Document d’Enregistrement Universel. Cross-references shall, where appropriate, be specified in the risk description.

## TABLE OF RISKS – NUMBERING, HEADINGS AND CRITICALITIES

Category	Risk
<b>1. Market regulation, political and legal risks</b>	1A: Changes in public policies and in the regulatory framework in France and Europe, especially relating to ARENH
	1B: Changes in the legal and regulatory framework for hydraulic concessions
	1C: Changes in the legislative and regulatory framework for electricity distribution concessions
	1D: Ethics or compliance violations
	1E: Litigation risk
<b>2. Financial and market risks</b>	2A: Energy market risk
	2B: Financial markets risk
	2C: Interest rate risk
	2D: Access to liquidity risk
	2E: Counterparty risk
	2F: Foreign exchange risk
<b>3. Group transformation and strategic risks</b>	3A: Transformation capacity in the face of disruptions
	3B: Adaptation to climate change: physical and transition risks
	3C: Adaptation of employees’ skills
	3D: Ability to fulfil long-term social commitments
<b>4. Operational performance</b>	4A: Management of large and complex industrial projects, including EPR projects
	4B: Operational continuity of supply chains and of contractual relationships
	4C: Occupational health or safety violations (employees and service providers)
	4D: Attacks against assets, including cyber attacks
	4E: Hydraulic safety violations
	4F: Risk of supply/demand imbalance within EDF
	4G: Risk of black-out



	4H: Industrial safety violations and impact on environmental assets, including biodiversity
<b>5. Specific risks related to nuclear activities</b>	5A: Failure to comply with the objectives in terms of operation and/or of extending the operating life of nuclear power plants (France and United Kingdom)
	5B: Control of radioactive waste treatment of the decommissioning of nuclear facilities, and ability to meet related commitments
	5C: Nuclear safety violations during operation resulting in nuclear civil liability
	5D: Control of the fuel cycle

## 1. MARKET REGULATION, POLITICAL AND LEGAL RISKS

### 1A: Changes in public policies and in the regulatory framework in France and Europe, especially relating to ARENH.

**Summary:** Public energy policies and market regulation in Europe, France and more generally the countries where the Group operates are likely to change even at short notice and, as a result, the Group faces major regulatory risk. In France, these changes may have an impact on regulated sales tariffs, the Regulated Access to Historic Nuclear Energy (“ARENH”) or the Tariffs for Using the Public Transmission and Distribution Networks (“TURPE”). They may impact the tax regime applicable to the Company. They may also affect the framework for CO<sub>2</sub> emission certificates or the Group’s investment financing mechanisms through the European taxonomy.

The consequences may be considerable for the Group, and could slow its development compared with its competitors, or hinder its financial situation and its ability to finance its strategy or meet its commitments to climate protection.

Discussions are beginning on both a national and a European scale on the changes in the architecture for the European electricity market. They are particularly aimed at reducing the heavy dependence of retail electricity prices on fluctuations in gas prices, and they seek to create more favorable conditions for investment both upstream (decarbonized electricity generation) and downstream (electrification of uses). In the current context of crisis in prices, there is a risk that any measures taken may be prejudicial to the Company.

In particular,

- the French government announcements of January 13, 2022 specified in the decree of March 11, 2022, imposed certain regulatory measures having significant financial impacts for the Group; and
- the existing regulatory framework in France, and the definition of the future regulatory framework, both of which apply to the value generated by the Group’s existing nuclear power generation in France, could work against EDF’s interests and jeopardize the Group’s ability to complete its industrial project and, where applicable, impair the financing for the New Nuclear France (“NNF”) project.

#### *a) Context*

**In France, the context determining the scale of this risk (laws, regulations, policy directions) is as follows:**

- **Energy mix:** Law n°2019-1147 of November 8, 2019 on Energy and the Climate (*loi Énergie et Climat*) of the French Energy Code sets at 2035 the target date for the reduction to 50% of the nuclear power component in electricity generation, and sets at 40% the target for reduction in fossil fuel consumption by 2030 (compared with 2012), and plans to achieve carbon neutrality by 2050 by dividing greenhouse gas emissions by a more than factor of six.

- **The speech by the President of the Republic of France on February 10, 2022 in Belfort:** The President of the Republic of France called upon EDF to prolong the life of all the nuclear reactors that could be extended without any concessions on safety, to examine the conditions for extension beyond 50 years in coordination with the ASN, and to launch a new reactor program: the construction of six EPR2 reactors and the launching of feasibility studies for the construction of eight additional EPR2 reactors. The President also announced the massive development of renewable energies: solar energy (with a tenfold increase in installed power to exceed 100 GW), offshore wind power (target 40 GW to be commissioned in 2050), onshore wind power (installed power 18.5 GW at end 2021, to be doubled by 2050), and hydropower.
- **The review process for the French energy climate strategy (“SFEC”)** began in October 2021. A first public consultation was held from November 2021 to February 2022, giving EDF the opportunity to express itself via a consultation paper. The aim is to publish in 2024 the texts comprising the French strategy: the National Low-Carbon Strategy (“SNBC”), the Multi-Year Energy Program (“PPE”) with its two periods, namely, 2023-2028 and 2029-2033, and the national plan for adapting to climate change. The French State services organized – the sequence is still continuing in March 2023 – working parties (for the SNBC) and some 35 workshops (for the PPE) during which EDF has presented and continues to present its analyses and expectations. A first version of the long-term scenario underpinning the SFEC was published in the summer of 2022 and a new version will be drafted in the spring of 2023. This scenario must respond to a number of constraints or assumptions recognized as critical to achieving carbon neutrality in 2050 (such as the quantity of electricity to be generated, availability of bio energy, the quantitative role of hydrogen and energy of synthesis generation and the feasibility and acceptability of assumptions relating to restraint or efficiency on the final-demand side).  
A second consultation, on the energy mix, was launched in November 2022. Among other features, it includes discussions in the regions. It is planned to introduce an energy-climate planning bill in mid-2023, for adoption by the year-end. The PPE and SNBC decrees would then be drafted in 2024.
- **To support the SFEC process,** in late 2022, the French government took the initiative of preparing two bills, which, without impinging on the development goals set by the SFEC, are designed to facilitate and accelerate the deployment of new renewable and nuclear installations:
  - the law on accelerating renewable energy generation was passed by the French Parliament on February 7, 2023, aimed in particular at easing the constraints on the development of the various renewable energies: hydropower, onshore wind power, offshore wind power, and solar power; and
  - the bill “on accelerating the procedures relating to the construction of new nuclear installations close to existing nuclear sites, and to the operation of existing installations” will be examined by the French Parliament in 2023. Its aims are:
    - on one hand, to facilitate the construction of new nuclear reactors by making the building permit rules for urban-planning purposes less stringent; under the French Coastline Act dated January 3, 1986 (*loi Littoral*), from the moment that the new reactors are sited next to an existing power plant, this will be under French State control; and
    - on the other, to facilitate the extension of the operating life of the present nuclear installations by simplifying the procedure for periodic review of reactors aged more than 35 years, and by replacing the automatic permanent shutdown of a nuclear installation that has ceased to operate for more than two years by a procedure requiring a decree of closure.
- **The ARENH and the regulatory framework for the existing nuclear facilities:** Law No. 2022-1158 of August 16, 2022 introducing emergency measures for protecting purchasing power set the “ARENH ceiling” at 120TWh, within which limit the French government has powers to lay down in an order the “maximum overall volume of electricity that EDF can pass on” to alternative suppliers, and this Act introduced the scope for raising its price to €49.5/MWh upon agreement by the European Commission. At this stage, however, the French government has maintained the maximum overall volume of electricity that can be passed on at 100TWh for 2023, and, as far as we are aware, has not approached the European Commission to raise the ARENH price.
- **Emergency measures**
  - **A €3 billion fund** has been set up to assist major companies particularly affected by the price crisis. The criteria for entitlement to these exceptional French State aids are controlled by the community decision relating to the Ukraine emergency measures.

- A **“tariff shield”**: for 2023, the French State has decided to cap the increase in regulated tariffs for electricity sales (**“TRVE”**) contracts to 15% including VAT. The corresponding loss of earnings is recognized as a public service expense and the Company will be compensated for its sales to TRVE customers as a market offer to customers eligible for TRVE.
- A **“cushioning effect”** consisting of a reduction of the portion supplied to customers exceeding an updated price charged, and charged to a fraction of the volumes delivered, has been instituted to benefit small business customers and local and regional authorities that are not eligible for TRVE, and are not eligible for the tariff shield referred to in the previous point. Two successive decrees specified the scope of the measure in January 2023.

The compensation mechanisms of these measures (tariff shield and cushioning) are discussed in the paragraph below entitled “public service expenses and income.”

- A **“Contribution levied on the infra-marginal electricity generation windfall” (“CRIM”)**: The French Finance Act for 2023 n°2022-1726 of December 30, 2022 (the **“2023 Finance Act”**) for 2023 implements EU Regulation 2022/1854 of October 6, 2022 on an emergency intervention to address high energy prices by instituting a levy, above a ceiling expressed as an MWh price, on income of electricity producers derived from certain primary energy sources. A decree specifying the terms and procedures for declaration and payment of the CRIM levy is pending. Its promulgation is expected before the end of the 1st quarter of 2023.

EDF falls under this measure for its power generation as follows: nuclear (excluding revenues derived from ARENH volumes made over to competitors to supply end customers or network managers in order to offset their losses); hydropower from free-running water, and part of the energy generated at dams (controllable hydropower from large-capacity lakes and dams is not covered by this measure); thermal fire generation (excluding coal-fired). While the European regulation covers only a period expiring in July 2023, the French measure applies to a period from July 2022 to December 2023. On the basis of both the calculation method laid down in the 2023 Finance Act and the market price outturns in 2022 and forecast for 2023, and allowing for the eligibility for any loss carry-forwards, the levy is estimated at between €0 billion and €5 billion for 2023. The final amounts are not yet known and are awaiting the future implementing decree.

The intention of the European Commission and the Member States is to use the resources thereby accruing for redistribution to consumers in order to uncouple the final costs of electricity from gas prices.

Excluding France, but in the UK, Belgium and Italy, mechanisms for tapping infra-marginal windfalls were also adopted in 2022 (UK: 45% above £75/MWh; Belgium and Italy: 100% above €180/MWh).

#### • **Public service expenses and income:**

In France, public service missions are assigned to EDF under French law (in particular by Articles L. 121-1 et seq. of the French Energy Code), which also provides for compensation mechanisms in favor of EDF in respect of the discharge of such missions in accordance with a rule of full compensation of expenses out of the French State general budget. Nevertheless, financial flows may differ from one year to the next, since the French State may accelerate or defer the settlement of the amounts paid to EDF, when the amounts of the expenses recognized exceed or fall short of forecast.

On July 15, 2022, the CRE discussed, as it does each year, the amount of public service expenses to be compensated in 2023. It met afresh on November 3, 2022 in the context of the high rise in market prices, and estimated a negative compensation amount of €31.6 billion, excluding price-freezing measures. Thus, for the first time, these sums should be repaid to the French State by EDF in respect of the public service missions carried out by the Company. However, taking into account the significant fall in electricity prices since end December 2022 (Cal23 at €270/MWh to be compared with the €517/MWh used by the CRE in its discussions on November 3, 2022), the expenses to be reimbursed for 2023 by EDF to the French State are now estimated by EDF at €14.8 billion. These fluctuations in market prices may still be very sizeable in 2023.

Moreover, the expenses relating to the emergency measures applied in 2023 (tariff shields, cushioning effects) were not evaluated by CRE in its latest discussions, since the principle for compensating them was only introduced on

December 30, 2022 under the 2023 Finance Act. In early February, EDF estimated the amount of that compensation (flow from the French State to EDF) at around €18 billion. The CRE will provide a final evaluation of that amount in May 2023.

As of December 31, 2022 and on the basis of these different amounts, EDF estimated a net compensation flow between EDF and the French State of the order of some €3 billion.

The 2023 Finance Act includes a special provision authorizing the CRE to re-evaluate the overall amount of compensation during 2023. The CRE has confirmed its intention to conduct that re-evaluation in July 2023. This re-evaluation should allow a firm figure to be arrived at for the net flow between EDF and the French State for the year 2023. The final provisions have not yet been laid down for a possible mechanism to neutralize the different compensation flows between now and that firm evaluation.

### **The European context also determines the scale of that risk:**

- The **“Fit for 55” climate package**, published by the European Commission on July 14, 2021, is one of the flagship schemes of the newly-reconstituted European Commission. In particular, it includes an increase in all targets to achieve -55% net GHG by 2030 compared with 1990, and carbon neutrality by 2050. The main policy thrusts relate to:
  - the revision of the EU Emissions Trading Scheme (“**EU-ETS**”) within the EU, including its extension to other sectors;
  - various legislative proposals (energy efficiency, renewable energies, energy taxation), including proposals aimed at regulating the development of hydrogen (with a definition of low-carbon electrolytic hydrogen compatible with the French electricity mix); and
  - a revision of the guidelines on French State aid for environmental protection and energy adopted on December 21, 2021, applicable from January 2022, which constitute a framework for structuring future EDF group investments.
- **The legal framework for the European Sustainable Finance Taxonomy** amending delegated EU regulation 2022/1214 which incorporates the nuclear and gas activities into the taxonomy was adopted on March 9, 2022 and will enter into force as from 2023 (“**Taxonomy Regulation**”). An appeal was lodged by the Republic of Austria on October 7, 2022 (published in the *Journal officiel* on January 23, 2023) against the delegated act by the European Commission incorporating certain nuclear and gas activities in the taxonomy.
- **In response to the energy crisis, the European Commission published on May 18, 2022 the RepowerEU plan** aimed at increasing Europe’s independence from Russian fossil fuels, accelerating the energy transition and strengthening the resilience of the European energy system. This plan lays down a series of measures aimed at enhancing the ambit of several legislative instruments, particularly those pertaining to energy efficiency, renewable energies and the development of hydrogen.
- **The European Commission opened a public consultation on reforming the electricity market design** (the consultation was open from January 24, 2023 to February 13, 2023). On March 14, 2023, the European Commission submitted draft legislation to the European Council in advance of the European Council’s meeting on March 23, 2023.

### ***b) Main risks***

#### **• General risks related to the existing ARENH scheme**

Regardless of the corresponding exceptional situation due to the announcements of January 13, 2022, as long as the ARENH scheme exists, it exposes EDF to the following risks:

- Since the ARENH mechanism is globally optional and free of charge, it gives suppliers opportunities for trade-offs between the ARENH mechanism and the market price, to the detriment of EDF, and exposes EDF to major uncertainties that have a negative impact on the effectiveness of its energy market risk management. As a result, EDF is highly exposed to falls in wholesale electricity market prices when their total level (energy + capacity) is below the ARENH price (currently €42/MWh) for the year of delivery in question. Conversely, the positive impact of wholesale electricity market price increases is limited when their total level (energy + capacity) is above the ARENH price;

- Beyond this, there is a risk of ARENH volume increasing, while this increase fails to correspond to a sufficient increase in price;
- The implementation of this measure has given rise to disputes described in Note 17.3 “Contingent liabilities” of the 2022 Consolidated Financial Statements. Some of these disputes, which relate to the application of force majeure in the context of the Covid-19 health crisis, exemplify the trade-offs performed by certain alternative suppliers when market prices become lower than the ARENH price, by suspending the performance of the ARENH contract between them and EDF in order to benefit from cheaper supplies on the markets; and
- Added to this is the risk arising from the practices of so-called “intermittent” suppliers to reduce their portfolio before the onset of winter (some suggest to their customers to return in the spring) to resell on the markets the ARENH volumes thereby becoming available.

• **The risk of a reform of the market architecture at variance with the issues facing the Company**

- Negotiations between the French State and the European Commission on a future regulatory framework have been halted;
- The following would be the main risks to the Company in the future:
  - o the unavailability of the resources required to implement an industrial investments program which is essential to a successful energy transition;
  - o the risk of the authorities systematically resorting to regulatory measures or measures adopted in emergency that are at variance with this policy aim, and of EDF not enjoying the optimum conditions for generating value from its power generation at a fair price freely negotiated with its customers, and of its being hampered in deploying its industrial strategy.

• **Risks of upward spiralling of the levy on electricity generators’ infra-margin revenues**

The amount of this levy for 2023 is estimated at between €0 billion and €5 billion (see the context described above):

- owing to the uncertainties regarding its calculation, the contribution amount could be revalued;
- the contribution amount is limited in 2023 because the calculation includes the period from July to December 2022, in which EDF has recognized a “deficit” that could be carried forward to 2023. In the event of this carry-forward being disputed, EDF would then be exposed to a very high tax charge;
- lastly, there is a risk of the measure being extended to 2024.

• **Risks related to compensation for public-service expenses**

- The mechanisms described in the foregoing context can be summarized as follows: first, the pricing cap for 2023, protecting consumers by limiting pricing increases to 15%, and other shielding mechanisms, should be reflected in a compensation payment by the French State to EDF, of an amount not yet defined, but evaluated by EDF at €18 billion. Furthermore, the compensation for energy expenses will give rise in 2023 to a compensation payment by EDF to the French State, not yet finally evaluated, but estimated by EDF at some €14.8 billion.
  - o These figures are not consolidated and are subject to a high degree of uncertainty in a highly volatile market context;
  - o The precise compensation terms (such as implementation date and flows neutralisation mechanism) are also uncertain and have not been validated; and
  - o These uncertainties entail a capital-outflow risk for EDF (a risk of EDF making overpayments in 2023 which would only be offset in 2024).
- More broadly, the legislation provides for EDF to be fully compensated for the public service expenses it bears. However, it cannot be completely ruled out that the terms of such compensation may be called into question and that such compensation may not entail any new public service obligation imposed upon EDF.

• **Other price and tariff risks**

- **TURPE (Public Transmission System Access Tariff):** The CRE deliberations in January 2021 formalized the implementation of TURPE 6 HTB and TURPE 6 HTA/BT as from August 1, 2021. The risk is that the level of compensation of network operators may not be sufficient to enable them to carry out the tasks entrusted to them, which are inherently evolving, beyond the TURPE 6 tariff period.

- **CO<sub>2</sub> price:** The revision of the EU-ETS could introduce many uncertainties and risks regarding the level and predictability of prices;
- **Emergency supply:** There is a risk of not being able to recoup the costs incurred in providing emergency supply to customers who can leave EDF's portfolio at any time, subject to prior notice to the companies. This risk exists in both the transitional and the permanent arrangements for emergency supply;
- **Hedging of costs of customers reverting to TRVE:** As a result of the crisis in prices, the disappearance of some suppliers and the leap-frogging increases of market offers, in 2022 a considerable and unforeseen number of eligible customers requested subscription to TRVE contracts. This trend may continue in 2023. This results in unforeseen expenses for supply to those contracts, and it is desirable to organize hedging of those expenses in 2023.

• **Risks related to the energy mix**

- Decisions ruling premature shutting down of power generating assets may arise, not due to an industrial choice, but to an energy policy decision or a court ruling. Such potential energy-policy decisions should lead to EDF being compensated for the harm suffered, as recalled by the French *Conseil constitutionnel* (the French Constitutional Council) in a decision of August 13, 2015. There is a risk that EDF would not be compensated for the entire loss.
- Risk of the French State failing to make or delaying the formal decision to launch a program for the construction of new EPR2 or even SMR nuclear reactors, particularly in view of the Energy Programming Act.

• **Local Climate and Energy Program (“LPEC”) related risks (Energy Climate Planning Act)**

The overall framework proposed by the French State during the preliminary exchanges, as it emerges during the first twelve months of deliberations, lays down a satisfactory breakdown of EDF's strategic policy orientations (priority to de-carbonation, first and foremost via electrification, upward revision of the nuclear generation trajectory complementary to the development of new, renewable energies, in line with, for example, the strategy announced by the President of the Republic of France in Belfort on February 10, 2022). In this context, the risks are as follows:

- a risk of delay or reduction in the aims of the LPEC (Quinquennial Planning Act on energy and climate) seeking to decarbonize all sections of society efficiently and fairly from an economic and climatic standpoint, with particular reference to decarbonizing buildings by electrification via the installation of heat pumps;
- the risk of the respective development trajectories for new generation resources (offshore wind power, solar energy, hydropower, nuclear power) lacking sufficient consistency with each other to ensure the most efficient possible electrical mix, having regard to the electrical system;
- the risk of the role allocated to hydrogen in the long-term energy mix being insufficiently clarified, and likewise as concerns the strategy and regulatory framework for production of low-carbon hydrogen, to be developed in coordination with our European partners; and
- the risk of the CO<sub>2</sub> capture and storage technology strategy, not mature as yet, being insufficiently detailed.

• **Risks associated with the European context**

- The risk of difficulties or delays in validation by the European Commission of the NNF program framework;
- the risk entailed in the design of a reform in the domestic electricity market (market design) not being favorable to the Group's interests;
- additional emergency measures by the European Commission, in response to a prolonging of the energy crisis, cannot be ruled out, with likely impacts on the Group;
- proposals to accelerate the permitting procedures for development of renewable energies are currently under discussion within the framework for RepowerEU, and the revision of the RED II renewable energy directive. However, risks of hampering the development of renewable energies persist;
- regarding electrolytic hydrogen, risks remain from the European regulatory framework and from the French strategy for the method of calculating emissions associated with hydrogen generated using network electricity;
- taxonomy: the EU Complementary Delegated Act to accelerate decarbonization, published in the Official Journal on July 15, 2022, includes nuclear energy as a transitional energy source. There remains a risk regarding the interpretation of the technical alignment criteria for purposes of their implementation as from January 1, 2023, and from the appeal for annulment lodged by Austria and Luxembourg;

- the risk of introducing a cap on the use of woody biomass, and of a definition that would exclude this resource from renewable energies (review of the renewable energy directive). This would significantly impact the activities of Dalkia; and
- the risk from the introduction of technical provisions precluding the decarbonization of electricity mixes in ultra-peripheral regions with electricity generating plant operating using bio liquids.

## **1B: Changes in the legal and regulatory framework for hydraulic concessions**

**Summary:** The Group carries out its hydropower generation activities mainly in France under concessions or license agreements. Therefore, the Group does not always own the assets it operates. In France, changes in the legislative and regulatory framework, particularly for the renewal of concessions (provisions for facilities with installed capacity above 4.5MW), changes in the economic conditions of concession specifications and changes in the conditions for implementing publicity and competitive-bidding procedures could have an impact on the Group's earnings.

### ***a) Main risks***

The challenges associated with the renewal of hydraulic concessions in France are specified in section 1.4.1.3.1.4 "Issues relating to hydropower generation" of the 2022 Document d'Enregistrement Universel. The French State has not renewed 31 concession titles that expired on December 31, 2022, corresponding to an installed capacity of 3,260MW. On the topic of concessions renewal, discussions have begun between the French State and the European Commission on the rescission of two formal notices dated October 22, 2015 and March 7, 2019.

There is the risk that the EDF group may not obtain the renewal of each of its concessions in its favor or may obtain the renewal under less favorable economic conditions. In addition, the compensation that should be paid by the French State, in particular, in the event of early termination of the operation of a concession, may not fully compensate the loss of revenue borne by the Group. Future regulations or the discussion with the European Commission could also change in a way that is detrimental to the Group. These factors could have an adverse impact on its activities and financial position.

Depending on the conditions in each country, and mainly in Italy, these concessions may not be continued or may not be renewed in its favor with changes to the financial terms and conditions of the concession specifications, which would have an adverse impact on the Group's activities and financial position.

## **1C: Changes in the legislative and regulatory framework for electricity distribution concessions**

**Summary:** Enedis conducts its distribution activities under public service concessions and does not own most of the assets it operates. Changes in the legislative framework, and in concession specifications, could have an impact on the Group's results.

### ***a) Context***

In France, the law stipulates that Enedis and the Local Distribution Companies ("**LDC**") have exclusive rights, in their respective service areas (as well as EDF for areas not interconnected with the continental metropolitan network), to carry out the mission of developing and operating the public electricity distribution networks. Similarly, EDF and the LDCs carry out a supply mission in their service areas at regulated tariffs, here again under the exclusive rights granted to them by law.

Insofar as the powers of Energy Distribution Organization Authority (*Autorité Organisatrice de la Distribution d'Énergie*) ("**AODE**"), the authority responsible for organizing public electricity distribution, are conferred by law upon local authorities (municipalities or inter-municipality cooperation establishments) and where these AODEs are, except for source stations, the owners of the assets constituting the public electricity distribution network, the law requires Enedis to enter into concession contracts with them for a period generally ranging from 25 to 30 years.

Consequently, Enedis carries out its public service missions (including maintenance, renewal and development of the network, metering and connections) both under the law (the French Energy Code designates the

operators of the electricity distribution networks and specifies the missions conferred upon them) and under these concession contracts. Moreover, the purpose of such contracts is, yet again in application of the law, to provide access to the TRVE regulated sales tariffs; they are therefore trilateral (they bind the AODEs, the distribution network operators and the regulated tariff supplier).

#### ***b) Main risks***

Due to the exclusive rights granted to them, Enedis and EDF, when renewing a concession contract, cannot be pitted against other parties. The current process for renewing concession contracts with all of the AODEs is based on a contract template drawn up in December 2017 by the French national federation of licensing authorities, France Urbaine, Enedis and EDF.

Even though two decisions of the French *Conseil d'État* (Council of State) in July and September 2020 confirmed the compatibility of the exclusive rights granted to Enedis and EDF under, on the one hand, European Union law and, on the other hand, the constitutional principle of the administrative freedom of local authorities, the Group cannot exclude the possibility of these provisions being amended by legislation or following an unfavorable court ruling.

### **1D: Ethics or Compliance Violations**

**Summary:** Risks of prohibited and unethical practices in the conduct of business by employees or third parties could put the EDF group at risk of non-compliance with regulations, or even violations of human rights or fundamental freedoms.

#### ***a) Main risks***

The international nature of the Group's activities and the strengthening of regulatory frameworks that control unethical business practices, in particular, are likely to expose the Group, its employees or third parties acting on behalf of the Group to breaches of its ethical commitments or non-compliance that could damage its reputation or lead to civil or criminal sanctions and impact the Group's financial performance.

### **1E: Litigation risk**

**Summary:** Proceedings or litigation could have a significant financial or reputational impact on the Group.

#### ***a) Main risks***

In the ordinary course of its business, the EDF group is involved in litigation, the proceedings or outcome of which could have a material adverse effect on its earnings or financial position.

In particular, the EDF group is subject in France to proceedings initiated by its competitors or by administrative authorities owing to its position in certain markets. Claims made against EDF could be considerable and could lead to the payment of compensation or a fine, or even lead to orders being issued that could have an impact on some of EDF's activities. For example, in proceedings before the competition authorities in France or before the European Commission, the amount of fines may be as high as 10% of the consolidated revenues of the company concerned (or of the group to which it belongs, as the case may be). The EDF group may also be involved in litigation relating to commercial or fiscal disputes with significant stakes, the outcome of which is inherently unpredictable. See "*Recent Developments*" section for additional information.

## **2. FINANCIAL AND MARKET RISKS**

The EDF group, through its varied activities, is exposed to numerous financial and market risks. This section describes these various risks by addressing interest rate risk, financial market risk, energy market risk, foreign exchange risk, counterparty risk and liquidity risk. All of these risks could affect the Group's ability to finance its investments. Financial and market risks are also discussed in the activity report and the appendices to the 2022 Consolidated Financial Statements.



## 2A: Energy market risk

**Summary:** In order to sell its output, the Group is exposed, directly or indirectly, to the prices of the European wholesale energy markets and capacity markets, the levels of which impact its financial position.

In particular, the very high volatility of the energy markets, which are positioned at a very high level since the end of 2021, the uncertainty regarding the level of the Group's French nuclear production, the possible increases in the ARENH ceiling (see risk 1A) by the French State, and the institution of a measure termed "tapping the infra-marginal windfall," give rise to great uncertainty about the Group's net exposure, and represent a major risk for the Group.

### *a) Context*

In conducting its production, distribution and marketing activities, the Group does business in energy markets, primarily in Europe. Accordingly, the Group is exposed to changes in wholesale market prices: electricity energy prices and prices of capacity guarantees for the countries concerned, gas, coal, petroleum products, CO<sub>2</sub> emission quotas (see section 5.1.2 "Economic environment" of the 2022 Document d'Enregistrement Universel for information on recent changes in these prices). A connection exists between these markets: a fall in the prices of gas, coal, petroleum products or CO<sub>2</sub> leads to a fall in electricity prices.

The wholesale prices of these various commodities fluctuate with the supply-demand balance worldwide (for oil, coal and gas) or at European and national level (for electricity). These markets can experience significant and unpredictable price fluctuations, in both directions, as well as liquidity crises. As an example, the Ukrainian conflict entails significant risks for the supply of gas at European level, and this knocks on to the prices for gas traded on the various European marketplaces.

### *b) Main risks*

These exposures may thus impact the Group's earnings and all of its financial indicators.

In France, the degree of exposure to market prices for electricity depends in particular on the level of sales under the ARENH system currently applicable until the end of 2025, which in turn depends on the level of market prices and potential regulatory changes. The risks associated with possible changes to the ARENH system are described in risk 1A "Changes in public policies and the regulatory framework in France and Europe, especially relating to ARENH."

The French government announced on January 13, 2022, and further elaborated by the decree of March 11, 2022, that EDF should sell an additional 20TWh of ARENH to its competitors over the period from April 1, 2022 to December 31, 2022 at a price of €46.2/MWh.

Thus, the very high prices and highly volatile markets, combined with a significant drop in nuclear production for 2022 and 2023 (see risk 5A below – "Failure to comply with the objectives for operation and/or for extending the operating life of nuclear power plants (France and United Kingdom)"), and the government decisions described above concerning the ARENH mechanism and the mechanism for appropriation of the infra-marginal income represent a major risk in terms of financial impact for the Group.

In these circumstances, the Group's market actions expose it both to sizeable liquidity requirements to meet margin calls, and to increased counterparty risks in the event of default by its trading partners.

Lastly, the Group is exposed to numerous requests for information pursuant to the European regulation relating to wholesale energy market transparency and integrity.<sup>17</sup>

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<sup>17</sup> EU regulation no. 1227/2011, see section 3.3.2.2.4 "Integrity and transparency of the wholesale energy market (REMIT regulation)" of the 2022 Document d'Enregistrement Universel.

## **2B: Financial markets risk**

**Summary:** As a result of its activities, the EDF group is exposed to risks related to the financial markets, in particular an equity risk.

### ***Main risks***

The Group is exposed to equity risk on securities held primarily as dedicated assets constituted to cover the cost of long-term commitments in relation with the nuclear business, in connection with outsourced pension funds and, to a lesser extent, in connection with its cash assets and investments held directly by the Group.

EDF is exposed to equity risks, interest rate risks and foreign exchange risks through its dedicated asset portfolio.

The market value of the listed equities in EDF's dedicated asset portfolio was €11,697 million at December 31, 2022. The volatility of the listed equities at the same date was 17.04% based on 52 weekly performances, compared to 10.93% at December 31, 2021. Applying this volatility to the value of listed equity assets at December 31, 2022, the Group estimates the annual volatility of the equities portion of dedicated assets at €1,993 million.

At December 31, 2022, the sensitivity of the listed bonds (€11,089 million) was 4.9, *i.e.*, a uniform 100 basis point rise in interest rates would result in a €538 million decline in market value. This sensitivity was 5.3 at December 31, 2021.

## **2C: Interest rate risk**

**Summary:** The Group is exposed to risks related to changes in interest rates in the various countries in which it operates. These rates depend partly on the decisions of the central banks.

### ***a) Risk of falling interest rates***

#### **Main risks**

Lower interest rate fluctuations could affect the Group's economic indebtedness due to changes in the value of the Group's financial assets and liabilities, as well as its discounted liabilities. The discount rates for pension commitments and other specific employee benefit commitments (see Note 16 "Provisions for employee benefits" of the 2022 Consolidated Financial Statements) and the Group's long-term nuclear commitments (see Note 15 "Provisions related to nuclear generation and dedicated assets" of the 2022 Consolidated Financial Statements) are directly or indirectly linked to interest rates over different time horizons.

For the specific case of nuclear provisions in France, given the decline in rates over the past few years, the discount rate could be reduced over the next few years. The extent of this decrease, if any, will depend on the future trend in rates, mainly in 20-year sovereign rates.

The order of July 1, 2020 on securing the financing of nuclear expenses, which amends the initial order of March 21, 2007, outlines new provisions concerning the regulatory ceiling on the discount rate. This is now expressed as a real value corresponding to the unrounded representative value of the expected long-term actual interest rate used for the calculation published by the European Insurance and Occupational Pensions Authority (EOIPA) of the ultimate forward rate applicable on the relevant date, increased by 150 basis points. This ceiling is applicable as from 2024. Until 2024, the ceiling is equal to the weighted average of 2.3% and this new ceiling. The weighting assigned to the 2.3% amount is set at 50% for 2020, 25% for 2021, 12.5% for 2022 and 6.25% for 2023.

Furthermore, an increase in nuclear provisions due to a decrease of the discount rate may require allocations to the dedicated assets and may result in an adverse effect on the Group's earnings, cash flow generation and net debt.

As the case may be, this increase in provisions, including those to be covered by dedicated assets, does not however automatically knock on to the amount to be allocated to dedicated assets at the dates in question, as this depends in particular on:

- the return on dedicated assets and the resulting hedge rate; and
- the period within which the allocation is made, as applicable rules provide for the option to set a maximum time period to proceed with the allocation, subject to approval by the supervisory authority.

In this respect, the decree of July 1, 2020 relating to securing the financing of nuclear expenses has modified the regulatory framework of the allocation obligation:

- elimination of the obligation, which previously existed under certain conditions, to allocate funds to dedicated assets when the coverage rate is greater than 100%;
- raising the threshold to 120% (from 110% previously) above which it is possible to withdraw funds from dedicated assets; and
- increasing to five years (instead of three years previously) the maximum period for allocating funds to dedicated assets in the event of under-coverage, following authorization by the administrative authority.

Given the changes in the regulatory framework, no additional allocation is expected for 2022, as the rate of coverage of nuclear provisions by dedicated assets is greater than 100%.

Moreover, an increase in inflation rate expectations, at a given interest rate, would result in a decrease in real interest rates which would have effects similar to a decrease in interest rates on the Group's discounted liabilities, given that the future expenses included in these liabilities are considered to be indexed to inflation rates.

#### ***b) Risk of higher interest rates***

##### **Main risks**

Upward variations in interest rates could affect the Group's ability to obtain financing on optimal terms, or even its ability to refinance itself if the markets were very strained in view of the risk related to changes in flows linked to variable-rate financial assets and liabilities. Financial securities and derivatives held by the Group, as well as debts issued, may pay or receive coupons directly indexed to variable interest rates.

Thus, a 0.5% increase in interest rates would have an effect on the pre-tax income of approximately €(160) million, due to the increase in coupons on the debt issued by the Group, at variable or floating rates, offset by the increase in the Group's cash proceeds.

These unfavorable impacts related to a rise in interest rates are in principle more than offset by the favorable impacts related to a rise in interest rates connected with long-term commitments.<sup>18</sup>

#### **2D: Access to liquidity risk**

**Summary:** The Group must at all times have sufficient financial resources to finance its day-to-day business activities and the investments necessary for its expansion and the appropriations to the dedicated portfolio of assets covering long-term nuclear commitments, as well as to deal with any exceptional events that may arise. Any downgrading of EDF's<sup>19</sup> financial rating could increase the cost of refinancing existing loans and have a negative impact on the Group's ability to obtain financing. On December 31, 2022, the Group's net financial debt amounted to €64.5 billion.

#### ***a) Context***

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<sup>18</sup> For additional information, see "Subsequent events" in the "Recent Developments" section of this offering memorandum.

<sup>19</sup> EDF's long-term rating is as follows: BBB+ with a stable outlook (Fitch Ratings); BBB with a stable outlook (S&P Global Ratings); Baa1 with a negative outlook (Moody's).

The year 2022 was marked by the volatility of the energy markets, which resulted in particular in significant margin calls and collateral in the trading activity. In this context, the Group's ability to raise new debt, refinance its existing indebtedness or, more generally, raise funds in financial markets, and the conditions that can be negotiated to this effect, depend on numerous factors including the rating of the Group's entities by rating agencies.

To meet liquidity needs, the Group issues securities on the bond and money markets, and resorts to bank borrowings with or without collateral.

Accordingly, on October 5, 2022, the Group issued euro-denominated senior bonds in three tranches for a total amount of €3 billion, including a green bond for €1.25 billion maturing in 12 years. On November 30, 2022, EDF conducted a hybrid bond issue for an amount of €1 billion.

The Group contracted the following:

- on March 15, 2022, bilateral loans with a three-year maturity for a total of €10.3 billion from 11 banks;
- on March 25, 2022 and April 29, 2022, two bilateral term loans maturing in three years for a total of €2 billion;
- on October 7, 2022, a green bilateral loan for €1 billion maturing in three years, and dedicated to financing the maintenance of the existing nuclear fleet in France; and
- in November 2022, bilateral term loans maturing in three years, for a total of €2.1 billion, from six banks, dedicated to financing the maintenance of the existing nuclear fleet in France.

On April 5, 2022, EDF performed a capital increase for an amount of €3.1 billion, supplemented by a capital increase reserved to employees for an amount of €0.1 billion.<sup>20</sup>

#### ***b) Main risks***

Any downgrading of EDF's financial rating could increase the cost of refinancing existing loans and have a negative impact on the Group's ability to obtain financing. This risk is increased in the event of delay in completion of the simplified public purchase offer.

The new ARENH volume allocations, the shutdown of nuclear power plants in France and the volatility of the electricity markets, in particular the margin calls on the trading activities, put pressure on the Group's rating and accentuate short-term liquidity requirements. This more uncertain financial outlook could lead to a further downgrading of the short- and long-term ratings by the rating agencies, and impact both the ability to access liquidity and its cost. EDF was placed under surveillance on May 25, 2022 by S&P. The rating was confirmed on December 14, 2022, with a stable outlook. Similarly, Fitch confirmed its EDF rating on April 3, 2023, with a stable outlook.<sup>21</sup>

This risk, having already increased the previous year, increased still further during 2022, particularly because of the very high volatility of energy prices, significant margin calls, and the unavailability of nuclear power stations.

Consequently, the year 2022 was marked by heavy calls on financial institutions in order to meet the Group's exceptional liquidity requirements. These calls may probably not recur in 2023, since the banks have reached a certain limit with respect to their EDF risk.

## **2E: Counterparty risk**

**Summary:** Like all economic operators, the Group is exposed to possible default by certain counterparties (partners, subcontractors, service providers, suppliers or customers).

#### ***a) Main risks***

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<sup>20</sup> For a discussion of the Group's issuances since December 31, 2022, see "Capitalization and Indebtedness" section of this offering memorandum.

<sup>21</sup> See the risk factor "Our credit ratings may not reflect all risks of an investment in the Notes and may be revised, suspended or withdrawn at any time" of this offering memorandum for additional information.

A default by these counterparties may impact the Group financially (loss of receivables, additional costs, in particular if EDF is required to find satisfactory alternatives or take over the relevant activities or pay contractual penalties).

The ending of support measures implemented during the Covid-19 crisis may lead to a risk of default by some of the Group's counterparties. As of December 31, 2022, no significant default had been identified among the Group's counterparties. The Group remains vigilant regarding industrial counterparties which may become vulnerable in the context of a worsening economic situation and of the energy crisis related to the Ukraine conflict. The Group is also closely monitoring the activities of its EDF Trading subsidiary in a context of highly volatile energy prices.<sup>22</sup>

## **2F: Foreign exchange rate risk**

**Summary:** Due to the diversity of its activities and their geographical distribution, the Group is exposed to the risks of fluctuations in foreign exchange rates, which may impact currency translation adjustments, balance sheet items and the Group's financial expenses, equity and financial position.

### ***a) Main risks***

Due to the diversity of its activities and geographical locations, the Group is exposed to the risk of exchange rate fluctuations, which may impact the translation differences affecting balance sheet items, Group financial expenses, equity capital, net income and the internal rate of return (“**IRR**”) of projects.

As the Group is involved in long-term contracts, an unfavorable currency fluctuation could have consequences on project profitability. In the absence of hedging, currency fluctuations between the euro and the currencies of the various international markets in which the Group operates can therefore significantly affect the Group's results and make it difficult to compare performance levels from year to year. If the euro appreciates (or depreciates) against another currency, the euro value of the assets, liabilities, income and expenses initially recognized in that other currency will decline (or increase). Moreover, insofar as the Group is likely to incur expenses in a currency other than that in which the corresponding sales are made, fluctuations in exchange rates could result in an increase in expenses, expressed as a percentage of turnover, which could affect the Group's profitability and income.

## **3. GROUP TRANSFORMATION AND STRATEGIC RISKS**

### **3A: Transformation capacity in the face of disruptions**

**Summary:** The Group's development strategy, changes in the scope of activities and synergies within the Group could not be implemented in accordance with the objectives defined by the Group.

#### ***a) Context***

- Changes in the decarbonization trajectory of the energy sector, emergence of new markets and new players, changes in the business models of the stakeholders;
- changes and volatility in energy and commodity prices;
- changes in the international competitive context, depending on the competitive situation. The Group is faced with different contexts (including more or less total opening up of markets, position in relation to competitors and regulation) and new customer expectations;
- changes in public policies and in the regulatory framework in France and in Europe with a significant impact on the Group's activities (SFEC and CRIM);
- the French State's decision to conduct a simplified takeover bid;
- geopolitical tensions; and
- the impact of climate change on our activities.

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<sup>22</sup> For additional information, see “*Subsequent events*” in the “*Recent Developments*” section of this offering memorandum.

In this context of multiple crises (such as security of supply, inflation and geopolitical tensions), competition is intensifying in all areas: energy production (including new renewable energies), supply, services, storage and disposal, international calls for tenders, and the game rules are changing (infra-day windfall tax).

### ***b) Main risks***

In the context above, the main risk is that the Group's strategy will not be successfully implemented. In particular:

- There is a risk that the transformations undertaken to cope with these changes will be insufficient, or that the Group's model will be jeopardized. This risk may increase in the event of further delay in completion of the simplified takeover bid. The potential consequences of this risk are measured in the following terms:
  - profitability (if regulations are imposed that are unfavourable as with ARENH) in the activity model;
  - market share losses, failure to meet decarbonization targets, failure to gain expected market share or lowered margins;
  - decline in upstream/downstream integration, which could lead to a reduced ability to cope with seasonal variations in activity, physical and market uncertainties, and lead to a loss of gross margin;
  - reduced cross-functional synergies deployed within the integrated Group, which could undermine the Group's ability to meet the diverse expectations of its customers and stakeholders, and reduce the efficiency and therefore the competitiveness of low-carbon industrial solutions; and
  - decrease in the Group's ability to seize new opportunities (such as mobility and hydrogen) and loss of the Group's leading position in the energy field.
- Nuclear costs and cost trends (such as new nuclear projects and *Grand Carénage*) and the Group's ability to finance them could force the Group to reconsider the pace at which it deploys its strategy.
- Even with a transformation that is well under way and adequate contractual arrangements, the Group cannot ensure that its various low-carbon solutions projects can be implemented according to the planned schedules and under satisfactory economic, financial, regulatory, partnership or legal conditions. It cannot ensure that they will meet the needs expressed by our customers and stakeholders over time with the profitability expected at the outset. All of this could have a negative impact on the Group's financial position, its commitment to combating climate change, and its reputation.
- There is a risk that staff will not be sufficiently mobilized individually and collectively due to a deteriorating labor-relations climate, as a result of the changes associated with the adaptations or transformations under way, be they internal or external.

### **3B: Adaptation to climate change: physical and transition risks**

**Summary:** The Group is exposed to physical effects of climate change that could have consequences on its own industrial and tertiary facilities and more generally on the Group's financial position. The societal, technological and economic context may not be favorable to the Group's low-carbon solutions.

According to the breakdown proposed by the Task Force on Climate-Related Financial Disclosures ("TCFD"), with which EDF complies (see section 3.1.3.2.1 "The EDF group and the TCFD" of the 2022 Document d'Enregistrement Universel), climate change risks are structured into two parts: risks of not adapting to the physical effects of climate change (termed "physical risks"), and risks induced by the transition to a low-carbon economy (termed "transition risks").

#### ***a) Main physical risks***

The EDF Group's facilities are closely tied to water, wind and solar resources. The overall reliability of the electricity system depends on the resilience of the generation facilities and network infrastructure to climate change, whether it be chronic effects or an increase in the frequency and intensity of extreme weather events.

Extreme risks can potentially affect the safety and security of facilities and network infrastructure or generation. Chronic risks can potentially have consequences on power generation, the environment and network capacities. These consequences can also lead to risks related to water resources (resource conflicts).

Due to this climate sensitivity and taking into account the many uncertainties associated with the effects of climate change, despite the control actions undertaken, climate change could have an adverse impact on the Group's business continuity, operating performance and balance sheet and financial results.

### ***b) Main transition risks***

The Group's long-term strategic directions are in line with the transition to a low-carbon economy. The EDF group's *raison d'être*, adopted in May 2020, centers on the objective of "building a CO<sub>2</sub>-neutral energy future." The majority of the Group's investments are directed towards this low-carbon climate strategy (see section 3.1.1.4 "Roadmap for increasing the Group's decarbonized generation" of the 2022 Document d'Enregistrement Universel).

In this seemingly favorable and promising context, there are several significant transition risks.

- This opportunity could be stalled by the external, societal, competitive, social, economic or industrial context. In particular, nuclear energy may not be recognized at the societal level as a key factor in enabling the low-carbon transition. For example:
  - the standards or taxonomies currently being put in place to recognize decarbonized energies could include criteria that would adversely affect nuclear energy, which would constitute a very significant risk for EDF and more generally for the achievement of national and European emission reduction objectives. In this respect, there is still a risk that decarbonized nuclear electricity will not be sufficiently recognized due to its classification as transitional energy by the European taxonomy, with potential consequences for access to financing for new projects. This topic of European taxonomy is developed in risk 1A above "Changes in public policies and in the regulatory framework in France and Europe, especially relating to ARENH"; and
  - in France, in connection with the preparation of the 2019-2028 PPE, the French government asked for a review of several scenarios between 2030 and 2050 "ranging from a 100% renewable scenario to one in which nuclear power remains a sustainable source of electricity generation integrated into the mix for reasons of production management and competitiveness."<sup>23</sup>
- Achieving the objectives of reducing emissions and, more generally, ensuring the success of the Group's low-carbon strategy depend primarily on the successful shutdown or decarbonization of fossil fuel power plants and the accelerated development of renewable generation resources to complement nuclear and hydroelectric generation.
- In addition, new low-carbon energy solutions may induce new societal questions (such as intrusive new technologies, land rights-of-way and new conflicts related to the use of water or scarce resources).
- The publication in May 2021 of the International Energy Agency's Net Zero scenario sets 2040 as the new target for decarbonizing the electricity sector by 100% (or even 2035 for developed countries). This target has been taken up by many players, including Eurelectric, investor coalitions (e.g., Institutional Investors Group on Climate Change) and Science Based Targets ("SBTi") in its new Net Zero standard published in October 2021, and has led EDF to re-examine its carbon trajectory and its 2020 commitments. This new situation carries risks for the Group: the risk of certain development projects being jeopardized, the risk of having to make commitments that are more difficult to keep, and the risk to the Company's profitability (by relinquishing profitable activities).
- The new European directive on the reporting of non-financial data (the Corporate Sustainability Reporting Directive adopted in November 2022) sets the goal for all European companies to be aligned with the 1.5°C target and for attaining carbon neutrality by 2050. The fact that the EDF Group has not yet received 1.5°C labelling by the SBTi organization is liable to provoke misunderstanding among our stakeholders.
- New legislative or regulatory changes brought about by climate change could also have a negative impact on EDF's business and lead to new legal or compliance risks.
- The Group may also have to deal with the emergence of new technologies or disruptive solutions that are part of the efforts to meet the transition objectives.

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<sup>23</sup> French Strategy for Energy and Climate, Multi Annual Energy Plan, 2019-2023 / 2024-2028, Ministry for Ecological and Solidary Transition.

Such situations could make it more difficult to carry out these transformations and achieve the desired objectives. These situations could directly or indirectly affect the Group's business volumes, margins, asset value, financial position, reputation and/or prospects.

### **3C: Adaptation of employees' skills**

**Summary:** The Group will have to secure the skills of the various sectors of the energy transition in a job market under pressure to cope with a significant volume of activity, particularly following the Belfort speech of February 10, 2022 (existing fleet, EPR2, increase in the volume of connections, gain of customers).

#### ***a) Main risks***

The EDF Group must cope with an employment market where labor is increasingly scarce and increasingly competitive: heavy competition among economic transactors in all industries seeking skills, particularly in engineer, technician and IS profiles; difficulty in recruiting skills in certain technical trades (welders, plate metal workers) as in many industries; and a training supply that does not always meet requirements.

In this new context, the Group, like all its industrial partners, must face unprecedented industrial issues requiring appropriate and skilled resources in the four energy-sector business lines (nuclear, distribution, renewable energy and energy services).

While the action plans hitherto implemented have allowed control of staff career paths, covered risks identified under benefit of strategic workforce planning (*Gestion Prévisionnel des Emplois et des Carrières*), and secured skills requirements for the coming period, the risk of the mismatching of skills with requirements is nevertheless increasing on account of the extension in the relevant scope in 2022. This is true because the skills issue exists throughout the EDF Group ecosystem and affects its ability to call upon external resources: subcontracting and temporary workers.

### **3D: Ability to fulfil long-term social commitments**

**Summary:** The Group may be required to meet significant commitments related to pensions and other employee benefits.

#### ***a) Main risks***

The pension plans applicable in the various countries in which the Group operates involve long-term commitments to pay benefits to the Group's employees (see Note 16 "Provisions for employee benefits" of the 2022 Consolidated Financial Statements). In France, in addition to these pension commitments, the Group also owes obligations for post-employment benefits and long-term benefits for employees currently in service. Pension reform in France may have an impact on the Group's commitments.

The amounts of these commitments, the provisions booked, the outsourced funds or pension funds set up and the additional contributions required to make up insufficient funding are calculated based on certain actuarial assumptions, including a discount rate subject to adjustment depending on market conditions and, with regard to employee-related commitments in France, on the rules governing retirement benefits paid out by the general retirement schemes, and the amounts to be borne by the Group. These assumptions and rules may be adjusted in the future, which could increase the Group's current commitments for pensions and other employee benefits and, therefore, require a corresponding increase in provisions.

Furthermore, if the value of pension funds in the UK proves insufficient to meet the corresponding commitments, primarily due to calculation assumptions or developments in the financial markets, the Group may be obliged to make additional contributions to the relevant funds, which may have an adverse impact on its financial position.

## **4. RISKS RELATED TO OPERATIONAL PERFORMANCE**



#### **4A: Management of large and complex industrial projects including EPR projects (HPC, FLA3, Taishan...)**

**Summary:** The Group carries out very large-scale projects. These projects represent a major risk for the Group in terms of the potential financial impact on its shareholders' equity and implications for its development strategy. In particular, the success of EPR projects depends on specific industrial, regulatory and financial factors.

##### ***a) Context***

As part of its activity and in its capacity as project owner or prime contractor, the Group is called upon to carry out highly complex projects, such as the EPR projects at Flamanville 3 in France and Hinkley Point C ("HPC") in the United Kingdom, projects in progress, as well as upcoming projects such as EPR2 in France and Sizewell C. These projects require significant investments and lengthy procedures for enquiries and regulatory approvals.

The success of these projects will determine the future of the nuclear industry sector. These projects represent a major risk for the Group.

The Group's other major projects underway are:

- major projects related to the existing nuclear plant (*Grand Carénage*, see risk 5A below, and decommissioning projects);
- offshore renewable energy projects (off-shore wind power); and
- international hydropower projects.

##### ***b) Main risks***

These projects are exposed to numerous technical and operational risks relating to their industrial implementation, which could result in start-up delays and an increase in associated costs or a possible reconsideration of certain technical choices. This could ultimately lead to a drop in expected profitability or even to more asset write-downs (see Note 10.8.2 "Impairment tests on goodwill, intangible assets and property, plant and equipment" of the 2022 Consolidated Financial Statements).

Given their scale, these projects could have a massive impact on the Group's results and balance sheet, mainly on its equity capital and its financing capacity, and entail major risks for the Group.

There exist other technical, industrial, operational, economic, regulatory, political, environmental or acceptability risks which could jeopardize project schedules, associated costs and/or profitability.

##### *Risks of technical or operational non-performance*

The technical and operational risks associated with large and complex industrial projects expose the Group to major uncertainties in the implementation and operation of these projects. These risks may have a major impact on the Group's business, results, asset value, financial position, reputation, organization and outlook.

By way of illustration:

- delays in construction or difficulties in the commercial commissioning of the HPC EPR units beyond October 31, 2036 could result in the loss of the revenue protection afforded to these works via the Contract for Difference ("CFD") (see section 1.4.5.1.2.5 "Nuclear New Build business" of the 2022 Document d'Enregistrement Universel); and
- the conclusions of the ongoing investigation into the June 2021 finding of fuel leakage in a reactor at the Taishan plant were progressively taken on board in other EPR projects (see sections 1.4.5.3.6.1 "Activities in China" and 2.2.4 "Risks related to operational performance" of the 2022 Document d'Enregistrement Universel).

In addition to or as a result of these uncertainties, the Group may be in breach of its contractual obligations.

### *Strategic risks*

The Group's strategic goal is to become involved in the construction of new nuclear facilities in France and abroad. The risk with regard to these projects would be that investment decisions might not be made or might be made under poor technical, regulatory or financial conditions.

#### **Risks related to financing and, where applicable, the regulatory framework**

New reactor construction projects, particularly in France and the United Kingdom, require considerable investment, as well as appropriate market organization, with appropriate financing and pricing conditions. Given the economic or institutional climate or depending on the appropriate progress of the pending projects, obtaining such funding may be delayed or compromised.

In France, inadequate market organization and the failure to obtain or delays in obtaining the authorizations required to continue the development of the EPR2 reactor could have an impact on the Group's financial position, particularly because of the development costs upstream of the decision which might ultimately be borne by EDF. Any event that may delay the launch of the project could lead to disruptions to engineering activities, difficulties in maintaining skills and difficulties in mobilizing the supply chain, which would be detrimental to the industrial control and performance of the program.

In the United Kingdom, the new context created by the implementation of Brexit may lead to changes in the conditions for the implementation and profitability of projects and may not allow sufficient conditions to be met for involving investors in the Group's future projects in the United Kingdom:

- as the financing needs of the HPC project exceed the contractual commitment of the shareholders (committed equity), the shareholders will be asked to allocate additional equity (voluntary equity). In the event that CGN (the China General Nuclear Corporation) does not allocate voluntary equity capital, it is likely that the Group will be required to contribute those funds in the place of CGN since CGN will have contributed its share of committed equity; and
- for the Sizewell C project, failure to obtain the right financing framework and appropriate regulation could significantly affect the project, and lead the Group to decide not to invest.

In addition, the classification as transitional energy under the Taxonomy Regulation (see risk 1A) could insufficiently recognize decarbonized nuclear electricity, with potential consequences for access to financing for new projects. The legislation does not include the fuel cycle or waste management. Finally, the conditions set out in the EU Complementary Delegated Act for the classification of nuclear energy as an aligned activity may not be fully met. These elements could influence the Group's ability to finance future major nuclear projects (see risk 1A "Changes in public policies and the regulatory framework in France and Europe, especially relating to ARENH").

#### *External risks – political and geopolitical, administrative procedures*

All these projects are large-scale and of long duration. They involve numerous industrial partners. Relations with the partners involved with EDF in these projects may also be a source of difficulties.

For example, trade tensions between the United States and China could have an impact on the conduct of some of these projects given the technologies and partnerships implemented (see risk 4B). In the United Kingdom, as EDF and CGN are partners in the HPC and Bradwell projects, these projects could be impacted by the worsening diplomatic relations between the United Kingdom, France, the United States and China, in particular for the Bradwell project led by CGN.

These projects require, among other things, administrative authorizations, licenses or permits which may be subject to disputes, withdrawals or delays in obtaining them.

#### *Risks related to CSR issues*

A very large number of stakeholders are involved in these projects, which may, for example, need to be associated with territorial development projects or suffer from difficulties related to local acceptance.

### *Cyclical risks*

Inflationary pressures could also lead to higher project costs (see in particular risk 4B “Operational continuity of supply chains and of contractual relationships”).

The health crisis has affected the deployment of these major projects and could, if it were to worsen, lead to further delays or additional costs.

In addition, the health crisis may have weakened the financial strength of some partners.

### *Other risks*

Other issues and risks specific to nuclear activities, whether in terms of nuclear safety, control of operations and maintenance activities, long-term commitments or the fuel cycle, are specified in section 2.2.5 “Specific risks related to nuclear activities” of the 2022 Document d’Enregistrement Universel.

## **4B: Operational continuity of supply chains and of contractual relationships**

**Summary:** The Group is exposed to the due completion and operational sustainability of the supply chains and of the contractual relations with its suppliers, as well as being exposed to the risk of price volatility, the risk to availability (discontinuance or shortage of supply) and the logistic risk entailed in materials, equipment or services that it purchases for the requirements of its business lines. These risks may be exacerbated by crises and conflicts, such as the Russian-Ukrainian conflict, with nations or blocks of nations at loggerheads with each other, particularly when major sources of raw materials or of production resources essential to continuity of supply to the Group or to its industrial partners are located in the territories concerned.

### **a) Main risks**

#### *Access to materials or products that are critical for the Group*

The Group’s needs for critical materials or products may arise in markets with a reduced area or in markets subject to growing pressure, due in particular to the structure of and trends in the industrial offer or to increased competition from new uses. This pressure is attributable in particular to the growing needs of information systems and the needs of energy actors, especially those related to climate transition. These market pressures may increase the cost of supplying certain critical products or services and lead to a reduction in supply by some suppliers in response to a contraction in their margins. Fluctuations in the price and availability of certain raw materials or products that play a key role in setting the price of electricity and energy services may affect the Group’s supply capacity and earnings. This risk is currently heightened due to inflationary pressures on the price of raw materials and components needed for operations.

The Group uses technologies, mainly in the fields of nuclear, hydraulic and renewable energy generation, electrical storage and mobility, which require materials and elements that may be highly sensitive in terms of access.<sup>24</sup> The scarcity of or conditions of access to certain raw materials may be critical for the Group due to geological, geopolitical, industrial, regulatory or competitive limitations, particularly in a context of energy transition. Certain crisis situations, such as the Covid-19 health crisis, may also accentuate or generate difficulties regarding access to certain products, materials or services required for the Group’s activities and may make the provision of certain services particularly complex or even delay their completion. The development, particularly related to storage/disposal, the growth of renewable energies and the market penetration of low-carbon electricity, could pose problems regarding access to certain materials: lithium for batteries, ferromagnetic rare earths for wind power, indium or selenium for solar energy. These difficulties could limit the Group’s ability to achieve its development objectives.

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<sup>24</sup> The topic of uranium supply is not considered here. It is dealt with in Risk 5D “Control of the fuel cycle.”

In addition, control of the conditions under which raw or semi-finished materials are extracted, processed, packaged or made available for the Group's needs may be subject to provisions calling for greater control of regulatory requirements and the duty of vigilance.

#### *Supplier panels*

The Group currently depends on a limited number of industrial players with specific skills and the required experience. This situation reduces competition in markets where EDF is a buyer and exposes the Group to the risk of default of one or more of these specialized suppliers or service providers. Apart from the large groups, it is the small and medium-sized French companies that represent the main portion of the supplier industrial fabric. These companies have so far weathered the Covid-19 crisis relatively well. Those companies that were the most affected suffered from their exposure to the aeronautics, oil and automotive sectors rather than to the nuclear sector, as the nuclear sector continued to ensure sustained activity thanks to the major maintenance projects under way, particularly in France. However, the trend towards financial vulnerability observed over the last ten years or so persists, although bankruptcies, which are limited in number, generally end in a takeover and provide an opportunity for revitalization.

#### *Contractual relations and partnerships*

Relations with the partners involved with EDF in completing these projects may also be a source of difficulties. Trade tensions between the United States and China could have an impact on the conduct of some of these projects given the technologies and partnerships implemented.

In this respect, decisions were made in October 2018 by the U.S. Department of Energy relating to civil nuclear cooperation with China with regard to CGN, and in August 2019 by the U.S. Department of Commerce placing four CGN Group entities on the restricted entity list. These decisions concern in particular the transfer of American goods and technologies, in particular dual-use goods and technologies, to CGN, EDF's partner, notably in its new nuclear projects in the United Kingdom. As a result of these decisions, the transfer of goods and technology within the technical scope to the entities in question must be specifically authorized in advance by the competent U.S. authorities

In June 2020, the U.S. Department of Defense also published a list of entities, including CGN, presumed to belong to or be affiliated with the Chinese army. This geopolitical risk also exists in the United Kingdom.

As a result of these measures, the People's Republic of China enacted its first integrated law on the control of exports of sensitive goods and technologies (December 2020), as well as a "blocking law" against decisions, particularly those of the United States, that are extraterritorial in scope (January 2021).

These risks may be aggravated by conflicts between nations or blocs of nations, and in particular, the Ukrainian conflict, when major sources of raw materials or of production resources essential for the continuity of supply to the Group or to its industrial partners are located in the territories concerned.

#### **4C: Occupational health or safety violations (employees and service providers)**

**Summary:** The Group is exposed to health and safety risks in the workplace, both in terms of its employees and those of its service providers.

##### ***a) Main risks***

Human resources and their related skills are a major challenge for the Group and its service providers. The industrial nature and diversity of the Group's activities reinforce the crucial importance of complying with the rules and taking into account the various risks that may affect people working in the Group's industrial facilities in order to protect health and safety in the workplace.

The risk of work-related accidents or occupational illnesses cannot be excluded in any of the Group's areas of activity. The occurrence of such events may lead to lawsuits against the Group and may result in the payment of damages, which could be significant.

#### **4D: Attacks against assets, including cyber attacks**

**Summary:** The Group is exposed to risks of failure of or damage to its tangible or intangible assets, including its information system. In particular, these risks may arise from malicious actions, including cybercrime.

##### ***a) Impact on assets***

###### *Main risks*

The Group's assets consist of its staff and its tangible and intangible assets. The facilities or assets operated by the Group or its employees may be the target of malicious acts of any kind. These acts could have negative consequences on the Group's operational activity, financial position, legal situation, assets or reputation.

The Group would also be forced to make additional investments or incur additional costs if laws and regulations relating to the protection of sensitive sites and critical infrastructures became more stringent.

##### ***b) Information systems failure, including from cyber attacks***

###### *Main risks*

The Group operates multiple, interconnected and complex information systems (including databases, servers, networks and applications) that are essential to the conduct of its commercial and industrial activity, the preservation of its human, industrial and commercial assets, and the protection of personal data (of customers and employees) and that must adapt to a rapidly changing context (such as the digital transition, development of working-from-home, new ways to share work in extended companies with suppliers and changes in regulations).

The facilities and assets operated by the Group or its employees may be the target of external attacks or malicious acts of any kind. An attack or malicious act committed on these facilities could have consequences such as injury to persons and/or damage to property, the Group being held liable on the grounds of measures judged to be inadequate and interruptions to operations. The Group would also be forced to contract additional investments or incur additional costs in the event of greater stringency in laws and regulations relating to the protection of sensitive sites and critical infrastructures.

The frequency and sophistication of information system hacking and data corruption incidents are increasing worldwide. The impact of a malicious attack or any other failure resulting in the unavailability of information systems may have a negative impact on the Group's operating activity, financial, legal and asset situation or reputation.

#### **4E: Hydraulic safety violations**

**Summary:** The hydroelectric facilities operated by the Group present risks with potentially serious consequences for people, property and the environment that could have a financial and reputational impact on the Group.

Hydropower safety comprises all the measures taken when designing and operating plants to reduce risks and hazards to people and property associated with water and the presence or operation of facilities.

##### ***a) Main risks***

The Group's hydraulic structures present specific risks with potentially very serious consequences: breakage, overflow during floods, operating maneuvers.

#### **4F: Risk of supply/demand imbalance within EDF**

**Summary:** A reduction in the production of nuclear power, combined in particular with a massive return of alternative suppliers' customers to EDF, could create an imbalance between the supply of and demand for electricity within

EDF's scope, which could result in significant purchasing requirements on the wholesale markets. Such a situation could have financial consequences for the Group.

**a) Context**

The risk of imbalance between electricity supply and demand at EDF for the winter of 2022-23 and following winter is greater than usual, particularly due to a lower winter availability of the EDF nuclear power stations and the return of many customers of alternative suppliers to EDF. This situation of reduced availability arises from the combination of an intensive *Grand Carénage* industrial program, with unfavorable events due to the Covid-19 crisis in 2020, and the stress corrosion identified. In the event of a production shortfall, high market prices would increase the cost of EDF buying back the missing production. Moreover, high market prices push private customers to choose the regulated sales tariff.

Given the thermal sensitivity of the consumption of some of EDF's customers, such a situation could mainly occur during a major cold and it would be worsened, should circumstances dictate, in a situation of low wind affecting wind power generation and the liquidity of the short-term markets. This risk cannot therefore be anticipated beyond a few days, depending on the weather forecasts.

**b) Main risks**

In the event of a proven imbalance, EDF may be compelled to purchase very sizeable energy volumes on short-term markets, at very high prices. The consequence for EDF is therefore financial. If market liquidity is insufficient to allow EDF to make the purchases necessary for balancing, the financial risks are increased because they depend on the settlement price of imbalances, which can be much higher than market prices.

**4G: Risk of blackout**

**Summary:** A blackout, *i.e.*, a widespread power grid incident, in a territory served by the Group, could have consequences for the Group's activities, financial position and reputation.

**a) Main risks**

The Group may be faced with a blackout, a widespread network incident of considerable scale, or be involved in such incident, even if the triggering event occurred on a network not operated by EDF or was attributable to a third party.

Unlike the risk of imbalance between supply and demand, the potential causes of a blackout are due to rapidly occurring phenomena: accidental power-supply or transmission failure, cascade failures on the transmission network and interconnection problems. The initiating event is usually a major failure in an essential equipment item for transport or, more rarely, for production, in specific, aggravating circumstances which, by triggering automatic protective devices, cause the rapid shutting down of a significant portion of the electrical system.

Unforeseeable supply breaks of this kind could create major disruption in all or part of the country, potentially lasting several hours. Thus, a blackout may negatively impact the Group's reputation among its customers and all its stakeholders, as well as impacting its financial position.

**4H: Industrial safety violations and impact on environmental assets, including biodiversity**

**Summary:** The Group operates facilities, accidents in which could, in the event of an industrial safety failure, have serious consequences on the human or natural environment, particularly in terms of biodiversity and environmental capital (air, soils and water).

**a) Main risks**

The Group operates or has operated facilities which, as part of their day-to-day operations, can be, may be, or may have been the cause of industrial incidents or accidents having environmental impacts (air, soil and water pollution risks) or health impacts.

Furthermore, all the Group's facilities and projects are concerned with biodiversity issues and, more generally, ecosystems, with particular reference to the issues of temperature and water extraction connected with climate change, especially in France where EDF is a major landowner and natural resource manager.

The stakes are all the higher since the energy transition introduces new or enhanced requirements in terms of biodiversity protection, pollution control and control of impacts on the environment as a whole.

The Group's facilities may be located in industrial areas where other activities subject to similar risks exist, which means that the Group's own facilities may be impacted by accidents occurring at neighboring facilities owned by other operators and not under the Group's control.

The Group owns 40 facilities classified as Seveso under the European directive for the prevention and management of major industrial risks. These are essentially storage or warehousing facilities for oil, gas or chemicals.

Measures taken for industrial safety and the control of these risks may not be fully effective, which could have consequences for people, property and immediate surroundings. The Group may be held liable.

In case of a major accident, insurance policies for civil liability and damage taken out by the Group could prove to be inadequate, and the Group cannot guarantee that it will be able in the long run to maintain a level of cover at least equal to current cover levels.

Risks specific to nuclear facilities are further developed in section 2.2.5 "Specific risks related to nuclear activities" of the 2022 Document d'Enregistrement Universel. Risks specific to hydraulic facilities are set out in risk 4E "Hydraulic safety violations" above.

An industrial safety failure may have a negative impact on the Group's operational activity, its financial or legal position regarding its duty of vigilance, its environmental assets, or its reputation, and may affect the Group's ability to achieve its corporate responsibility goals pertaining to biodiversity (see section 3.2.1 "EDF's Nature issues, commitments and governance" of the 2022 Document d'Enregistrement Universel).

## **5. SPECIFIC RISKS RELATED TO NUCLEAR ACTIVITIES**

### **5A: Failure to comply with the objectives for operation and/or for extending the operating life of nuclear power plants (France and United Kingdom)**

**Summary:** The Group may not be able to meet its nuclear power plants' operating objectives in terms of safety and availability, notably in the case where controls or defect detection would lead to modifications on the nuclear French fleet. It may also not be able to continue operating its reactors beyond the current planned expiry date, or even be authorized to operate them until that date in both France and the United Kingdom. In addition, the Group may not be able to control costs and deadlines for upgrading its operating fleet (*Grand Carénage*), which constitutes a major risk for the Group.

#### **a) Context**

The fleet of nuclear reactors that the Group currently operates in France is highly standardized (see section 1.4.1.1.2.1 "EDF's nuclear fleet in France and its operation" of the 2022 Document d'Enregistrement Universel). This enables the Group, in particular, to achieve economies of scale, to apply improvements made to its newest reactors to all reactors and, in the event of a reactor malfunction, to anticipate the measures to be taken with the other reactors. The Group has been aiming for several years to continue operating its nuclear power plants in France beyond 40 years.

On December 15, 2021, EDF announced the occurrence of the phenomenon known as "stress corrosion" near welds in the safety injection system pipes as part of the ten-year inspection of reactor No. 1 at the Civaux plant. Similar

defects have been detected in other plants. Dealing with these phenomena may involve checks and repairs leading to unscheduled shutdowns and have an impact on nuclear generation.

During the periodic reviews carried out during the ten-yearly inspections and following the Fukushima accident in Japan, the Group drew up a major work program, called *Grand Carénage*, the principle of which was approved by the Board of Directors.

In the United Kingdom, the operating period currently planned for the reactors in EDF Energy's existing nuclear fleet ranges from 41 to 47 calendar years for advanced gas reactors ("AGR") and is 40 years for the Sizewell B pressurized water reactor ("PWR"). Since EDF Energy acquired them, the operating lifespan of the AGR power plants has been extended by six years on average and the objective is to increase the operating life of the PWR power plant by 20 years in addition to the 40 years currently planned (see section 1.4.5.1.2.2 "Nuclear generation" of the 2022 Document d'Enregistrement Universel). The two reactors at Dungeness B were permanently shut down in June 2021, those at Hunterston B in November 2021 and those at Hinkley Point B in July and August 2022.

## **b) Main risks**

### **Nuclear fleet in France**

- This standardization of the fleet has a potential parallel risk of the dysfunction being ordinary to several reactors or to a generation or series of reactors (see section 1.4.1.1.2 "Nuclear power generation in France" of the 2022 Document d'Enregistrement Universel).
- The Group may be required to make significant or costly repairs or modifications to all or some of its plants. Events may occur that could have an impact on the operation of the fleet or on its output, which could lead to a temporary shutdown or closure of all or part of the fleet.

In particular, the detection of indications (termed "stress corrosion") discussed above brought about the shutting down of the reactors of the N4 series. The preventive inspections carried out revealed similar defects in other reactors.

Checks could be further extended within the nuclear fleet, in close consultation with the ASN. They could result in further investigations and entail potentially lengthy and costly repairs.

- During the periodic ten-year reviews, the ASN decides on the measures taken by the operator and may give additional instructions for each reactor. Solutions are being studied to demonstrate the capacity of non-replaceable equipment such as the containment building and reactor vessels, to ensure their operation up to 60 years. These studies, which are based on data available in France but also internationally,<sup>25</sup> make it possible to confirm the safety margins available for the operating periods under examination but may also incur the need to adopt additional protective measures, if necessary, for the existing fleet, which could have consequences on its performance.
- In its decision of February 23, 2021 on the conditions for continued operation of EDF's 900MWe reactors beyond their fourth periodic review, the ASN found that the measures planned by EDF, supplemented by the responses to the requirements formulated by the ASN, will make it possible to achieve the objectives of the review and that these safety improvements open up the prospect of continued operation of the 900MWe reactors for a period of ten years beyond their fourth periodic review, subject to the implementation of additional measures. These new requirements lead to an increase in investments and an additional industrial load of around 25% compared with the already very ambitious initial program, increasing the risk affecting the ability of industrialists to make the necessary investments within the stipulated deadlines.
- In accordance with the French Environmental Code, the measures proposed by EDF during reviews after the thirty-fifth year of operation will be submitted for each reactor individually to the ASN for authorization, after a public enquiry. For Tricastin 1, whose VD4 (head of series) culminated in recoupling on December

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<sup>25</sup> Four reactors in the U.S. have been licensed to operate for up to 80 years. For six others, the license application is currently being processed: the Nuclear Regulatory Commission staff has defined subsequent license renewal to be the period of extended operation from 60 years to 80 years.



23, 2019, the periodic review conclusion report was transmitted in February 2020, and was the subject of a public enquiry from January 13, 2022 to February 14, 2022, after publication of the generic ASN opinion regarding the VD4. The ASN's opinion on the Tricastin 1 RCR is expected to be issued in 2023. At the end of 2022, the VD4s were completed for the following reactors: the Tricastin 1; Tricastin 2; Tricastin 3; Bugey 2; Bugey 4; Bugey 5; Dampierre 1; Dampierre 2; Gravelines 1; and Gravelines 3 reactors, and the VD4 of Blayais 1 is under way. Each ASN opinion may include site-specific requirements in addition to the requirements of the generic opinion, impacting industrial load and costs.

- In 2016, the Board of Directors approved the extension in the consolidated financial statements of the depreciation period for the 900MW PWR plants, except Fessenheim, from 40 years to 50 years, without prejudice to the decisions of the ASN on the measures proposed by EDF for each reactor individually, after each 10-year inspection. The risk cannot be ruled out that the extension of the operating life of certain 900MW reactors may not be authorized, but an important step forward was taken with the generic opinion issued by the ASN on February 23, 2021.
- The continuing in operation of the other series of France's nuclear fleet (1,300MW and 1,450MW), which are more recent, remains an industrial objective for the Group. In 2021, the Board of Directors approved the extension in the consolidated financial statements of the depreciation period for the 1,300MW PWR plants from 40 years to 50 years (see Note 1.4.1 "Effects of market price levels on comparability" of the 2022 Consolidated Financial Statements). This accounting estimate does not assume that continued operation will be authorized; such authorization will be granted unit by unit by the safety authority after each ten-yearly inspection, as required by law.
- The potential uncertainties regarding the *Grand Carénage* program include a possible delay in the processing of the authorizations required to start operations, especially as regards the authorizations expected from the ASN. Such uncertainties may also concern the manufacture and delivery on site of new equipment or work carried out on-site in a situation where a large number of industrial operations are being carried out at the same time. Furthermore, the Group may not receive the expected operating lifespan extension from the competent authorities. Such extensions could also be obtained under certain conditions, the financial impact of which, in particular in terms of investments, could affect the Group's strategy with respect to extending the operating life of its reactors or the Group's ability to pursue its global investment strategy. These events could have a significant negative impact on the Group's financial position.

### **Nuclear facilities in the United Kingdom**

- Given the nuclear safety rules applicable in the United Kingdom and AGR reactor technology in particular, EDF Energy may not obtain the necessary authorizations from the Office for Nuclear Regulation ("ONR") when the time comes to operate its existing nuclear reactors until the currently planned (AGR) or potential (Sizewell B) end of operation date, or may obtain such authorizations under conditions involving significant expenditure or investment by the Group.
- The ongoing analysis of graphite ageing in the AGR may lead to prolonged unavailability or early shutdown of the reactors. The cracking of graphite subjected to irradiation must be carefully monitored, with inspections carried out regularly, and controlled by the ONR, to ensure that there is sufficient knowledge of the core to justify continued operation. Following decisions taken in August 2020 and November 2020, Hunterston B was permanently shut down in January 2022, and Hinkley Point B permanently ceased production in July 2022. Following a life review of the AGRs in December 2021, the projected final shutdown dates for Heysham 2 and Torness have been brought forward from 2030 to March 2028.
- An accelerated fuel withdrawal strategy would be implemented in the event of any risk of an early shutdown of the other AGR plants. If this strategy were to be adopted, a re-examination of the value of the assets may be required.
- Given the ageing of the British fleet and the many technical difficulties encountered, the future level of output of the AGRs currently in service is very uncertain.

### **Other nuclear facilities**

- For nuclear reactors where EDF is not in charge of operation but has financial interests (Belgium, China), the Group is also financially exposed to some risks. The Group may need to contribute up to the amount of its share to costly repairs or modifications to be carried out on these units or to events that may have an impact on their operating lifespan, production or availability. As in France and the United Kingdom, the nuclear safety authorities in these countries may take decisions that require additional work or controls, in particular as regards exploiting feedback from international experience and anticipating potentially precursory events. The Group is also exposed in terms of the value of its assets.

### **Other risks**

- Furthermore, despite the quality of operations and the changes made by the Group to its nuclear facilities, it cannot be ruled out that some of these facilities will be subject to special operating conditions to reinforce the operating safety margins at the initiative of the nuclear operator responsible for nuclear safety or at the request of the ASN.
- Finally, a potential serious nuclear accident not involving the Group but with widespread consequences worldwide could lead the safety authorities to require new reactor upgrades applicable to the Group's reactors, and to those in which the Group has a stake.

### **5B: Control of radioactive waste treatment, and decommissioning of nuclear facilities, and ability to meet related commitments**

**Summary:** The provisions set aside by the Group to cover the expenses relating to the decommissioning of nuclear facilities in France and for the treatment, decommissioning and ultimate disposal of radioactive waste, including long-lived waste from spent fuel treatment and decommissioning, may be exposed to technical, cost and planning risks which could make them insufficient. In order to control these risks, EDF has instituted a dedicated organization to carry out decommissioning and waste management projects covered by these provisions. The 2020-2021 audit by the French General Directorate for Energy & Climate (“**DGEC**”) on the decommissioning of halted facilities and the ASN inspection in 2021 on the management of projects for decommissioning natural uranium graphite gas (“**NUGG**”) reactors, lent strength both to the scenarios examined and to the relevance of the organization and management for the projects instituted by EDF. However, several exogenous factors remain, with a likely impact on the expenses of decommissioning and long-term waste management, particularly the following: the inflation risk, the uncertainties regarding the tax treatment of the industrial geological storage center (“**CIGEO**”) waste management project, the tensions on the industrial fabric and skills shortages. These risk factors could unfavorably impact the estimated expenses, requiring upward revision of the related provisions and of the assets dedicated to covering them, with a negative impact on the Group's cash flow, earnings and prospects. In addition, these operations must address the CSR challenge of waste management and the circular economy.

#### ***a) Decommissioning of finally shut-down power plants***

In France, the law (Environmental Code) requires every basic nuclear plant operator to prudently evaluate the expenses for decommissioning their facilities and the expenses for managing spent fuel and radioactive waste, including expenses of transport away from the site. The law also requires the setting aside of provisions corresponding to these expenses and the exclusive allocation to covering these provisions of the necessary assets also termed “dedicated assets.” This obligation also applies both to installations that have already been halted, where their decommissioning has not been completed and the authority has not pronounced them to be declassified, and to installations currently in operation, in anticipation of their future decommissioning.

Currently, the operations for decommissioning EDF nuclear installations in France (see section 1.4.1.1.2.3 “The issues relating to the nuclear activity” of the 2022 Document d'Enregistrement Universel) chiefly concern reactors that were constructed, operated then finally shut down. These operations cover four different reactor technologies: heavy water reactor (Brennilis), sodium-cooled fast-neutron reactor (Superphenix at Creys-Malville), graphite-moderated and gas-cooled reactors (NUGG reactors at Chinon, Saint Laurent and Bugey) and the PWRs at Chooz A and Fessenheim.

In the United Kingdom, the two reactors at Dungeness were permanently shut down in June 2021, those at Hunterston B in November 2021 and those at Hinkley Point B in June and August 2022. Under the agreements concluded in connection with the restructuring of British Energy, the costs of decommissioning EDF Energy Nuclear Generation Group Ltd.'s existing nuclear power plants will be paid by the Nuclear Liabilities Fund (“NLF”). If the assets of this Fund prove insufficient, these costs will be borne by the British Government (see section 1.4.5.1.2.2 “Nuclear generation” of the 2022 Document d’Enregistrement Universel). In 2019, EDF Energy and the UK government began discussions with a view to clarifying the conditions for implementing the above-mentioned agreements, in particular as regards determining the decommissioning costs to be recovered by EDF Energy from the NLF and the conditions under which the British authorities may exercise their option to acquire the nuclear power plants at the end of the defuelling phase. In June 2021 an agreement was reached with the government, which specifies EDF Energy’s role in the fuel disposal phase, how and when costs will be recovered, and the terms under which the plants will be transferred to the government. This agreement updates the NLF Agreement.

### **Main risks**

- The decommissioning operations under way in France are a first for EDF, and apart from the PWR, they concern reactor technologies for which there is little or no feedback internationally. They therefore require development of new methods and technologies that are riskier than technologies for which feedback already exists.
- It will be construed that any provision relating to a future expense presents a risk which may in particular relate to changes in the administrative, regulatory, technical and economic context.
- These uncertainties and contingencies may lead to revisions of the amounts provisioned for decommissioning installations and for the long-term management of their waste.
- These uncertainties and contingencies could lead to a significant revision of the amounts provisioned. The provisions set aside may not cover the costs actually incurred in due course. Accordingly, in the United Kingdom, the agreements in force provide that the expenses related to the unloading and evacuation of the fuel, to be covered by the NLF, must be evidenced by EDF Energy and approved by the French government; failing this, they would remain the responsibility of EDF Energy.
- For nuclear power plants which EDF does not operate, but has financial interests in (China and Belgium), the Group is exposed financially in proportion to its shareholding in its contribution to future decommissioning costs.

### ***b) Waste management***

In France, EDF is responsible for all radioactive waste produced during:

- the operation of the nuclear facilities operated by the Group;
- processing operations for spent fuel from reactors operated by EDF; and
- decommissioning operations at the nuclear facilities operated by the Group (see section 1.4.1.1.2.3 “The issues relating to the nuclear activity – storing conditioned ultimate waste” of the 2022 Document d’Enregistrement Universel).

In this regard, EDF has allocated provisions for the long-term management of such waste (see legal framework as set out above). For each category of waste (high, medium, low or very low activity), a specific management channel is identified.

Most of the provision for the long-term management of waste concerns high-level waste (“HLW”) and intermediate-level long-lived waste (“LLW”). It is based on the assumption of geological disposal, which is the international benchmark for the ultimate disposal of high-level and intermediate-level, long-lived radioactive waste, and on the work carried out in 2006 with the National Agency for Radioactive Waste Management (“ANDRA”), the public authorities and other producers of radioactive waste (see Note 15.1 “Provisions related to nuclear generation and dedicated assets in France” of the 2022 Consolidated Financial Statements and see section 1.4.1.1.2.3 “The issues relating to the nuclear activity” of the 2022 Document d’Enregistrement Universel).

The reference cost of the storage/disposal project for HLW and for LLW, which enables the associated provisions to be drawn up, is laid down in the Order of January 15, 2016.

Law no. 2006-739 dated June 28, 2006 provides for a dedicated storage center for Low-Level Long-Life waste (“**LLW-LL**”), such as the graphite of the NUGG reactors. The overall industrial scheme for the management of all LLW-LL is being defined within the framework of the French National Plan for the Management of Radioactive Materials and Waste (“**PNGMDR**”) (see section 1.4.1.1.2.3 “The issues relating to the nuclear activity” of the 2022 Document d’Enregistrement Universel).

In the United Kingdom, under the terms of agreements entered into with the authorities, the liability and certain costs associated with the management of certain radioactive waste are transferred to the UK government. The supplementary agreement entered into with the government in 2021 clarifies how the costs associated with waste management will be recovered.

#### *Main risks*

- As a nuclear operator, the Group is liable for assuring the safety of its own waste treatment and disposal facilities.
- As a producer of radioactive waste, the Group is liable for identifying the appropriate waste management processes. When the waste management processes are operated (within the meaning of a nuclear operator) by other players, the Group may be liable particularly in the event of an accident with damage to third parties or to the environment due to nonconformities of such waste with the specifications defined by the operators of the facilities concerned.
- A challenge to the specifications used as the assumption for accepting waste for geological disposal could lead to reassessing certain waste management methods and the related financial assumptions.
- The reservations that remain, and the supplementary investigation being carried out by ANDRA to obtain approval for the construction of the geological storage area, could lead to a revision of the provisions for long-term radioactive waste management.
- For the geological disposal center project developed by ANDRA to accommodate high-level waste and intermediate-level long-lived waste (CIGEO), the risks of overcosts persist at both design phase and construction phase. Moreover, the policy directions for the tax treatment of this project were modified in late 2020 by a legislative amendment (instituting a storage levy) without specifying the terms and procedures for implementation, and hence they continue to pose a risk of upward revision of the applicable tax charge. All these items, and the supplementary investigation being carried out by ANDRA to obtain approval for the construction of this geological storage area, could lead to a revision of the provisions for long-term radioactive waste management.
- It may be necessary to update the provisions on the basis of the conclusions of studies conducted in connection with the PNGMDR relating to the storage of LLW-LL, or the results of the end of the preliminary and final draft design study optimization cycle for the design of the future geological disposal site developed by ANDRA.
- Pursuant to the restructuring agreements of British Energy, EDF Energy Nuclear Generation Ltd. remains financially, technically and legally liable for the management, storage and reprocessing of waste that does not come within the scope of the aforementioned agreements.
- Failure to control the costs and time frames for completion with respect to the solutions for the treatment and ultimate storage of waste for which the Group is liable would have a negative impact on the Group’s financial position and reputation.
- For nuclear power plants which EDF does not operate, but in which it has financial interests (Belgium, China), the Group is exposed financially in proportion to its shareholding to contributing to future expenditures related to the management of spent fuel and waste.

#### *c) Provisions and management of dedicated assets*

##### **Context**

Note 15.1.2.4 “Nuclear provisions in France” of the 2022 Consolidated Financial Statements sets out the amounts of expenses under the economic conditions at the end of 2022 as well as the corresponding provisions relating to:

- the future decommissioning of the nuclear electricity generation fleet in France and of the currently halted facilities;
- the management of the last fuel cores; and
- the long-term management of waste and the recovery and packaging of waste present in the facilities.

This note also provides analyses of the sensitivity of the Group’s provisions and income to a change in the discount rate for the various categories of provisions. All these provisions represent several tens of billions of euros.

Note 17.1 “Other provisions for decommissioning” of the 2022 Consolidated Financial Statements presents the same items for Framatome and Cyclife France (formerly SOCODEI) and their basic nuclear facilities in France.

Note 15.1.2.4 “Valuation of EDF’s dedicated assets” of the 2022 Consolidated Financial Statements sets out the realizable value of EDF’s portfolio of dedicated assets to cover the costs of long-term nuclear commitments (radioactive waste and decommissioning) at December 31, 2022.

In the United Kingdom, the funds for nuclear liabilities are managed by a body independent of EDF set up by the British government (NLF) for the existing nuclear fleet. For HPC-related liabilities, the funds will be managed by FundCo, a body (Trust) independent of HPC’s shareholders (EDF Energy and CGN) and the UK government. Operators therefore have no assets to manage for this purpose (see section 1.4.5.1.2.2 “Nuclear generation” of the 2022 Document d’Enregistrement Universel).

## Main risks

- All of the contingencies and uncertainties regarding these provisions may have a material adverse impact on the Group’s financial position (see Note 15.1 “Provisions related to nuclear generation and dedicated assets in France” of the 2022 Consolidated Financial Statements).
- In the event of a significant change in the provisions determining the reference base of the dedicated assets, it might prove necessary to make additional allocations to adjust the value of these assets, which could have a material adverse impact on EDF’s financial position. Moreover, stricter regulations at the national level (in particular those that might impact the base for determining the dedicated assets to be constituted by EDF<sup>26</sup>) or European level may lead to more stringent requirements regarding the constitution of dedicated assets and have a significant impact on EDF’s financial position.
- Although these assets are constituted and managed in accordance with strict prudential rules, price fluctuations in the financial markets or changes in valuation may have a material adverse impact on the value of these assets (for a sensitivity analysis, see section 5.1.6.1.6 “Management of financial risk on EDF’s dedicated asset portfolio” of the 2022 Document d’Enregistrement Universel), which could require EDF to allocate additional amounts to restore the value of these assets. Such events could have a material adverse effect on the Group’s financial position.
- The unavailability or insufficient amount of the dedicated assets to hedge the expenditure schedules of the Group’s long-term commitments could have a negative impact on the Group’s financial position and reputation.

## 5C: Nuclear safety violations during operation resulting in nuclear civil liability

**Summary:** In addition to controlling industrial performance, and given the importance of nuclear generation within the EDF group, the way EDF exercises its responsibility as a nuclear operator – with nuclear safety being the number-

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<sup>26</sup> The report of the French *Cour des comptes* to the Senate Finance Committee on the decommissioning and dismantling of nuclear power plants, published on March 4, 2020, recommends that the costs of all decommissioning preparation operations, post-operational expenses and the cost of taxes, levies and insurance premiums directly attributable to decommissioning sites should be phased into the long-term expense categories.

one priority – determines the Group’s overall performance. As a result of its nuclear activities, the Group is exposed to nuclear civil liability risks.

#### ***a) Context***

The primary responsibility for nuclear safety lies with the nuclear operator throughout the operating cycle of nuclear reactors. This principle along with the principle of control are reaffirmed in the EDF group’s nuclear safety policy. Liability as a nuclear operator falls under the “nuclear safety, health and security” aspect of the Group’s CSR policy (see section 3.3.1 “Security, health and safety for all” of the 2022 Document d’Enregistrement Universel). The Chairman and Chief Executive Officer delegates this responsibility to the Group Senior Executive Vice-President, Nuclear and Thermal and the Group Senior Executive Vice-President, New Nuclear Projects and Engineering, who then sub-delegate it to the Directors of the Divisions involved, who in turn sub-delegate it to the Unit Managers.

#### ***b) Main risks***

##### *Control of nuclear safety*

The top priority is nuclear safety, as defined in the Group’s Nuclear Safety Policy, and this is a factor in the industrial performance of the nuclear business as a whole. Nuclear safety takes into account the design by the nuclear operator and the operation by the designer. Failure to control operating safety could have major or even vital consequences on the value of the Group’s industrial assets, its financial position and its development outlook or even on the continuation of its industrial activity.

Any serious event related to the Group’s nuclear activities, with a potential or proven impact on the population, the environment or on a territory, could lead to a significant increase in the operating constraints of the Group’s industrial sites, or even the partial or total interruption of the Group’s nuclear activities. Such an event could have a significant negative impact on the Group’s activities, financial position, strategy and reputation.

##### *Nuclear civil liability*

The nuclear civil liability scheme that applies to nuclear facility operators of states, which are parties to the Paris Convention, and the insurance applicable thereto, are described in section 2.1.3.7 “Insurance” of the 2022 Document d’Enregistrement Universel. This scheme is based on the principle of the operator’s strict liability. Accordingly, if an event occurs that causes nuclear damage, the Group would be automatically liable up to a monetary maximum set by the law applicable in the country, regardless of the source of the event that caused the damage and any safety measures that may have been taken.

In countries where the Group operates nuclear facilities, statutory liability limits may be increased or repealed. For example, the protocols amending the Paris Convention and the Brussels Convention, in force since January 1, 2022, provide for these maximum amounts to be increased and a substantial expansion of the loss to be covered. The operator’s liability in France amounts to €700 million for nuclear damage caused by each nuclear accident, and €80 million in the event of transport of nuclear substances for a given nuclear accident. The entry into force of the other amendments introduced in these protocols is likely to further increase the cost of insurance, and insurance covering this liability may not always be available or maintained. Insurance coverage for the Group’s nuclear operator’s civil liability and for the transport of nuclear substances is described in section 2.1.3.7 “Insurance” of the 2022 Document d’Enregistrement Universel.

Property damage to EDF’s nuclear facilities is covered by insurance programs (see section 2.1.3.7 “Insurance” of the 2022 Document d’Enregistrement Universel). Despite this cover, any event that may cause significant damage to a nuclear facility of the Group could have an adverse impact on the Group’s business and financial position.

Lastly, the Group cannot guarantee that the insurers that cover both its liability as a nuclear plant operator and property damage to its facilities will always have available capacity or that the costs of cover will not significantly increase, particularly in light of the impacts on the insurance market of events such as the nuclear accident in Japan that occurred in March 2011.

## **5D: Control of the fuel cycle**

**Summary:** In addition to the control of nuclear safety (risk 5C), the operation of existing nuclear facilities (risk 5A) and new nuclear projects (risk 4A), the Group is exposed, in the context of nuclear activities, to the control of the nuclear fuel cycle.

### ***a) Context***

The Group's operating costs include nuclear fuel purchases.

EDF is supplied with uranium, conversion and enrichment services, fuel assembly supplies and spent fuel reprocessing operations for its nuclear fleet in France and the United Kingdom.

In France, EDF has set aside provisions for spent nuclear fuel management operations (transport, processing, conditioning for recycling) (see Note 15 "Provisions related to nuclear generation and dedicated assets" of the 2022 Consolidated Financial Statements) based on the price and volume conditions of the master agreement signed with Orano in December 2008 and broken down in the successive implementation agreements (see section 1.4.1.1.2.3 "The issues relating to the nuclear activity" of the 2022 Document d'Enregistrement Universel). As of December 31, 2022, these provisions amounted to €10.2 billion.

Note 15.1.1.5 "Discount rate, inflation and sensitivity analyses" and Note 15.1 "Provisions related to nuclear generation and dedicated assets in France" of the 2022 Consolidated Financial Statements set out the connection between "costs based on year-end economic conditions," which represent estimated amounts as at December 31, 2022, and "provisions made at present value."

### ***b) Main risks***

#### *Nuclear fuel supply*

Prices and volumes are subject to fluctuations that depend on factors beyond the Group's control, including political and economic factors (in particular, profitability outlook for mining investments, supply/demand imbalance or supply side shortage, associated, for example, with the occurrence of an operating incident in a uranium mine or cycle plant, a delay in commissioning a new mine, or an event leading to institutional instability in a producing country, or restrictions/sanctions/embargos).

#### *Nuclear fuel logistics*

The storage and transport of new or spent nuclear fuel is an industrial activity that requires specific safety and security measures. These requirements could become more stringent, generating additional difficulties and costs for the Group.

In the event of the collapse of this industrial logistics system, the Group could reduce or even interrupt all or part of the electricity generation at the affected sites, either due to the non-delivery of new assemblies or to the saturation of storage facilities, which could have a negative impact on the Group's financial position (see section 1.4.1.1.2.3 "The issues relating to the nuclear activity" of the 2022 Document d'Enregistrement Universel).

Transport of nuclear materials continues to be highly constrained, particularly with regard to the increase in security and regulatory requirements; in line with the management of the "yellow vests" (*gilets jaunes*) crisis, the Covid-19 pandemic was well anticipated and did not disrupt transport, but reminded us that the situation remains precarious.

In view of the saturation of the existing storage pools, and of the risk of the long-term impossibility of implementing multi-recycling in its third-generation pressurized water reactors, or of recycling in fourth-generation reactors termed "GEN IV" (abandonment of the ASTRID rapid-neutron reactor), the fuel cycle could be jeopardized. This would have both operational and financial consequences.

*Provisions for spent fuel disposal*

The amount of provisions currently booked to cover the period not covered by the current agreement with Orano should be reassessed if the terms under which this agreement is renewed prove more costly than those currently applicable.

The contracts entered into in France and abroad may not sufficiently protect the Group from sudden or significant price increases. When these contracts expire, the Group may not be able to renew them, in particular at an equivalent price. This could have an adverse impact on the Group's financial position.



## **RISK FACTORS RELATED TO THE NOTES AND THE NOTES OFFERING**

### ***There is currently no public market for the Notes.***

Each series of Notes comprises a new issue of securities for which there is currently no public market. There is no existing trading market for any series of Notes. Although the Issuer has applied to list the Notes on the Official List of the Luxembourg Stock Exchange and admit them to trading on the Euro MTF Market, a listing on a stock exchange or other trading market does not imply that a trading market for the Notes will develop or continue. There can be no assurance that any market for the Notes will develop or continue or, if one does develop, that it will be maintained, that any market for the Notes will be liquid or that Noteholders will be able to sell their Notes when desired, or at all, or at prices they find acceptable. The liquidity of, and trading market for, the Notes may also be adversely affected by general declines in the market for similar securities.

In addition, the French State, the majority shareholder of the Issuer, has expressed in its Offer filed with the AMF that it intends to delist EDF, following which the Issuer will no longer be a publicly listed company. Recent regulatory actions by the SEC under Rule 15c2-11 of the Exchange Act may restrict the ability of broker and dealers to publish quotations on the Notes on any interdealer quotation system or other quotation medium after January 3, 2025, which may materially adversely affect the liquidity and trading prices for the Notes.

### ***The Notes may not become or remain listed on the Official List of the Luxembourg Stock Exchange.***

Application has been made to the Official List of the Luxembourg Stock Exchange for the listing of the Notes and for admission to trade the Notes on the Euro MTF Market thereof. There can be no assurance that the Notes will become or remain listed on the Luxembourg Stock Exchange. If the Issuer cannot maintain the listing on the Official List of the Luxembourg Stock Exchange and the admission to trading on the Euro MTF Market thereof, or if it becomes unduly burdensome to make or maintain such listing, the Issuer may cease to maintain such listing on the Official List of the Luxembourg Stock Exchange. Listing of any of the Notes on the Official List of the Luxembourg Stock Exchange does not imply that a public offering of any of the Notes in Luxembourg has been authorized. Although no assurance is made as to the liquidity of the Notes as a result of listing on the Official List of the Luxembourg Stock Exchange or another recognized listing exchange for comparable issuers, the delisting of the Notes from the Official List of the Luxembourg Stock Exchange or another listing exchange may have an adverse effect on a holder's ability to resell Notes in the secondary market and may result in adverse tax consequences for holders of the Notes.

### ***The Notes are subject to restrictions on transfer.***

The Notes have not been registered under the Securities Act or the securities laws of any state of the United States or any other jurisdiction, and the Notes may not be publicly offered, sold, pledged or otherwise transferred in any jurisdiction where such registration may be required.

The Notes are being offered in reliance upon an exemption from registration under the Securities Act and applicable state securities laws of the United States. As such, the Notes may be transferred or resold only in a transaction registered under or exempt from the Securities Act and applicable U.S. state securities laws. These restrictions on transfer may have a material adverse effect on the ability of any Noteholder to transfer such Notes.

### ***Investors may experience difficulties in enforcing civil liabilities.***

The Issuer is incorporated in France. The Company's directors and management (and several parties named in this offering memorandum) reside outside the United States, and all, or a substantial portion of, the Issuer's and such persons' assets are located outside the United States. As a result, it may not be possible for investors to effect service of process upon the Issuer or such persons within the United States, or to enforce against the Issuer or such persons in the United States judgments obtained in the U.S. courts, including judgments predicated upon the civil liability provisions of the federal securities laws of the United States. Under the laws of the Republic of France, certain provisions of laws or regulations may restrict or prevent enforcement of judicial measures against certain assets of the Company in France and elsewhere because, among other reasons, (i) they are dedicated to public service (*service public*) activities, (ii) they are used in connection with the management of a concession, or (iii) their use requires

authorization (for instance in the nuclear field). The provisions of the 2014 Order regarding governance and capital transactions of state-owned companies, as amended, and the regulations promulgated thereunder, Decree no. 2014-949 of August 20, 2014 and Decree no. 53-707 of August 9, 1953, each as amended from time to time and including the regulations promulgated thereunder, may also restrict or prevent enforcement of judicial measures against certain assets of the Company. In addition, actions in the United States under the U.S. federal securities laws could be affected under certain circumstances by the French law no. 68-678 of July 26, 1968 (relating to communication of documents and information of an economic, commercial, industrial, financial or technical nature to foreign persons or entities), as amended from time to time, European and French data protection regulations (including Regulation (EU) 2016/679 of April 27, 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, as amended from time to time, and Act no. 78-17 of January 6, 1978, as amended from time to time), which may preclude or restrict the obtaining of evidence in France or from French persons in connection with a judicial or administrative U.S. action.

***The Notes are unsecured obligations of the Issuer.***

The Notes will be senior, unsecured indebtedness of the Issuer and will rank *pari passu* with all of the Issuer's existing and future unsecured and unsubordinated obligations (subject to such exceptions as are from time to time mandatory under French law). As a result, in any liquidation, dissolution, bankruptcy or other similar proceeding, the holders of the Issuer's secured debt may assert rights against the secured assets in order to receive full payment of their debt before such assets may be used to pay the Noteholders.

For more information on the ranking of the Notes, see "*Description of Notes.*"

***Our credit ratings may not reflect all risks of an investment in the Notes and may be revised, suspended or withdrawn at any time.***

The credit ratings ascribed to us and our outstanding debt securities (including the credit ratings ascribed to the Notes) are intended to reflect our ability to meet the payment obligations under our outstanding debt securities, and may not reflect the potential impact of all risks related to structure, market, additional factors described herein, and other factors on the value of our outstanding debt securities or the Notes.

A credit rating is not a recommendation to purchase, sell or hold securities and may be revised, suspended or withdrawn, at any time and without notice, by the independent credit rating agencies assigning such ratings. Any such revision, suspension or withdrawal of any credit rating will generally affect the market value of debt securities we have issued, including the Notes. In particular, following the publication of press releases by Fitch on April 3, 2023, Standard & Poor's on December 14, 2022 and Moody's on July 7, 2022, the Issuer's long-term and short-term ratings have been respectively set at "BBB+" and "F2" with stable outlook by Fitch, "BBB" and "A-2" with stable outlook by Standard & Poor's and "Baa1" and "P-2" with negative outlook by Moody's.

Fitch indicated in its press release of April 3, 2023 that EDF's issuer default rating, which was affirmed at BBB+ with a stable outlook, incorporated a two-notch uplift for state support. The assessment assumes the full nationalization of the Group and reflects the links with the stronger sovereign. Fitch indicated the following rating sensitivities that could, individually or collectively, lead to negative rating action/downgrade: (i) long-term reduction of available generation capacity from the existing fleet in France and weaker assessment of EDF's asset base; (ii) funds from operations ("FFO") net leverage above 4.7x on a sustained basis; (iii) unexpected political measures similar to those taken in 2022; and (iv) failure to implement the nationalization. On December 14, 2022, Standard & Poor's indicated that the stable outlook reflects nuclear-generation and profit recovery prospectus despite the persistent risks on nuclear new builds and on domestic nuclear availability. Nevertheless, Standard & Poor's noted that the corrosion issues under stress at many of EDF's newer domestic reactors raised concerns on the level and predictability of EDF's power and profit generation, which weighed on EDF's business risk profile and drove the revision of EDF's stand-alone credit profile to 'bb-' from 'bb'. Finally, Standard & Poor's stated that, barring a change in its views on extraordinary government support, a downgrade would be driven by a significant stand-alone credit profile deterioration, which would likely reflect more severe industrial challenges at the domestic nuclear fleet or a significant deviation from S&P's base case for leverage. In Moody's press release, dated July 7, 2022, the rating agency stated that it expected the renationalization, if successful, to be credit positive because it would further evidence the French government's strong support for EDF. However, Moody's noted that the announcement of the proposed renationalization occurs in

a context of an ongoing deterioration of the Group's credit profile resulting from reduced and unpredictable nuclear output combined with large spending to maintain and develop nuclear capacities among other. In addition, Moody's noted that it expects EDF's 2022 credit metrics will fall significantly short of levels consistent with the baa3 Baseline Credit Assessment (BCA), with FFO/net debt potentially negative; which compares with Moody's ratio guidance of mid-to-high teens in percentage terms, despite planned mitigation measures including the €3.15 billion completed capital increase, the prolonged scrip dividend policy over 2022-23 and a €3 billion disposal program to be implemented over 2022-24.

***An investment in the Notes involves risks relating to changes in the interest rate environment.***

A holder of a Note, which pays interest at a fixed rate, is exposed to the risk that the value of such Note could fall as a result of changes in the market interest rate. While the nominal interest rate of the Notes specified herein is fixed during the term of such Notes, the current interest rate on the capital markets ("**market interest rate**") typically varies on a daily basis. As the market interest rate changes, the value of the Notes would typically change in the opposite direction. If the market interest rate increases, the value of the Notes would typically fall, until the yield of such Notes is approximately equal to the market interest rate. If the market interest rate falls, the value of the Notes would typically increase until the yield of such Notes is approximately equal to the market interest rate. Changes in the market interest rate are typically relevant to Noteholders intending to sell their Notes prior to the maturity date, or in the case the Notes are redeemed by the Issuer prior to the stated maturity. We cannot provide any assurance regarding the future level of market interest rates.

***We are not restricted in the amount of additional debt that we may incur or guarantee, including debt ranking senior to, or pari passu with the Notes, which may make it difficult to satisfy our obligations under the Notes or reduce the value of the Notes.***

The Notes and the Fiscal Agency Agreement under which the Notes will be issued will not contain any limitation on the amount of unsecured debt which the Issuer may issue. We, including our subsidiaries, may incur additional indebtedness or grant guarantees in respect of indebtedness of third parties, including indebtedness or guarantees that rank senior in priority of payment to, or *pari passu* with, the Notes. The Group is an active issuer of debt and other types of securities. EDF regularly assesses its financial condition and financing requirements, and monitors national and international financial markets for opportunities to conduct additional issuances of senior debt, hybrids and/or other types of securities. In particular, EDF expects to conduct an issuance of senior notes in Canada shortly after the offering of the Notes. Our incurrence of additional debt may have important consequences for you as a Noteholder, including making it more difficult for us to satisfy our obligations with respect to the Notes, a loss in the trading value of your Notes, if any, and a risk that the credit rating of the Notes is lowered or withdrawn. In addition, if the Issuer's financial condition were to deteriorate, the relevant Noteholders could suffer direct and materially adverse consequences, including missed interest payments, default at maturity, and, if the Issuer were liquidated (whether voluntarily or involuntarily), loss by the relevant Noteholders of all or a portion of their investment.

***A Noteholder's actual yield on the Notes may be reduced from the stated yield by transaction costs.***

When Notes are purchased or sold, several types of incidental costs (including transaction fees and commissions) are incurred in addition to the current price of the Notes. These incidental costs may significantly reduce or even exclude the potential profit of the Notes. For instance, credit institutions as a rule charge their clients for their own commissions, which are either fixed minimum commissions or pro-rata commissions depending on the order value. To the extent that additional (domestic or foreign) parties are involved in the execution of an order, including but not limited to domestic dealers or brokers in foreign markets, Noteholders must take into account that they may also be charged for the brokerage fees, commissions and other fees and expenses of such parties (third-party costs).

In addition to such costs directly related to the purchase of securities (direct costs), Noteholders must also take into account any additional costs (such as custody fees). Investors should inform themselves about any additional costs incurred in connection with the purchase, custody or sale of the Notes before investing in the Notes.

***There are exchange rate risks and exchange controls associated with the Notes.***

We will pay principal and interests on the Notes in U.S. dollars. This may result in 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 U.S. dollar. Such risks include, without limitation, (i) significant exchange rate fluctuations between U.S. dollar and the Investor's Currency (including changes due to devaluation of the U.S. dollar, or revaluation of the Investor's Currency) and (ii) the imposition or modification of exchange controls by authorities with jurisdiction over the Investor's Currency, as such authorities have imposed from time to time, and may in the future impose, which could adversely affect an applicable exchange rate and result in investors receiving less interest or principal than expected, or no interest or principal at all. An appreciation in the value of the Investor's Currency relative to the U.S. dollar would decrease (a) the Investor's Currency-equivalent yield on the Notes, (b) the Investor's Currency-equivalent value of the principal payable on the Notes and (c) the Investor's Currency-equivalent market value of the Notes.

***The Issuer may redeem the Notes in whole or in part at its option prior to their maturity.***

The Notes may be redeemed by the Issuer, at its option, at any time or from time to time at a make-whole redemption price. The optional redemption feature may affect the market value of the Notes. The market value of the Notes generally is unlikely to rise substantially above the price at which they can be redeemed.

An issuer is generally likely to, and we may therefore elect to, redeem the Notes when prevailing market interest rates are lower than the interest rates on the Notes. Potential investors should consider reinvestment risk as they may not be able to reinvest the redemption proceeds in a comparable investment at an effective interest rate as high as that of the Notes.

The Notes are subject to a Residual Maturity Call Option exercisable at the option of the Issuer prior to maturity. The Issuer may, at its option, at any time or from time to time, (i) during a period of one month preceding the applicable maturity date redeem the Five-Year Fixed Rate Notes, (ii) during a period of three months preceding the applicable maturity date redeem the Ten-Year Fixed Rate Notes and (iii) during a period of six months preceding the applicable maturity date redeem the Thirty-Year Fixed Rate Notes, in each case in whole or in part. Such redemption options would be exercised at the principal amount of the Notes together with interest accrued to, but excluding, the date of redemption. If the Issuer decides to redeem fewer than all of the outstanding Notes (a partial redemption) and the Notes to be redeemed are Global Notes then held by DTC, the Notes shall be redeemed on a pro rata pass through distribution of principal basis. In the case of a partial redemption in which the Notes to be redeemed are not Global Notes then held by DTC, the selection of the Notes for redemption will be made pro rata, by lot or by such other method as the Fiscal Agent in its sole discretion deems appropriate and fair. If any Note is to be redeemed in part only, the notice of redemption that relates to the Note will state the portion of the principal amount of the Note to be redeemed. A new Note in a principal amount equal to the unredeemed portion of the Note will be issued in the name of the Holder of the Note upon surrender for cancellation of the original Note. For so long as the Notes are held by DTC (or another depository), the redemption of the Notes shall be done in accordance with the policies and procedures of the depository.

Such an early redemption of the Notes may result, for the Noteholders, in a yield that is lower than anticipated. In addition, our redemption right may also adversely affect your ability to sell the Notes as their redemption date approaches.

***The Issuer may redeem the Notes at its option upon the occurrence of a Change in Tax Law.***

The Issuer may redeem the Notes, at its option, at a price equal to their principal amount plus accrued and unpaid interest, upon the occurrence of a Change in Tax Law, as defined herein under "*Description of Notes.*" If the Issuer chooses to redeem the Notes, there is no guarantee that Noteholders will be able to reinvest the proceeds received upon redemption in a comparable investment at an effective interest rate as high as that of the Notes.

***The Notes may not be a suitable investment for all investors.***

Each potential investor must determine the suitability of any investment in the Notes in light of its own circumstances, including its own investment objectives and experience, and any other factors which may be relevant to it in connection with such investment, either alone or with the assistance of a financial adviser. In particular, each potential investor should:

- have sufficient knowledge and experience to make a meaningful evaluation of the relevant Notes, the merits and risks of investing in the relevant Notes and the information contained or incorporated by reference in this offering memorandum;
- have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation and the investment(s) it is considering, an investment in the Notes and the impact the Notes will have on its overall investment portfolio;
- have sufficient financial resources and liquidity to bear all of the risks of an investment in the relevant Notes, including where the currency for principal or interest payments is different from the potential investor’s currency;
- understand thoroughly the terms and conditions of the relevant Notes and be familiar with the behavior of financial markets and of any financial variable which might have an impact on the return on the Notes; and
- be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

A potential investor should not invest in the Notes unless it has the expertise (either alone or with a financial adviser) to evaluate how the Notes will perform under changing conditions, the resulting effects on the value of the Notes and the impact this investment will have on the potential investor’s overall investment portfolio.

Prospective purchasers should also consult their own tax advisers as to the tax consequences of the purchase, ownership and disposition of Notes.

***French insolvency law proceedings may adversely impact Noteholders seeking repayment in the event that the Issuer or one or more of its subsidiaries is subject to such proceedings.***

Under French insolvency law, subject to certain threshold conditions which are met by the Issuer, parties directly impaired by the proposed insolvency plan (including holders of debt securities) are grouped into classes (the “Classes”) in the event of the opening in France of safeguarding proceedings (*procédure de sauvegarde*), accelerated safeguarding proceedings (*procédure de sauvegarde accélérée*) regarding, or a judicial restructuring (*procédure de redressement judiciaire*) of, the Issuer, in order to defend their common interests.

The court-appointed administrator is responsible for drawing up the Classes and informing each affected party that it is a member of a Class. The allocation of the affected parties in Classes must follow certain conditions, in particular: (i) each Class must present a sufficient commonality of economic interest (*communauté d'intérêt économique suffisante*), (ii) creditors whose claims are secured by security interests *in rem* (*sûretés réelles*), in respect of their claims so secured, and other creditors shall belong to different Classes, and (iii) the Class formation shall comply with subordination agreements entered into before commencement of the proceedings (such agreements need to be brought to the attention of the court-appointed administrator beforehand). Thus, holders of all debt securities issued by the Issuer (including the Notes), regardless of their governing law, are part of one or more Classes.

The Classes deliberate on the draft safeguarding plan (*projet de plan de sauvegarde*), draft accelerated safeguarding proceedings plan (*projet de plan de procédure de sauvegarde accélérée*), or draft restructuring plan (*projet de plan de redressement*) applicable to the Issuer, and may further agree to:

- increase the liabilities (*charges*) of holders of debt securities (including the Noteholders) by rescheduling due payments and/or writing-off receivables in the form of debt securities, partially or totally;
- establish an unequal treatment between holders of debt securities (including the Noteholders) as appropriate under the circumstances; and/or
- convert debt securities (including the Notes) into securities that give, or may give rights, to share capital.

Decisions of each Class are taken by a two-thirds majority of the votes held by the members of such Class (it being specified that the votes held are based on the value of the claims). No quorum is required to convene the Classes.

In principle, a proceedings plan must be adopted by each of the Classes in order to be submitted to the court. However, a cross-Class cram-down mechanism exists under French law. Thus, subject to certain conditions, where a plan is not approved by a two-thirds majority of each Class, it may nonetheless be adopted by the court at the request of the debtor or the court-appointed administrator (with the approval of the debtor, or of an affected party in case of restructuring proceedings) and be imposed on the parties that voted against such plan.

Any of the above proceedings, as amended from time to time, could have an adverse impact on Noteholders seeking repayment in the event that the Issuer or one or several of the Issuer's subsidiaries were to be subject to any such proceedings.

***Many factors may adversely affect the trading market, value or yield of the Notes.***

In addition to our own creditworthiness, many other factors may affect the trading market for, and market value of, the Notes, including, but not limited to:

- the method of calculating principal, premium and interest;
- the time remaining to the maturity date;
- the outstanding amount of our debt securities;
- redemption or repayment features; and
- the level, direction and volatility of market interest rates generally — the conditions of the financial markets and prevailing interest rates have fluctuated in the past and are likely to fluctuate in the future, which could have an adverse effect on the market prices of the Notes, regardless of our prospects and financial performance and condition.

The value of the Notes also depends on a number of interrelated factors, including economic, financial and political events in France or elsewhere, including factors affecting capital markets generally. The price at which a Noteholder will be able to sell the Notes prior to maturity may be at a discount, which could be substantial, from the issue price or the purchase price paid by such purchaser.

In addition, if you decide to sell the Notes, there may be a limited number of buyers (if any) or there may be a surplus of debt securities of other issuers available with similar credit, maturity and other structural characteristics. This may affect the price you receive for the Notes or your ability to sell them at all. You should not purchase the Notes unless you understand and know you can bear the related investment risks.

## RISK MITIGATION AND CONTROL ACTIONS

As described in Section 2 “Risk factors and control framework” of the 2022 Document d’Enregistrement Universel, in order to control risks to which the Group is exposed, the Group has put in place certain measures. Some measures apply to all risks, such as internal control and the commitment approval process (see section 2.1 “Risk management and control of activities” of the 2022 Document d’Enregistrement Universel), while others are specific to each risk.

The following describes the risk mitigation and control actions related to the risk factors presented in the “Risk factors related to the Issuer’s business, financial position and futures results” section of this offering memorandum, as applicable.

Prospective investors should consult their own financial and legal advisers about risks associated with investment in the Notes and the suitability of investing in the Notes in light of their particular circumstances.

In connection with the risks presented in 1A (“Changes in public policies and in the regulatory framework in France and Europe, especially relating to ARENH”), the Group notes the following additional information with respect to risk mitigation and control actions:

Control actions are limited for those risks, which stem from decisions originating outside the Company. Nevertheless, the control actions include the following:

- monitoring the political, legislative and regulatory context in France, Europe and in the regions where the Group operates;
  - analysis of the potential consequences of published or still pending legislative or regulatory instruments in order to identify the impact on the Group, particularly as concerns the ARENH, the tariff shield, the cushioning, the taxation of infra-marginal power generation revenues; see in particular the action plan for strengthening the Group’s balance sheet structure;
  - dialogue with and lobbying of public authorities (particularly in France and Europe) to share views on all the potential direct and indirect impacts on the EDF group of the pending instruments and public policies;
  - contribution to public consultations on relevant pending texts at the national and European level;
  - participation of EDF in the *Conseil supérieur de l’énergie*;
  - EDF’s participation in industry associations and think tanks in France and at the European level;
  - the institution of operational measures to align with legislative and regulatory instruments posing a significant challenge or impact identified for EDF or the Group; and
  - energy market risk and financial risk control policies.
- Concerning the energy public service expenses: frequent dialogue with DGEC, *Agence des participations de l’État* and the French Budget Directorate (*direction du Budget*) in order to support the parliamentary examination of the 2023 Finance Act (with particular reference to the amount of budget allocations to the “Energy Public Service” program), and to defend the compensation for expenses in 2023 in order to ensure the closest possible fit with the expenses actually recognized (including expenses relating to price freezes) making sure that such compensation is as complete and up-to-date as possible.
  - EDF maintains a close dialogue with the French State authorities on the issue of financing public energy service obligations, in order to secure implementation of the compensation mechanism. EDF is particularly vigilant regarding capital-outflow risks, and actively seeks to secure payment by the French State at the end of the year and avoid year-on-year trade-offs by the French State.

In connection with the risks presented in 1B (“Changes in the legal and regulatory framework for hydraulic concessions”), the Group notes the following additional information with respect to risk mitigation and control actions:

EDF operates as a responsible concession holder through dialogue and joint construction with all its stakeholders, chiefly regarding the management of water resources and support for local economic development in the regions.

This consultation is conducted on a daily basis by EDF’s close collaboration with actors from the economic, political and trade-association sectors in the geographical areas concerned and by maintaining a close dialogue with the people living near the facilities.

In France, anchoring the economy in the regions means maximizing local economic benefits by making 67% of all of its purchases in the hydraulic regions to support the local industrial fabric (referencing in the supplier panels of more than 1,980 local companies in the specifically hydraulic trades).

In connection with the risks presented in 1C (“Changes in the legislative and regulatory framework for electricity distribution concessions”), the Group notes the following additional information with respect to risk mitigation and control actions:

- Vigilance in the monitoring of legislative and regulatory instruments, whether they are European or national and regardless of whether they are sector-specific.
- Careful monitoring of any legal dispute that might call into question the public electricity distribution model (challenging the exclusive rights of the distribution network managers and tariff equalization, among others).

In connection with the risks presented in 1D (“Ethics or Compliance Violations”), the Group notes the following additional information with respect to risk mitigation and control actions:

Thirteen programs have been set up to prevent risks relating to ethical breaches or non-compliance. These programs cover the following topics:

- preventing the risk of corruption and influence peddling;
- preventing conflicts of interest;
- fight against fraud;
- compliance with international sanctions programs;
- prevention of harassment and discrimination;
- prevention of market abuse;
- prevention of the risk of money laundering and financing of terrorism;
- compliance with the European Market Infrastructure Regulation to regulate financial markets;
- compliance with the Regulation on Wholesale Energy Market Integrity and Transparency (“REMIT”) regulation;
- preventing breaches of competition law;
- personal data protection;
- export control (dual-use goods); and
- the duty of vigilance (covering environmental, human rights, and health and safety issues).

These programs are detailed in section 3.3.2 “Ethics, compliance and human rights” of the 2022 Document d’Enregistrement Universel.

In connection with the risks presented in 1E (“Litigation risk”), the Group notes the following additional information with respect to risk mitigation and control actions:

The EDF group considers that overall, in all the countries in which it operates, it complies with all the specific regulations in force, and particularly those relating to the conditions under which it carries out its nuclear activities. However, it cannot anticipate in this respect what may be decided by the supervisory and administrative or judicial authorities to which such matters are referred. These risks are monitored with particular vigilance and give rise to implementation of prevention policies (including contractual policies and compliance policies). A procedure is in place to provide information to the Group’s legal department on actual or potential material litigation or other disputes.

The main proceedings in which the EDF group is involved are described in Note 17.3 “Contingent liabilities” of the 2022 Consolidated Financial Statements and in section 7.1.5 “Disputes” of the 2022 Document d’Enregistrement Universel.



In connection with the risks presented in 2A (“Energy market risk”), the Group notes the following additional information with respect to risk mitigation and control actions:

The Group manages its exposure to energy markets through a specific energy market risk policy, which is essentially aimed at gradually reducing uncertainties regarding the level of its financial results in the coming years (see section 5.1.6 “Management and control of market risks” of the 2022 Document d’Enregistrement Universel for more detailed information on the associated principles and organizational measures). This policy serves to smooth the impact of price changes but cannot negate it. The Group remains subject to the contingencies affecting its production or the consumption of its customers, or to the structural trends of upward or downward movements in the commodity markets (see Note 18.6 “Market and counterparty risks” of the 2022 Consolidated Financial Statements).

The level of hedging sought by the Group entails striking the right balance between reducing uncertainties due to price fluctuations and those due to changes in volume of the EDF portfolio.

In addition, a Group REMIT directive defines the expectations for ensuring that Group entities comply with the European Regulation no. 1227/2011 on the transparency and integrity of wholesale energy markets.

In connection with the risks presented in 2D (“Access to liquidity risk”), the Group notes the following additional information with respect to risk mitigation and control actions:

The EDF group was able to meet its financing needs by conservative liquidity management and has obtained financing on satisfactory terms. A range of specific levers are used to manage the Group’s liquidity risk:

- As of December 31, 2022, EDF had not made issuances on the dollar market since 2018, on the yen market since 2017 and on the pound sterling market since 2014.<sup>27</sup> This will give it latitude for diversifying the financing currencies;
- On July 12, 2022, EDF published a green financing framework enabling it to substantially increase its green issues, for which there is sustained investor demand;
- centralization of financing for controlled subsidiaries at the level of the Group’s Cash Management Department. Changes in subsidiaries’ working capital requirement are financed out of the Group treasury resources in the form of stand-by credit lines provided for subsidiaries, which may also be granted revolving credit from the Group. EDF and the investment subsidiary EDF Investissements Groupe, set up in partnership with the bank Natixis Belgique Investissements, also provide medium- and long-term financing for EDF Group operations outside France. Each company independently sets its own terms, which are the same as the subsidiary would have in an arm’s-length market transaction;
- the Group’s cash pooling system, which centralizes cash management for controlled subsidiaries. This system is aimed at making the subsidiaries’ cash balances available to EDF in return for interest, so as to optimize the Group’s cash management and provide subsidiaries with a system that guarantees them market-equivalent financial terms, active management and diversification of the financing sources used by the Group. The Group has access to short-term resources on various markets through programs for French commercial paper (*billets de trésorerie*) and U.S. commercial paper. For EDF, the ceilings for these programs were increased from €6 billion to €10 billion for the Negotiable European Commercial Paper program and \$10 billion for its U.S. commercial paper; and
- the repurchase of securities (repo) from the Treasury portfolio placed with bank counterparties for cash.

In connection with the risks presented in 2E (“Counterparty risk”), the Group notes the following additional information with respect to risk mitigation and control actions:

For certain activities, the risk may be hedged by the use of margin calls.

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<sup>27</sup> For a discussion of the Group’s issuances since December 31, 2022, see “*Capitalization and Indebtedness*” section of this offering memorandum.

Furthermore, the Group has a counterparty risk management policy which applies to EDF and all operationally controlled subsidiaries. This policy sets out the governance associated with monitoring this type of risk, and the organization of counterparty risk management and monitoring. The policy also involves quarterly consolidation of the Group's exposures.

At September 30, 2022, 88% of the Group's exposure concerned "investment grade" counterparties, mainly due to the predominance of exposures generated by the cash and asset management activity, as most short-term investments concern low-risk assets.

In connection with the risks presented in 2F ("Foreign exchange rate risk"), the Group notes the following additional information with respect to risk mitigation and control actions:

To limit exposure to foreign exchange risk, the Group has introduced the following management principles:

- local currency financing: to the extent possible given the local financial markets' capacities, each entity finances its activities in its own functional currency. When financing is contracted in other currencies, derivatives may be used to limit foreign exchange risk;
- matching of assets and liabilities: the net assets of subsidiaries located outside the Euro zone expose the Group to a foreign exchange risk. The foreign exchange risk for the consolidated balance sheet from foreign currency assets is managed by market hedging with debts issued or contracted in foreign currencies, or by using derivative financial instruments. Hedging of net assets in foreign currencies complies with risk/return targets. The hedging ratio varies depending on the currency. If no hedging instruments are available, or if hedging costs are prohibitive, the foreign exchange positions remain open and the risk on such positions is monitored by sensitivity calculations;
- hedging of operating cash flows in foreign currencies: in general, the operating cash flows of EDF and its subsidiaries are in their local currencies, with the exception of flows related to fuel purchases which are primarily in U.S. dollars, and certain flows related to purchases of equipment, which concern lower amounts. Under the principles laid down in the "Strategic financial management framework," EDF and the main subsidiaries concerned by foreign exchange risks (EDF Energy, EDF Trading, Edison, EDF Renewables) are required to hedge firm or highly probable commitments related to these future operating cash flows.

In connection with the risks presented in 3A ("Transformation capacity in the face of disruptions"), the Group notes the following additional information with respect to risk mitigation and control actions:

The following actions are in line with the Group's *raison d'être* and its CSR commitments, responding to the needs of its customers and stakeholders:

- continued development and deployment of low-carbon solutions: supply and services, particularly for energy efficiency and decarbonization of uses, low-carbon electricity generation, storage solutions, low-carbon hydrogen projects, flexibility solutions, with a view to sustainable development and proximity to customers and regions. This development concerns France, the "core" countries in Europe (United Kingdom, Italy, Belgium) and the other countries where the Group is present, in accordance with the CAP 2030 strategy. This strategy combines the search for growth drivers with the promotion of existing assets. The strategy and drivers of the Group's transformation are described in section 1.3 "Group strategy and objectives" of the 2022 Document d'Enregistrement Universel;
- in particular, the Solar Plan, the Electric Storage Plan, the Electric Mobility Plan and the Excell Plan are major levers for developing and expanding the range of low-carbon energy solutions offered by the Group in addition to the generation plants already widely available within the Group, particularly wind, solar, hydro and nuclear power (see section 1.4.1.1.1 "The excell plan" of the 2022 Document d'Enregistrement Universel);
- implementation of development, adaptation and transformation programs and performance plans. These programs may be complemented by a strategic analysis of assets which may itself lead to a requirement for additional financial agility, giving rise to disposals or acquisitions (see section 1.2.3 "Significant events of the year" of the 2022 Document d'Enregistrement Universel); and

- actions to mobilize work groups through transformation projects, including in particular the “work differently, manage differently” project within EDF.

In connection with the risks presented in 3B (“Adaptation to climate change: physical and transition risks”), the Group notes the following additional information with respect to risk mitigation and control actions:

*Control actions for physical risks*

- Periodic reviews are carried out on nuclear and hydraulic facilities, incorporating both feedback and climate change projections; this is a key cornerstone of the robustness of the facilities.
- As per the Group CSR policy, to address these risks, the operating entities shall regularly update their climate change adaptation plans, based whenever possible on the Intergovernmental Panel on Climate Change scenarios, in order to review the measures taken and to be taken. To this end, a guide to implementing adaptation plans is available to the Group’s entities. These adaptation plans are particularly strong for nuclear entities in France and the United Kingdom, and hydraulic and island entities.
- Since the 1990s, the EDF group has been building up specific research and development (“R&D”) expertise on climate change issues, which it has invested in collaborative academic research projects to support these actions.
- The Group carries out numerous monitoring and anticipation actions on extreme and chronic effects so as to update its adaptation plans as much as necessary, both for production facilities and infrastructures, as well as to anticipate the consequences on the supply-demand balance.
- The Group coordinates internally and with external stakeholders on water uses.
- In connection with climate change and its potential consequences in terms of external threats (such as temperature, flooding and storms), a program called ADAPT has been set up in France for the Group’s nuclear and thermal generation facilities in order to sustainably ensure the resilience of these industrial tools.
- The Group regularly renews or takes out specific insurance covers, even if this could prove increasingly difficult or expensive due to the impact, frequency and magnitude of natural disasters experienced in recent years.

*Control actions to address transition risks*

- Carbon trajectory: In 2018, the Group made a commitment to significantly reduce its carbon dioxide emissions, with a target of 30 million tons in 2030 instead of 51 million tons in 2017 (40% reduction). The EDF group also confirmed this goal in 2020 by joining the “Business Ambition for 1.5 degrees” initiative. The EDF group has made new commitments to contribute to achieve carbon neutrality by 2050, both in direct and indirect emissions (scopes 1, 2 and 3), with milestones set for 2023 and 2030. The SBTi organization certified this approach in 2020 as going beyond the 2°C set out in the Paris Agreement. Thus, for the first time, the EDF group has set reduction targets for its indirect emissions, covering in particular the emissions associated with the sale of gas to end customers (see section 3.1.1 “Group carbon trajectory” of the 2022 Document d’Enregistrement Universel). The EDF Group undertook discussions with the SBTi organization in 2022 in order to obtain 1.5°C labelling for its trajectory.
- Deployment of low-carbon solutions: The Group has been particularly active in the development of renewable energy in France, electric storage and low-carbon electric mobility, which will make it possible to develop and promote the Group’s low-carbon energy solutions, particularly for the transport sector, which still emits a very high level of carbon dioxide in France and Europe.
- As a final step in the process of contributing to achieving neutrality, the Group favors so-called “negative emission” projects to offset its residual emissions by 2050 (see section 3.1.1.6 “Carbon offsetting solutions” of the 2022 Document d’Enregistrement Universel).

- Control actions for risk No. 1A concerning changes in public policies and the regulatory framework consist of: monitoring the political, legislative and regulatory context; analyzing the potential consequences of legislation in preparation; dialogue with and lobbying of the public authorities.

*Overall control actions – summaries and mapping of climate risks*

- In 2019, a summary on climate change and its impacts on EDF, integrating the accumulation of all the knowledge acquired by the EDF group and its scientific partners, was presented to EDF’s Scientific Council.
- Since the 1990s, the Group has had significant expertise in climate change, both in its R&D department and in its engineering centers, and this expertise has been maintained over time. The precise resources allocated to this expertise are specified in section 3.1.2.4 “High-level, internal climate department” of the 2022 Document d’Enregistrement Universel).
- In 2019, a Group-wide climate risk mapping of all physical and transition risks was also established following the recommendations of the TCFD and submitted to the Audit Committee. Climate risks are now identified, assessed and updated annually in accordance with the Group’s general risk-mapping methodology (summarized in this risk factor and further detailed in section 3.1.3.2.2 “Identifying climate change risks and opportunities” of the 2022 Document d’Enregistrement Universel).
- This mapping of climate risks, based in particular on the operational entities’ adaptation plans and the report to the Scientific Council, has led, since 2020, to a “climate” action plan, included in the CAP 2030 strategic program, covering actions relating to emissions reduction and resilience. This action plan mobilizes the Group both at the corporate level and at the entity level to guide and coordinate the various control actions.
- An audit on the adaptation of the EDF Group resources to climate change was conducted between October 2021 and February 2022.
- Numerous actions are carried out internally to raise awareness of climate issues among all employees and to mobilize them in concrete ways. By way of example (these examples are developed in section 3.1.3.5.2 “Innovation and collective intelligence focused on climate action” of the 2022 Document d’Enregistrement Universel):
  - the Climate Fresk has been developed by the Group for all its teams since 2020. By the end of 2022, the Group had raised awareness among 60,000 employees using this tool (see section 3.1.3.5.2.2 “The “Climate Fresk”” of the 2022 Document d’Enregistrement Universel);
  - the “Fighting CO2” program offers all employees in France the opportunity to become ambassadors for the energy transition by making a private commitment; and
  - the Carbon Neutrality Passport enables employees to assess their carbon footprint and make a commitment to start taking action; obtaining this passport was one of the criteria of the profit-sharing agreement signed for 2020. Over 36,000 passports were obtained in 2022 (see section 3.1.3.5.2.1 “The “Carbon neutrality passport”” of the 2022 Document d’Enregistrement Universel).

In connection with the risks presented in 3C (“Adaptation of employee’s skills”), the Group notes the following additional information with respect to risk mitigation and control actions:

Risk management is based on matching skills to short-, medium- and long-term needs. In this respect, the main control actions concern:

- Better identification of needs by all the sectors concerned (nuclear, networks, renewables and energy services) via the employment and skills development commitment program and territorial GPEC;
- Strengthened work and partnership on attractiveness;
- A more global approach to the attractiveness, sourcing, training and recruitment chain; and
- An ambitious skills development policy within the France Group scope: increased recourse to alternative and digital procedures, including in live work situations; accelerated skills acquisition by newly hired employees through knowledge; and skills transfers between employees (knowledge management approaches extended to all business lines beyond nuclear, to impart a learning mentality to the organization).

In connection with the risks presented in 3D (“Ability to fulfil long-term social commitments”), the Group notes the following additional information with respect to risk mitigation and control actions:

In order to cover these commitments, the Group has set up pension funds in the United Kingdom, where coverage of commitments is a regulatory obligation, and outsourced funds in France, which provide partial coverage of the commitments. In the United Kingdom, the pension reform in 2021 (from defined benefit to defined contribution) and the merger of the three existing funds (the British Energy Generation Group, the EDF Energy Generation and Supply Group and the EDF Energy Pension Scheme) into one fund (called “EDF Group of the ESPS”) from December 31, 2021 will limit future risks.

In connection with the risks presented in 4A (“Management of large and complex industrial projects including EPR projects (HPC, FLA3, Taishan...)”), the Group notes the following additional information with respect to risk mitigation and control actions:

#### *Cross-cutting control actions*

- As part of a continuous improvement approach to project management, the Group has a project management policy and a commitments policy, which require an analysis of risks and associated security measures. Regular project reviews are carried out and the Group set up a Major Project Control unit at the end of 2020. The Group has been implementing the Excell Plan since December 2019, which will return the French nuclear industry to a high standard of stringency and quality to ensure success for the major projects under way and to be carried out in France, the United Kingdom and elsewhere in the world (see section 1.4.1.1.1 “The Excell Plan” of the 2022 Document d’Enregistrement Universel).
- Project management takes into account, in accordance with EDF’s vigilance plan, the potential impacts of projects on human rights, the environment, health and safety, as well as the CSR issues of dialogue and consultation with stakeholders, territorial development, development of industrial sectors, ethics and responsible land management (see sections 3.2, 3.3, 3.4 and 3.9 of the 2022 Document d’Enregistrement Universel).

#### *Control of committed EPR projects*

##### *1. EPR Flamanville 3 (France)*

In particular, meeting the timetable and cost objectives as announced is still dependent on the following (see section 1.4.1.1.3.1 “Flamanville 3 EPR project” of the 2022 Document d’Enregistrement Universel):

- the finalizing of non-destructive tests and stress-relieving heat treatments for “complex geometric shapes” following the upgrading of the main secondary circuit and the conducting of hydraulic tests for its approval;
- ASN’s confirmation of the conclusions drawn by EDF from the loop tests demonstrating the adequacy of the work conducted to assure the efficiency of the safety injection circuit/containment heat removal system filtration when recirculating water from the main primary circuit after a pipe breach;
- the remainder of the examination of the last technical issues in conjunction with the ASN with a view to obtaining the administrative authorizations;
- the completion of the final stages of the facility; and
- the possible emergence of new technical issues, particularly in the context of further work. A decree of March 25, 2020 extended the maximum time limit for commissioning the reactor to April 2024.

In addition to the activities still to be carried out before the fuel is loaded into the reactor vessel and the overall start-up tests are carried out, the project could also face other potentially significant additional costs and delays in the event of a new hazard. Schedule and cost to completion risks remain high.

##### *2. EPR Taishan (China)*

In China, the Group has a 30% stake in Taishan Nuclear Power Joint Venture Company Limited (“TNPJVC”) alongside its Chinese partner CGN and Guangdong Energy Group (19%). Taishan 1 was the first EPR reactor to be coupled to the grid on June 29, 2018. It became commercially operational on December 13, 2018. The Taishan 2 reactor became commercially operational on September 7, 2019 (see section 1.4.1.1.3.2 “Other “New Nuclear” projects” of the 2022 Document d’Enregistrement Universel).

The profitability of the asset is linked to the feed-in tariff for electricity produced by Taishan and could be affected if tariff decisions are not favorable. On March 20, 2019, a temporary tariff was set by the National Development and Reform Commission at RMB 435/MWh until the end of 2021, for a guaranteed annual volume of generation offtake equivalent to 7,500 hours of full power operation. Any surplus above this volume is sold at the market price. As with any scalable generation facility, the actual call-up of the Taishan plant is decided by the Guangdong provincial power grid operator. The temporary tariff was extended on December 22, 2021 until the publication of the new tariff mechanism applied to Chinese third-generation nuclear power plants, particularly the Taishan plant. The authorities had issued no further publication at the beginning of 2023. The profitability of the asset is also subject to the risk of changes in the volume of sales at this tariff, against a background of development in the electricity market.

The financing arrangements put in place by TNPJVC include provisions to secure the repayment of the joint venture’s financial liabilities. In certain situations, these provisions may temporarily limit the payment of dividends. If the company were to fail to generate a positive cumulative net result or a sufficient level of cash flow, the amount of dividends expected by EDF would be revised downwards, which could result in the need for depreciation of the asset.<sup>28</sup>

### 3. Hinkley Point C – EPR (United Kingdom)

Control of the design and bringing the manufacturing and the major milestones of the HPC construction site under control will determine the profitability of the project and the financing of any future projects in the United Kingdom.

Construction passed a number of milestones in 2022 (see section 1.4.5.1.2.5 “Nuclear New Build business” of the 2022 Document d’Enregistrement Universel); however, the project was marked by:

- civil engineering performance remaining lower than expected;
- shortages in the global building materials market and job market;
- one fatal accident on the site in November 2022, still under investigation by the ONR. The project team maintains constant vigilance as to the health and safety of workers; and
- supply chain problems due to the geopolitical and macroeconomic climate.

There is a risk that these factors will continue to impact construction progress and the supply chain. Action plans are underway to address delays and improve civil engineering performance. Compliance with the schedule and cost to completion (see section 1.4.5.1.2.5 “Nuclear New Build business” of the 2022 Document d’Enregistrement Universel) requires that these actions produce the expected results.

The IRR of the HPC project is sensitive to:

- inflation and changes in electricity market prices beyond the term of the CFD;
- impacts of the agreements between EDF and CGN which include a mechanism for compensating certain EDF price supplements between the two shareholders in case of a deviation from the initial cost budget or delays. Given the current schedule and the forecast cost to completion, this mechanism was triggered in January 2023 (see section 1.4.5.1 “United Kingdom” of the 2022 Document d’Enregistrement Universel);
- the risk of CGN not contributing voluntary equity; and

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<sup>28</sup> The value of TNPJVC’s equity at the end of 2021 in EDF’s accounts is €1,210 million – see Note 12 “Investments in associates and joint ventures” of the 2022 Consolidated Financial Statements.

- the exchange rate between the British Pound and the Euro. A hedging strategy for this risk is in place at the HPC project and Group levels.

### *Control of future projects*

#### *1. Renewal of the nuclear plant in France – EPR2 (see section 1.4.1.1.3.2 “Other “New Nuclear” projects” of the 2022 Document d’Enregistrement Universel)*

The main challenge is to ensure that the conditions are fulfilled as early as possible for a decision to launch the program and its transposition into the legal and financial framework necessary for its implementation.

This requires several main prior actions:

- consolidation of estimated costs to completion and planning costs;
- signature of principal contracts before the program commitment decision;
- following the structuring of the program with the creation in 2022 of the Directorate for the New Nuclear Program for France, defining in particular the schedule for financing, regulation and governance to which the French State and EDF will commit;
- If necessary, notification by the French State to the European Commission of the program’s structuring arrangements, having regard to state aid regulations; and
- public consultation on the program and on the site for the first buildings. The conclusions of this consultation must be taken into account as a constituent part of the application for authorization to create that the nuclear operator must submit to the administrative authorities in order to launch the construction of a new nuclear facility.

#### *2. Sizewell C (United Kingdom)*

A description of the Sizewell C project development is provided in section 1.4.5.1.2.5 “Nuclear New Build business” of the 2022 Document d’Enregistrement Universel. EDF’s ability to make the final investment decision alongside other investors and to contribute to the financing of the construction phase is contingent on, *inter alia*:

- securing the project financing, which relies on, among other things, the regulatory framework and the level of residual risk post-Government Support Package (“GSP”), as well as macroeconomic trends;
- EDF’s ability to deconsolidate the project in the Group’s financial statements (including in the calculation of economic indebtedness by the rating agencies) following the final investment decision;
- remuneration of the capital expected by EDF as investor within 19.99%, in line with its investment policy;
- the obtaining of all the required authorizations remaining outstanding, particularly the authorization concerning control of subsidies;
- the finalizing of the GSP;
- an agreement with the British government concerning the reference estimation of the cost to completion and the estimated project timetable; and
- the finalizing of the main EDF contracts to be signed on the date of the Final Investment Decision (“FID”).

EDF’s commitment to fund Sizewell C up until the date of the FID is subject to an equity cap, without any obligation to fund the project beyond the funding cap.

Failure to bring about these conditions could result in the Group not making a FID. In particular, making an investment decision when EDF’s ability to deconsolidate the project is not secured would heavily penalize the Group.

The main control actions to create favorable conditions for the decision include:

- work with the British government to finalize the remaining stages and prepare for future investments. On November 29, 2022, the British government announced its decision to invest some £700 million in the Sizewell C project and to sustainably assist the project’s development in the long term;
- work with supply chain operators to develop an appropriate contractual strategy, particularly including the replication strategy; organizational and collaborative discussions with Hinkley Point C are underway to secure the benefits of HPC’s replication on the Sizewell C project, while taking into account the difference

in governance (such as percentage of eventual ownership and partners). Depending on the schema, the risk of non-compatibility with the deconsolidation target could be significantly aggravated.

- a detailed review of the cost and planning, taking into account the feedback from the HPC project.

### 3. Jaitapur (India)

EDF and its partners submitted a comprehensive, conditional, non-binding bid to Nuclear Power Corporation of India Limited (“NPCIL”) at the end of 2018; in this offer, the EDF group and its partners would undertake to supply all the studies and equipment for the nuclear island, the conventional island and the auxiliary systems, as well as the heat sinks and galleries of the EPR technology.

EDF does not plan to invest in the project. The NPCIL client will be the overall project manager and integrator in the implementation phase (bearing in particular the risks of licensing, construction, assembly and overall integration). In April 2021, a binding technical and commercial offer was transmitted and discussions are ongoing (see section 1.4.1.1.3.2 “Other “New Nuclear” projects” of the 2022 Document d’Enregistrement Universel).

The project has the risk profile of a supplier of engineering services and plant and equipment supplies. Its value therefore lies in the realization of the margin included in the price of the services sold. Like all large complex industrial projects, this project presents technical, industrial and cost control risks for the scope under the responsibility of EDF and its partners, as well as a risk relating to compliance with pre-defined milestones, particularly with regard to the expected revenue model. In addition to the country risk, which includes a substantial tax dimension, the conditions related to the scope of nuclear liability in India must be met, and the project’s financing plan must be secured before the final contracts are signed.

#### *Control actions specific to Framatome*

Framatome can expose the Group to risk through its activities in France and abroad, for nuclear operators other than EDF, or with its other customers.

The Group’s exposure may be financial or reputational. Framatome’s industrial performance is strategic for EDF as a nuclear operator in France and the UK.

The success of EPR projects, the competitiveness of the nuclear industry in France, and the success of the Group’s international development all depend on their quality and compliance with contractual clauses in the production of studies, components and services by Framatome.

In connection with the risks presented in 4B (“Operational continuity of supply chains and contractual relationships”), the Group notes the following additional information with respect to risk mitigation and control actions:

In 2021, the Group adopted a new suppliers policy, which aims to secure the performance objectives of projects by ensuring their reliance on panels of suppliers that meet their needs and by allaying risk situations of supplier failure, quality crisis or contractual deadlock.

Furthermore, the Excell Plan launched in 2020 (see section 1.4.1.1.1 “The Excell Plan” of the 2022 Document d’Enregistrement Universel) aims to meet these challenges, in particular those concerning strengthening the sector’s skills (welding plan and initiatives connected with professional and educational facilities), improving supplier selection and qualification processes and taking into account the CSR issues relating to “Ethics, compliance and human rights” and to “responsible territorial development” (see sections 3.3.2 “Ethics, compliance and human rights” and 3.4.2 “Responsible regional development”), as well as increasing the number of more partnership-based contractual relationships. In 2021 in this context, the Group set up a “Supplier policy panel” for the nuclear sector intended to coordinate the actions of the entities involved in the relationship with suppliers. The French Nuclear Energy Industry



Group (*Groupement des industriels français de l'énergie nucléaire*) (“GIFEN”)<sup>29</sup> is also a key player in relaying the Group’s industrial policy.

Regarding contracts entered into between the Group and suppliers of equipment or services, improved contracting processes and management of the contracts that have been entered into, in particular through the implementation of vigilance actions at each stage, constitute a major issue as concerns controlling operations, deadlines and associated costs.

The Contract Management function, led by the Contract Management Department, itself reporting to the Group Legal Affairs Department, aims to improve risk management and create opportunities in the management of contracts. This function calls on the involvement of contract managers from the departments throughout the contractual process. It is an additional line of defense in the management of contracts, along with Group senior managers and the departments.

In response to the regulations and laws adopted by the USA and China, and in order to ensure its compliance with these laws and decisions, the EDF group (including EDF SA, Nuclear New Build and Framatome) has taken precautionary measures in connection with the organization of its nuclear projects, particularly in the United Kingdom.

In connection with the risks presented in 4C (“Occupational health or safety violations (employees and service providers)”), the Group notes the following additional information with respect to risk mitigation and control actions:

The Group has for many years taken the steps necessary to comply with the health and safety laws and regulations in the various countries in which it operates, and considers that it takes the measures required to ensure the health and safety of both its employees and its subcontractors. Each Group entity has action plans aimed at continuously improving health and safety at work. Actions are also carried out at the Group level as a whole: definition and promotion of the vital rules and the BEST reference framework for health and safety management, and the one-day shutdown on October 13, 2022 to reflect on improving and strengthening safety actions at shop-floor level (see section 3.3.1 “Security, health and safety for all” of the 2022 Document d’Enregistrement Universel).

In connection with the risks presented in 4D (“Attacks against assets, including cyberattacks”), the Group notes the following additional information with respect to risk mitigation and control actions:

#### *Impact on assets*

The EDF group has defined its Security of Assets against Malicious Acts policy to prevent this risk and limit its impact in the event of an attack. This policy is supplemented by procedures for the protection of people, property assets, intangible assets, instructions and an IT tool for collecting security incidents. This policy and procedure were updated in 2021 to take into account the changing threat environment. This policy and procedure is supported by a network of Asset Security Managers (“RSP”), who are members of the entities’ management boards.

The main asset-protection actions are:

- coordination of the RSP network, training of new RSPs, letters (DSIE@eDF), support on request (*e.g.*, security of premises, projects abroad and security) and presentations on current topics (such as the IGI 1300 inter-ministerial general instruction (“IGI”) regarding classified media and documents and secrecy protection and new tools for collecting security incidents);
- production of an e-learning course on the Security of Assets against Malicious Acts policy;
- adapting the EDF procedures for implementing the Group’s Asset Security policy in dealing with malicious acts, in particular the Classification and Protection of Information memorandum and the procedure for reporting security incidents;
- implementation of the new security incident collection application;
- participating in steering the implementation of the EU Security of Networks & Information Systems directives and the Military Programming Act in conjunction with the French National Agency for Information

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<sup>29</sup> The GIFEN, created in October 2018, aims to bring together all the actors in the French nuclear industry to ensure the attractiveness of the sector and maintain its skills.

Systems Security (*Agence Nationale de la Sécurité des Systèmes d'Information*) (“ANSSI”), General Directorate for Information Security (“DSIG”) and the entities involved;

- contributing to the introduction of the obligations associated with the new version of the IGI 1300, an instruction involving significant changes for the Group:
  - participating in the drafting of the IGI 1300 ministerial memoranda with the French ecological transition ministry and other relevant operators;
  - drafting IGI implementation internal memoranda; and
  - assisting entities in the implementation of this instruction by ensuring that all regulatory obligations are properly implemented;
- setting up a training course with the DGSI and the DRHG on radicalization and religious issues in companies for human resource departments, managers and lawyers;
- helping to take into account “Asset Security” files during the development of IS applications; and
- contributing to the preparation of compliance files.

#### *Information systems failure, including cyberattacks*

The EDF group has defined its Security of Assets against Malicious Acts policy and an Information System Security policy to prevent this risk and limit its impact in the event of an attack. These policies are supplemented by guidelines on the protection of personal data.

A charter regarding the use of IT resources is annexed to the Company’s internal regulations. Information system (“IS”) security training courses are adapted to the different profiles (including users, project managers, application developers and IS security managers) and are offered to employees. The Executive Committee and Audit Committee of the Board of Directors receive reports on cyber security risk management. Several dozen security audits are carried out each year by external IS security audit companies (IS security audit providers), which are PASSI qualified by the ANSSI, both on IT infrastructures and on business information systems. In addition, the EDF Group Security Operational Center reports on IS security incidents on a monthly basis. This center is now qualified as a security incidents detection service provider.

In 2022, the main actions deployed in the areas of cyber security, protection of intangible assets and, more generally, the Company’s resilience to the risks of damage to information systems were:

- the definition of cyber security goals for the Group entities, their achievement being measured via cyber security reviews;
- the deployment of an e-learning “Cyber Security Passport” module accessible to all (including in subsidiaries) and rendered compulsory for all Group senior executives and managers in France;
- deploying phishing awareness campaigns within the Group’s entities (96,000 people targeted in 2022);
- the continued strengthening of the cyber security operational function that guarantees an efficient response in the event of a security incident, *e.g.*, strengthening the specialist teams and promulgation of a cybersecurity incidents management policy;
- the opening of the Rennes site. The opening of this site completes the EDF cyber system within a relevant European reference territory (graduate schools, research centers, companies, start-ups, the Ministry of the Armed Forces and the ANSSI);
- the creation of the Vulnerability Operation Center, aimed at detecting areas of vulnerability through regular scans and audits conducted on all types of IS;
- continued deployment and assessment within the entities of a security reference framework based on the rules of the ANSSI; and
- the periodic publication of a dashboard intended for the Executive Committee, reflecting the Group’s cyber security level, and also adapted for each reporting entity, addressed to each of the Executive Committee members.

In addition, IS crisis and cyber security drills are regularly carried out to test the various measures put in place.

In connection with the risks presented in 4E (“Hydraulic safety violations”), the Group notes the following additional information with respect to risk mitigation and control actions:

Hydropower safety is the major and permanent concern of the producer. It falls under the purview of the Group’s CSR “nuclear safety, health and security” issue (see section 3.3.1 “Security, health and safety for all” of the 2022 Document d’Enregistrement Universel). It involves three main activities:

- measures to address the major risk associated with dam or reservoir failures, through the regular monitoring and maintenance of facilities under the supervision of public authorities, mainly the French regional environment, land use and housing authorities (*Directions régionales de l’environnement, de l’aménagement et du logement – DREAL*). Of the largest dams, 67 of them are subject to a special administrative procedure implemented by the competent prefect;
- the management of facilities during periods of exceptionally high water levels in order to ensure safety at the facilities and for the surrounding communities; and
- control of operational risks, such as changes in the level of the water bodies or the flow of watercourses downstream of the works.

EDF regularly monitors and maintains its dams, including through continuous monitoring. The real-time readings and analysis at each site of multiple data (such as settlement, pressure and leakage measurements, combined with the visual inspection of the concrete and an inspection of the mechanical parts) enable EDF to conduct a regular assessment on the state of its dams. In Grenoble and Toulouse, EDF teams can analyze the largest dams or those dams that are the hardest to access remotely and in real time, using a series of sensors.

Furthermore, for each of the large dams, a danger study, including an exhaustive examination, is conducted every ten or fifteen years (for one class A dam and one class B dam, respectively). This examination requires draining or an inspection of the submerged parts with sub-aquatic equipment. These operations are carried out under the strict control of the French State authorities (*Service de contrôle et de sécurité des ouvrages hydrauliques* (Hydraulic Works Control and Safety Department) within each DREAL (French regional environment, land use and housing authority)).

At the organizational level, the Hydro Safety Inspector prepares an annual report for the Chairman & Chief Executive Officer of EDF, to whom he or she reports directly, as well as reporting to those involved in hydropower safety (see section 1.4.1.3.1.3 “Hydropower safety” of the 2022 Document d’Enregistrement Universel). Issued after analyses, inspections and assessments carried out by the Hydropower Safety Inspector, this report aims to give an opinion on the level of hydropower safety of the Group’s installations and provide a basis for reflection and progress to ensure its improvement and consolidation. This report is made public on the Group’s website.

In connection with the risks presented in 4F (“Risk of supply/demand imbalance within EDF”), the Group notes the following additional information with respect to risk mitigation and control actions:

As of December 31, 2022, as part of preparations for winter, EDF had implemented numerous preventive actions and actions to control that risk, working on both production and demand.

In order to maximize available production in winter, EDF has in particular conducted a detailed review of the scheduling for halting nuclear units, anticipating or delaying stoppages to free as much capacity as possible for weeks of heavy demand. Operating waivers have been obtained to increase the authorized operating limits for the Cordemais coal-fired units.

On the demand side, EDF has formalized by contract new load-shedding volumes with its customers, conducted communication campaigns to foster energy restraint, relaunched at the French government’s request the TEMPO option of the TRVE-charging scheme, making for lower consumption on days of heavy strain on the supply and demand equilibrium.

Finally, if the imbalance is such that the French electricity system is no longer able to balance itself, RTE will have to implement the various contracts and back-up mechanisms available to it in real time (contracted load

shedding with large consumers, temporary lowering of the electricity network voltage plan, temporary and targeted load shedding).

The communication exercise conducted by the government authorities with RTE and EDF has had considerable effects since an appreciable drop (by some 10%) has been observed in French consumption adjusted for temperature variation.

In connection with the risks presented in 4G (“Risk of blackout”), the Group notes the following additional information with respect to risk mitigation and control actions:

Controlling this risk is at the heart of RTE’s mission, as it is responsible 24 hours a day for managing the French electricity system and balancing electricity supply and demand in France, particularly in real time. The resources implemented by RTE fall within the framework defined by the public authorities, and they comply with the policies ordinary to European transmission system operators and established within the framework of the European Network of Transmission System Operators for Electricity. EDF’s contribution to risk management, over and above its regulatory obligations and in accordance with the public service contract and its responsibility as a balance manager, lies in its commitment to:

- respond to RTE’s calls for tenders for the constitution of reserves;
- contract with RTE to enable coordinated planning of generation unit shutdowns and network interventions; and
- compliance of the performance of its power plant and the automated mechanisms associated with the standards and formalized by contract commitments between EDF and RTE.

In connection with the risks presented in 4H (“Industrial safety violations and impact on environmental assets, including biodiversity”), the Group notes the following additional information with respect to risk mitigation and control actions:

The risk management studies carried out on each industrial site integrate potential health or environmental impacts, such as compliance with regulations, monitoring, prevention and protection of soil, water and air, and potential health effects. In addition, they include avoidance measures for accident situations. In this respect, feedback from the fire that occurred on September 26, 2019 at the Seveso-classified Lubrizol plant in Rouen was included in the analyses. The Group’s French Seveso sites all implement the regulatory requirements applicable to this type of facility. In addition, those sites all responded to the requests of the prefects following the fire at the Lubrizol plant. The additional post-Lubrizol decrees on the storage of flammable liquids and toxic materials are applicable and therefore integrated into the Group’s industrial facilities that are classified for the protection of the environment. The industrial and natural risks network within EDF ensures that the new requirements are monitored, appropriated and integrated on the sites. Furthermore, the Group is committed to biodiversity through its corporate social responsibility concerns relating to the preservation of the planet’s resources (see section 3.2 “Preserving the planet’s resources” of the 2022 Document d’Enregistrement Universel).

In connection with the risks presented in 5A (“Failure to comply with the objectives for operation and/or for extending the operating life of nuclear power plants (France and United Kingdom)”), the Group notes the following additional information with respect to risk mitigation and control actions:

The action plans for this risk are carried out by all the operational engineering and operating teams of the nuclear fleet, particularly in the context of the Start 2025 and *Grand Carénage* projects (see section 1.4.1.1.2.1 “EDF’s nuclear plant in France and its operation” of the 2022 Document d’Enregistrement Universel).

During the ten-year inspections, the safety assessment makes it possible to increase the level of safety by taking into account, on the one hand, international best practices and, on the other hand, the condition of the facilities, the experience acquired during operation and the developments in the knowledge and rules applicable to similar facilities.

The increase in the number of VD4s completed each year (one in 2019, one in 2020, four in 2021 and five in 2022) and the increase in the load on the industrial fabric are covered by an approach involving the main suppliers of the plant in operation, in order to have a multi-year vision of the load and to enable the entire nuclear industry to

implement the necessary measures (in terms of, for example, resources, contractual terms and standardization) so as to secure the success of the industrial program for the plant in operation.

Since December 2019, the Group has been implementing the Excell Plan, which aims to enable the French nuclear industry to return to the highest level of rigor, quality and excellence in order to keep up with major projects and meet the needs of existing nuclear power plants in France and the United Kingdom (see section 1.4.1.1.1 “The Excell Plan” of the 2022 Document d’Enregistrement Universel).

Concerning stress corrosion, out of the 16 reactors most sensitive to this occurrence (reactors of the N4 and P’4-1300 series), 10 were treated in 2022 or are undergoing treatment. EDF initiated a plan for inspections across the nuclear fleet, with the aim of completing them by the beginning of 2025, during scheduled maintenance and fuel-renewal outages at all the reactors. In the case of the reactors of the P’4-1300 series, EDF adapted its treatment strategy for the series as a whole. This strategy, presented in 2022 to the ASN, is aimed at treating the stress corrosion issue on all the 1300-P’4 reactors by the end of 2023. For these reactors, EDF is contemplating full preventive replacement of the pipes for the safety injection lines of which the welds could be affected by stress corrosion.

In the United Kingdom, risk control is also based on:

- ongoing interactions with the regulator on safety cases relating to the life cycle of facilities, assessments by the regulator and licensing requirements;
- the graphite management and ageing monitoring program for the AGR fleet, with frequent graphite inspections, in particular at Heysham 2 and Torness;
- Sizewell B’s long-term operating program to manage the production of the business case in support of the decision on the investment program required for extending the operating life; reviews, where necessary, of the life cycle of the AGRs; and actions to prepare for fuel retirement in the event of early closure; and
- strategies for preventive monitoring and maintenance of facilities to enable early consideration of problems that could lead to loss of generation.

In connection with the risks presented in 5B (“Control of radioactive waste treatment and decommissioning of nuclear facilities, and ability to meet related commitments”), the Group notes the following additional information with respect to risk mitigation and control actions:

#### *Decommissioning of finally shut-down power plants*

- For the present and future decommissioning of nuclear installations in France, and for the long-term management of waste, EDF has set up a dedicated organization for defining the project covered by the legally prescribed provisions, in technical terms and in terms of cost and lead times.
- The feedback from the virtually completed decommissioning of the ChoozA PWR reactor, and the information derived from the Fessenheim studies, together with the early information on the preparation for decommissioning of that site’s reactors, render as robust as possible the studies and the estimate for the future cost of decommissioning the currently operational EDF nuclear fleet.
- The Group regularly conducts an update of the key assumptions underpinning the provisions (see Note 15 “Provisions related to nuclear generation and dedicated assets” of the 2022 Consolidated Financial Statements). These information items are set out in particular in the triennial report drawn up by EDF pursuant to the French Environment Code, describing the evaluation of the expenses of decommissioning and waste management, the methods applied for calculating provisions corresponding to those expenses, and the options adopted regarding the composition and management of the assets assigned to cover these provisions. This report, together with its annual updating document, is submitted for assessment by the competent authority (DGEC).
- The 2020-2021 audit by the DGEC on the decommissioning of halted facilities (excluding PWR) and the ASN inspection in 2021 on the management of projects for decommissioning NUGG reactors lent strength both to the scenarios examined and to the relevance of the organization and management for the DP2D projects (Directorate for decommissioning and waste projects), which inspection found that “*the process for estimating and for annual review is robust, and allows for good traceability of the assumptions used and the*

*original data. The provisions are consistent with the baseline scenarios of the projects and cover the full scope of the expenses of the audited scope.”*

- Governance in terms of securing the financing of nuclear expenses has been strengthened through the development of a Group policy, validated by the Board of Directors on June 30, 2021, and the creation in 2021 of a nuclear expense assessment control function in accordance with Decree 2020-830 of July 1, 2020.
- The amount of these provisions, in accordance with the French Environmental Code, is subject to control by the administrative authority DGEC, which verifies in particular the adequacy of the provisioned expenses and imposes a cap on the discount rate for the provisions.
- In the United Kingdom, the risk of decommissioning cost recovery has been significantly reduced by the agreement with the government. Additional risk control actions are:
  - maintaining the quality of relations with the government and the UK Nuclear Decommissioning Authority; and
  - strengthening monitoring and contractual compliance arrangements, as well as reporting and performance management.

#### *Waste management*

- The control strategy consists of developing and securing radioactive waste treatment channels to meet the present and future needs of the Group’s nuclear facility decommissioning and operating projects. To this end, the structuring of the Cyclife subsidiaries has in particular been consolidated in order to offer a range of appropriate waste treatment solutions.
- For CIGEO (the geological disposal center project developed by ANDRA for high-level waste and intermediate-level long-lived waste), the control strategy consists of securing the project by proposing to ANDRA and support for the development strategy and implementation of the disposal, in order to meet the target cost of €25 billion<sup>30</sup> (see section 1.4.1.1.2.3 “The issues relating to the nuclear activity” of the 2022 Document d’Enregistrement Universel). To this end, a cooperation agreement was signed at the end of 2020 between EDF and ANDRA.
- The Group participates, as a producer, in the various working groups on the storage of graphite waste. In addition, EDF is very actively involved in the PNGMDR steering committee.
- In the United Kingdom, arrangements are in place for the management of spent fuel from AGR and PWR reactors:
  - through its safety and sustainable development policies, EDF Energy implements actions to continuously improve and minimize the quantities of spent fuel and waste generated;
  - the arrangements for the management of spent fuel from the AGRs were defined at the time of the restructuring of British Energy. Spent fuel from AGRs is disposed of at the Sellafield reprocessing site for long-term storage. EDF Energy finances this storage (as well as the reprocessing carried out in previous years); and
  - the Sizewell B PWR spent fuel is stored on site in a dedicated dry storage facility. This facility will provide safe storage for all spent fuel produced during the lifetime of Sizewell B. At the end of this long-term surface storage, the Sizewell B PWR spent fuel will be transferred to the future UK geological disposal facility. This strategy is approved by the Nuclear Decommissioning Authority and financed by the NLF.

#### *Provisions and management of dedicated assets*

In order to ensure the control of provisions and the management of dedicated assets, the Group has put in place specific governance arrangements:

- the Nuclear Expense Assessment Control Function, in accordance with Decree 2020-830 of July 1, 2020;
- the Dedicated Asset Portfolio Operational Management Committee; and

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<sup>30</sup> Economic cost 2011 (see Note 28.2 “Provisions for other long-term benefits for current employees” of the 2022 Consolidated Financial Statements).

- the Nuclear Commitments Monitoring Committee of the Board of Directors.

In connection with the risks presented in 5C (“Nuclear safety violations during operation resulting in nuclear civil liability”), the Group notes the following additional information with respect to risk mitigation and control actions: in view of these risks, and pursuant to the Group’s policy, each Group company operating nuclear facilities acts within the framework of legal and regulatory requirements specific to the country in which it operates and is obliged to comply with them. Each one ensures the nuclear safety of its facilities and constantly improves the level of this safety based on its methods, skills and values. The Group develops ordinary principles aiming to obtain the best level of prevention of incidents and protection of workers, the public and the environment. These principles apply to all stages of the activity, both for new projects and for the existing power plants or sites being decommissioned. The Group closely involves its industrial partners in the achievement of these objectives.

Each company is responsible for the proper conduct of its nuclear activities and sets the appropriate delegations at each decision and action level. The Group guarantees the allocation of the necessary resources for nuclear safety.

An internal entity in charge of an independent safety evaluation is put in place at the level of each site, each company and the Group. Each one reports to the manager concerned, independently of other managerial functions; furthermore, each one has the duty to alert the superior hierarchical level if the reaction of the level directly involved is not what is expected.

The Group’s nuclear operating companies regularly receive international evaluation teams (World Association of Nuclear Operators Peer Review and Operational Safety Analysis Review Team from the International Agency of Atomic Energy (*Agence Internationale de l’énergie Atomique*)).

Clear and honest information communication concerning the events and their possible impacts are promoted within the Group. This high standard of dialogue is sought and maintained with the salaried personnel and their representatives, subcontractors, the supervisory authorities (ASN in France, ONR in the United Kingdom), local government and all other nuclear safety stakeholders.

The Nuclear Safety Council, which the Chairman and Chief Executive Officer of EDF chairs, meets several times a year and periodically reviews the annual assessment of nuclear safety for the EDF group. A general inspector for nuclear safety and radiation protection is appointed by the Chairman and Chief Executive Officer to whom he/she reports. He/she carries out inspection assignments regarding all of the nuclear activities of the EDF group. Each year, he/she issues an opinion on safety within EDF. The report is presented to and discussed by the Nuclear Safety Council. It is then made public (see section 1.4.1.1.4.3 “Nuclear facilities and safety” of the 2022 Document d’Enregistrement Universel).

In connection with the risks presented in 5D (“Control of the fuel cycle”), the Group notes the following additional information with respect to risk mitigation and control actions:

The supply risk management strategy consists of progressively securing the portfolio through competitive, diversified and long-term contracts in line with the objectives for covering requirements presented to the Board of Directors. Fixed price contracts are preferred or contracts including a limited market price component, the latter systematically including ceilings/floors to reduce exposure to the market.

In the field of transport, the control actions implemented by EDF include strengthening the unpredictability of transport and ties to the authorities (HFDS/ IRSN/ASN), the prevention and reduction of potential impacts on the fleet and the development of alternative drivers (such as anticipation of deliveries and inter-unit transfer).

The control of spent fuel storage capacity is essential to preserve the balance of the closed cycle. A new large capacity spent fuel storage pool will be commissioned by EDF in 2034 at the site in The Hague (see section 1.4.1.1.2.3 “The issues relating to the nuclear activity” of the 2022 Document d’Enregistrement Universel). In the meantime, Orano plans to densify its existing pools on the site and is developing a dry storage solution for spent fuel.

Lastly, EDF’s strategy for the fuel cycle is to maintain the long-term perspective of a closed cycle based on GEN IV reactors.

## **USE OF PROCEEDS**

We estimate that the net proceeds from the issuance and sale of the Notes will be approximately U.S. \$2,973,950,000 after deducting underwriting discounts and commissions but before other expenses of the offering that are to be borne by the Issuer. We intend to use the net proceeds of this offering for general corporate purposes.



## PRESENTATION OF EXCHANGE RATES AND CURRENCY INFORMATION

We publish our consolidated financial statements in euro. The following table shows the period-end, average, high and low daily reference euro/U.S. dollar exchange rates based on the Noon Buying Rate (as defined below) expressed in U.S. dollars for €1.00. The information concerning the U.S. dollar exchange rate is based on the noon buying rate in New York City for cable transfers in foreign currencies as certified for customs purposes by the Federal Reserve Bank of New York (the “**Noon Buying Rate**”). On May 12, 2023, the Noon Buying Rate was €1 = \$1.0856. Because the Noon Buying Rate is not published on a daily basis, we have also obtained information on the euro-dollar exchange rate published by the European Central Bank (the “**ECB**”). On May 16, 2023, the ECB daily reference exchange rate was €1 = \$1.0881.

	Period End	Noon Buying Rate		
		Average <sup>(1)</sup>	High	Low
<b>Year:</b>				
2018.....	1.1456	1.1785	1.2488	1.1281
2019.....	1.1227	1.1184	1.1524	1.0905
2020.....	1.2230	1.1475	1.2280	1.0682
2021.....	1.1318	1.1787	1.2295	1.1196
2022.....	1.0698	1.0534	1.1487	0.9616
2023 (through May 12, 2023) .....	1.0856	1.0807	1.1054	1.0522
<b>Month:</b>				
January 2022.....	1.1212	1.1317	1.1464	1.1141
February 2022.....	1.1224	1.1349	1.1487	1.1154
March 2022.....	1.1093	1.1019	1.1163	1.0860
April 2022 .....	1.0537	1.0903	1.1043	1.0500
May 2022.....	1.0709	1.0559	1.0744	1.0376
June 2022 .....	1.0469	1.0567	1.0740	1.0388
July 2022 .....	1.0202	1.0168	1.0409	1.0028
August 2022 .....	1.0065	1.0129	1.0338	0.9936
September 2022.....	0.9783	0.9899	1.0129	0.9616
October 2022 .....	0.9885	0.9853	1.0068	0.9692
November 2022 .....	1.0323	1.0192	1.0402	0.9759
December 2022 .....	1.0698	1.0591	1.0698	1.0494
January 2023 .....	1.0858	1.0777	1.09	1.052
February 2023 .....	1.0602	1.0702	1.092	1.055
March 2023 .....	1.0872	1.0711	1.0899	1.0535
April 2023 .....	1.104	1.0962	1.1054	1.084
May 2023 (through May 12, 2023).....	1.0856	1.0976	1.1049	1.0856

<sup>(1)</sup> The average of the Noon Buying Rates on the last business day of each month (or portion thereof) during the relevant period for annual averages; and on each business day of the month (or portion thereof) for monthly averages.

Fluctuations in exchange rates that have occurred in the past are not necessarily indicative of fluctuations in exchange rates that may occur at any time in the future. No representations are made herein that the euro or U.S. dollar amounts referred to herein could have been or could be converted into U.S. dollars or euros, as the case may be, at any particular rate.

The Noon Buying Rates are given solely for information purposes and do not purport to be the rates used in the preparation of any of the Group’s consolidated financial statements contained or included by reference herein.

## CAPITALIZATION AND INDEBTEDNESS

The following table sets forth, on a consolidated basis, the capitalization and indebtedness of the Group as of December 31, 2022. You should read this table in conjunction with the 2022 Consolidated Financial Statements.

	December 31, 2022 (in € million)
<b>Shareholders' equity - Group Share</b>	<b>34,340</b>
Share Capital	1,944
Consolidated reserves and net income	32,396
<b>Total</b>	<b>34,340</b>
<b>Loans and other financial liabilities</b>	
Current portion of loans and other financial liabilities	28,713
Loans from financial institutions from one to five years	17,141
Loans from financial institutions at more than five years	2,655
Bonds from one to five years	11,496
Bonds at more than five years	31,633
Other financial liabilities from one to five years	106
Other financial liabilities at more than five years	372
Loans related to finance-leased assets from one to five years	2,042
Loans related to finance-leased assets at more than five years	1,539
Accrued interest from one to five years	94
Accrued interest at more than five years	262
<b>Total (I)</b>	<b>96,053</b>
Derivatives used to hedge liabilities (II)	2,098
Cash and cash equivalent (III)	10,948
Liquid assets (IV)	18,507
<b>Net indebtedness (V = I - II - III - IV)</b>	<b>64,500</b>

Except for net result, translation adjustments and changes in other comprehensive income (OCI), there has been no event which had a material impact on Group's shareholders' equity since December 31, 2022 (up to the date of this offering memorandum), except the following:

- the conversion of an aggregated number of 87,831,856 OCEANes in EDF shares was valued at €960 million on February 28, 2023 and led to an increase in the share capital of EDF of €57 million, following the issuance of an aggregated number of 113,215,262 new EDF shares.

With respect to the Group's loans and other financial liabilities (excluding changes in fair value and foreign exchange differences), there has been no event which had a material impact since December 31, 2022 (up to the date of this offering memorandum), except the following:

- Issuance on January 19, 2023 under the EMTN program of four tranches of senior bonds for a nominal amount of €2.0 billion and £950 million:
  - €1 billion bond, with a nine-year maturity and a 4.25% fixed coupon;
  - €1 billion bond, with a 20-year maturity and a 4.625% fixed coupon;
  - £450 million bond, with a 12-year maturity and a 5.5% fixed coupon; and
  - £500 million bond, with a 30-year maturity and a 5.625% fixed coupon.

- Redemption on March 10, 2023 for an amount of €2.0 billion of the senior bonds issued under EMTN program by EDF on September 4, 2012;
- Redemption on January 29, 2023 for an amount of €1,925 million of USD-denominated reset perpetual subordinated notes issued by EDF on January 29, 2013, following the announcement on November 30, 2022 of the Group's intention to exercise its option to redeem the outstanding USD hybrid notes;
- Issuance of new term loans for an aggregate principal amount of €900 million and partial reimbursement of loan granted to EDF by the European Investment Bank (EIB) for €30 million;
- Reimbursement net of issuance of €248 million negotiable debt securities;
- Increase in bank overdraft of €171 million;
- Net increase of margin calls of €237 million; and
- Cash paid for debt securities transferred to several banks under repurchase agreements amounting to €310 million.

Except the shareholders' equity operation on OCEANE detailed above, the above-mentioned operations have no impact on net indebtedness.

The Group is an active issuer of debt and other types of securities. EDF regularly assesses its financial condition and financing requirements, and monitors national and international financial markets for opportunities to conduct additional issuances of senior debt, hybrids and/or other types of securities. In particular, EDF expects to conduct an issuance of senior notes in Canada shortly after the offering of the Notes.

## DESCRIPTION OF NOTES

In this offering, the Issuer will issue 5.700% fixed rate notes due May 23, 2028 (the “**Five-Year Fixed Rate Notes**”), 6.250% fixed rate notes due May 23, 2033 (the “**Ten-Year Fixed Rate Notes**”) and 6.900% fixed rate notes due May 23, 2053 (the “**Thirty-Year Fixed Rate Notes**,” and together with the Five-Year Fixed Rate Notes and the Ten-Year Fixed Rate Notes, the “**Notes**”), pursuant to a fiscal agency agreement (the “**Fiscal Agency Agreement**”), dated as of May 23, 2023, between the Issuer and Citibank, N.A., London Branch, as fiscal agent and principal paying agent (the “**Fiscal Agent**,” which expression shall, where the context so requires, include any successor for the time being as Fiscal Agent, or the “**Paying Agent**,” where the context so requires, which term shall also include any substitute or additional paying agents from time to time under the Fiscal Agency Agreement). Citibank, N.A., London Branch is also acting as transfer agent (in such capacity, the “**Transfer Agent**”) and registrar (the “**Registrar**”) of the Notes. The Issuer reserves the right at any time to vary or terminate the appointment of the Fiscal Agent or Paying Agent and/or to appoint a successor Fiscal Agent and additional or other Paying Agents; provided that it will, so long as the Notes are outstanding, maintain a Paying Agent in New York City. Notice of any change of Fiscal Agent or any change in or addition to the Paying Agents or any change in their respective specified offices will be published as set forth below under “—*Notices*.”

Holders of the Notes (the “**Holders**”) are deemed to have notice of all provisions of the Fiscal Agency Agreement. The summary information set forth herein is subject to the detailed provisions of the Fiscal Agency Agreement, copies of which are available for inspection or collection (at all reasonable times during normal business hours) by a Holder at the corporate trust office of the Fiscal Agent and the Registrar or may be provided by email to a Holder following their prior written request to the Fiscal Agent and provision of proof of holding and identity (in a form satisfactory to the Fiscal Agent). A copy of the Fiscal Agency Agreement is also available upon request from the Issuer.

For purposes of this “*Description of Notes*,” references to the “*Issuer*,” “*we*,” “*our*” and “*us*” refer only to the Issuer and not to any of its subsidiaries unless otherwise specified.

### General

In this offering, the Issuer will issue the Five-Year Fixed Rate Notes in the aggregate principal amount of \$1,000,000,000, the Ten-Year Fixed Rate Notes in the aggregate principal amount of \$1,000,000,000 and the Thirty-Year Fixed Rate Notes in the aggregate principal amount of \$1,000,000,000. The Notes of each series will be issued in denominations of \$200,000 and integral multiples of \$1,000 in excess thereof.

The Notes will be our senior unsecured obligations, ranking equally in right of payment with all of our existing and future senior unsecured debt (save for certain mandatory exemptions provided by French law). The Notes will rank equally with each other.

In certain circumstances, the Notes may be redeemed at our option. The Notes will not be subject to repayment at the option of the Holders. There will be no sinking fund for the Notes.

We may, without the consent of the Holders of any series of the Notes, create and issue additional Notes (the “**Additional Notes**”) of such series ranking equally with the Notes of such series in all respects, including having the same CUSIP and/or ISIN number, so that such Additional Notes shall be consolidated and form a single series with such series of the Notes under the Fiscal Agency Agreement; provided that the Additional Notes are fungible with the notes of such series offered hereby for the U.S. federal income tax purposes. Any such Additional Notes will have the same terms as to status, redemption or otherwise as the Notes of such series. No Additional Notes may be issued if an Event of Default (which we describe under “—*Events of Default*” below) has occurred and is continuing with respect to the Notes. Unless the context otherwise requires, in this “*Description of Notes*,” references to the “*Notes*” include the Notes and any Additional Notes that are issued.

### Principal, Maturity and Interest

The Issuer will issue the Notes as follows:

- the Five-Year Fixed Rate Notes will bear interest at 5.700% per annum and will mature on May 23, 2028;
- the Ten-Year Fixed Rate Notes will bear interest at 6.250% per annum and will mature on May 23, 2033;
- the Thirty-Year Fixed Rate Notes will bear interest at 6.900% per annum and will mature on May 23, 2053.

Each series of Notes will be payable at 100% of the face amount thereof upon redemption at maturity.

Interest on each series of Notes will be payable semi-annually in arrears on May 23 and November 23, commencing on November 23, 2023, to holders of record on May 8 and November 8 immediately preceding the related interest payment date. The first interest payment will be for interest accrued from and including May 23, 2023 up to, but excluding, November 23, 2023.

If the due date for any payment in respect of any Note is not a Business Day, the Holder thereof will not be entitled to payment of the amount due until the next succeeding Business Day, and will not be entitled to any further interest or other payment as a result of any such delay.

The term “**Business Day**” means a day other than a Saturday, Sunday or other day on which commercial banking institutions are authorized or required by law to close in New York City or Paris, France.

Interest on the Notes will be calculated on the basis of a 360-day year of twelve 30-day months.

### **Book-Entry; Delivery and Form**

The Notes offered and sold to qualified institutional buyers (“**QIBs**”), in reliance on Rule 144A under the Securities Act initially will be represented by one or more restricted global registered notes (together, the “**Rule 144A Global Note**”). The Notes offered and sold outside the United States in reliance on Regulation S under the Securities Act will be issued in the form of one or more unrestricted global registered notes (together the “**Regulation S Global Note**”). The Rule 144A Global Note and the Regulation S Global Note are referred to collectively as the “**Global Notes**.”

The Global Notes will be deposited on the date of issuance with Citibank, N.A. as custodian for DTC. The Global Notes will be registered in the nominee name of The Depository Trust Company (“**DTC**”), in each case for credit to an account of a direct or indirect participant in DTC (including Euroclear and Clearstream) as described below. Beneficial interests in the Rule 144A Global Note may be exchanged for beneficial interests in the Regulation S Global Note at any time in the circumstances described under “*Book-Entry; Delivery and Form—Summary of Provisions Relating to Notes in Global Form.*”

The Notes will be subject to certain restrictions on transfer and will bear restrictive legends as described in “*Transfer Restrictions.*” In addition, transfer of beneficial interests in the Global Notes will be subject to the applicable rules and procedures of DTC and its direct or indirect participants, which may change from time to time.

Ownership of the Global Notes may not be transferred, in whole or in part, except in limited circumstances. Beneficial interests in the Global Notes may not be exchanged for notes in certificated form (“**Certificated Notes**”) except in the limited circumstances described herein under “*Book-Entry; Delivery and Form—Summary of Provisions Relating to Certificated Notes.*”

### **Payments**

So long as the Notes are in the form of Global Notes, all payments in respect of the Notes will be made by the Paying Agent to DTC or its nominee as the registered holder. The Paying Agent will treat the persons in whose names Global Notes are registered as the owners thereof for the purpose of making such payments and for any and all other purposes whatsoever. Neither we, nor any of our agents, has or will have any responsibility or liability for:

- any aspect of the records of the registered holder(s) or any participant's or indirect participant's records relating to, or payments made on account of, beneficial ownership interests in the Global Notes, or for maintaining, supervising or reviewing any of the records of the registered holder(s) or any participant's or indirect participant's records relating to the beneficial ownership interests in the Global Notes; or
- any other matter relating to the actions and practices of the registered holder(s) or any of its or their participants or indirect participants.

DTC has advised us that its current practice, upon receipt of any payment in respect of securities such as the Notes, is to credit the accounts of the relevant participants with the payment on the payment date unless DTC has reason to believe it will not receive payment on such payment date. Payments by the participants and the indirect participants to the beneficial owners of the Notes will be governed by standing instructions and customary practices and will be the responsibility of the participants or the indirect participants and will not be the responsibility of DTC or us. We and the Paying Agent may conclusively rely, and shall bear no responsibility or liability for any action taken in reliance, on instructions from DTC or its nominee for all purposes.

We expect that Euroclear or Clearstream, upon receipt of any payment of principal or interest in respect of a Global Note will immediately credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of that Global Note as shown on the records of Euroclear or Clearstream. We also expect that payments by participants to ultimate owners of beneficial interests in a Global Note held through such participants will be governed by standing instructions and customary practices, as is now the case with securities held for the accounts of customers registered in the names of nominees for such customers. Such payments will be the responsibility of such participants.

All payments are subject in all cases to (i) any applicable fiscal or other laws, regulations and directives in the place of payment, but without prejudice to the provisions described under “—*Payment of Additional Amounts*” and (ii) withholding or deduction imposed or required pursuant to FATCA, which refers to (1) sections 1471 to 1474 of the United States Internal Revenue Code or any associated regulations or other official guidance; (2) any treaty, law, regulation or other official guidance enacted in any other jurisdiction, or relating to an intergovernmental agreement between the United States and any other jurisdiction, which (in either case) facilitates the implementation of (1) above; or (3) any agreement pursuant to the implementation of (1) or (2) above with the United States Internal Revenue Service, the United States government or any governmental or taxation authority in any other jurisdiction (“FATCA”).

### **Certain Duties of the Fiscal Agent**

As paying agent, the Fiscal Agent will act as agent of the Issuer and will not assume fiduciary obligations to holders of the Notes. The Fiscal Agency Agreement provides that the Fiscal Agent will be under no obligation to take any action or perform any duties other than those specifically set forth in the Fiscal Agency Agreement. The Fiscal Agency Agreement will not oblige the Fiscal Agent to exercise certain responsibilities that may be exercised by trustees with respect to other debt securities, including, but not limited to, certain discretionary actions customarily taken by trustees in connection with events of default under debt securities.

The Issuer may appoint, at its discretion, additional Paying Agents for the payment of principal of and interest and other amounts on the Notes at such place or places as the Issuer may determine.

The Fiscal Agency Agreement provides that the Fiscal Agent may resign and that the Issuer may remove the Fiscal Agent or any other Paying Agent in respect of the Notes, but any such resignation or removal will take effect only upon the appointment by the Issuer of, and acceptance of such appointment by, a successor Fiscal Agent or other Paying Agent which in any such case is organized or licensed and doing business under the laws of the United States or the State of New York, in good standing and having an established place of business in the Borough of Manhattan, The City of New York, and authorized under such laws to act as Fiscal Agent under the Fiscal Agency Agreement.

### **Redemption**

The Issuer may redeem the Notes before their stated maturity as stated under “—*Optional Redemption*,” “—*Residual Maturity Call Option*” or “—*Tax Redemption*.”

The Notes are not and will not be entitled to the benefit of any sinking fund — that is, we will not deposit money on a regular basis into any separate custodial account to repay your Notes. In addition, you will not be entitled to require us to buy your Notes from you before their stated maturity.

### **Optional Redemption**

Prior to the Par Call Date (as defined under “—*Residual Maturity Call Option*” below), the Issuer may redeem the Notes at its option, in whole or in part, at any time and from time to time, at a redemption price (expressed as a percentage of principal amount and rounded to three decimal places) equal to the greater of:

- (1) (a) the sum of the present values of the remaining scheduled payments of principal and interest thereon discounted to the redemption date (assuming the Notes matured on the Par Call Date) on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus (i) 35 basis points with respect to the Five-Year Fixed Rate Notes, (ii) 45 basis points with respect to the Ten-Year Fixed Rate Notes and (iii) 50 basis points with respect to the Thirty-Year Fixed Rate Notes, in each case less (b) interest accrued to the date of redemption, and
  - (2) 100% of the principal amount of the Notes to be redeemed,
- plus, in either case, accrued and unpaid interest thereon to the redemption date.

“**Treasury Rate**” means, with respect to any redemption date, the yield determined by the Issuer in accordance with the following two paragraphs.

The Treasury Rate shall be determined by the Issuer after 4:15 p.m., New York City time (or after such time as yields on U.S. government securities are posted daily by the Board of Governors of the Federal Reserve System), on the third business day preceding the redemption date based upon the yield or yields for the most recent day that appear after such time on such day in the most recent statistical release published by the Board of Governors of the Federal Reserve System designated as “Selected Interest Rates (Daily) - H.15” (or any successor designation or publication) (“**H.15**”) under the caption “U.S. government securities—Treasury constant maturities—Nominal” (or any successor caption or heading) (“**H.15 TCM**”). In determining the Treasury Rate, the Issuer shall select, as applicable: (1) the yield for the Treasury constant maturity on H.15 exactly equal to the period from the redemption date to the Par Call Date (the “**Remaining Life**”); or (2) if there is no such Treasury constant maturity on H.15 exactly equal to the Remaining Life, the two yields – one yield corresponding to the Treasury constant maturity on H.15 immediately shorter than and one yield corresponding to the Treasury constant maturity on H.15 immediately longer than the Remaining Life – and shall interpolate to the Par Call Date on a straight-line basis (using the actual number of days) using such yields and rounding the result to three decimal places; or (3) if there is no such Treasury constant maturity on H.15 shorter than or longer than the Remaining Life, the yield for the single Treasury constant maturity on H.15 closest to the Remaining Life. For purposes of this paragraph, the applicable Treasury constant maturity or maturities on H.15 shall be deemed to have a maturity date equal to the relevant number of months or years, as applicable, of such Treasury constant maturity from the redemption date.

If on the third business day preceding the redemption date H.15 TCM is no longer published, the Issuer shall calculate the Treasury Rate based on the rate per annum equal to the semi-annual equivalent yield to maturity at 11:00 a.m., New York City time, on the second business day preceding such redemption date of the United States Treasury security maturing on, or with a maturity that is closest to, the Par Call Date, as applicable. If there is no United States Treasury security maturing on the Par Call Date but there are two or more United States Treasury securities with a maturity date equally distant from the Par Call Date, one with a maturity date preceding the Par Call Date and one with a maturity date following the Par Call Date, the Issuer shall select the United States Treasury security with a maturity date preceding the Par Call Date. If there are two or more United States Treasury securities maturing on the Par Call Date or two or more United States Treasury securities meeting the criteria of the preceding sentence, the Issuer shall select from among these two or more United States Treasury securities the United States Treasury security that is trading closest to par based upon the average of the bid and asked prices for such United States Treasury securities at 11:00 a.m., New York City time. In determining the Treasury Rate in accordance with the terms of this

paragraph, the semi-annual yield to maturity of the applicable United States Treasury security shall be based upon the average of the bid and asked prices (expressed as a percentage of principal amount) at 11:00 a.m., New York City time, of such United States Treasury security, and rounded to three decimal places.

The Issuer's actions and determinations in determining the redemption price shall be conclusive and binding for all purposes, absent manifest error.

Notice of any redemption will be mailed or electronically delivered (or otherwise transmitted in accordance with the depository's procedures) at least 10 days but not more than 60 days before the redemption date to the Fiscal Agent and each Holder of the Notes to be redeemed. The Issuer shall also notify the Fiscal Agent of the final redemption amount due to be paid no later than two Business Days prior to the relevant redemption date.

If the Issuer decides to redeem fewer than all of the outstanding Notes (a partial redemption) and the Notes to be redeemed are Global Notes then held by DTC, the Notes shall be redeemed on a pro rata pass through distribution of principal basis. In the case of a partial redemption in which the Notes to be redeemed are not Global Notes then held by DTC, the selection of the Notes for redemption will be made pro rata, by lot or by such other method as the Fiscal Agent in its sole discretion deems appropriate and fair. No Notes of a principal amount of less than \$200,000 will be redeemed in part. If any Note is to be redeemed in part only, the notice of redemption that relates to the Note will state the portion of the principal amount of the Note to be redeemed. In the case of Certificated Notes only, a new Note in a principal amount equal to the unredeemed portion of the Note will be issued in the name of the Holder of the Note upon surrender for cancellation of the original Note. For so long as the Notes are held by DTC (or another depository), the redemption of the Notes shall be done in accordance with the policies and procedures of the depository.

Unless the Issuer defaults in payment of the redemption price, on and after the redemption date interest will cease to accrue on the Notes or portions thereof called for redemption.

### **Residual Maturity Call Option**

The Issuer may, on giving not less than 15 nor more than 30 days' irrevocable notice to each Holder of the Notes of such series with a copy to the Fiscal Agent, at any time or from time to time from and including the date that is the specified number of months prior to the applicable Maturity Date as set out below (the "**Par Call Date**"), redeem, in whole or in part, the relevant series of Notes at par plus any accrued and unpaid interest accrued to, but excluding, the date fixed for redemption.

- Five-Year Fixed Rate Notes: 1 month prior to maturity
- Ten-Year Fixed Rate Notes: 3 months prior to maturity
- Thirty-Year Fixed Rate Notes: 6 months prior to maturity

All Notes in respect of which any such notice is given shall be redeemed on the date specified in such notice.

In the case of a partial redemption, the redemption will be effected in accordance with the process provided under "*Optional Redemption*" above.

### **Tax Redemption**

The Notes of any series may be redeemed, at the option of the Issuer, in whole but not in part, upon giving not less than 30 nor more than 60 calendar days' notice to each Holder of the Notes of such series with a copy to the Fiscal Agent (which notice shall be irrevocable), at a price equal to 100% of the aggregate principal amount thereof, plus accrued and unpaid interest thereon, if any, to (but excluding) the redemption date, together with all Additional Amounts, if any, which otherwise would be payable if, as a result of any amendment to, or change in, the laws or treaties (or any regulations or rulings promulgated thereunder) of a Relevant Taxing Jurisdiction (as defined under "*Payment of Additional Amounts*" below) affecting taxation, or any amendment to or change in an official interpretation or application regarding such laws, treaties, regulations or rulings, including a holding, judgment or



order by a court of competent jurisdiction which becomes effective on or after the date hereof (or, in the case of a successor located in a jurisdiction other than a Relevant Taxing Jurisdiction with respect to the Issuer, the date on which such person assumed the Issuer's obligations under the Notes) (a "**Change in Tax Law**") the Payor is, or on the next interest payment date in respect of the Notes of such series would be, required to pay Additional Amounts in respect of any Note of such series pursuant to the terms and conditions thereof which obligation cannot be avoided by the taking of reasonable measures available to it; provided, however, that (a) no such notice of redemption may be given earlier than 90 calendar days prior to the earliest date on which the Payor would be obligated to pay such Additional Amounts were a payment in respect of the Notes then due and payable and (b) at the time such notice is given, such obligation to pay such Additional Amounts remains in effect.

Prior to the giving of any such notice of redemption, the Payor will deliver to the Fiscal Agent (for the benefit of the Holders of the Notes for such series) an opinion of tax counsel of recognized standing to the effect that the Payor is or would be obligated to pay such Additional Amounts as a result of a Change in Tax Law. The Fiscal Agent is not responsible for the content of any opinion required by this condition. The opinion shall be available for inspection or collection at all reasonable times during normal business hours by a Holder at the office of the Fiscal Agent or may be provided by email to a Holder of the Notes following their prior written request to the Fiscal Agent and provision of proof of holding and identity (in a form satisfactory to the Fiscal Agent).

If the Issuer would on the next payment of principal or interest in respect of the Notes be prevented by French law from making payment to the Noteholders of the full amounts then due and payable, notwithstanding the undertaking to pay additional amounts contained in "*Payment of Additional Amounts*" below (a "**Withholding Tax Event**"), then the Issuer shall forthwith, giving not less than 10 days' prior notice of such fact to the Fiscal Agent and the Noteholders in accordance with "*Notices*" below, redeem all, but not some only, of the Notes then outstanding at their redemption amount together with any interest accrued to the date set for redemption on the latest practicable Interest Payment Date on which the Issuer could make payment of the full amount then due and payable in respect of the Notes, provided that if such notice would expire after such Interest Payment Date the date for redemption pursuant to such notice of Noteholders shall be the later of (i) the latest practicable date on which the Issuer could make payment of the full amount then due and payable in respect of the Notes and (ii) 14 days after giving notice to the Fiscal Agent as aforesaid.

### **Payment of Additional Amounts**

All payments made by the Issuer or a successor (each, a "**Payor**") under, or with respect to, the Notes will be made free and clear of and without withholding or deduction for, or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature (including penalties, interest and other liabilities related thereto) (collectively, "**Taxes**") imposed, levied, collected or assessed by or on behalf of (1) France or any political subdivision or governmental authority thereof or therein having power to tax or (2) any other jurisdiction in which the Payor is organized, resident or engaged in business, or any political subdivision or governmental authority thereof or therein having the power to tax (each of paragraphs (1) and (2), a "**Relevant Taxing Jurisdiction**") unless the withholding or deduction of such Taxes is then required by law.

If any deduction or withholding for, or on account of, any Taxes of any Relevant Taxing Jurisdiction will at any time be required by law from any payments made with respect to the Notes, including payments of principal, redemption price, interest or premium, if any, the Payor will, to the fullest extent then permitted by law, pay (together with such payments) such additional amounts (the "**Additional Amounts**") as may be necessary in order that the net amounts received in respect of such payments by each Holder and beneficial owner of the Notes, as the case may be, after such withholding or deduction (including any such deduction or withholding from such Additional Amounts), will not be less than the amounts which would have been received in respect of such payments in the absence of such withholding or deduction; provided, however, that no such Additional Amounts will be payable in relation to any payment in respect of any Notes:

- (a) to, or to a third party on behalf of, a Holder of Notes who is liable for such Taxes by reason of the existence of any present or former business or personal connection between the Holder and the Relevant Taxing Jurisdiction imposing such Taxes (other than (a) the mere ownership or holding of such Notes, or (b) the receipt of principal, interest or other payments in respect thereof);

- (b) where such withholding or deduction is imposed on a payment to an individual and required to be made pursuant to (i) any European Union directive or regulation concerning the taxation of interest income, or (ii) any international treaty or understanding relating to such taxation and to which the Relevant Taxing Jurisdiction or the European Union is a party, or (iii) any provision of law implementing, or complying with, or introduced to conform with, such directive, regulation, treaty or understanding;
- (c) where such withholding or deduction is imposed or withheld by reason of the failure of the Holder or beneficial owner to provide in a reasonable and timely manner certification, information, documents or other evidence concerning the nationality, residence, or identity of the Holder and beneficial owner or to make any valid or timely declaration or similar claim or satisfy any other reporting requirements relating to such matters, whether required or imposed by statute, treaty, regulation or administrative practice, as a precondition to exemption from, or a reduction in the rate of withholding or deduction of such taxes;
- (d) where such withholding or deduction consists of any estate, inheritance, gift, sales, excise, transfer, personal property or similar tax;
- (e) where such withholding or deduction is imposed on or with respect to any payment by the Issuer to the registered Holder if such Holder is a fiduciary or partnership or any person other than the sole beneficial owner of such payment to the extent that taxes would not have been imposed on such payment had such registered Holder been the sole beneficial owner of such Note;
- (f) by or on behalf of a Holder of Notes who would have been able to avoid such withholding or deduction by presenting the relevant Note to another paying agent in a member state of the European Union;
- (g) presented for payment more than 30 calendar days after the Relevant Date (as defined below), except to the extent that the relevant Holder would have been entitled to such Additional Amounts on presenting the same for payment on or before the expiry of such period of 30 calendar days; or
- (h) where such withholding or deduction is payable for any combination of (a) through (g) above.

In addition, any amounts to be paid on any Notes or Coupons will be paid net of any deduction or withholding imposed or required pursuant to FATCA, which refers to (1) sections 1471 to 1474 of the United States Internal Revenue Code or any associated regulations or other official guidance; (2) any treaty, law, regulation or other official guidance enacted in any other jurisdiction, or relating to an intergovernmental agreement between the United States and any other jurisdiction, which (in either case) facilitates the implementation of (1) above; or (3) any agreement pursuant to the implementation of (1) or (2) above with the United States Internal Revenue Service (the “IRS”), the United States government or any governmental or taxation authority in any other jurisdiction, and the Payor will have no obligation to pay Additional Amounts or otherwise indemnify a Holder and beneficial owner of the Notes, as the case may be, for any such FATCA deduction or withholding deducted or withheld by the Payor, any Paying Agent or any other party.

For purposes of the foregoing, the “**Relevant Date**” means, in respect of any payment, the date on which such payment first becomes due and payable, but if the full amount of the monies payable has not been received by the Fiscal Agent or, as the case may be, the Paying Agent, on or prior to such due date, it means the first date on which, the full amount of such monies having been so received and being available for payment to Holders, notice to that effect has been duly given to the Holders of the Notes.

The Payor will (a) make any required withholding or deduction, and (b) remit the full amount deducted or withheld to the Relevant Taxing Jurisdiction in accordance with applicable law. The Payor will use all reasonable efforts to obtain certified copies of tax receipts evidencing the payment of any Taxes so deducted or withheld from each Relevant Taxing Jurisdiction imposing such Taxes and will provide such certified copies to each Holder. The Payor will attach to each certified copy a certificate stating (x) that the amount of withholding Taxes evidenced by the certified copy was paid in connection with payments in respect of the principal amount of Notes then outstanding, and (y) the amount of such withholding Taxes paid on the principal amount of the Notes. Copies of such documentation will be supplied by the Payor and made available for inspection or collection during ordinary business hours at the offices of each Paying Agent by the Holders upon request or may be provided by email to a Holder following their prior written request to a Paying Agent and provision of proof of holding and identity (in a form satisfactory to the relevant Paying Agent).

At least 30 calendar days prior to each date on which any Additional Amount payment under or with respect to the Notes is due and payable if the Payor will be obligated to pay Additional Amounts with respect to such payment, the Payor will deliver to the Fiscal Agent an officers' certificate stating the fact that such Additional Amounts will be payable, the amounts so payable and any other information necessary to enable the Fiscal Agent to pay such Additional Amounts to Holders on the relevant payment date. Each such officers' certificate may be relied upon until receipt of a further officers' certificate addressing such matters.

The Payor will pay any stamp, issue, registration, documentary, court, excise or other similar taxes, charges and levies (including interest and penalties) imposed by or on behalf of France (or any political subdivision or taxing authority of any such jurisdiction) or any other jurisdiction in which the Payor or Paying Agent is located in respect of or in connection with the execution, issue, delivery, redemption or enforcement of the Notes, the Fiscal Agency Agreement or any other document in relation thereto.

Potential purchasers and sellers of the Notes should be aware that they may be required to pay taxes or other documentary charges or duties in accordance with the laws and practices of the jurisdiction where the Notes are transferred or other jurisdictions. In some jurisdictions, no official statements of the tax authorities or court decisions may be available for financial instruments such as the Notes. Potential investors cannot rely upon the tax summary contained in this offering memorandum but should ask for their own tax advisor's advice on their individual taxation with respect to the acquisition, holding, disposal and redemption of the Notes. Only these advisors are in a position to duly consider the specific situation of the potential investor. See "*Taxation*."

Whenever in the Fiscal Agency Agreement, the Notes or in this offering memorandum there is mentioned, in any context, (1) the payment of principal, premium, if any, or interest, (2) redemption prices or purchase prices in connection with the redemption or purchase of the Notes, or (3) any other amount payable under or with respect to any Note, such mention shall be deemed to include mention of the payment of Additional Amounts to the extent that, in such context, Additional Amounts are, were or would be payable in respect thereof.

### **Limitation on Liens**

So long as any of the Notes remain outstanding, the Issuer has agreed that it will not create or have outstanding any mortgage, charge, pledge or other security interest upon the whole or any part of its undertaking, revenues or assets, present or future, in order to secure any Indebtedness (as defined below), or any guarantee or indemnity in respect of any Indebtedness except for any mortgage, charge, pledge or other security interest granted by the Issuer on property purchased by the Issuer as security for all or part of the purchase price thereof or on nuclear fuel owned by it as security for the financing of the cost of acquisition and/or processing thereof, without at the same time according to the Notes the same security.

For purposes of the Notes, "**Indebtedness**" means any indebtedness of the Issuer which, in each case, is in the form of or represented by any bond, note, debenture, debenture stock, loan stock, certificate or other instrument which is, or is capable of being, listed, quoted or traded on any stock exchange or in any securities market (including, without limitation, any over-the-counter market).

### **Events of Default**

The following events are defined as "*Events of Default*" with respect to the Notes of each series:

- (1) the failure to pay the principal on the Notes within 15 calendar days after the maturity date or the redemption date following a redemption for taxation reasons, as the case may be;
- (2) the failure to pay interest on the Notes of such series when the same becomes due and payable and the default continues for a period of 15 calendar days;
- (3) a default in the observance or performance of any other covenant, agreement or warranty contained in the Notes or the Fiscal Agency Agreement, which default continues (except in any case where such default is incapable of remedy) for a period of 30 calendar days after the Issuer receives written notice specifying such default from the Holder of any Notes;

- (4) (a) any Indebtedness of the Issuer (being Indebtedness having an outstanding aggregate principal amount in excess of €100,000,000 or its equivalent in any other currency) is not paid within 30 calendar days after its stated maturity or an earlier redemption date, as the case may be, or within any longer original applicable grace period, as the case may be, (b) any Indebtedness (being Indebtedness having an outstanding aggregate principal amount in excess of €100,000,000 or its equivalent in any other currency) becomes due and payable prior to its stated maturity as a result of a default thereunder which is not remedied within the relevant grace period, or (c) the Issuer fails to pay when due any amount payable by it under any guarantee of Indebtedness (being Indebtedness having an outstanding aggregate principal amount in excess of €100,000,000 or its equivalent in any other currency), unless, in each case, the Issuer is contesting in good faith its obligations to make payment or repayment of any such amount;
- (5) the Issuer is dissolved prior to redemption in full of the Notes unless, at that time, the obligations and liabilities of the Issuer pursuant to the Notes are transferred to a French legal entity and, until the Notes have been repaid in full, (a) at least 51% of the capital of such entity remains, directly or indirectly, controlled by France, or (b) the Notes are assigned by Moody's Investors Service Ltd. and S&P Global Ratings Europe Limited (or, in the event that either or both of such institutions cease to exist, at least two international rating agencies of comparable reputation), a rating equal to A+/A1 or more and the above-mentioned entity is an entity assuming all or part of the existing industrial activities of the Issuer and owning the assets corresponding with such activities, or (c) such entity's obligations and liabilities under the Notes are unconditionally guaranteed by France; or
- (6) a judgment is issued for judicial liquidation (*liquidation judiciaire*) of the Issuer or for a transfer of the whole of its business (*cession totale de l'entreprise à la suite d'un plan de cession*) pursuant to a judicial reorganisation (*redressement judiciaire*), or the Issuer is subject to equivalent legal proceedings, or in the absence of legal proceedings the Issuer makes a voluntary conveyance, assignment or other arrangement for the benefit of its creditors or enters into a composition with its creditors or the Issuer is voluntarily wound up or dissolved (*dissolution or liquidation amiable*).

If an Event of Default (other than an Event of Default specified in clause (6) above with respect to the Issuer) shall occur and be continuing with respect to the Notes of any series, the Holder of any Note of any series may declare the principal of and accrued interest on such Note to be due and payable by notice in writing to the Issuer specifying the respective Event of Default and that it is a "notice of acceleration," and the same shall become immediately due and payable unless, prior thereto, all Events of Default in respect of the Notes shall have been cured. If an Event of Default specified in clause (6) above with respect to the Issuer occurs and is continuing, then all unpaid principal of, and premium, if any, and accrued and unpaid interest on all of the outstanding Notes shall *ipso facto* become and be immediately due and payable without any declaration or other act on the part of any Holder.

### **Amendments and Waivers**

Subject to certain exceptions, the Fiscal Agency Agreement and the Notes of any series may be amended or supplemented with the consent of the Holders of at least a majority in principal amount of the Notes of such series then outstanding, or of such lesser percentage as may act at a meeting of Holders held in accordance with the provisions of the Fiscal Agency Agreement, which contains provisions for convening meetings of Holders for such purposes and for considering other matters that may affect their interests.

However, without the consent of each Holder of an outstanding Note, no amendment may, among other things:

- (1) reduce the principal amount of Notes whose Holders must consent to an amendment, supplement, or waiver;
- (2) reduce the stated rate, or extend the stated time for payment, of interest on any Note;
- (3) change the principal, or extend the maturity date, of any Note;
- (4) change the redemption date or redemption price of any Note;
- (5) make any Notes payable in a currency other than U.S. dollars;
- (6) impair the right of any Holder to receive payment of, premium, if any, principal of or interest on such Holder's Notes on or after the due dates therefor or to institute suit for the enforcement of any payment on or with respect to such Holder's Notes;

- (7) make any change in the amendment or waiver provisions of the Fiscal Agency Agreement which require each Holder's consent; or
- (8) make any change in the provisions of the Notes or the Fiscal Agency Agreement relating to Additional Amounts that directly and adversely affects the rights of any Holder of such Notes in any material respect or amends the terms of such Notes in a way that would (a) result in a loss of an exemption from any of the Taxes described thereunder or an exemption from any obligation to withhold or deduct Taxes so described thereunder unless the Payor agrees to pay Additional Amounts, if any, in respect thereof or (b) cause any Holder to be treated as having disposed of or otherwise transferred the Notes for tax purposes.

Notwithstanding the foregoing, without the consent of any Holder, the Issuer and the Fiscal Agent may amend the Fiscal Agency Agreement and the Notes of any series to:

- (1) cure any ambiguity, omission, defect or inconsistency;
- (2) provide for the assumption by a successor corporation of the obligations of the Issuer under the Fiscal Agency Agreement and the Notes;
- (3) provide for uncertificated Notes in addition to or in place of certificated Notes;
- (4) add to the covenants of the Issuer for the benefit of the Holders or surrender any right or power conferred upon the Issuer;
- (5) conform the text of the Fiscal Agency Agreement to any provision of this "*Description of Notes*;"
- (6) make any change that does not, in the opinion of the Issuer, directly and adversely affect the rights of any Holder;
- (7) evidence and provide for the acceptance and appointment under the Fiscal Agency Agreement of a successor Fiscal Agent pursuant to the requirement thereof; or
- (8) comply with applicable law or regulation.

The consent of the Holders is not necessary under the Fiscal Agency Agreement to approve the particular form of any proposed amendment, supplement or waiver. It is sufficient if such consent approves the substance of the proposed amendment, supplement or waiver. A consent to any amendment, supplement or waiver under the Fiscal Agency Agreement by any Holder of Notes given in connection with a tender of such Holder's Notes will not be rendered invalid by such tender.

In determining whether the Holders of the requisite principal amount of Notes of any series have given any request, demand, authorization, consent, vote or waiver in connection with the Fiscal Agency Agreement and the Notes of such series, Notes owned by the Issuer or any Affiliate (as defined in the Fiscal Agency Agreement) of the Issuer shall be disregarded and deemed not to be outstanding for these purposes.

The Issuer will publish a notice of any material amendment, supplement or waiver in accordance with the provisions of the Fiscal Agency Agreement described under "*—Notices.*"

Any modifications, amendments or waivers to the Fiscal Agency Agreement or to the terms and conditions of the Notes of any series will be conclusive and binding on all Holders of Notes of such series, whether or not they have given such consent or were present at such meeting, and on all future holders of Notes of such series, whether or not notation of such modifications, amendments or waivers is made upon the Notes of such series. Any instrument given by or on behalf of any Holder of a Note of any series in connection with any consent to any such modification, amendment or waiver will be irrevocable once given and will be conclusive and binding on all subsequent Holders of such Note.

The Issuer or the Holders of 66 2/3% of the Notes of any series outstanding may at any time call a meeting of the Holders of the Notes of such series. At a meeting of the Holders of the Notes of any series (including the holding of physical or, wholly or partly, virtual meetings by means of electronic facility or facilities (including telephone and video conference platforms)) called for the purpose of approving a modification or amendment to, or obtaining a waiver of, any covenant or condition set forth in the Notes of such series that may be modified with the consent of the

Holders of a majority in principal amount of the Notes of such series then outstanding, persons entitled to vote at least a majority in aggregate principal amount of the Notes of such series at the time outstanding shall constitute a quorum. In the absence of a quorum at any such meeting, the meeting may be adjourned for a period of not less than 10 days; in the absence of a quorum at any such adjourned meeting, such adjourned meeting may be further adjourned for a period of not less than 10 days; at the reconvening of any meeting further adjourned for lack of a quorum, the persons entitled to vote at least 50% in aggregate principal amount of the Notes of such series at the time outstanding shall constitute a quorum for the taking of any action set forth in the notice of the original meeting. At a meeting or an adjourned meeting duly convened and at which a quorum is present as aforesaid, any resolution to modify or amend, or to waive compliance with, any of the covenants or conditions referred to above shall be effectively passed if passed by the persons entitled to vote the lesser of (i) at least a majority in aggregate principal amount of Notes of such series then outstanding or (ii) at least 75% in aggregate principal amount of the Notes of such series represented and voting at the meeting.

## **Notices**

For so long as any of the Notes are listed on the Official List of the Luxembourg Stock Exchange and the rules of the Luxembourg Stock Exchange so require, notices with respect to the Notes will be published on the official website of the Luxembourg Stock Exchange ([www.bourse.lu](http://www.bourse.lu)). All notices to Holders will be validly given if mailed to them at their respective addresses in the register of the Holder of such Notes, if any, maintained by the Registrar. For so long as any Notes are represented by Global Notes, the Issuer will publish notices to Holders on its website and all notices to holders of the Notes will be delivered to DTC or its nominee, as the Registered Holder, which will give such notices to the holders of Book-Entry Interests.

Each such notice shall be deemed to have been given on the date of such publication on the Issuer's website; *provided* that, if notices are mailed, such notice shall be deemed to have been given on the later of (a) such publication, and (b) the seventh day after being so mailed. Any notice or communication mailed to a Holder shall be mailed by first-class mail or other equivalent means and shall be deemed sufficiently given if so mailed within the time prescribed. Failure to mail a notice or communication to a Holder or any defect in it shall not affect its sufficiency with respect to other Holders. If a notice or communication is mailed in the manner provided above, it shall be deemed duly given, whether or not the addressee receives it.

## **No Personal Liability of Directors, Officers, Employees and Shareholders**

No director, officer, employee, incorporator or shareholder of the Issuer shall, to the fullest extent permitted by law, have any liability for any obligations of the Issuer under the Notes or the Fiscal Agency Agreement or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder by accepting a Note waives, to the fullest extent permitted by law, any such claim and releases any such director, officer, employee, incorporator or shareholder of any such liability. The waiver and release are part of the consideration for issuance of the Notes. The waiver and release may not be effective to waive liabilities under applicable securities laws.

## **Prescription**

Claims against the Issuer for payment of principal, interest and Additional Amounts, if any, on the Notes will become void unless presentment for payment is made (where so required herein) within, in the case of principal and Additional Amounts, if any, a period of ten years or, in the case of interest, a period of five years, in each case from the applicable original payment date therefor.

## **Governing Law**

The Fiscal Agency Agreement and the Notes will be governed by, and construed in accordance with, the laws of the State of New York.

The Issuer has submitted to the non-exclusive jurisdiction of and venue in any federal or state court in the Borough of Manhattan in the City of New York, County and State of New York, United States of America, in any suit or proceeding based on or arising out of or under or in connection with the Notes or the Fiscal Agency Agreement.

## BOOK-ENTRY; DELIVERY AND FORM

*The information set out in the sections of this offering memorandum describing clearing and settlement arrangements is subject to any change or reinterpretation of the rules, regulations and procedures of DTC as currently in effect. The information in such sections concerning clearing systems has been obtained from sources that the Issuer believes to be reliable. The Issuer accepts responsibility only for the correct extraction and accurate reproduction of such information, but not for the accuracy of such information. As far as the Issuer is aware and able to ascertain from the information published by the clearing systems, no facts have been omitted which would render the reproduced information inaccurate or misleading in any material respect. If an investor wishes to use the facilities of any clearing system, it should confirm the applicability of the rules, regulations and procedures of the relevant clearing system. The Issuer will not be responsible or liable for any aspect of the records relating to, or payments made on account of, book-entry interests held through the facilities of any clearing system or for maintaining, supervising or reviewing any records relating to such book-entry interests.*

### Summary of Provisions Relating to Notes in Global Form

The certificates representing the Notes will be issued in fully registered form without interest coupons. The Notes will be represented by Book-Entry Interests (as defined below) and are being offered and sold only (i) to qualified institutional buyers (“**QIBs**”), in reliance on Rule 144A under the Securities Act (the “**Rule 144A Notes**”) or (ii) to persons other than U.S. persons (within the meaning of Regulation S under the Securities Act) in offshore transactions in reliance on Regulation S (the “**Regulation S Notes**”). The Regulation S Notes will be represented by one or more permanent Regulation S global notes in definitive, fully registered form without interest coupons (the “**Regulation S Global Notes**”), and will be deposited with Citibank, N.A. as custodian for, and registered in the name of Cede & Co., as nominee for DTC, for the accounts of its participants, including Euroclear and Clearstream. Prior to the 40<sup>th</sup> day after the later of the commencement of the offering of the Notes and the date of the original issue of the Notes, any resale or other transfer of beneficial interests in a Regulation S Global Note (“**Regulation S Book-Entry Interests**”) or a Rule 144A Global Note as defined below (“**Rule 144A Book-Entry Interests**”) and, together with the Regulation S Book-Entry Interests, the “**Book-Entry Interests**”) to U.S. persons shall not be permitted unless such resale or transfer is made pursuant to Rule 144A or Regulation S and in accordance with the certification requirements described below.

The Rule 144A Notes will initially be represented by one or more permanent Rule 144A global notes in definitive, fully registered form without interest coupons (the Rule 144A Global Notes and, together with the Regulation S Global Notes, the “**Global Notes**”), with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by the Fiscal Agency Agreement and such legends as may be applicable thereto, and will be deposited with Citibank, N.A. as custodian for, and registered in the name of Cede & Co., as nominee for DTC, duly executed by the Issuer and authenticated by the Registrar, as provided in the Fiscal Agency Agreement. Regulation S Book-Entry Interests may be transferred to a person who takes delivery in the form of Rule 144A Book-Entry Interests during the 40-day period commencing on the later of the closing date and the date of commencement of the distribution of the Notes (the “**distribution compliance period**”) only if such transfer occurs in connection with a transfer of Notes pursuant to Rule 144A and only upon receipt by the Registrar or the Transfer Agent, of written certifications (in the form or forms provided in the Fiscal Agency Agreement) to the effect that the Notes are being transferred to a person who the transferor reasonably believes is a QIB within the meaning of Rule 144A under the Securities Act, purchasing the Notes for its own account or the account of a QIB in a transaction meeting the requirements of Rule 144A and in accordance with all applicable securities laws of the states of the United States and other jurisdictions. Rule 144A Book-Entry Interests may be transferred to a person who takes delivery in the form of Regulation S Book-Entry Interests only upon receipt by the Registrar or the Transfer Agent, of written certifications from the transferor (in the form or forms provided in the Fiscal Agency Agreement) to the effect that such transfer is being made in accordance with Rule 903 or Rule 904 of Regulation S.

Any Book-Entry Interest in one of the Global Notes that is transferred to a person who takes delivery in the form of an interest in another Global Note will, upon transfer, cease to be an interest in such first Global Note and become an interest in the other Global Note and, accordingly, will thereafter be subject to all transfer restrictions, if any, and other procedures applicable to Book-Entry Interests in such other Global Note for as long as it remains such an interest.

Each Global Note (and any Notes issued in exchange therefor) will be subject to certain restrictions on transfer set forth therein described under “*Transfer Restrictions.*” Except in the limited circumstances described below under “—*Summary of Provisions Relating to Certificated Notes,*” owners of Book-Entry Interests will not be entitled to receive physical delivery of certificated Notes.

Ownership of Book-Entry Interests will be limited to persons who have accounts with DTC, or participants, or persons who hold interests through participants. Ownership of Book-Entry Interests will be shown on, and the transfer of that ownership will be effected only through, records maintained by DTC or its nominee (with respect to interests of participants) and the records of participants (with respect to interests of persons other than participants). QIBs may hold their Rule 144A Book-Entry Interests directly through DTC if they are participants in such system, or indirectly through organizations which are participants in such system.

Investors may hold their Regulation S Book-Entry Interests directly through Euroclear or Clearstream, if they are participants in such systems, or indirectly through organizations that are participants in such systems. Euroclear and Clearstream will hold Regulation S Book-Entry Interests on behalf of their participants through DTC.

So long as DTC, or its nominee, is the registered owner or holder of a Global Note, DTC or such nominee, as the case may be, will be considered the sole owner or holder of the Notes represented by such Global Note for all purposes under the Fiscal Agency Agreement and the Notes. No beneficial owner of a Book-Entry Interest will be able to transfer that interest except in accordance with DTC’s applicable procedures, in addition to those provided for under the Fiscal Agency Agreement and, if applicable, those of Euroclear and Clearstream.

Conveyance of notices and other communications by DTC to its participants, by those participants to their indirect participants, and by participants and indirect participants to beneficial owners of Book-Entry Interests will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

The Fiscal Agent will send, on behalf of the Issuer, any notices in respect of the Notes held in book-entry form to DTC or its nominee.

Neither DTC nor its nominee will consent or vote with respect to the Notes unless authorized by a participant in accordance with DTC’s procedures. Under its usual procedures, DTC mails an omnibus proxy to the Issuer as soon as possible after the record date. The omnibus proxy assigns DTC’s or its nominee’s consenting or voting rights to those participants to whose account the Notes are credited on the record date.

Payments of the principal of and interest on a Global Note will be made to DTC or its nominee, as the case may be, as the registered owner thereof. Neither the Issuer nor any Agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of Book-Entry Interests or for maintaining, supervising or reviewing any records relating to such Book-Entry Interests.

The Issuer expects that DTC or its nominee, upon receipt of any payment of principal or interest in respect of a Global Note, will credit participants’ accounts with payments in amounts proportionate to their respective Book-Entry Interests in the principal amount of such Global Note as shown on the records of DTC or its nominee. The Issuer also expects that payments by participants to owners of Book-Entry Interests in such Global Note held through such participants will be governed by standing instructions and customary practices, as is now the case with securities held for the accounts of customers registered in the names of nominees for such customers. Such payments will be the responsibility of such participants.

Transfers between participants in DTC will be effected in the ordinary way in accordance with DTC rules and will be settled in same-day funds. Transfers between participants in Euroclear and Clearstream will be effected in the ordinary way in accordance with their respective rules and operating procedures.

Cross-market transfers between persons holding directly or indirectly through DTC, on the one hand, and directly or indirectly through Euroclear or Clearstream participants, on the other, will be effected in DTC in accordance with DTC rules on behalf of the relevant European international clearing system by the relevant European depository;



however, those cross-market transactions will require delivery of instructions to the relevant European international clearing system by the counterparty in that system in accordance with its rules and procedures and within its established deadlines (European time). The relevant European international clearing system will, if the transaction meets its settlement requirements, deliver instructions to the relevant European depository to take action to effect final settlement on its behalf by delivering or receiving securities in DTC, and making or receiving payment in accordance with normal procedures for same-day funds settlement applicable to DTC. Euroclear and Clearstream participants may not deliver instructions directly to the European depositories.

Because of time zone differences, credits of securities received in Euroclear or Clearstream as a result of a transaction with a person that does not hold the Notes through Euroclear or Clearstream will be made during subsequent securities settlement processing and dated the first day Euroclear or Clearstream, as the case may be, is open for business following the DTC settlement date. Those credits or any transactions in those securities settled during that processing will be reported to the relevant Euroclear or Clearstream participants on that business day. Cash received in Euroclear or Clearstream as a result of sales of securities by or through a Euroclear participant or a Clearstream participant to a DTC participant will be received with value on the DTC settlement date, but will be available in the relevant Euroclear or Clearstream cash account only as of the first day Euroclear or Clearstream, as the case may be, is open for business following settlement in DTC.

The Issuer expects that DTC will take any action permitted to be taken by a holder of Notes (including the presentation of Notes for exchange as described below) only at the direction of one or more participants to whose account the DTC interests in a Global Note are credited and only in respect of such portion of the aggregate principal amount of Notes as to which such participant or participants has or have given such direction. However, if there is an event of default under the Notes, DTC will exchange the applicable Global Note for certificated Notes, which it will distribute to its participants and which may be legended as set forth under the heading “*Transfer Restrictions.*”

## **DTC**

DTC has advised that it is a limited purpose trust company organized under the laws of the State of New York, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code and a “clearing agency” registered pursuant to the provisions of Section 17A of the Exchange Act. DTC holds securities for its participants and facilitates the clearance and settlement of securities transactions between participants through electronic book-entry changes in accounts of its participants, thereby eliminating the need for physical movement of securities certificates. Direct participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. Indirect access to the DTC system is available to others such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a participant, either directly or indirectly, or indirect participants.

## **Euroclear**

Euroclear holds securities and Book-Entry Interests in securities for participating organizations and facilitates the clearance and settlement of securities transactions between Euroclear participants, and between Euroclear participants and participants of certain other securities intermediaries through electronic book-entry changes in accounts of such participants or other securities intermediaries. Euroclear provides Euroclear participants, among other things, with safekeeping, administration, clearance and settlement, securities lending and borrowing, and related services. Euroclear participants are investment banks, securities brokers and dealers, banks, central banks, supranationals, custodians, investment managers, corporations, trust companies and certain other organizations. Certain of the Initial Purchasers, or other financial entities involved in this offering, may be Euroclear participants. Non-participants in the Euroclear system may hold and transfer Book-Entry Interests in the Notes through accounts with a participant in the Euroclear system or any other securities intermediary that holds a Book-Entry Interest in the securities through one or more securities intermediaries standing between such other securities intermediary and Euroclear.

Investors electing to acquire Notes in the offering through an account with Euroclear or some other securities intermediary must follow the settlement procedures of such intermediary with respect to the settlement of new issues of securities. Notes to be acquired against payment through an account with Euroclear will be credited to the securities

clearance accounts of the respective Euroclear participants in the securities processing cycle for the first day Euroclear is open for business following the settlement date for value as of the settlement date.

Investors electing to acquire, hold or transfer Notes through an account with Euroclear or some other securities intermediary must follow the settlement procedures of such intermediary with respect to the settlement of secondary market transactions in securities. Euroclear will not monitor or enforce any transfer restrictions with respect to the Notes. Investors that acquire, hold and transfer interests in the Notes by book-entry through accounts with Euroclear or any other securities intermediary are subject to the laws and contractual provisions governing their relationship with their intermediary, as well as the laws and contractual provisions governing the relationship between such intermediary and each other intermediary, if any, standing between themselves and the individual Notes.

Euroclear has advised that, under Belgian law, investors that are credited with securities on the records of Euroclear have a co-property right in the fungible pool of interests in securities on deposit with Euroclear in an amount equal to the amount of interests in securities credited to their accounts. In the event of the insolvency of Euroclear, Euroclear participants would have a right under Belgian law to the return of the amount and type of interests in securities credited to their accounts with Euroclear. If Euroclear did not have a sufficient amount of interests in securities on deposit of a particular type to cover the claims of all participants credited with such interests in securities on Euroclear's records, all participants having an amount of interests in securities of such type credited to their accounts with Euroclear would have the right under Belgian law to the return of their pro rata share of the amount of interests in securities actually on deposit. Under Belgian law, Euroclear is required to pass on the benefits of ownership in any interests in Notes on deposit with it (such as dividends, voting rights and other entitlements) to any person credited with such interests in securities on its records. Distributions with respect to the Notes held beneficially through Euroclear will be credited to the cash accounts of Euroclear participants in accordance with the Euroclear terms and conditions.

### **Clearstream**

Clearstream has advised that it is incorporated under the laws of Luxembourg and licensed as a bank and professional depository. Clearstream holds securities for its participating organizations and facilitates the clearance and settlement of securities transactions among its participants through electronic book-entry changes in accounts of its participants, thereby eliminating the need for physical movement of certificates. Clearstream provides to its participants, among other things, services for safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Clearstream interfaces with domestic markets in several countries. Clearstream has established an electronic bridge with the Euroclear operator to facilitate the settlement of trades between Clearstream and Euroclear. As a registered bank in Luxembourg, Clearstream is subject to regulation by the Luxembourg Commission for the Supervision of the Financial Sector. As a professional depository, Clearstream is subject to regulation by the Luxembourg Monetary Institute. Clearstream participants are recognized financial institutions around the world, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. In the United States, Clearstream participants are limited to securities brokers and dealers and banks, and may include the Initial Purchasers, or other financial entities involved in, this offering. Other institutions that maintain a custodial relationship with a Clearstream participant may obtain indirect access to Clearstream. Clearstream is an indirect participant in DTC. Distributions with respect to Notes held beneficially through Clearstream will be credited to cash accounts of Clearstream participants in accordance with its rules and procedures.

Although DTC, Euroclear and Clearstream are expected to follow the foregoing procedures in order to facilitate transfers of interests in a global note among participants of DTC, Euroclear and Clearstream, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. Neither the Issuer nor the Fiscal Agent will have any responsibility for the performance by DTC, Euroclear or Clearstream or their respective participants or indirect participants of their respective obligations under the rules and procedures governing their respective operations.

### **Summary of Provisions Relating to Certificated Notes**

If DTC is at any time unwilling or unable to continue as a depository for the Global Notes and a successor depository is not appointed by the Issuer within 90 days, or if there shall have occurred and be continuing an Event of Default with respect to the Notes and a holder so requests, the Issuer will issue certificated Notes in exchange for the

Global Notes. Certificated notes delivered in exchange for Book-Entry Interests will be registered in the names, and issued in denominations of \$200,000 and integral multiples of \$1,000 in excess thereof, requested by or on behalf of DTC or the successor depository (in accordance with its customary procedures). Holders of Book-Entry Interests may receive certificated Notes, which may bear the legend referred to under “*Transfer Restrictions*,” in accordance with DTC’s rules and procedures in addition to those provided for under the Fiscal Agency Agreement.

Except in the limited circumstances described above, owners of Book-Entry Interests will not be entitled to receive physical delivery of individual definitive certificates. The Notes are not issuable in bearer form.

Transfers of interests in certificated Notes may be made only in accordance with the legend contained on the face of such Notes, and the Transfer Agent or the Registrar will not be required to accept for registration of transfer any such Notes except upon presentation of evidence satisfactory to the Registrar or the applicable Transfer Agent that such transfer is being made in compliance with such legend.

Payment of principal and interest in respect of the certificated Notes shall be payable at the office or agency of the Issuer in the City of New York, through the corporate trust office of the Fiscal Agent who is located in London, England, and whose U.S. Dollar account is located in the City of New York.

## TAXATION

### Taxation in France

*The following is a summary of certain French withholding tax considerations relating to the holding of the Notes by a holder of the Notes which does not currently hold shares of the Issuer. This summary is based on the tax laws and regulations of France, as in effect and applied by the French tax authorities at the date of this offering memorandum, all of which are subject to change (possibly with a retroactive effect) or to different interpretation. This summary is for general information and does not purport to address all French tax considerations that may be relevant to specific holders in light of their particular situation. Persons considering the purchase of Notes should consult their own tax advisers as to French tax considerations relating to the purchase, ownership and disposition of Notes in light of their particular situation.*

#### **Withholding taxes on payments made by the Issuer**

Payments of interest and other assimilated revenues made by or on behalf of the Issuer with respect to the Notes will not be subject to the withholding tax provided by Article 125 A III of the French *Code général des impôts* unless such payments are made outside France in a non-cooperative State or territory (*État ou territoire non coopératif*) within the meaning of Article 238-0 A of the French *Code général des impôts* (a “**Non-Cooperative State**”) other than those mentioned in 2° of 2 *bis* of Article 238-0 A of the French *Code général des impôts*.

If such payments under the Notes are made in a Non-Cooperative State other than those mentioned in 2° of 2 *bis* of Article 238-0 A of the French *Code général des impôts*, a 75% withholding tax will be applicable (regardless of the tax residence of the Noteholder) subject to exceptions and to the more favorable provisions of any applicable double tax treaty, by virtue of Article 125 A III of the French *Code général des impôts*. The list of Non-Cooperative States is published by a ministerial executive order and may be updated at any time and at least on a yearly basis.

Furthermore, pursuant to Article 238 A of the French *Code général des impôts*, interest and other assimilated revenues under such Notes are not deductible from the Issuer’s taxable income (in circumstances where they would otherwise be deductible), if they are paid or have accrued to persons domiciled or established in a Non-Cooperative State or paid to an account held with a financial institution established in such a Non-Cooperative State (the “**Deductibility Exclusion**”). Under certain conditions, any such non-deductible interest and other assimilated revenues may be re-characterized as constructive dividends pursuant to Articles 109 *et seq.* of the French *Code général des impôts*, in which case such non-deductible interest and other assimilated revenues may be subject to the withholding tax provided by Article 119 bis 2 of the French *Code général des impôts*, (i) at a rate of 12,8% for payments to holders that are non-French tax resident individuals or (ii) the standard rate of corporate income tax set out in the second paragraph of Article 219 I of the French *Code général des impôts* (*i.e.*, 25% for payments to holders that are non-French tax resident legal entities for fiscal years beginning as from 1st January 2022), in each case (x) unless payments are made in a Non-Cooperative State other than those mentioned in 2° of 2 *bis* of Article 238-0 A of the French *Code général des impôts* (in which case the withholding tax rate would be equal to 75%) and (y) subject to certain exceptions and to the more favorable provisions of any applicable double tax treaty.

Notwithstanding the foregoing, neither the 75% withholding tax provided by Article 125 A III of the French *Code général des impôts* nor, to the extent the relevant interest and other assimilated revenues relate to genuine transactions and are not in an abnormal or exaggerated amount, the Deductibility Exclusion and therefore the withholding tax set out under Article 119 bis 2 of the French *Code général des impôts* will apply in respect of the issue of the Notes solely by reason of the relevant payments being made to persons domiciled or established in a Non-Cooperative State or paid in such a Non-Cooperative State if the Issuer can prove that the principal purpose and effect of the issue of the Notes was not that of allowing the payments of interest and other assimilated revenues to be made in a Non-Cooperative State (the “**Exception**”).

Pursuant to official guidelines issued by the French tax authorities under the references BOI-INT-DG-20-50-20, No. 290 and BOI-INT-DG-20-50-30 No. 150 (the “**Administrative Guidelines**”), the Notes will benefit from the Exception without the Issuer having to provide any proof of the purpose and effect of the issue of the Notes if the Notes are:

- (i) offered by means of a public offer within the meaning of Article L. 411-1 of the French *Code monétaire et financier* for which the publication of a prospectus is mandatory or pursuant to an equivalent offer in a state which is not a Non-Cooperative State. For this purpose, an “equivalent offer” means any offer requiring the registration or submission of an offer document by or with a foreign securities market authority; and/or
- (ii) admitted to trading on a French or foreign regulated market or multilateral securities trading system provided that such market or system is not located in a Non-Cooperative State, and the operation of such market is carried out by a market operator or an investment services provider, or by such other similar foreign entity, provided further that such market operator, investment services provider or entity is not located in a Non-Cooperative State; and/or
- (iii) admitted, at the time of their issue, to the operations of a central depository or of a securities delivery and payment systems operator within the meaning of Article L. 561-2 of the French *Code monétaire et financier*, or of one or more similar foreign depositories or operators provided that such depository or operator is not located in a Non-Cooperative State.

In particular, as the Notes issued pursuant to this offering memorandum are admitted at the time of their issue to the operations of DTC, which is a non-French central depository that is (i) similar to a central depository within the meaning of Article L. 561-2 of the French *Code monétaire et financier* and (ii) not located in a Non-Cooperative State, payments of interest and other assimilated revenues made by or on behalf of the Issuer with respect to the Notes will not be subject to the withholding tax set out under Article 125 A III of the French *Code général des impôts*, as construed under the Administrative Guidelines. In addition, they will be subject neither to the non-deductibility rule set out under Article 238 A of the French *Code général des impôts* nor to the withholding tax set out under Article 119 bis 2 of the French *Code général des impôts* solely on account of their being paid to an account held with a financial institution established in a Non-Cooperative State or accrued or paid to persons established or domiciled in a Non-Cooperative State.

#### ***Withholding taxes applicable on payments made to individuals fiscally domiciled in France***

Pursuant to Article 125 A I of the French *Code général des impôts* (i.e., where the paying agent (*établissement payeur*) is established in France) and subject to certain exceptions, interest and other assimilated revenues received by individuals fiscally domiciled in France are subject to a 12.8% withholding tax, which is deductible from the personal income tax payable in respect of the year in which the payment has been made. Social contributions (CSG, CRDS and solidarity levy) are also levied by way of withholding at an aggregate rate of 17.2% on such interest and other assimilated revenues paid to individuals fiscally domiciled in France, subject to certain exceptions.

#### **United States Federal Income Tax Considerations**

This section describes the material United States federal income tax (“USFIT”) consequences with respect to the ownership and disposition of the Notes we are offering. It applies to you only if you acquire Notes in the offering at the offering price and you hold the Notes as capital assets (generally, property held for investment) for tax purposes. This section does not apply to you if you are a member of a class of holders subject to special rules, such as:

- a dealer in securities,
- a trader in securities that elects to use a mark-to-market method of accounting for your securities holdings,
- a bank,
- a life insurance company,
- a regulated investment company,
- a real estate investment trust,

- a tax-exempt organization,
- a person that owns Notes that are a hedge or that are hedged against interest rate risks,
- a person that owns Notes as part of a straddle or conversion transaction for tax purposes,
- a person that purchases or sells Notes as part of a wash sale for tax purposes, or
- a U.S. Holder, as defined below, whose functional currency for tax purposes is not the U.S. dollar.

Moreover, this discussion does not address any non-United States, state, or local tax considerations, the Medicare tax on net investment income, the alternative minimum tax, or any withholding or information reporting requirements pursuant to sections 1471 through 1474 of the Internal Revenue Code of 1986, as amended (the “Code”).

The Note-related USFIT consequences to persons who own an interest in a holder that is treated as a pass-through entity for USFIT purposes (such as a partnership) will generally depend on the status of such person and the tax treatment of such pass-through entity. However, special rules apply to such persons, and, consequently, they should consult their tax advisors with respect to their particular circumstances.

This section is based on the federal income tax laws of the United States, including the Code, its legislative history, existing and proposed regulations promulgated thereunder, and published rulings and court decisions, all as currently in effect. These laws are subject to change, possibly on a retroactive basis.

If you purchase Notes at a price other than the offering price, the amortizable bond premium or market discount rules may also apply to you. You should consult your tax advisor regarding this possibility.

***Please consult your own tax advisor concerning the consequences of owning these Notes in your particular circumstances under the Code and the laws of any other taxing jurisdiction.***

#### ***Taxation of U.S. Holders***

This subsection describes the tax consequences to a U.S. Holder. You are a U.S. Holder if you are a beneficial owner of Notes and you are, for USFIT purposes,:

- a citizen or tax resident of the United States,
- a domestic corporation,
- an estate whose income is subject to USFIT regardless of its source, or
- a trust if a United States court can exercise primary supervision over the trust’s administration and one or more United States persons are authorized to control all substantial decisions of the trust.

If you are not a U.S. Holder, this subsection does not apply to you and you should refer to “Taxation of Non-U.S. Holders” below.

Payments of Interest. Interest on the Notes and Additional Amounts (if any) generally will be includible in the gross income of a U.S. Holder as ordinary income at the time the interest income is received or when it accrues, depending on such holder’s regular method of accounting (cash or accrual) for USFIT purposes. U.S. Holders must include any tax withheld from the interest payment as ordinary income even though such U.S. Holders do not in fact receive it. A U.S. Holder may be entitled to deduct or credit this tax, subject to applicable limits. The rules governing foreign tax credits are complex and U.S. Holders should consult their tax advisors regarding the availability of the foreign tax credit.

Source of Interest Income. Interest paid on the Notes and Additional Amounts (if any) are income from sources outside the United States for purposes of the rules regarding the foreign tax credit allowable to a U.S. Holder, and will generally be “passive” income for purposes of computing the foreign tax credit.

Purchase, Sale and Retirement of the Notes. A U.S. Holder’s tax basis in the Notes generally will be its cost. A U.S. Holder will generally recognize U.S. source capital gain or loss on the sale or retirement of a Note equal to the difference, if any, between the amount realized on the sale or retirement (excluding any amounts attributable to accrued but unpaid interest) and such U.S. Holder’s tax basis in the Note. Capital gain recognized by individuals and certain other non-corporate U.S. Holders is generally taxed at preferential rates where such individuals or non-corporate U.S. Holders have a holding period greater than one year. The deductibility of capital losses is subject to certain limitations. Prospective investors should consult their own tax advisors concerning such limitations.

### ***Taxation of Non-U.S. Holders***

This subsection describes the tax consequences to Non-U.S. Holders. You are a Non-U.S. Holder if you are a beneficial owner of a Note and you are, for USFIT purposes:

- a nonresident alien individual,
- a foreign corporation or
- an estate or trust that in either case is not subject to USFIT on a net income basis on income or gain from a Note.

If you are a U.S. Holder, this subsection does not apply to you.

Under United States federal income and estate tax law, and subject to the discussion of backup withholding below, if you are a Non-U.S. Holder of a Note then interest paid to you on a Note is exempt from USFIT, including withholding tax, whether or not you are engaged in a trade or business in the United States, unless:

- you are an insurance company carrying on a United States insurance business to which the interest is attributable, within the meaning of the Code, or
- you both have an office or other fixed place of business in the United States to which the interest is attributable and derive the interest in the active conduct of a banking, financing or similar business within the United States, or are a corporation with a principal business of trading in stocks and securities for its own account.

Purchase, Sale, Retirement and Other Disposition of the Notes. If you are a Non-U.S. Holder of a Note, you generally will not be subject to USFIT on gain realized on the sale, exchange or retirement of a Note unless:

- the gain is effectively connected with your conduct of a trade or business in the United States or
- you are an individual, you are present in the United States for 183 or more days during the taxable year in which the gain is realized and certain other conditions exist.

For purposes of the United States federal estate tax, the Notes will be treated as situated outside the United States and will not be includible in the gross estate of a Non-U.S. Holder who is neither a citizen nor a resident of the United States at the time of death.

### ***Information with Respect to Foreign Financial Assets***

Owners of “specified foreign financial assets” with an aggregate value in excess of \$50,000 (and in some circumstances, a higher threshold) may be required to file an information report with respect to such assets with their tax returns. “Specified foreign financial assets” include financial accounts maintained by foreign financial institutions, as well as any of the following, but only if they are held for investment and not held in accounts maintained by financial

institutions: (i) stocks and securities issued by non-United States persons, (ii) financial instruments and contracts that have non-United States issuers or counterparties, and (iii) interests in foreign entities. Holders that are individuals are urged to consult their tax advisors regarding the application of this reporting requirement to their ownership of the Notes.

### ***Backup Withholding and Information Reporting***

If you are a non-corporate U.S. Holder, information reporting requirements, on IRS Form 1099, generally would apply to payments of principal and interest on a Note within the United States, and the payment of the proceeds from the sale of a Note effected at a U.S. office of a broker.

Additionally, backup withholding may apply to such payments if you fail to comply with applicable certification requirements or (in the case of interest payments) are notified by the IRS that you have failed to report all interest and dividends required to be shown on your federal income tax returns.

If you are a Non-U.S. Holder, you are generally exempt from backup withholding and information reporting requirements with respect to payments of principal and interest made to you outside the United States by the Issuer or another non-United States payor. You are also generally exempt from backup withholding and information reporting requirements in respect of payments of principal and interest made within the United States and the payment of the proceeds from the sale of a Note effected at a United States office of a broker, as long as either (i) the payor or broker does not have actual knowledge or reason to know that you are a United States person and you have furnished a valid IRS Form W-8BEN or W-8BEN-E or other documentation upon which the payor or broker may rely to treat the payments as made to a non-United States person, or (ii) you otherwise establish an exemption.

Payment of the proceeds from the sale of a Note effected at a foreign office of a broker will generally not be subject to information reporting or backup withholding. However, a sale of a Note that is effected at a foreign office of a broker could be subject to information reporting (and in certain cases may be subject to backup withholding as well) if (i) the broker has certain connections to the U.S., (ii) the proceeds or confirmation are sent to the U.S., or (iii) the sale has certain other specified connections with the U.S.

You generally may obtain a refund of any amounts withheld under the backup withholding rules that exceed your income tax liability by filing a refund claim with the IRS.



## PLAN OF DISTRIBUTION

Pursuant to a purchase agreement dated May 17, 2023 (the “**Purchase Agreement**”), Barclays Capital Inc., BNP Paribas Securities Corp., BofA Securities, Inc., Credit Agricole Securities (USA) Inc., Deutsche Bank Securities Inc., J.P. Morgan Securities LLC, Mizuho Securities USA LLC, Morgan Stanley & Co. LLC, MUFG Securities Americas Inc., Santander US Capital Markets LLC, SG Americas Securities, LLC, SMBC Nikko Securities America, Inc., Standard Chartered Bank AG and Wells Fargo Securities, LLC (together, the “**Initial Purchasers**”) have severally agreed with the Issuer, subject to the satisfaction of certain conditions, to purchase the respective principal amount of the Notes set forth opposite their respective names appearing in the tables below, aggregating \$3,000,000,000 principal amount of the Notes and consisting of \$1,000,000,000 principal amount of the Five-Year Fixed Rate Notes, \$1,000,000,000 principal amount of the Ten-Year Fixed Rate Notes and \$1,000,000,000 principal amount of the Thirty-Year Fixed Rate Notes.

<u>Initial Purchaser</u>	<u>Principal Amount of the Five-Year Fixed Rate Notes</u>
Barclays Capital Inc. ....	\$25,000,000
BNP Paribas Securities Corp. ....	\$25,000,000
BofA Securities, Inc. ....	\$150,000,000
Credit Agricole Securities (USA) Inc. ....	\$60,000,000
Deutsche Bank Securities Inc. ....	\$60,000,000
J.P. Morgan Securities LLC.....	\$150,000,000
Mizuho Securities USA LLC.....	\$60,000,000
Morgan Stanley & Co. LLC.....	\$60,000,000
Santander US Capital Markets LLC.....	\$25,000,000
SG Americas Securities, LLC.....	\$150,000,000
SMBC Nikko Securities America, Inc. ....	\$60,000,000
Standard Chartered Bank AG.....	\$25,000,000
Wells Fargo Securities, LLC.....	\$150,000,000
TOTAL.....	\$1,000,000,000

<u>Initial Purchaser</u>	<u>Principal Amount of the Ten-Year Fixed Rate Notes</u>
Barclays Capital Inc. ....	\$25,000,000
BNP Paribas Securities Corp. ....	\$60,000,000
BofA Securities, Inc. ....	\$150,000,000
Credit Agricole Securities (USA) Inc. ....	\$25,000,000
Deutsche Bank Securities Inc. ....	\$60,000,000
J.P. Morgan Securities LLC.....	\$150,000,000
Mizuho Securities USA LLC.....	\$60,000,000
Morgan Stanley & Co. LLC.....	\$60,000,000
MUFG Securities Americas Inc. ....	\$60,000,000
Santander US Capital Markets LLC.....	\$25,000,000
SG Americas Securities, LLC.....	\$150,000,000
Standard Chartered Bank AG.....	\$25,000,000
Wells Fargo Securities, LLC.....	\$150,000,000
TOTAL.....	\$1,000,000,000

<u>Initial Purchaser</u>	<u>Principal Amount of the Thirty-Year Fixed Rate Notes</u>
Barclays Capital Inc. ....	\$50,000,000
BNP Paribas Securities Corp. ....	\$25,000,000

BofA Securities, Inc. ....	\$150,000,000
Credit Agricole Securities (USA) Inc. ....	\$25,000,000
Deutsche Bank Securities Inc.....	\$50,000,000
J.P. Morgan Securities LLC.....	\$150,000,000
Mizuho Securities USA LLC.....	\$50,000,000
Morgan Stanley & Co. LLC.....	\$50,000,000
MUFG Securities Americas Inc. ....	\$50,000,000
Santander US Capital Markets LLC.....	\$50,000,000
SG Americas Securities, LLC.....	\$150,000,000
Standard Chartered Bank AG.....	\$50,000,000
Wells Fargo Securities, LLC.....	\$150,000,000
TOTAL.....	<u>\$1,000,000,000</u>

Subject to the terms and conditions set forth in the Purchase Agreement, the Initial Purchasers have agreed, severally and not jointly, to purchase all of the Notes sold under the Purchase Agreement if any of these Notes are purchased. If an Initial Purchaser defaults, the Purchase Agreement provides that the purchase commitments of the non-defaulting Initial Purchasers may be increased or the Purchase Agreement may be terminated.

The Initial Purchasers are offering the Notes, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the Notes, and other conditions contained in the Purchase Agreement, such as the receipt by the Initial Purchasers of officer’s certificates and legal opinions. The Initial Purchasers reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

The Purchase Agreement entitles the Initial Purchasers to terminate the purchase of the Notes in certain circumstances prior to payment to the Issuer. The Issuer has agreed to indemnify the Initial Purchasers against certain liabilities in connection with the offer and sale of the Notes, including liabilities under the Securities Act, and may be required to contribute to payments the Initial Purchasers may be required to make in respect thereof.

The Initial Purchasers, or certain of their respective affiliates acting as selling agents, initially propose to offer the Notes at a price of 99.850%, plus accrued interest, if any, from May 23, 2023 for the Five-Year Fixed Rate Notes, at a price of 99.897%, plus accrued interest, if any, from May 23, 2023 for the Ten-Year Fixed Rate Notes and at a price of 99.323%, plus accrued interest, if any, from May 23, 2023 for the Thirty-Year Fixed Rate Notes. After the initial offering of the Notes, the offering prices may from time to time be varied by the Initial Purchasers.

The Issuer will not, during the period of 80 days following the date hereof, without the prior written consent of BofA Securities, Inc., J.P. Morgan Securities LLC, SG Americas Securities, LLC and Wells Fargo Securities, LLC, as representatives of the Initial Purchasers (which consent shall not be unreasonably withheld), directly or indirectly, sell, offer, contract or grant any option to sell, pledge, transfer or otherwise dispose of or transfer, or announce the offering of, any U.S. dollar-denominated debt securities of the Company (other than commercial paper) or securities exchangeable for or convertible into U.S. dollar-denominated debt securities of the Company (other than the Notes or any perpetual subordinated notes) in the United States in a private placement exempt from the registration requirements of the Securities Act.

The Notes are new issues of securities with no established trading market. The Initial Purchasers are not obligated to make a market in the Notes and accordingly no assurance can be given as to the liquidity of, or trading market for, the Notes. See “*Risk Factors—There is currently no public market for the Notes.*”

In connection with the issue of the Notes, one or more of Barclays Capital Inc., BNP Paribas Securities Corp., BofA Securities, Inc., Credit Agricole Securities (USA) Inc., Deutsche Bank Securities Inc., J.P. Morgan Securities LLC, Mizuho Securities USA LLC, Morgan Stanley & Co. LLC, MUFG Securities Americas Inc., Santander US Capital Markets LLC, SG Americas Securities, LLC, SMBC Nikko Securities America, Inc., Standard Chartered Bank AG and Wells Fargo Securities, LLC (the “**Stabilizing Manager(s)**”) (or persons acting on behalf of any Stabilizing Manager(s)) 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, there is no assurance that the Stabilizing Manager(s)

(or persons acting on behalf of a Stabilizing Manager) will undertake stabilization action. Any stabilization action may begin on or after the date on which adequate disclosure of the final terms of the offer of the Notes is made and, if begun, may be ended at any time, but must end no later than the earlier of 30 days after the issue date of the Notes and 60 days after the date of the allotment of the Notes. Any stabilization action or overallotment must be conducted by the relevant Stabilizing Manager(s) (or person(s) acting on behalf of any Stabilizing Manager(s)) in accordance with all applicable laws and rules.

The Initial Purchasers may impose a penalty bid. Penalty bids permit the Initial Purchasers to reclaim selling concessions from a syndicate member when they, in covering syndicate positions or making stabilizing purchases, repurchase Notes originally sold by that syndicate member.

Any of these activities may cause the price of the Notes to be higher than the price that otherwise would exist in the open market in the absence of such transactions. These transactions may be effected in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time at the sole discretion of the Initial Purchasers, as applicable.

No action has been or will be taken in any jurisdiction that would permit a public offering of the Notes or the possession, circulation or distribution of any material relating to the Issuer in any jurisdiction where action for such purpose is required. Accordingly, the Notes may not be offered or sold, directly or indirectly, nor may any offering material or advertisement in connection with the Notes (including this document and any amendment or supplement hereto) be distributed or published, in or from any country or jurisdiction except under circumstances that will result in compliance with any applicable rules and regulations of any such country or jurisdiction.

The Initial Purchasers and their affiliates have, from time to time, performed and may in the future perform, various investment and commercial banking or financial advisory or other services for the Issuer and its affiliates, for which they have received or may receive customary fees and commissions.

In addition, in the ordinary course of their business activities, the Initial Purchasers 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 ours or our affiliates. Certain of the Initial Purchasers or their affiliates that have a lending relationship with us routinely hedge, certain of those Initial Purchasers or their affiliates are likely to hedge or otherwise reduce, and certain of those Initial Purchasers or their affiliates may hedge or otherwise reduce, their credit exposure to us consistent with their customary risk management policies. Typically, such Initial Purchasers 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 our securities, including potentially the Notes offered hereby. Any such credit default swaps or short positions could adversely affect future trading prices of the Notes offered hereby. The Initial Purchasers 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.

Delivery of the Notes will be made against payment therefor on May 23, 2023, which will be four New York City business days following the date of pricing of the Notes. Trades in many secondary markets generally settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade Notes on the date of pricing or the succeeding business day will be required, by virtue of the fact that the Notes initially settle on May 23, 2023, to specify an alternate settlement arrangement at the time of any such trade to prevent a failed settlement. Purchasers of the Notes who wish to trade the Notes prior to their date of delivery hereunder should consult their advisers.

## **Selling Restrictions**

### ***United States***

The Notes have not been and will not be registered under the Securities Act or the securities laws of any other jurisdiction and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and any applicable state or local securities laws. Accordingly, the Notes are being offered and sold only (i) outside the United States in reliance on Regulation S under the Securities Act and (ii) within the United States to QIBs in accordance with Rule 144A. Prospective purchasers that are QIBs are hereby notified that the Initial Purchasers of the Notes may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A thereunder.

Each Initial Purchaser has represented and agreed with the issuer that (i) it has not offered or sold, and will not offer or sell, any Notes except (x) to those it reasonably believes to be QIBs or (y) in offshore transactions in accordance with Rule 903 of Regulation S, (ii) no general solicitation or general advertising (within the meaning of Rule 502 under the Securities Act) will be used in the United States in connection with the offering of the Notes, (iii) neither it, nor any of its affiliates nor any person acting on its or their behalf has engaged or will engage in any directed selling efforts (within the meaning of Regulation S) with respect to the Notes and that such Initial Purchaser, its affiliates and any persons acting on its or their behalf have complied and will comply with the offering restrictions of Regulation S and (iv) it is a QIB within the meaning of Rule 144A.

Unless otherwise stated, terms used in the preceding two paragraphs have the meanings ascribed to them by Regulation S under the Securities Act.

In addition, until 40 days after the commencement of the offering of the Notes, an offer or sale of Notes within the United States by any dealer (whether or not participating in the offering of the Notes) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A under the Securities Act.

### ***United Kingdom***

Each Initial Purchaser has represented and agreed that, in relation to the United Kingdom:

- (i) 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 the Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and
- (ii) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Notes in, from or otherwise involving the United Kingdom.

Each Initial Purchaser has represented and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes to any retail investor in the United Kingdom. For the purposes of this provision: (a) 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 UK domestic law by virtue of the EUWA; or (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 UK domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of the Prospectus Regulation as it forms part of UK domestic law by virtue of the EUWA; and (b) 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.

### ***PRIIPs Regulation / Prospectus Regulation / Prohibition of Sales to EEA Retail Investors***

Each Initial Purchaser has acknowledged and agreed that, with respect to the EEA, this offering memorandum is only being distributed to and is only directed at, and any offer subsequently made may only be directed at persons who are “qualified investors” as defined in Article 2(e) of the Prospectus Regulation. In particular, each Initial Purchaser has represented and agreed 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 offering memorandum to any retail investor in the EEA. For the purposes of this provision, 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 MiFID II; or (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.

Consequently, no key information document required by the PRIIPs Regulation for offering or selling the Notes or otherwise making them available to retail investors in the EEA, and no Prospectus Regulation compliant prospectus subject to the approval of the AMF or any other Member State’s regulator have been or will be 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 and the Prospectus Regulation.

This offering memorandum has been prepared on the basis that any offer of Notes in any Member State will be made pursuant to an exemption under the Prospectus Regulation from the requirement to publish a prospectus for offers of Notes. This offering memorandum is not a prospectus for the purposes of the Prospectus Regulation in relation to such offer. The Notes have not been and will not be offered or sold or caused to be offered or sold, directly or indirectly, to retail investors in France or in any other Member State and neither this offering memorandum, nor any other offering material or information contained therein relating to the Notes, has been submitted to the approval of the AMF or of any competent authority of another Member State. Neither this offering memorandum, nor any other offering material or information contained therein relating to the Notes has been or will be released, issued or distributed or caused to be released, issued or distributed, directly or indirectly, to retail investors in France or any other Member State, or used in connection with any offer for subscription, exchange or sale of the Notes to retail investors in France or any other Member State. Neither the Issuer nor the Initial Purchasers have authorized, nor do they authorize, the making of any offer of Notes in circumstances in which an obligation arises for the Issuer or the Initial Purchasers to publish a Prospectus Regulation compliant prospectus for such offer.

The Issuer has not authorized and does not authorize the making of any offer of Notes through any financial intermediary, other than offers made by the Initial Purchasers with a view to the final placement of the Notes as contemplated in this offering memorandum. Accordingly, no purchaser of the Notes, other than the Initial Purchasers, is authorized to make any further offer of the Notes on behalf of the Issuer or the Initial Purchasers.

### ***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**”). The Notes may not be offered or sold, directly or indirectly, in Japan or to or for the benefit of any resident of Japan (including any person resident in Japan or any corporation or other entity organized under the laws of Japan) or to others for reoffering or resale, directly or indirectly, in Japan or to or for the benefit of any 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.

### ***Hong Kong***

The Notes may not be offered or sold in Hong Kong by means of any document other than (i) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (“**Securities and Futures Ordinance**”) and any rules made thereunder, or (ii) in other circumstances which do not result in the document being a “prospectus” as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) (“**Companies (Winding Up and Miscellaneous Provisions) Ordinance**”) or which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to the Notes may be issued or may be

in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in 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” in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

### *Singapore*

In relation to Singapore, this offering memorandum has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the offering memorandum and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes will not be circulated or distributed, nor will the Notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act 2001 (2020 Revised Edition) of Singapore, as modified or amended from time to time (the “SFA”)) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries’ rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:

- (1) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(c)(ii) of the SFA;
- (2) where no consideration is or will be given for the transfer;
- (3) where the transfer is by operation of law;
- (4) as specified in Section 276(7) of the SFA; or
- (5) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018 of Singapore.

### *Canada*

The Notes may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this offering memorandum (including any amendment thereto) contains a misrepresentation,

provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to Section 3A.3 of National Instrument 33-105 Underwriting Conflicts ("NI 33-105"), the initial purchasers are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

#### CUSIP

Five-Year Fixed Rate Notes	144A: 28504D AB9 Regulation S: F29416 AB4
Ten-Year Fixed Rate Notes	144A: 28504D AC7 Regulation S: F29416 AC2
Thirty-Year Fixed Rate Notes	144A: 28504D AD5 Regulation S: F29416 AD0

#### ISIN

Five-Year Fixed Rate Notes	144A: US28504DAB91 Regulation S: USF29416AB40
Ten-Year Fixed Rate Notes	144A: US28504DAC74 Regulation S: USF29416AC23
Thirty-Year Fixed Rate Notes	144A: US28504DAD57 Regulation S: USF29416AD06

#### COMMON CODE

Five-Year Fixed Rate Notes	144A: 259495130 Regulation S: 259494915
Ten-Year Fixed Rate Notes	144A: 262880192 Regulation S: 262880176
Thirty-Year Fixed Rate Notes	144A: 262880249 Regulation S: 262880214

## TRANSFER RESTRICTIONS

### Offers and Sales

The Notes have not been and will not be registered under the Securities Act and may not be offered or sold in the United States, except pursuant to an effective registration statement or (i) in a transaction not subject to the registration requirements under the Securities Act or (ii) in accordance with an applicable exemption from the registration requirements thereof.

Accordingly, the Notes offered hereby are being offered and sold only:

- (a) within the United States or to U.S. persons (as defined under Regulation S) to qualified institutional buyers (“QIBs” and each, a “QIB”) in accordance with Rule 144A; or
- (b) outside the United States to non-U.S. persons, or for the account or benefit of non-U.S. persons, in offshore transactions in reliance upon Regulation S under the Securities Act.

### Rule 144A Global Notes

Each purchaser of Notes within the United States will be deemed by its acceptance of the Notes to have represented and agreed on its behalf, and on behalf of any investor accounts for which it is purchasing the Notes, that (a) neither the Issuer nor the Initial Purchasers, nor any person acting on their behalf, has made any representation to it with respect to the offering or sale of any Notes, other than the information contained in this offering memorandum, which offering memorandum has been delivered to it and upon which it is solely relying in making its investment decision with respect to the Notes, (b) it has had access to such financial and other information concerning the Issuer and the Notes as it has deemed necessary in connection with its decision to purchase any of the Notes and (c) that:

- (i) the purchaser is not an affiliate of the Issuer or a person acting on behalf of the Issuer or on behalf of such affiliate; and it is not in the business of buying and selling securities or, if it is in such business, it did not acquire the Notes from the Issuer or an affiliate thereof in the initial distribution of the Notes;
- (ii) the purchaser acknowledges that the Notes have not been and will not be registered under the Securities Act or with any securities regulatory authority of any state of the United States and are subject to significant restrictions on transfer;
- (iii) the purchaser (x) is a QIB, (y) is aware that the sale to it is being made in reliance on Rule 144A, and (z) is acquiring such Notes for its own account or for the account of a QIB, in each case for investment and not with a view to, or for offer or sale in connection with, any resale or distribution of the Notes in violation of the Securities Act or any state securities laws;
- (iv) the subscriber or purchaser is aware that the Notes are being offered in the United States in a transaction not involving any public offering in the United States within the meaning of the Securities Act;
- (v) if the purchaser decides to offer, resell, pledge or otherwise transfer such Notes, such Notes may be offered, sold, pledged or otherwise transferred only (v) to a person whom the beneficial owner and/or any person acting on its behalf reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A, (w) in accordance with Regulation S, (x) in accordance with Rule 144 (if available), (y) in accordance with an effective registration statement under the Securities Act, or (z) pursuant to any other available exemption from the registration requirements of the Securities Act in each case in accordance with any applicable securities laws of any state of the United States or any other jurisdiction and agrees to give any subsequent purchaser of such Notes notice of any restrictions on the transfer thereof;
- (vi) the Notes have not been offered to it by means of any general solicitation or general advertising;



- (vii) the Notes are “restricted securities” within the meaning of Rule 144(a)(3) under the Securities Act and no representation is made as to the availability of the exemption provided by Rule 144 under the Securities Act for resales of any such Notes;
- (viii) the Notes, unless otherwise determined by the Issuer in accordance with applicable law, will bear a legend to the following effect:

THE NOTES EVIDENCED HEREBY HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE “**SECURITIES ACT**”), OR ANY STATE SECURITIES LAWS. OWNERSHIP INTERESTS IN THE NOTES MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED (I) WITHIN THE UNITED STATES TO, OR FOR THE ACCOUNT OR BENEFIT OF, PERSONS OTHER THAN “QUALIFIED INSTITUTIONAL BUYERS” (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) IN TRANSACTIONS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND (II) OUTSIDE THE UNITED STATES OTHER THAN TO PERSONS WHO ARE NOT U.S. PERSONS IN OFFSHORE TRANSACTIONS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT PURSUANT TO RULE 903 OR RULE 904 OF REGULATIONS THEREOF. EACH PERSON ACQUIRING AN OWNERSHIP INTEREST IN THE NOTES EVIDENCED HEREBY (1) SHALL BE DEEMED TO REPRESENT AND WARRANT THAT IT IS EITHER (A) A “QUALIFIED INSTITUTIONAL BUYER” (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) OR (B) NOT A U.S. PERSON (AS DEFINED IN REGULATIONS) AND IS OUTSIDE THE UNITED STATES; (2) AGREES THAT IT WILL NOT RESELL OR OTHERWISE TRANSFER THE NOTE EVIDENCED HEREBY EXCEPT IN ACCORDANCE WITH THE FOREGOING RESTRICTIONS, AND IN ANY CASE IN COMPLIANCE WITH ALL APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND ANY OTHER APPLICABLE JURISDICTION; (3) PRIOR TO SUCH TRANSFER, AGREES THAT IT WILL FURNISH TO CITIBANK, N.A., LONDON BRANCH, AS REGISTRAR (OR A SUCCESSOR REGISTRAR, AS APPLICABLE) OR AS TRANSFER AGENT, SUCH CERTIFICATIONS, LEGAL OPINIONS OR OTHER INFORMATION AS THE REGISTRAR OR THE TRANSFER AGENT MAY REASONABLY REQUIRE TO CONFIRM THAT SUCH TRANSFER IS BEING MADE PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND (4) AGREES THAT IT WILL DELIVER TO EACH PERSON TO WHOM THE NOTE EVIDENCED HEREBY IS TRANSFERRED A NOTICE SUBSTANTIALLY TO THE EFFECT OF THIS LEGEND. AS USED HEREIN, THE TERMS “UNITED STATES,” “U.S. PERSON” AND “OFFSHORE TRANSACTION” HAVE THE MEANINGS GIVEN TO THEM BY REGULATIONS UNDER THE SECURITIES ACT; and

- (ix) the Issuer shall not recognize any offer, sale, pledge or other transfer of the Notes made other than in compliance with the above-stated restrictions.

Terms defined in Rule 144A shall have the same meaning when used in the foregoing sections (i)—(ix).

Each purchaser acknowledges that the Issuer and the Initial Purchasers will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements, and agrees that if any of the acknowledgements, representations or warranties deemed to have been made by such purchaser by its purchase of Notes are no longer accurate, it shall promptly notify the Issuer and the Initial Purchasers; if they are acquiring any Notes offered hereby as a fiduciary or agent for one or more investor accounts, each purchaser represents that they have sole investment discretion with respect to each such account and full power to make the foregoing acknowledgements, representations and agreements on behalf of each such account.

Each purchaser of the Notes will be deemed by its acceptance of the Notes to have represented and agreed that it is purchasing the Notes for its own account, or for one or more investor accounts for which it is acting as a fiduciary or agent, in each case for investment, and not with a view to, or for offer or sale in connection with, any distribution thereof in violation of the Securities Act or any state securities laws, subject to any requirement of law that the disposition of its property or the property of such investor account or accounts be at all times within its or their control

and subject to its or their ability to resell such Notes pursuant to Rule 144A, Regulation S or any other exemption from registration available under the Securities Act.

The Issuer recognizes that none of DTC, Euroclear nor Clearstream in any way undertakes to, and none of DTC, Euroclear nor Clearstream have any responsibility to, monitor or ascertain the compliance of any transactions in the Notes with any exemptions from registration under the Securities Act or any other state or federal securities law.

### **Regulation S Global Notes**

Each purchaser of Notes outside the United States pursuant to Regulation S will be deemed by its acceptance of the Notes to have represented and agreed, on its behalf and on behalf of any investor accounts for which it is purchasing the Notes, that (a) neither the Issuer nor the Initial Purchasers, nor any person acting on their behalf, has made any representation to it with respect to the offering or sale of any Notes, other than the information contained in this offering memorandum, which offering memorandum has been delivered to it and upon which it is solely relying in making its investment decision with respect to the Notes, (b) it has had access to such financial and other information concerning the Issuer and the Notes as it has deemed necessary in connection with its decision to purchase any of the Notes and (c) that:

- (i) the purchaser understands and acknowledges that the Notes have not been and will not be registered under the Securities Act, or with any securities regulatory authority of any state of the United States, and may not be offered, sold or otherwise transferred except in compliance with the registration requirements of the Securities Act or any other applicable securities law, pursuant to an exemption therefrom or in any transaction not subject thereto;
- (ii) the purchaser, and the person, if any, for whose account or benefit the purchaser is acquiring the Notes, is not a U.S. person and is acquiring the Notes in an “offshore transaction” meeting the requirements of Regulation S and was located outside the United States at the time the buy order for the Notes was originated and continues to be outside of the United States and has not purchased the Notes for the account or benefit of any U.S. person or entered into any arrangement for the transfer of the Notes to any U.S. person;
- (iii) the purchaser is aware of the restrictions on the offer and sale of the Notes pursuant to Regulation S described in this offering memorandum and agrees to give any subsequent purchaser of such Notes notice of any restrictions on the transfer thereof;
- (iv) the Notes have not been offered to it by means of any “directed selling efforts” as defined in Regulation S; and
- (v) the Issuer shall not recognize any offer, sale, pledge or other transfer of the Notes made other than in compliance with the above-stated restrictions.

Terms defined in Regulation S shall have the same meaning when used in the foregoing sections (i)—(v).

Unless the Issuer determines otherwise in compliance with applicable law, the Regulation S notes will bear the following restrictive legend and may not be transferred otherwise than in accordance with the transfer restrictions set forth in such legend:

THE NOTES EVIDENCED HEREBY HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE “**SECURITIES ACT**”), OR ANY STATE SECURITIES LAWS. OWNERSHIP INTERESTS IN THE NOTES MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED (I) WITHIN THE UNITED STATES TO, OR FOR THE ACCOUNT OR BENEFIT OF, PERSONS OTHER THAN “QUALIFIED INSTITUTIONAL BUYERS” (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) IN TRANSACTIONS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, OR (II) OUTSIDE THE UNITED STATES OTHER THAN TO PERSONS WHO ARE NOT U.S. PERSONS IN OFFSHORE TRANSACTIONS EXEMPT FROM THE

REGISTRATION REQUIREMENTS OF THE SECURITIES ACT PURSUANT TO RULE 903 OR RULE 904 OF REGULATION S THEREOF. EACH PERSON ACQUIRING AN OWNERSHIP INTEREST IN THE NOTES EVIDENCED HEREBY AS PART OF THE INITIAL DISTRIBUTION SHALL BE DEEMED TO REPRESENT AND WARRANT THAT IT IS (A) NOT A U.S. PERSON AND (B) ACQUIRING THE NOTES IN AN "OFFSHORE TRANSACTION" AS DEFINED IN RULE 902(H) UNDER THE SECURITIES ACT OUTSIDE THE UNITED STATES. EACH PERSON ACQUIRING AN OWNERSHIP INTEREST IN THE NOTES EVIDENCED HEREBY (1) AGREES THAT IT WILL NOT RESELL OR OTHERWISE TRANSFER THE NOTES EVIDENCED HEREBY EXCEPT IN ACCORDANCE WITH THE FOREGOING RESTRICTIONS IN I AND II ABOVE, AND IN ANY CASE IN COMPLIANCE WITH ALL APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND ANY OTHER APPLICABLE JURISDICTION AND (2) AGREES, PRIOR TO SUCH TRANSFER, TO FURNISH TO CITIBANK, N.A., LONDON BRANCH, AS REGISTRAR (OR A SUCCESSOR REGISTRAR, AS APPLICABLE) OR AS TRANSFER AGENT, SUCH CERTIFICATIONS, LEGAL OPINIONS OR OTHER INFORMATION AS THE REGISTRAR OR THE TRANSFER AGENT MAY REASONABLY REQUIRE TO CONFIRM THAT SUCH TRANSFER IS BEING MADE PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT. AS USED HEREIN, THE TERMS "UNITED STATES," "U.S. PERSON" AND "OFFSHORE TRANSACTION" HAVE THE MEANINGS GIVEN TO THEM BY REGULATION S UNDER THE SECURITIES ACT.

## ENFORCEMENT OF FOREIGN JUDGMENTS AND SERVICE OF PROCESS

The Company is a French *société anonyme*, a form of limited liability company, established under the laws of France. All of the Company's directors and substantially all of its executive officers reside outside the United States. In addition, a substantial portion of the assets of the Company and its directors and executive officers are located outside the United States. As a result, it may be difficult for investors to effect service of process within the United States on such persons. It may also be difficult to enforce against them, either inside or outside the United States, judgments obtained against them in U.S. courts, or to enforce in U.S. courts, judgments obtained against it in courts in jurisdictions outside the United States, in any action based on civil liabilities under the U.S. federal securities laws. There is some doubt as to the enforceability against such persons in France, whether in original actions or in actions to enforce judgments of U.S. courts, of liabilities based solely on the U.S. federal securities laws. Additionally, awards of punitive damages in actions brought in the United States or elsewhere may be unenforceable in France.

Moreover, certain provisions of laws or regulations may restrict or prevent enforcement of judicial measures against certain assets of the Company in France and elsewhere because, among other reasons, (i) they are dedicated to public service (*service public*) activities, (ii) they are used in connection with the management of a concession, or (iii) their use requires authorization (for instance in the nuclear field). The provisions of the 2014 Order, Decree no. 2014-949 of August 20, 2014 and Decree no. 53-707 of August 9, 1953, each as amended from time to time and including the regulations promulgated thereunder, may also restrict or prevent enforcement of judicial measures against certain assets of the Company. In addition, the French State is, to a great extent, immune from execution in France of judgments rendered against it in France or elsewhere.

In addition, actions in the United States under the U.S. federal securities laws could be affected under certain circumstances by the French Act no. 68-678 of July 26, 1968, relating to communication of documents and information of an economic, commercial, industrial, financial or technical nature to foreign persons or entities, as amended from time to time, which may preclude or restrict the obtaining of evidence in France or from French persons in connection with a judicial or administrative United States action. Similarly, European and French data protection regulations (including Regulation (EU) 2016/679 of April 27, 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, as amended from time to time, and Act no. 78-17 of January 6, 1978, as amended from time to time) can limit under certain circumstances the obtaining of evidence in France or from French persons in connection with a judicial or administrative U.S. action.

## GENERAL INFORMATION

Application has been made to list the Notes on the Official List of the Luxembourg Stock Exchange and to admit them to trading on the Euro MTF Market.

The Company has appointed Citibank, N.A., London Branch as fiscal agent, paying agent, transfer agent and registrar and Walkers Listing Services Limited as listing agent with respect to the Notes. The Company reserves the right to change this appointment on the official website of the Luxembourg Stock Exchange ([www.luxse.com](http://www.luxse.com)). A physical copy of the Fiscal Agency Agreement, dated the date of the issuance of the Notes, will be available for inspection at Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB.

For so long as the Notes are listed on the Euro MTF Market and the rules of the Luxembourg Stock Exchange so require, copies of the following documents may be inspected and obtained at the specified office of the Fiscal Agent during normal business hours on any weekday:

- this offering memorandum;
- the organizational documents of the Issuer;
- the Company's most recent audited consolidated financial statements;
- the Notes; and
- other material agreements described in this offering memorandum as to which the Company specifies that copies thereof will be made available.

The issuance of the Notes was authorized by resolutions of the board of directors of the Issuer passed at a meeting held on December 16, 2022.

Any notices to the Holders will be posted (so long as the Notes are listed on the Luxembourg Stock Exchange and the rules of the Luxembourg Stock Exchange so require) on the website of the Luxembourg Stock Exchange ([www.luxse.com](http://www.luxse.com)).

Except as disclosed in this offering memorandum, there has been no material change in the prospects and the financial position of the Issuer since December 31, 2022.

## **VALIDITY OF THE NOTES**

The validity of the Notes offered hereby will be passed upon by Sullivan & Cromwell LLP, U.S. and French counsel for the Issuer. The Initial Purchasers have been represented by Allen & Overy LLP, as U.S. and French counsel for the Initial Purchasers.

## INDEPENDENT STATUTORY AUDITORS

The 2020 Consolidated Financial Statements, the 2021 Consolidated Financial Statements and the 2022 Consolidated Financial Statements have been audited by Deloitte & Associés and KPMG Audit, a department of KPMG SA, independent auditors of the Issuer, as set forth, respectively, in the 2020 Statutory Auditors' Report, the 2021 Statutory Auditors' Report and the 2022 Statutory Auditors' Report incorporated therein. Both Deloitte & Associés and KPMG Audit, a department of KPMG SA, are members of the *Compagnie nationale des commissaires aux comptes*. Deloitte & Associés is located at 6, place de la Pyramide, 92908 Paris La Défense Cedex and KPMG Audit is located at Tour Egho, 2, avenue Gambetta - CS 60055, 92066 Paris La Défense Cedex.

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**\$3,000,000,000**

**consisting of**

**\$1,000,000,000 5.700% Fixed Rate Notes due May 23, 2028**

**\$1,000,000,000 6.250% Fixed Rate Notes due May 23, 2033**

**\$1,000,000,000 6.900% Fixed Rate Notes due May 23, 2053**

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**OFFERING MEMORANDUM**

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**Barclays  
BNP PARIBAS  
BofA Securities  
Credit Agricole CIB  
Deutsche Bank Securities  
J.P. Morgan  
Mizuho  
Morgan Stanley  
MUFG  
Santander  
SMBC Nikko  
SOCIETE GENERALE  
Standard Chartered Bank AG  
Wells Fargo Securities**

**May 17, 2023**