



# Annual results **2024**

21 February 2025



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# Annual results

**Luc Rémont**

Chairman and Chief Executive Officer

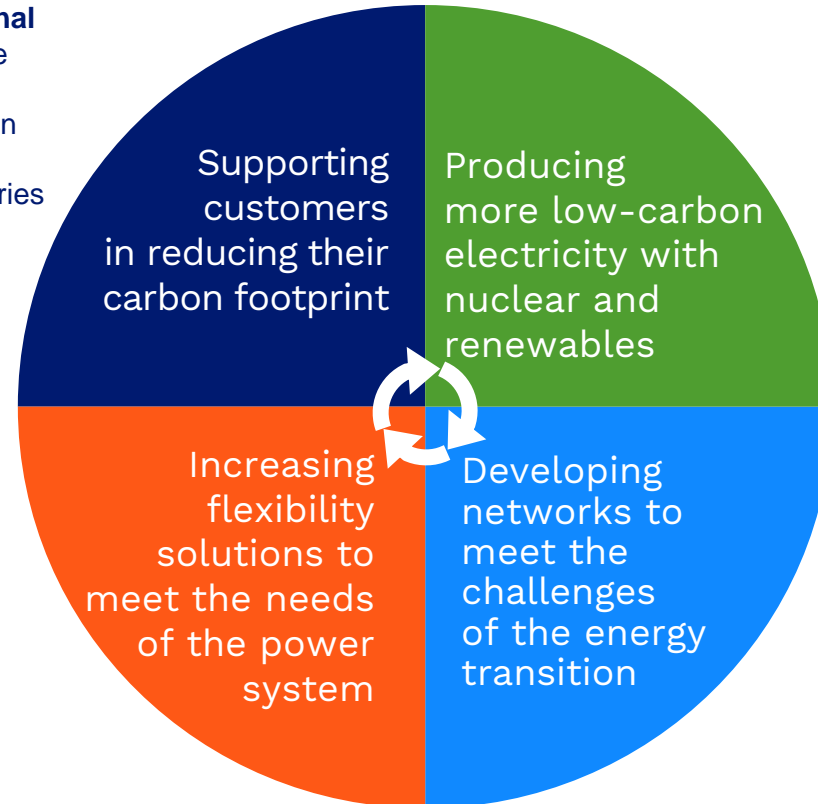
# EDF is building the electricity system of tomorrow with "Ambitions 2035"

## Customers:

- Contributing directly to **150TWh of additional demand of electricity** in France, to replace fossil energies
- 8-9 million customers with a decarbonization offer in the G4 countries <sup>(1)</sup>
- **> 45 Mt CO<sub>2</sub> avoided/year** in the G4 countries
- 1.5 contract/individual customer in the G4 countries

## Flexibility:

- Leader in flexibility solutions for its core markets
- **+27GW of flexibilities** (flexible decarbonized generation and storage assets, customer flexibility)



## Low-carbon generation:

- **75% of dispatchable assets** in the energy mix <sup>(2)</sup>
- Ability to deliver up to 2 nuclear reactors/year
- **8GW gross of renewable** commissioned/year by the Group on average over 2024-2035
- Ensure maximum available electricity supply, safely and on time
- **22gCO<sub>2</sub>** emitted on average/kWh produced

## Networks <sup>(3)</sup>:

- Continuing the development of **network intelligence**
- **Meeting customers' connection needs** while ensuring optimised network management
- Restoration of power to 90% of customers within less than 48 hours in the event of a climate hazard (excluding exceptional circumstances)
- Network resilience in non-interconnected zones, with 100% renewable electricity

(1) G4 countries are France, Italy, UK, Belgium

(2) Calculated in net TWh

(3) In France, the public distribution network is managed independently by Enedis

# Low-carbon electricity is available, let's use it

## Excellent Group operational performance

**+53TWh**



thanks to the increase in nuclear output in France, hydro and renewable output

**+21%**

of electric mobility connected in France

## Record net electricity exports from France

**89TWh <sup>(1)</sup>**

i.e. **+78% vs 2023**

EDF contributes to meet the needs of France's neighboring countries with its low-carbon electricity production available on demand at any time

In a context of low electricity consumption, close to that of 20 years ago

## Supporting customers to reduce their carbon footprint

**6,000 medium-term contracts signed <sup>(2)</sup>**

Deployment of the commercial policy

Supporting customers in the electrification of their uses

First Olympic and Paralympic Games entirely connected to the electric grid thanks to EDF group

(1) Gross exports: 101.2TWh and imports: 12.2TWh in 2024

(2) Contracts for delivery in 2028 and 2029

# Supporting customers in reducing their carbon footprint

## Successful deployment of the commercial policy

- **6,000 power supply contracts** signed representing around **22TWh for 2028 and 12TWh for 2029**. Increase from 28 to 39 months average maturity of contracts signed in 2024 vs 2023
- **9 letters of intent signed including one with a binding contract**, for long-term industrial partnerships <sup>(1)</sup>, backed by the historic nuclear fleet representing **over 12TWh a year**
- 4 and 5-year auctions offering visibility to clients beyond 3 years with 5MW of power in ribbon on sale every day
- **New offers** of electricity supply, heating control services for residential customers

## Customer portfolio growth in the G4 countries

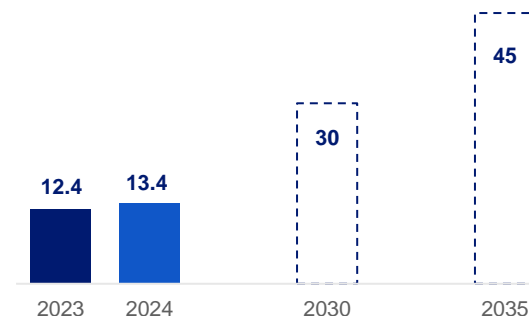
- **+1,5 % rise in portfolio of customers** <sup>(2)</sup> to 41.5 millions at end-2024

(1) Nuclear Production Allocation Contracts.

(2) The customer portfolio consists of electricity, gas and recurring services contracts.

## EDF acts to decarbonise its customers' uses

**CO<sub>2</sub> avoided emissions** by clients in G4 countries  
(in Mt CO<sub>2</sub>)

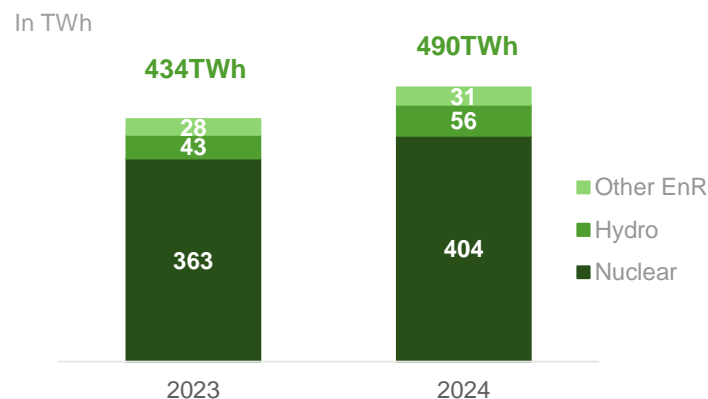


- **35,000tCO<sub>2</sub> fossil avoided a year** thanks to the biomass boiler installed by **Dalkia** at the Swiss Krono plant
- **18,000tCO<sub>2</sub> avoided a year** thanks to the installation made by **Edison** at Michelin's Cuneo plant
- **+18% in charging points** installed or managed at end-2024 vs 2023 in G4 countries (~408,000 points at end-2024)



# Producing more low-carbon electricity

EDF is the leader in the decarbonised output<sup>(1)</sup>:  
94% low-carbon generation in 2024



- **Excellent operational performance:**

- **+41.3TWh in nuclear output in France** thanks to optimised reactor outages under the **START 2025** programme

- **+12.7TWh in hydro output** in a context of outstanding hydraulicity

- **+1.8TWh in solar and wind output** thanks to the new commissioning

- **Low carbon intensity: 30gCO<sub>2</sub>/kWh** vs 37gCO<sub>2</sub>/kWh in 2023

(1) Source: [Enerdata](#), Power Plant Tracker 2023.

## Connection to the grid of Flamanville 3 and progress of major nuclear projects

- **Flamanville 3: connection to the grid of the EPR** on 21 December after divergence on 3 September. Beginning of testing and grid connection and disconnection phases until the reactor reaches full power. Approval of the ASN on 31 January 2025 on an increase to above 25% power.
- **Hinkley Point C: installation of the first reactor pressure vessel** supplied by Framatome.
- **EPR 2:** maturity review validating the move into the **detailed design** for the main nuclear island buildings.
- **Small Modular Reactor:** launch of the conceptual design phase for a pressurised water SMR by NUWARD based on proven technological building blocks.



# Developing networks to meet the challenges of the energy transition

## Significant rise of connections to the grid by Enedis<sup>(1)</sup>

More than **5.1GW of installed capacity** for electric vehicles

More than **5.5GW of renewable capacity** connected to the grid in 2024 (vs 4.2GW in 2023)

## Smart grids

Enedis ranked « world's smartest grid » in the Smart Grid Index for the 3rd consecutive year.

## Success of Enedis' mission for the Olympic and Paralympic Games

Fully available network at all sites through the events, cutting CO<sub>2</sub> emissions by **80% for the energy** for Paris 2024.

## Management of climate events

Power restored to **90% of customers within 48 hours** after weather events in France.

- After the **cyclone Chido in Mayotte** on 14 December, support to Electricité de Mayotte for the reconnection of the power:
  - Emergency actions: dispatch of Enedis and EDF SEI<sup>(2)</sup> employees alongside employees of the *Force d'Action Rapide du Nucléaire* with equipment, vehicles and generators
  - 90% of the customers reconnected on 18 January and 100% on 31 January.
- Management of the **cyclone Belal in La Réunion**: 90% of the customers reconnected 48h after the end of the red alert by EDF SEI.



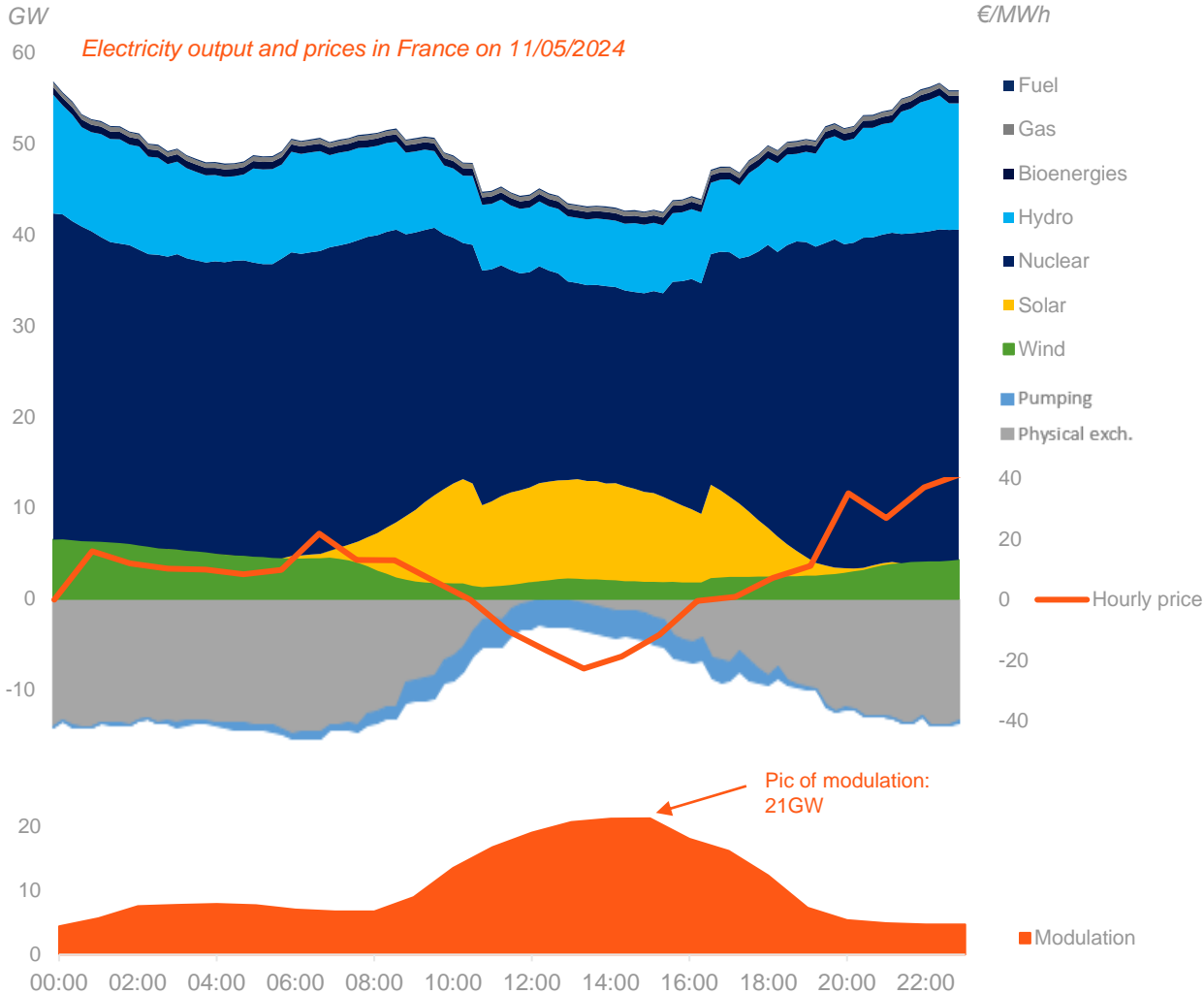
(1) Enedis is an independent subsidiary of EDF under the French Energy Code.

(2) EDF SEI Island Energy Systems



# Developing flexibility solutions to meet the needs of the power system

## Need of development of flexibility to cope with the system instability



Renewable energy intermittency entails:

- high price volatility: in 2024, **1,366 hours**, i.e. **more than 15%** of the time with **hourly prices < 10 €/MWh** (vs 500 hours, i.e. more than 5% in 2023)
- **high system instability** through the day which leads to **modulation of nuclear**: for instance, **22 reactors have modulated on 11/05/2024**

## Progression in flexibility offers for customers

**+18% vs end-2023**, i.e. **2.1GW** of capacity in flexibility offers to customers in the G4 countries <sup>(1)</sup>

## Decarbonisation of flexible thermal plants

Start of the works at the **Ricanto liquid biomass plant** (130MW – France), to replace the Vazzio thermal plant

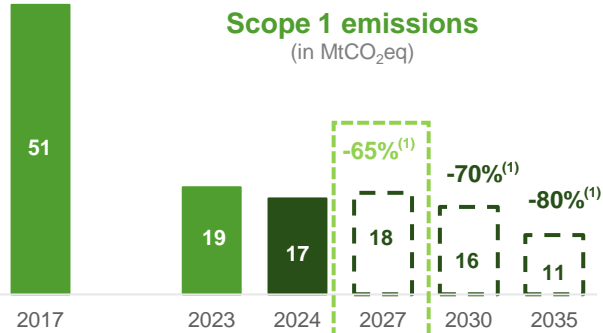
Inauguration of the **Presenzano CCG plant** (800MW - Italy) with 30% lower CO<sub>2</sub> emissions, and a turbine ready to run on hydrogen



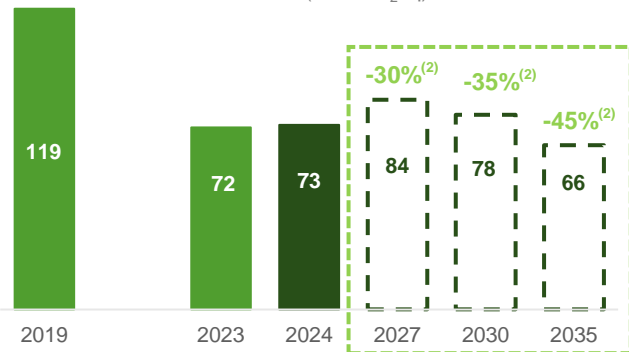
# New CSR architecture and upgrade of targets

## Stronger ambitions to cut CO<sub>2</sub> emissions

### Scope 1 emissions (in MtCO<sub>2</sub>eq)



### Scope 3 emissions (in MtCO<sub>2</sub>eq)

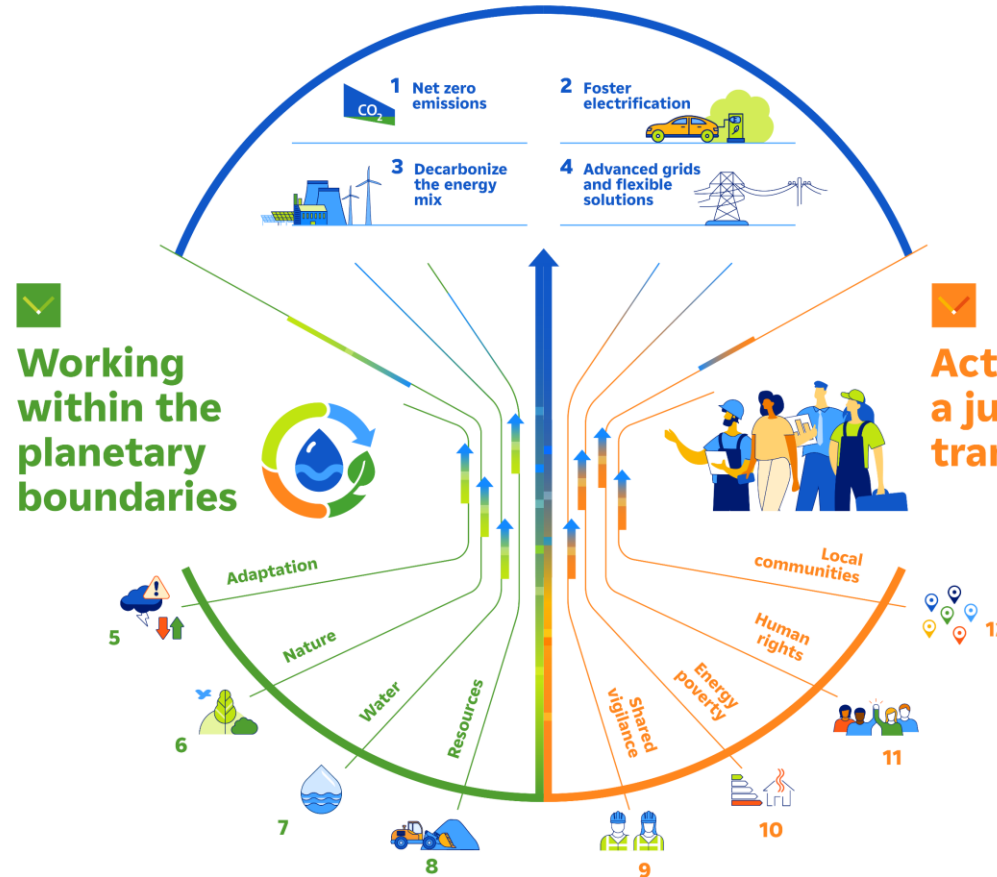


     New targets

(1) Vs 2017.

(2) Vs 2019. Previous 2030 target of -28%.

## Building the electricity system of tomorrow



**Our ambition: to be the generation making the transition**

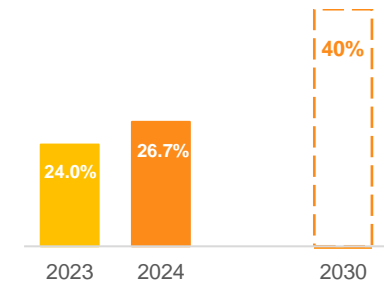
## Recruitment rise

To meet its skill needs, the Group has hired nearly **20,000** employees in France, including around:

- 10,000 employees on permanent contracts
- 4,500 work-study trainees
- 5,000 interns

promoting a **good gender balance and diversity** and **bringing young people into work**.

## Rise in the proportion of executive women



# Solid 2024 results thanks to an excellent operational performance already impacted by the decrease of market prices



# Annual results

**Xavier Girre**

Group Senior Executive Vice President -  
Performance Impact Investment &  
Finance



# 2024 financial results: stabilisation of the net financial debt

In billions of euros	2023	2024	Organic variation
Sales	139.7	118.7	-15.7%
<b>EBITDA</b>	<b>39.9</b>	<b>36.5</b>	-8.4%
<b>EBIT</b>	<b>13.2</b>	<b>18.3</b>	+43.0%
Net income excl. non-recurring items	18.5	15.2	-15.8%
<b>Net income - Group share</b>	<b>10.0</b>	<b>11.4</b>	+17.1%

## Net financial debt (NFD)

**€54.3bn**

vs €54.4bn at end-2023

## NFD / EBITDA ratio

**1.49x**

## Adjusted economic debt (AED)<sup>(1)</sup>

**€87.7bn**

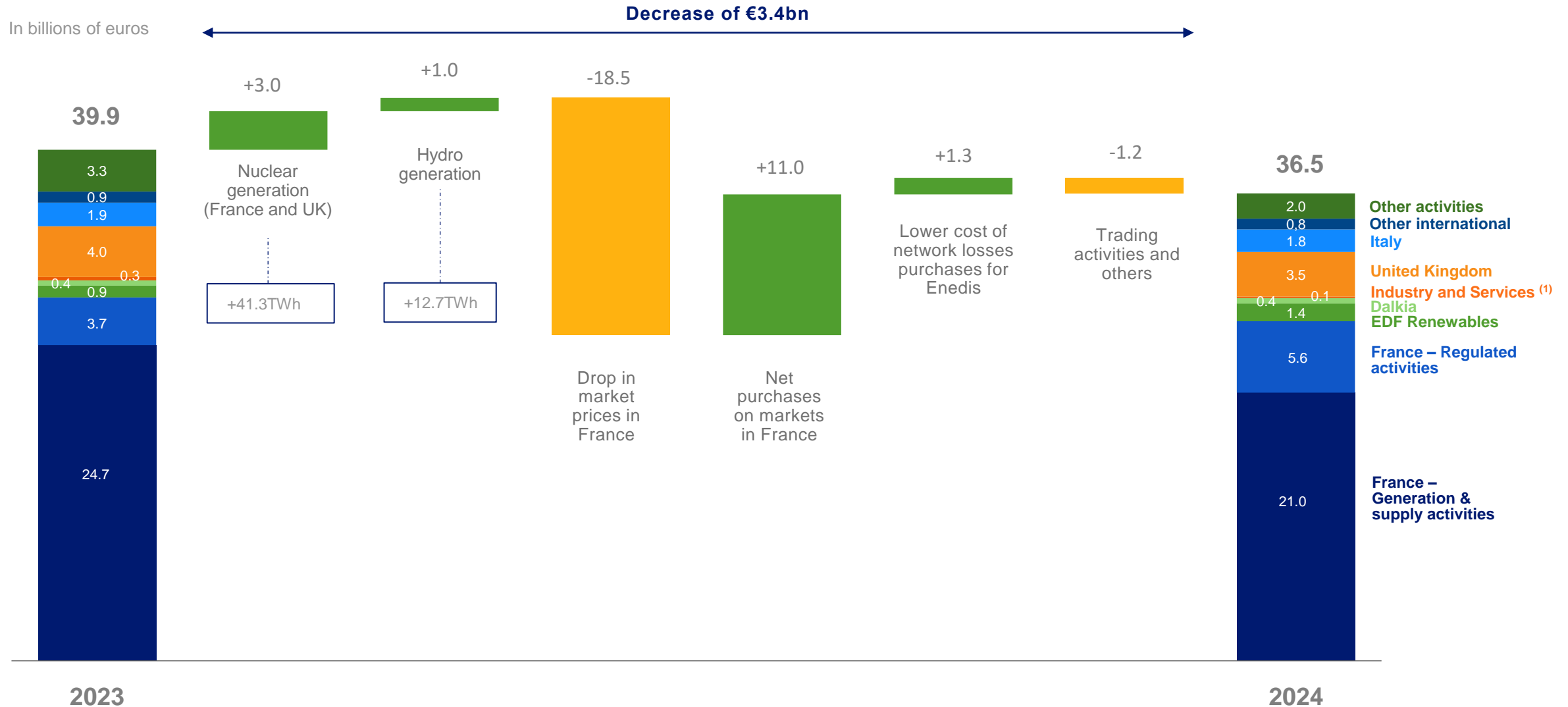
vs 86.3bn€ at end-2023

## AED / adjusted EBITDA ratio

**2.73x**

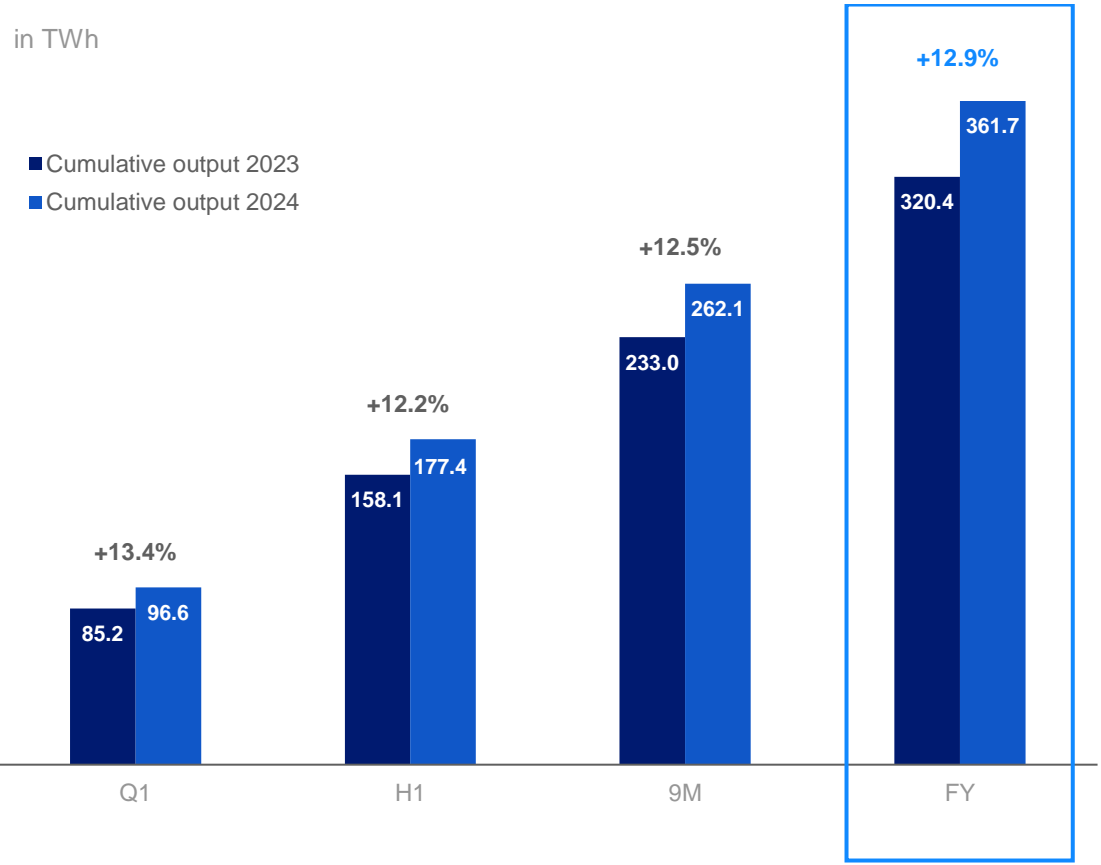


# EBITDA: excellent operational performance and effects of lower market prices



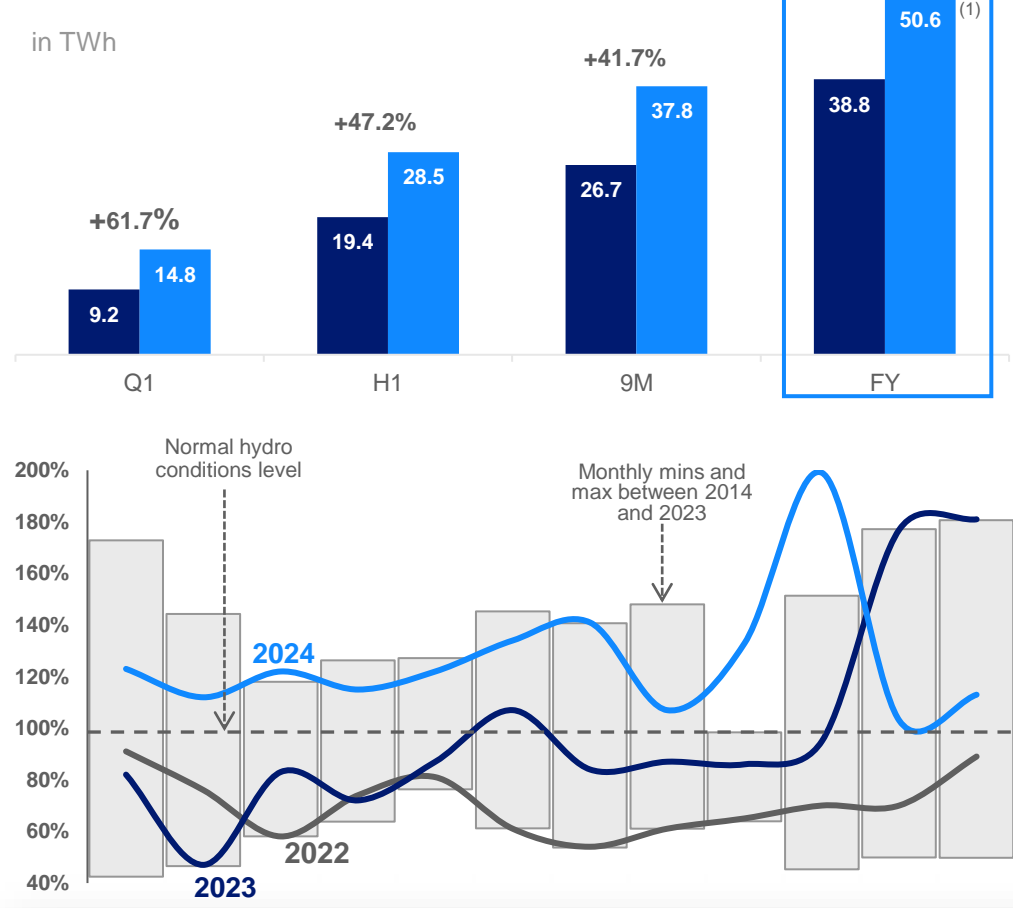
# Strong increase of the nuclear and hydro output in France

## Nuclear output



**+41.3TWh of nuclear output in France in 2024 vs 2023**, mainly thanks to optimised reactor outages under the START 2025 programme and industrial control of stress corrosion treatments

## Hydro output



**+11.8TWh of hydro output in France in 2024 vs 2023**, particularly due to an outstanding hydraulicity

(1) Production after pumping deduction : 33.0TWh in 2023 / 42.9TWh in 2024

# EBIT

In billions on euros	2023	2024	Δ
<b>EBITDA</b>	<b>39.9</b>	<b>36.5</b>	<b>-3.4</b>
Commodities volatility	0.4	0.4	-
Net depreciation and amortisation	(11.2)	(12.0)	-0.8
Impairments and other operating income and expenses	(16.0)	(6.6)	+9.3
<b>EBIT</b>	<b>13.2</b>	<b>18.3</b>	<b>+5.2</b>

## Impairments and other operating income and expenses

- Impairment of Hinkley Point C project for -€1.1bn due to the change in inflation rate hypothesis;
- New forecast cost estimate following the review of the scenario for spent fuel storage in France for -€3.2bn;
- Reassessment of the cost of storage project Cigeo for -€0.8bn.



# Financial result

In billions of euros	2023	2024	Δ
Cost of gross financial debt	(3.8)	(4.1)	-0.3
<i>o/w interest expenses</i>	(3.9)	(4.0)	-0.1
Discount expenses	(4.0)	(3.2)	+0.8
Other financial income and expenses	4.5	6.4	+1.9
<i>o/w net change in fair value of dedicated assets</i>	2.2	3.0	+0.8
<b>Financial result</b>	<b>(3.3)</b>	<b>(0.9)</b>	<b>+2.4</b>
<i>Excluding non-recurring items (change in IFRS 9 fair value of dedicated assets)</i>	(2.2)	(2.8)	-0.6
<b>Current Financial result</b>	<b>(5.6)</b>	<b>(3.7)</b>	<b>+1.9</b>

**Stabilization of financing costs** thanks to an active debt management in a context of high interest rates

**Coverage rate of nuclear provisions by dedicated assets in France:**  
**104.7% at end-2024 vs 108.5% at end-2023**

- **Performance of the dedicated assets portfolio:** 10.8% vs 10.2%, thanks to the performance of 21.7% of the growth assets
- **Real discount rate for nuclear provisions:** +10 bps to 2.6 % vs stability in 2023

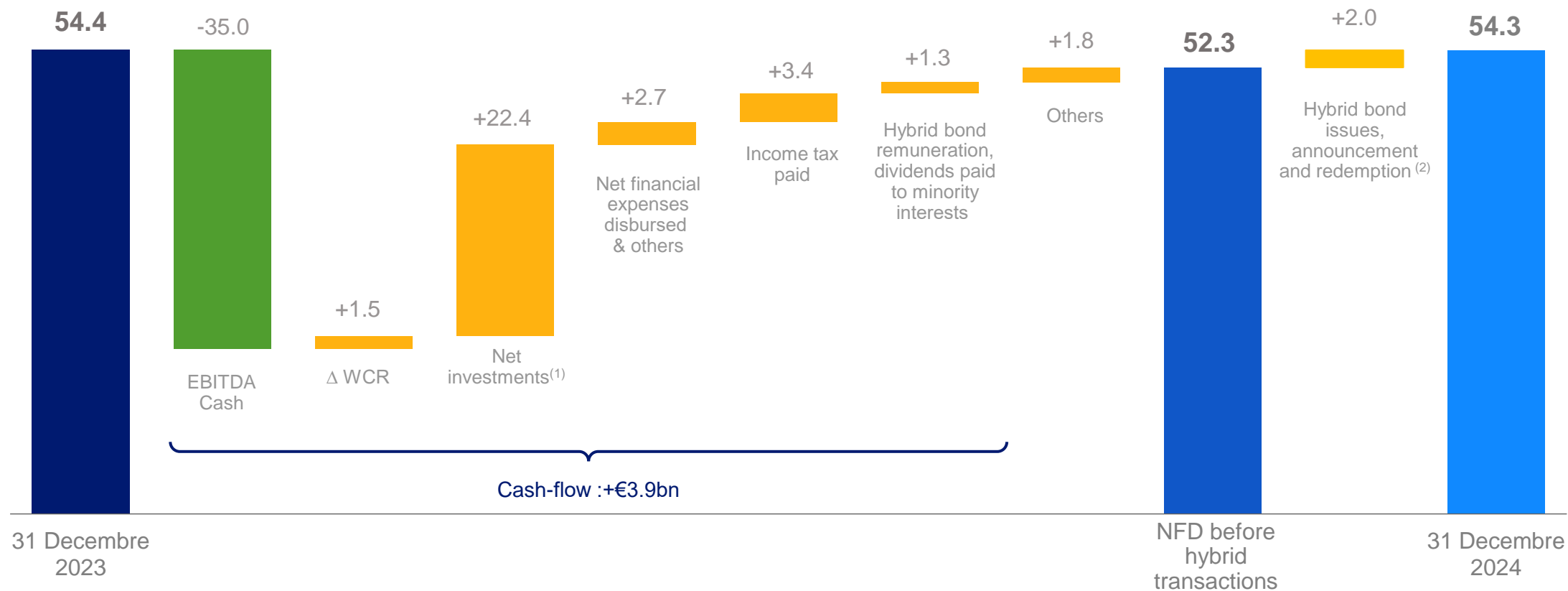
# Net income

In billions of euros	2023	2024	Δ
<b>EBIT</b>	<b>13.2</b>	<b>18.3</b>	<b>+5.2</b>
Financial result	(3.3)	(0.9)	+2.4
Income tax	(2.5)	(4.9)	-2.4
Share of net income from associates and joint-ventures <sup>(1)</sup>	0.3	(0.7)	-1.0
(-) Deducting net income from minority interests	2.4	(0.4)	-2.9
<b>Net income – Group share</b>	<b>10.0</b>	<b>11.4</b>	<b>+1.4</b>
<i>(-) Change in financial instruments &amp; commodities fair value</i>	<i>(1.9)</i>	<i>(2.3)</i>	<i>-0.4</i>
<i>(-) Impairments and other operating income and expenses</i>	<i>10.4</i>	<i>6.2</i>	<i>-4.2</i>
<i>Neutralisation of non-recurring items net of tax</i>	<i>8.5</i>	<i>3.9</i>	<i>-4.6</i>
<b>Net income excluding non-recurring items</b>	<b>18.5</b>	<b>15.2</b>	<b>-3.3</b>

(1) Including -€0.9bn mainly due to the impairment of the offshore wind project Atlantic Shores in the USA

# Stabilisation of the net financial debt

In billions of euros

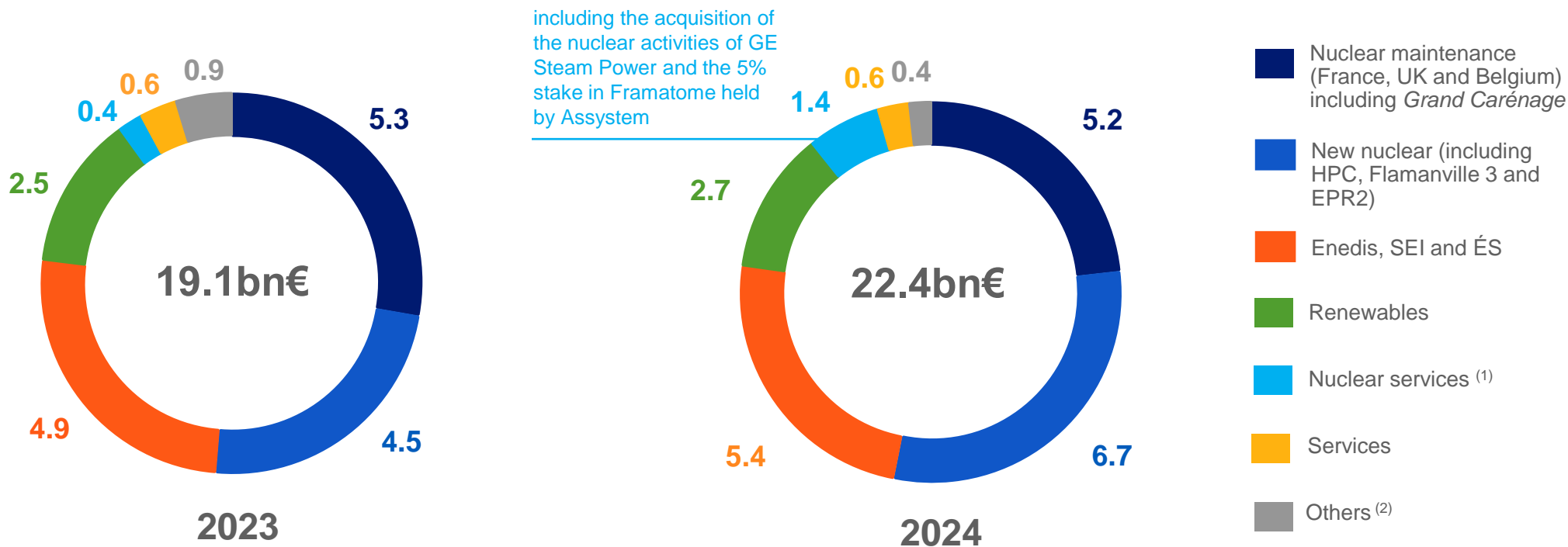


(1) Net investments excluding Group disposals.

(2) Announcement of redemption on 18 December 2024 of the hybrid bond issued in January 2013 for a nominal amount of €1.25bn reclassified from equity to other financial debts.

# Increase in net investments in coherence with the strategic objectives of the Group

In billions of euros



In 2024 almost 94% of the Group's investments are made in accordance with its net zero emission target

(1) Framatome and Arabelle Solutions since June 2024.

(2) Including central functions, property, gas and fuel.

# Outlook

**Luc Rémont**

Chairman and Chief Executive Officer



# Challenges for the coming months

## Supporting customers in reducing their carbon footprint

- Continued deployment of the **commercial policy**
- **Invitations to tender for datacenters**
- Accelerate the development of **electrification of uses** with the emergence of 150TWh of demand by 2035 in France

## Producing more low-carbon electricity

*In our hands:*

- **Estimated nuclear output in France:** 350-370TWh in 2025, 2026 and 2027 (including Flamanville 3)
- Continuation of the **Hinkley Point C** project
- Ramp-up of **Flamanville 3** up to the industrial commissioning

*With stakeholders:*

- **Electrification of uses, controllable decarbonised production**
- Financing framework of the **EPR2 programme**
- Future **hydroelectric scheme**
- Decision on **Sizewell C**

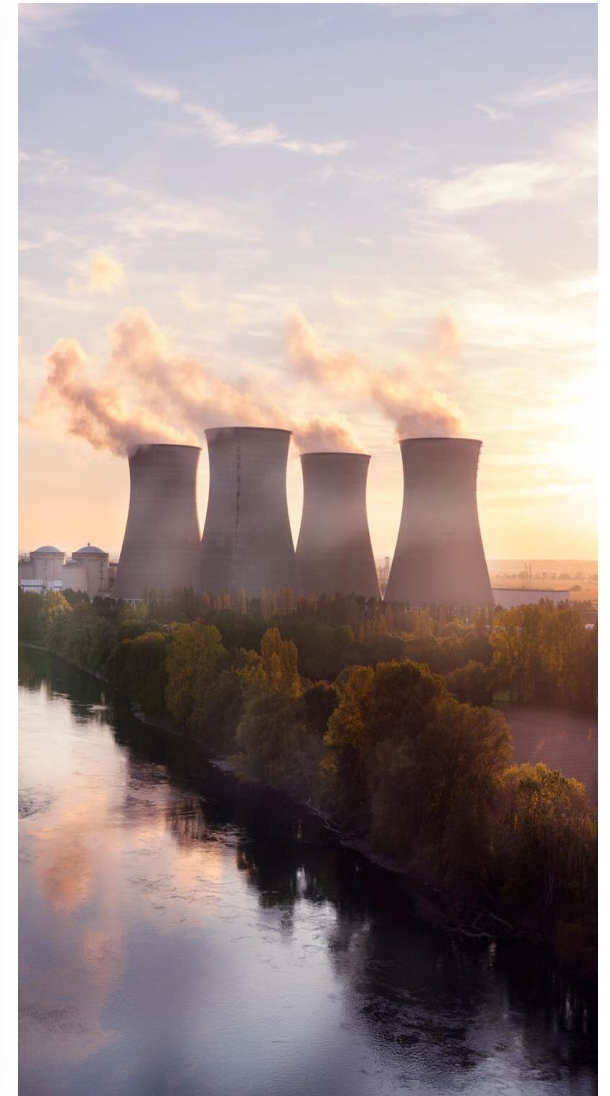
## Developing networks to meet the challenges of the energy transition

- **Accelerating the connection** of new assets and new consumption facilities

## Developing flexibility solutions to meet the power system needs

- **Adapting the electricity system** to the intermittent nature of renewable energies
- Peak/off-peak hours

**Expected decrease of the prices impacting the EBITDA in 2025**



# Projection of 2025 EBITDA

In billions of euros



# 2027 targets

**Net financial debt / EBITDA<sup>(1)</sup>**

**≤ 2.5x**

**Adjusted economic debt / Adjusted EBITDA<sup>(1)(2)</sup>**

**≤ 4x**

(1) Based on scope and exchange rates at 01/01/2025 and an assumption of French nuclear output including Flamanville 3 of 350-370TWh in 2025, 2026 and 2027

(2) As per current S&P methodology on the ratio.





# Annual results

21/02/2025





# Annual results *2024*

Complementary book



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# Strategic projects



# Hinkley Point C EPR (3.3GW)

## Schedule and cost review

- As a reminder, conclusions of the last schedule and cost review for the Hinkley Point C project announced on 23 January 2024<sup>(1)</sup>:
- In terms of schedule, several scenarios have been analysed, pursuant to which Unit 1 would become operational in:
  - (i) 2029, operational schedule around which the project is organised, based on a target productivity for electromechanical (MEH) work and action plans
  - (ii) 2030, scenario which assumes certain risks materialise in MEH ramp-up and testing
  - (iii) 2031, scenario which assumes a further 12-month risk materialises
- The project completion cost is estimated in the range of £31 to 34bn<sub>2015</sub><sup>(2)</sup>. If the scenario (iii) materialises, this could lead to an additional cost of around £<sub>2015</sub>1bn
- The start of operation date for Unit 2 is targeted 12 months after Unit 1 commissioning

## Construction progress

- In 2024, the reactor pressure vessel was installed in the Unit 1 reactor building, the heat exchanger component installation started for the Unit 1 diesel programme, the third liner ring was lifted to the Unit 2 reactor building, the reactor building transfer compartment & reactor cavity pool was installed in Unit 2.
- The stator of Unit 1 has been installed.
- 2024 was below operational schedule (i). Action plans are currently implemented. The risks of delay in schedule and over cost still exists.

## Financing of the project

- As the project's total financing needs exceed the contractual commitment of the shareholders, shareholders were asked to provide additional equity on a voluntary basis as from Q3 2023. HPC funding is now through Voluntary Equity, to which only EDF is currently contributing.
- Complementary alternative financing solutions are being investigated by EDF.
  - At end-December 2024 EDF's share in HPC is 72.6%, with CGN owning the remaining 27.4%.
  - At end-2024, the total costs amount to €34.6bn including €2.7bn of capitalized interest.

(1) See press release of 23 January 2024

(2) Excluding interim interests and at a reference exchange rate for the project of £<sub>2015</sub>1 = €1.23. The range of £31bn to 34bn<sub>2015</sub> corresponds to the range of £41.6 to 46.5bn in current value (with an additional risk of £1.4bn)

# Sizewell C EPR (3.3GW)

## Main aspects

- Project of 2 UK EPR at Sizewell on the Suffolk coast for a total capacity of 3.3GW
- Power supply to 6 million households for around 60 years
- Second of a kind EPR in the UK following Hinkley Point C, replicating as much as possible the Hinkley Point C design and supply chain



## Progress

### Development of the Project

- Sizewell C acquired the main site land from EDF Energy in H1 2024 and preliminary construction works on site have formally started.
- Framatome signed several contracts with Sizewell C in April 2024 to provide the two nuclear heat production systems and the plant's safety instrumentation and control systems, fuel supply and long-term services and maintenance to support the operations. The manufacturing of all the Unit 1 forgings has started.
- Nuclear Site License was granted in May 2024.
- EDF and Edvance have signed in July 2024 an engineering contract and an Intellectual Property agreement relating to the rights of use granted to SZC on the UK EPR design.

### Financing the construction

- The project is eligible for funding under the Regulated Asset Base (RAB) model, with a Government Support Package (GSP), the terms of which are being finalised.
- In September 2023, the UK government launched a capital raise process to seek funding for the construction of the power plant from private investors. The end of equity and debt raise process is targeted for 2025.
- In August 2024, the Department for Energy Security and Net Zero published the award of a further Sizewell C development expenditure subsidy scheme for up to £5.5bn, securing the financing up to mid-2026.
- EDF funding cap until FID was reached in December 2023. The project was fully funded by the UK government in 2024, consolidating its position as the majority shareholder of the project. Sizewell C is owned at 83.8% by the UK government and at 16.2% by EDF at 31 December 2024.

### Consolidation method

- As of 31 December 2023, Sizewell C was fully consolidated in the Group's financial statements. Given the evolution of the project in 2024, the consolidation method changed as of 31 December 2024 to consolidate Sizewell C under the equity method.

## Final Investment Decision (FID)

- The power plant's construction remains subject to the approval of a FID.
- FID is subject to the fulfilment of some conditions including:
  - Securing the project financing through the finalisation of RAB model and GSP and the completion of the equity raise process
  - Formal approval from the UK government of the baseline cost and schedule estimate at completion.
- EDF's contribution to the funding of the construction is subject to some conditions, including:
  - A share ownership of the project of 10 to 19.99%, including a cap on financial exposure in value
  - A return on capital expected by EDF as an investor in line with market return for this type of assets, risk allocation profile and its investment policy.

# EPR2 programme in France

## Main aspects

- European Pressurised Reactor EPR2 of 1.6GW/reactor
- A programme of 3 pairs of reactors to benefit from series effects in technological terms: equipment purchasing, construction-phase services, operation and maintenance.
- Feasibility studies for 8 additional reactors
- Integrating feedback from other EPR built worldwide and from the fleet in operation
- EPR2 is an upgraded EPR with same safety level (one of the highest in the world), same power and environmental performance and with standardised and optimised construction process.
- A reactor first licensed for French market

## Progress

- Deep review of engineering studies finalized and development of the detailed design for the nuclear island of the EPR2.
- Launch of a task force dedicated to reducing the construction time of a reactor to 70 months.
- Start of preparatory works at Penly.
- Implementation of the "Grand Chantier" at Penly with the French State administration and local authorities to anticipate the arrival of thousands of workers: transport, housing, services...
- Start production of the main components of the EPR2: reactor pressure vessel, steam generators by Framatome.
- Public debates held for the construction of reactors at Penly and Gravelines and on going for Bugey.



## Final Investment Decision (FID)

- The power plant's construction remains subject to FID
- EDF and the French State in discussion on the financial support scheme.
- The ambition is still to take a FID by the end of 2026.



# Operational data





# Electricity output

*Fully consolidated entities*

<i>(in TWh)</i>	<b>2023</b>		<b>2024</b>	
Nuclear	363.4	78%	404.2	78%
Total Renewables	70.8	15%	86.1	17%
<i>Hydro<sup>(1)</sup></i>	42.8	60%	55.5	64%
<i>Wind</i>	23.5	33%	23.7	28%
<i>Solar</i>	3.2	5%	4.8	6%
<i>Biomass</i>	1.4	2%	2.2	3%
Gas	28.5	6%	25.6	5%
Fuel oil	4.6	1%	4.1	0.8%
Coal	0.2	0.05%	0.2	0.04%
<b>Group</b>	<b>467.6</b>	<b>100%</b>	<b>520.3</b>	<b>100%</b>

(1) Hydro output includes tidal energy for 519GWh in 2024 and 504GWh in 2023. Production after deduction of pumped volumes is 47.8TWh in 2024 and 37.0TWh in 2023.

# CO<sub>2</sub> emissions and carbon intensity<sup>(1)</sup>

*Fully consolidated entities*

Heat and power generation by segment	Emissions (in kt CO <sub>2</sub> )				Carbon intensity (in gCO <sub>2</sub> /kWh <sup>(4)</sup> )	
	2023		2024		2023	2024
France – Generation and supply activities	2,901	16%	1,315	8%	8	3
France – Regulated activities <sup>(2)</sup>	2,917	16%	2,792	17%	469	453
Dalkia	3,588	20%	3,188	20%	147	135
United Kingdom	4	0%	0	0%	0	0
Italy	6,263	34%	6,053	38%	302	262
Other international	2,547	14%	2,714	17%	182	198
<b>Group<sup>(3)</sup></b>	<b>18,249</b>	<b>100%</b>	<b>16,096</b>	<b>100%</b>	<b>37</b>	<b>30</b>

(1) Including direct CO<sub>2</sub> emissions (excluding life cycle analysis of fuel, production means and other CO<sub>2</sub>-equivalent gas emissions). The other CO<sub>2</sub>-equivalent gas emissions are included in the scope 1 calculation.

(2) Power generation in non-interconnected zones corresponding to overseas departments and Corsica - (mainly island territories) and Electricité de Strasbourg (ES).

(3) Framatome and Arabelle Solutions contribute to 33ktCO<sub>2</sub> in 2024 and 29ktCO<sub>2</sub> in 2023, The direct CO<sub>2</sub> emissions from "Other activities" segment are not significant compared to Group total emissions and are not disclosed in this table.

(4) Carbon intensity corresponds to CO<sub>2</sub> emissions in relation to the Group's electricity and heat generation. The EDF Group's heat generation amounts to 23.8TWh in 2024 (vs 23.7TWh in 2023).

# Installed capacity at end-2024

<i>(in GW)</i>	<b>Total net capacity of EDF Group, including shares in associates and joint ventures</b>	<b>Consolidated capacity of EDF Group</b>	
Nuclear <sup>(1)</sup>	67.8	67.9	57%
Hydro <sup>(2)</sup>	22.7	21.6	18%
Other renewables <sup>(3)</sup>	16.8	13.3	11%
Gas	11.6	11.8	10%
Fuel oil	3.2	3.1	3%
Coal	3.0	1.2	1%
<b>Total</b>	<b>125.0</b>	<b>118.8</b>	<b>100%</b>

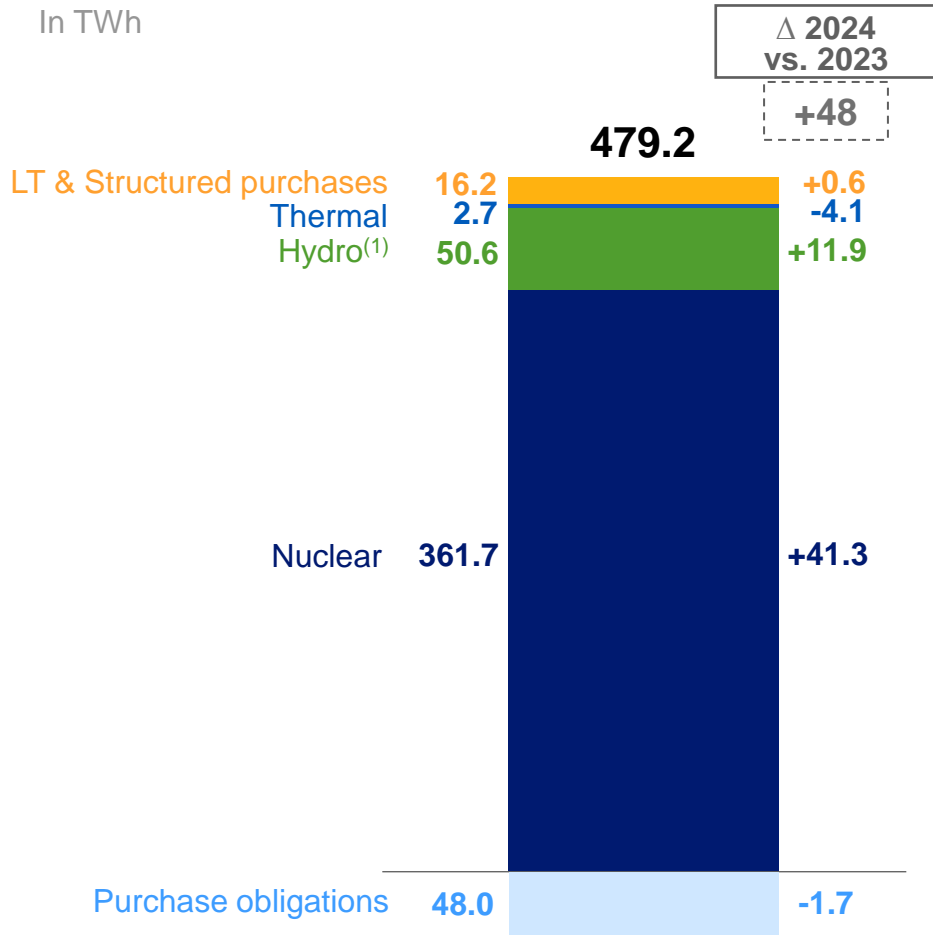
(1) This capacity does not include the EPR reactor of Flamanville 3

(2) Including sea energy: 0.24GW in 2024.

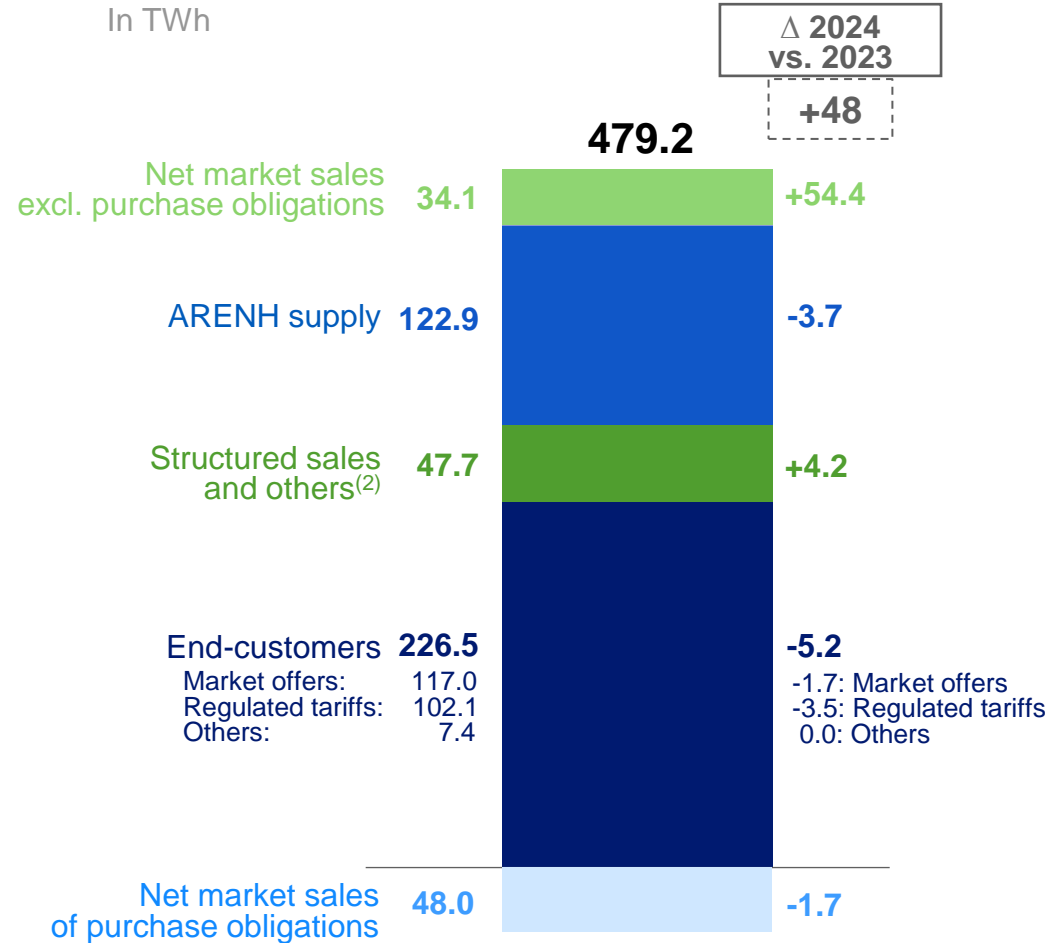
(3) Including wind, solar, biomass and geothermal.

# France: upstream / downstream electricity balance

## OUTPUT / PURCHASE



## CONSUMPTION / SALES



NB: EDF excluding French islands electrical activities.

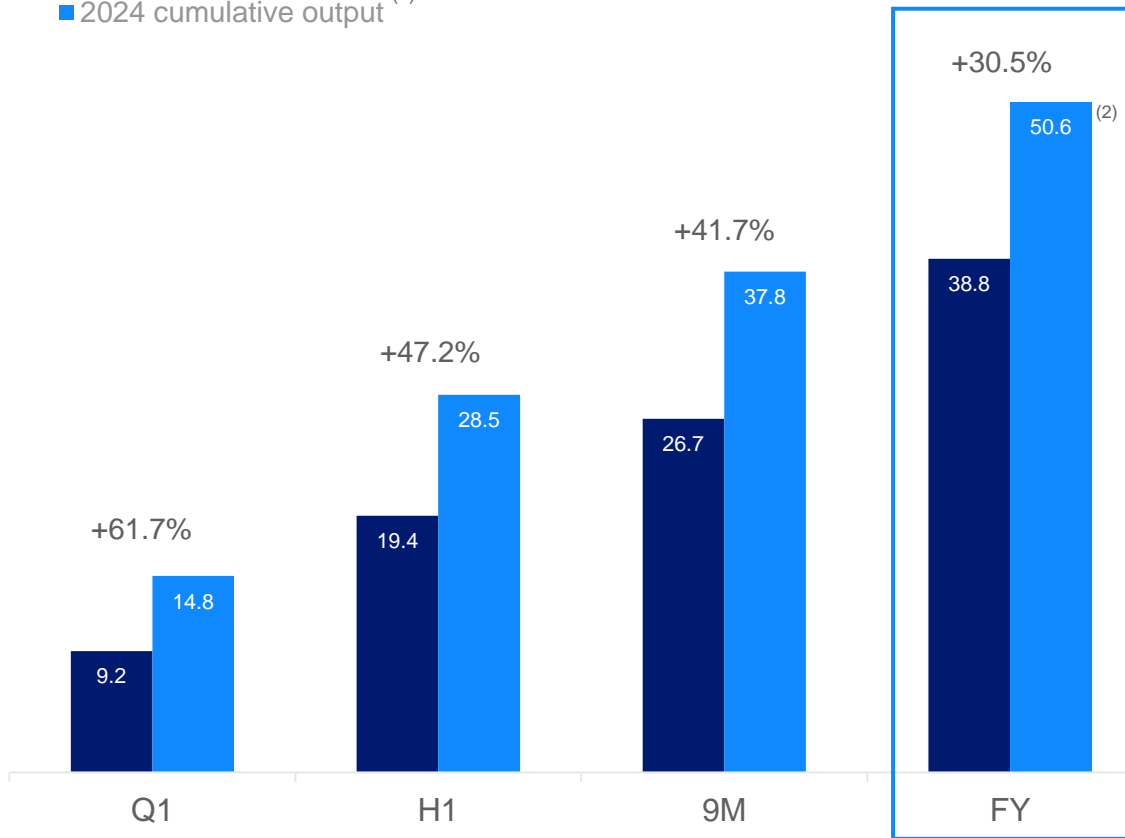
(1) Hydro output after deduction of pumped volumes represents 42.9TWh in 2024 / 33.0TWh in 2023.

(2) Including hydro pumped volumes of 7.7TWh in 2024 / 5.7TWh in 2023.

# France hydro output

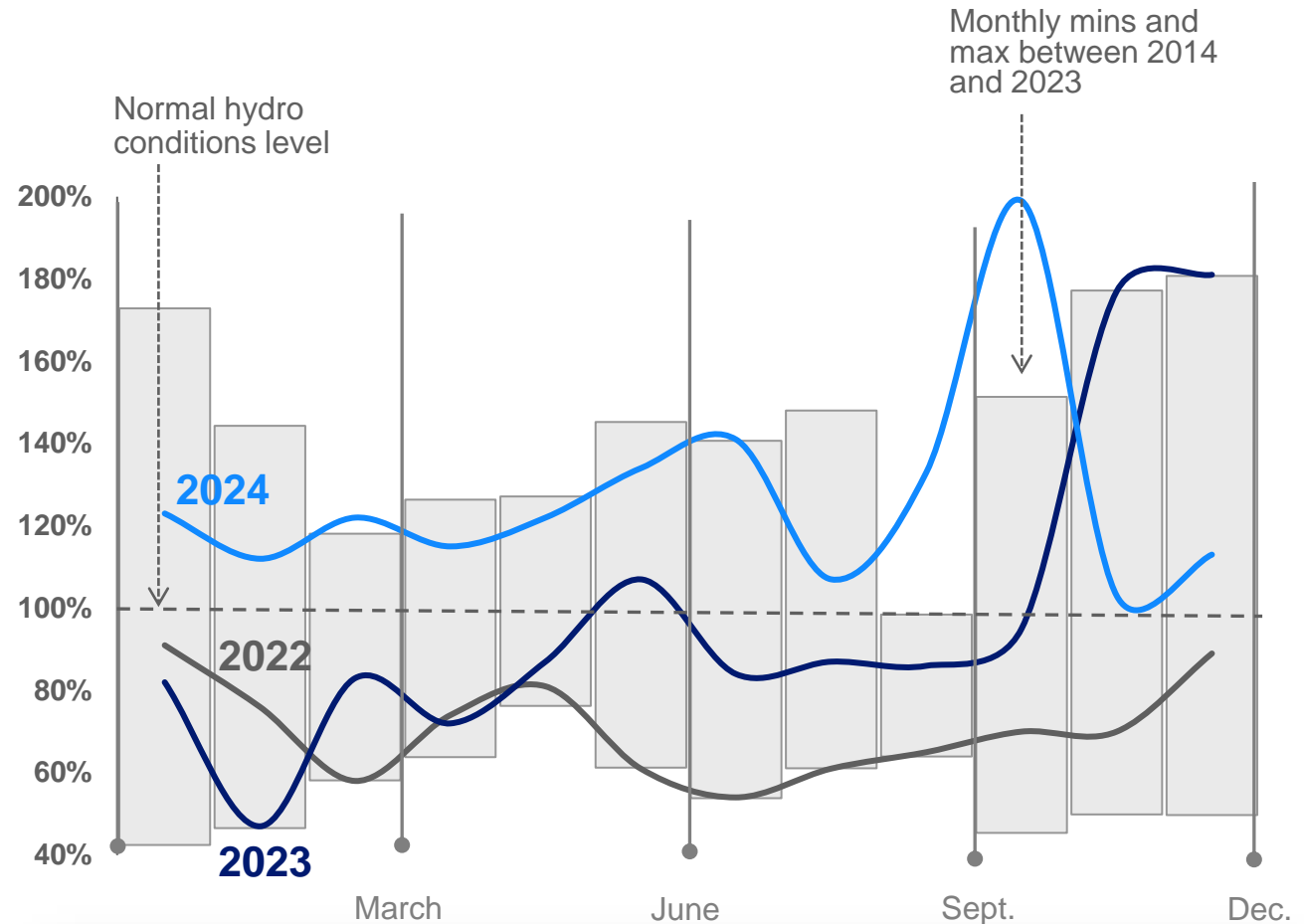
(in TWh)

- 2023 cumulative output <sup>(1)</sup>
- 2024 cumulative output <sup>(1)</sup>



(1) Hydropower excluding electrical activities on French islands, before deduction of pumping consumption.

(2) Production after deduction of pumped volume consumption: 33.0TWh in 2023 / 42.9TWh in 2024



**Favourable hydro conditions in 2024** contrast with the past two years: hydraulic conditions index of 1.26 in 2024 vs 0.98 in 2023 and 0.71 in 2022

**Hydraulic reservoirs filling rate in France at 68.8%** at end-2024: +5.8% above historical average (63.0%)

# EDF: a European leading player in renewable energies

## Installed capacity: 39.5GW net<sup>(1)</sup>

A diversified mix with 39.5GW in operation

- **22.7GW of hydropower**
- **16.3GW of wind and solar**
- **0.5GW others** (biomass and geothermal)

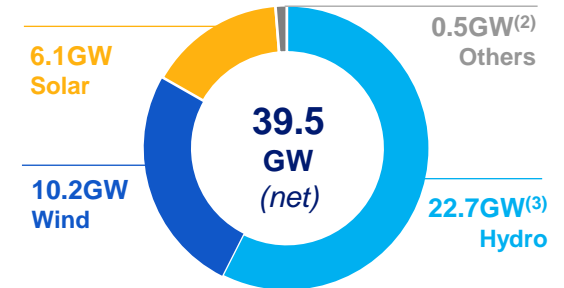
Hydropower

- **Leading European producer** of hydropower
- More than **400 production sites** worldwide

A global leader in wind and solar energy

- **3.2GW gross** commissioned in 2024
- **8.6GW gross** under construction (1.9GW in onshore wind, 0.7GW in offshore wind, 6.0GW in solar)

### Capacity by sector:



### Capacity by geography:



NB: data at end-2024.

(1) Installed capacity shown as net, corresponding to the consolidated data based on EDF's participation in Group companies, including investments in affiliates and joint ventures.

(2) Biomass and geothermal.

(3) Including sea energy: 0.24GW.

# Renewables: installed capacity and capacity under construction

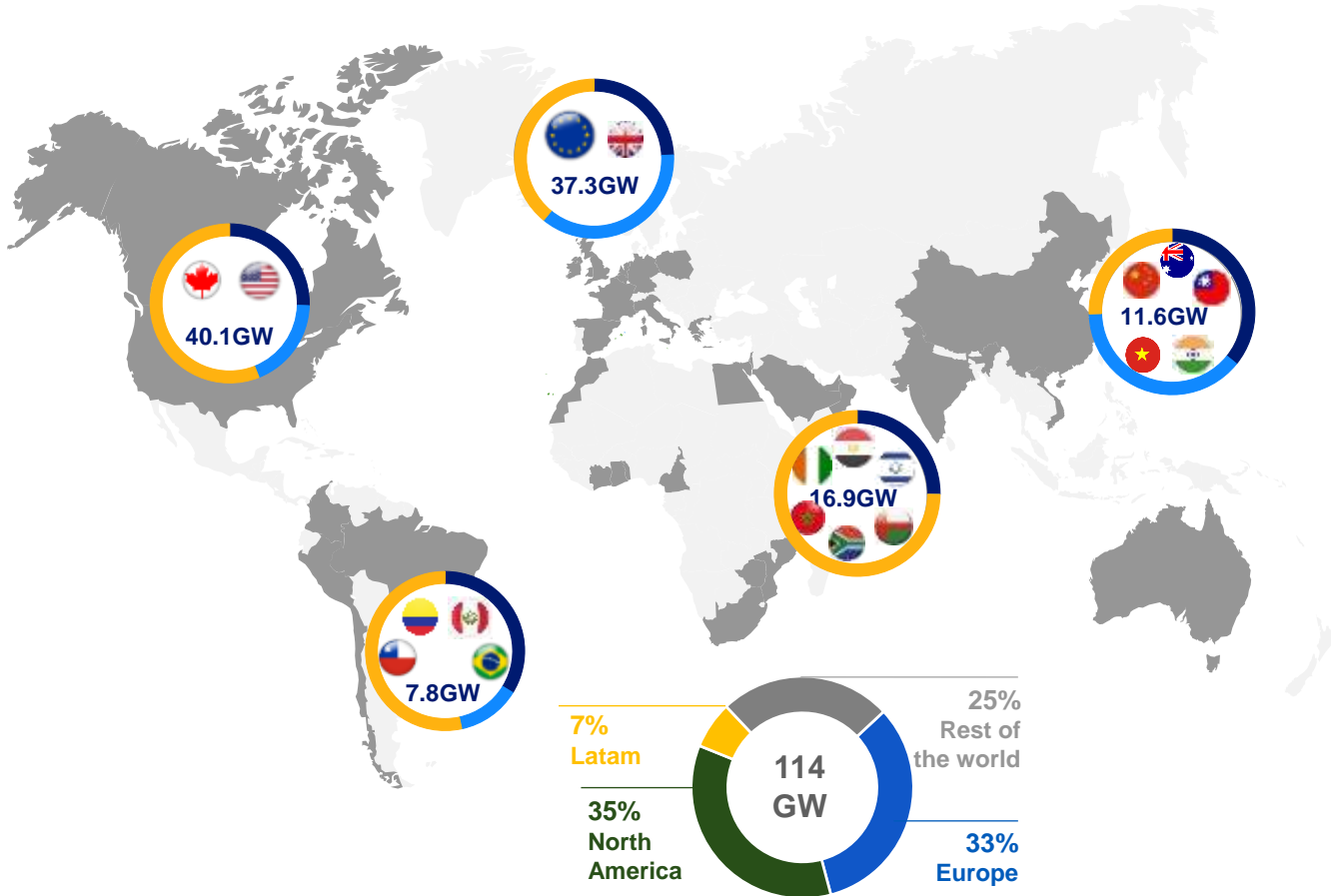
<i>(in MW)</i>	<b>Gross<sup>(1)</sup></b>		<b>Net<sup>(2)</sup></b>	
	<b>31/12/2023</b>	<b>31/12/2024</b>	<b>31/12/2023</b>	<b>31/12/2024</b>
Wind	2,685	2,538	1,591	1,528
Solar	3,728	6,039	2,617	2,595
<b>Capacity under construction</b>	<b>6,413</b>	<b>8,577</b>	<b>4,209</b>	<b>4,123</b>
Onshore wind	13,244	13,169	9,342	9,404
Offshore wind	1,621	2,148	581	807
Solar	9,425	11,444	4,734	6,066
<b>Wind &amp; Solar installed capacity</b>	<b>24,289</b>	<b>26,762</b>	<b>14,657</b>	<b>16,277</b>
Biomass and geothermal	-	-	440	481
<b>Renewable (excl. hydro) installed capacity</b>	<b>-</b>	<b>-</b>	<b>15,097</b>	<b>16,758</b>
Hydro	-	-	22,571	22,740
<b>Renewable installed capacity</b>	<b>-</b>	<b>-</b>	<b>37,668</b>	<b>39,498</b>

(1) Gross capacity: total capacity of the facilities in which EDF has a stake.

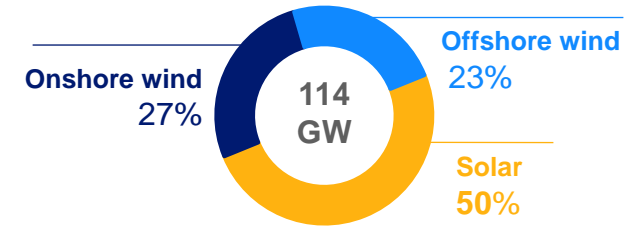
(2) Net capacity: capacity corresponding to EDF's stake.

# A portfolio of wind and solar projects of 114GW gross<sup>(1)</sup>

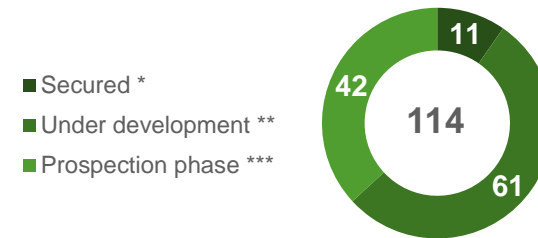
## A geographically diversified portfolio



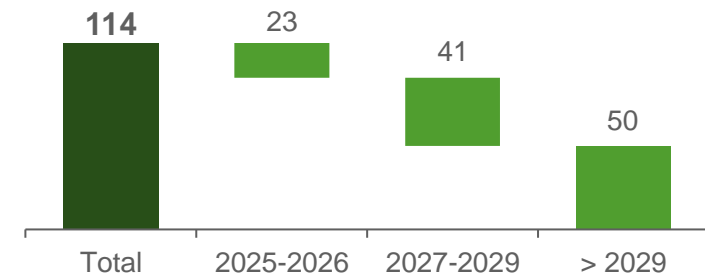
## Balanced between wind and solar



## Breakdown by development phase <sup>(2)</sup> (in GW)



## Breakdown by date of start of construction <sup>(3)</sup> (in GW)



NB: data at end-2024.

(1) Excluding capacities under construction. Gross data corresponding to 100% of the capacity of the project.

(2) Projects in prospection phase are included in the pipeline.

(3) Not probability-based.

\* Securing a power purchase agreement (following call for tenders, auction, OTC negotiation)

\*\* Sufficient land securisation and start of technical studies

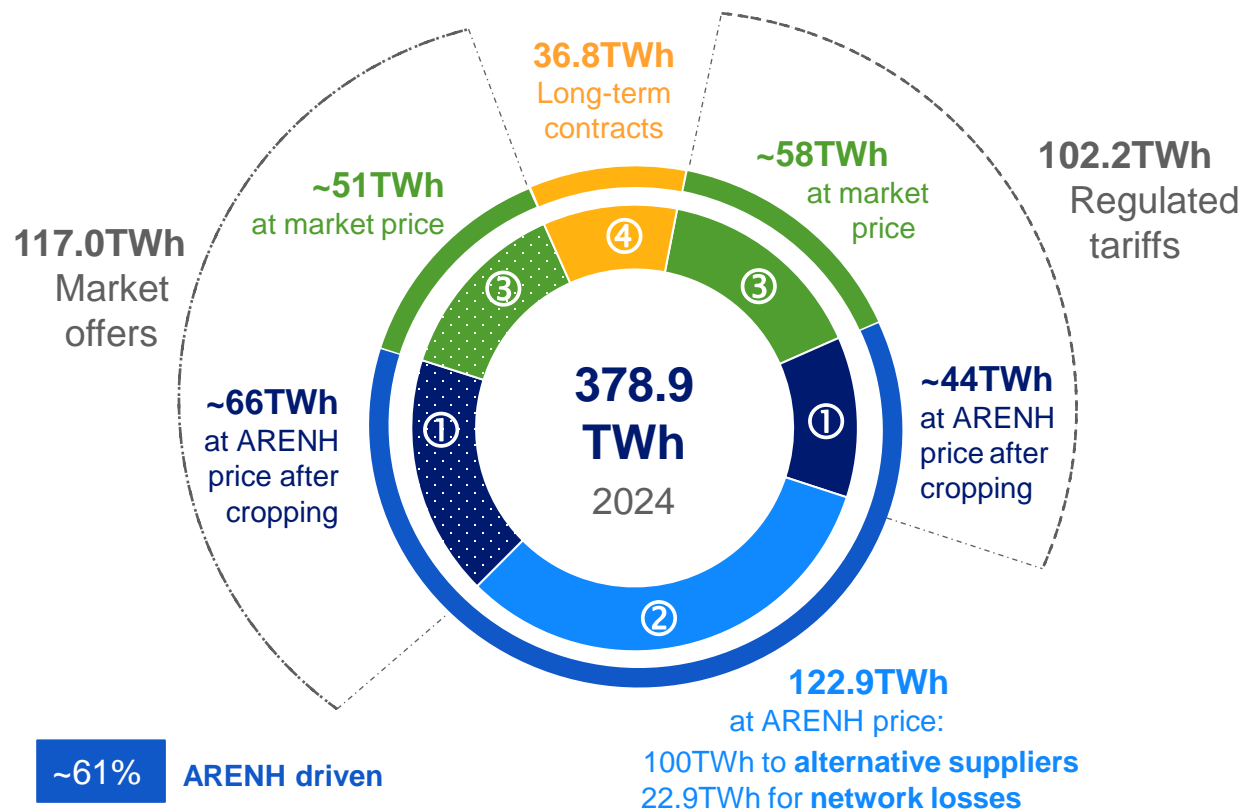
\*\*\* Start of land identification and preliminary studies



# Customers (France)



# France: distribution of electricity sales<sup>(1)</sup> according to their market price exposure



**①** Volumes sold at **ARENH price** following the cost-stacking formula in the **regulated sales tariffs** (essentially blue residential and non-residential tariffs) and to EDF final customers under **market-based contracts**<sup>(2)</sup>

**②** Volumes sold at **ARENH price**<sup>(3)</sup>, which include:

- the ARENH volumes of **100TWh** that can be requested by **alternative suppliers**
- The purchase of losses by **network operators** for **22.9TWh**  
... **or at market price** if such price is lower than the ARENH arbitration threshold (ARENH price - capacity price) – not applicable in 2024

**③** Volumes sold at **market price**, whatever the price, which include:

- Part of the volumes sold to EDF final customers: “market complement supply” in the regulated tariffs<sup>(4)</sup>, balance of the volumes sold to clients under market-based contracts
- Volumes sold on wholesale power markets

**④** Contracts at **negotiated prices** that do not follow a market-indexed structure of 36.8TWh

(1) See “France: upstream / downstream electricity balance” p.12. Estimated distribution based on the situation in 2024, in particular in terms of EDF downstream market shares.

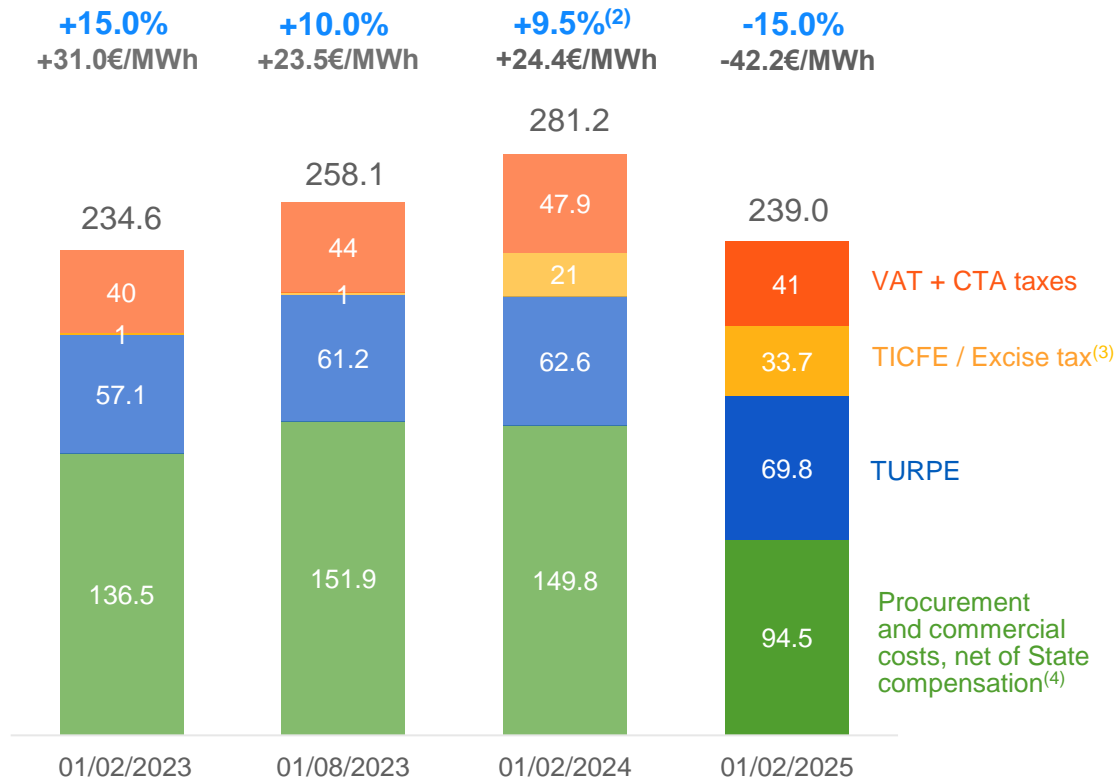
(2) Related to the replication of the sourcing cost structure of alternative suppliers: shares of the volumes corresponding to the “ARENH rights” including replication of additional volumes to the alternative suppliers.

(3) EDF is subject to the arbitrage between the two prices and its date of exercise is variable depending on the volumes (it takes place at the latest at the time of the ARENH end of year subscription window for a delivery the following year).

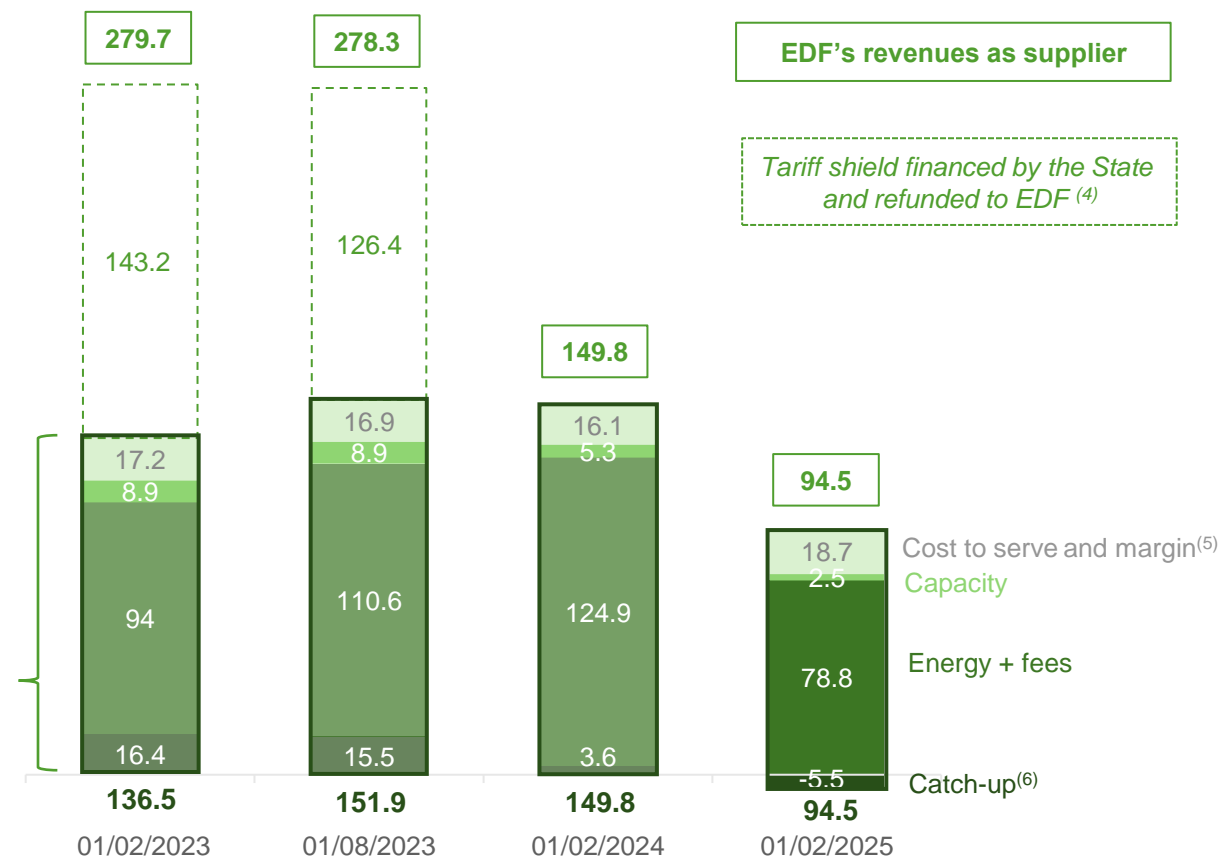
(4) Related to the replication of the sourcing cost structure of alternative suppliers: the balancing volumes sourced on the market which exceed the “ARENH rights”.

# Change in regulated sales tariffs in France

Composition of the average bill including VAT (in €/MWh) <sup>(1)</sup>



Focus on procurement and commercial costs (in €/MWh)



(1) Data based on an average calculation on customers portfolio at Regulated Tariffs the end of the year before.

(2) Calculation made by the CRE in January 2024 with the data available at that time

(3) See decree of 25/01/2024 and decree of 20/12/2024 on the Excise tax

(4) The tariff shield in 2023 was compensated by the CSPE mechanism and was not subject to a catch-up in 2024.

(5) Including cost of Energy Efficiency Certificates.

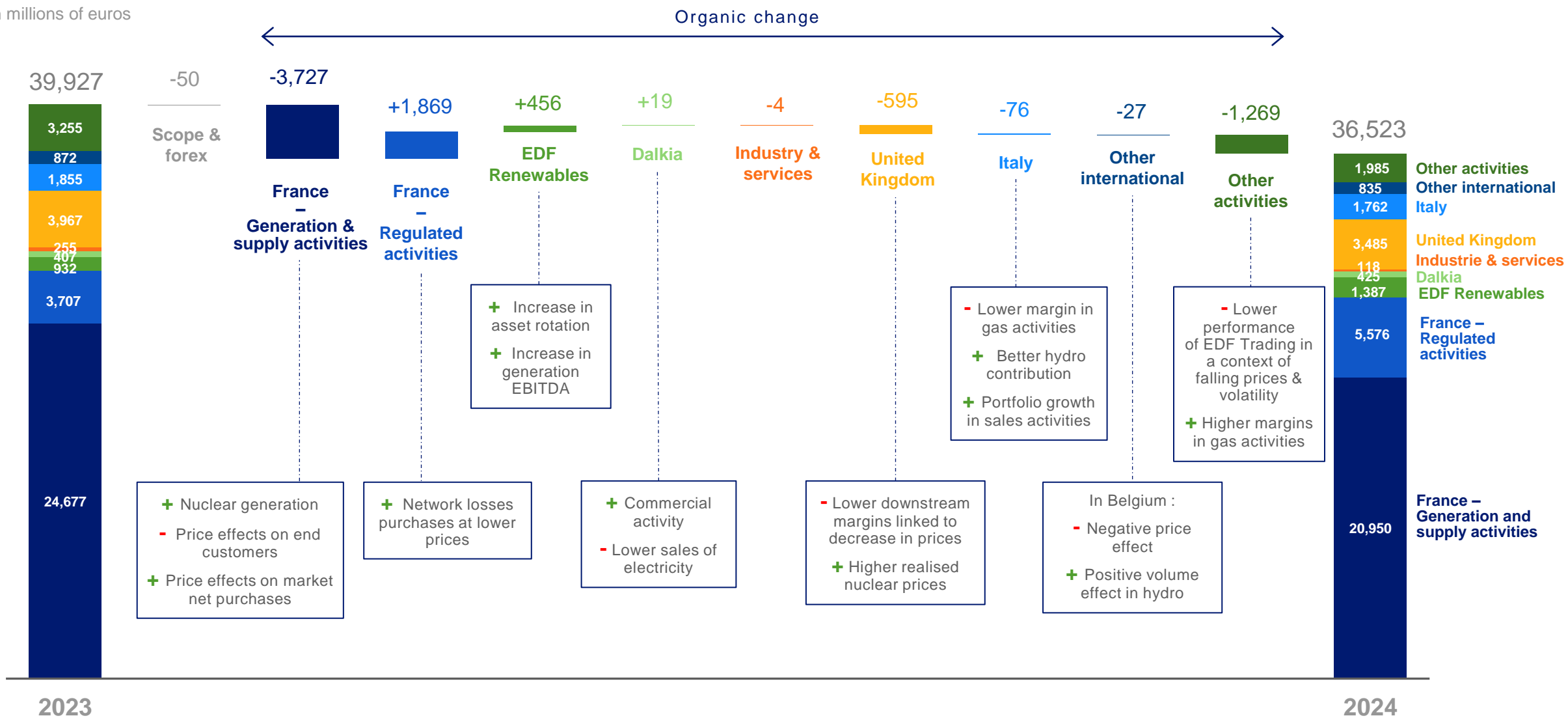
(6) Remaining tariff increase decided in Year-1 but invoiced in Year+1 and for 2025, catch-up of the TURPE increase from 01/11/2024 to 31/01/2025 not invoiced to end customer

# Consolidated financial statements



# Group EBITDA by Segment

In millions of euros



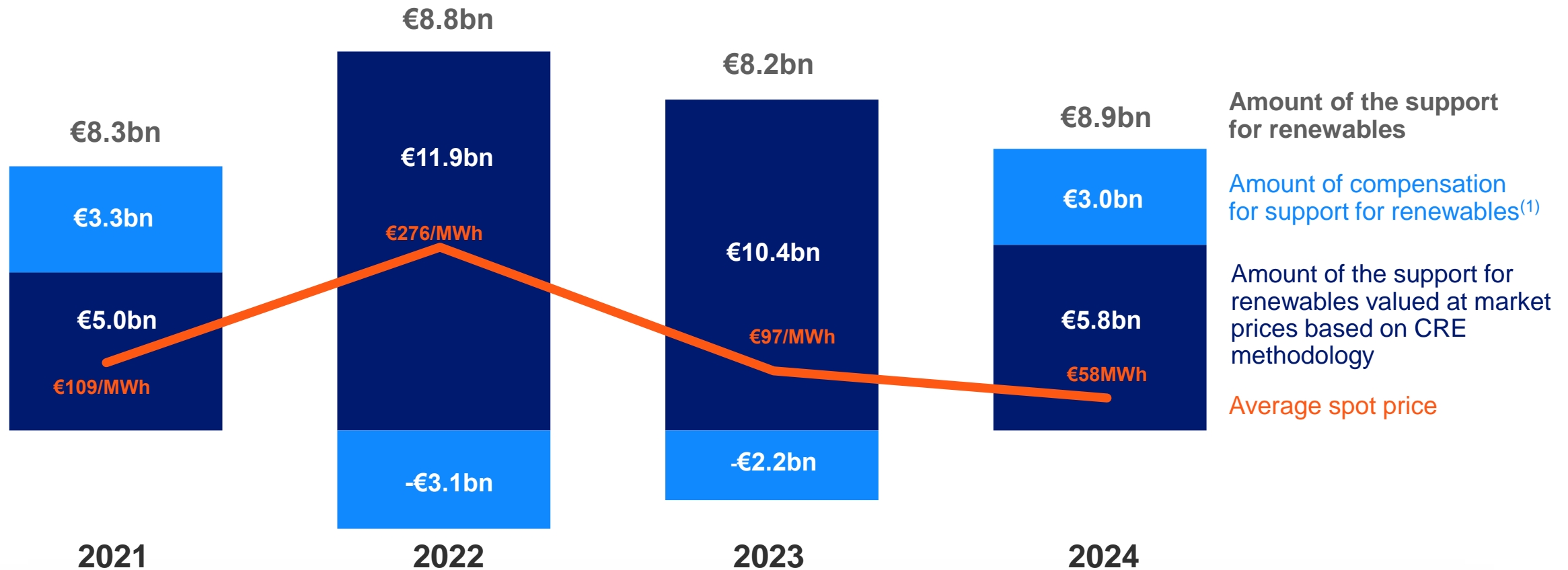
# Current and non-current elements of the P&L

In millions of euros	2023 current	2023 non-current	<b>2023</b>	2024 current	2024 non-current	<b>2024</b>
<b>EBITDA</b>	39,927	-	<b>39,927</b>	36,523	-	<b>36,523</b>
Commodities volatility	-	363	<b>363</b>	-	443	<b>443</b>
Amortisation/depreciation expenses and provisions for renewal	(11,161)	-	<b>(11,161)</b>	(11,970)	-	<b>(11,970)</b>
Impairments and other operating income and expenses	-	(15,955)	<b>(15,955)</b>	-	(6,669)	<b>(6,669)</b>
<b>EBIT</b>	28,766	(15,592)	<b>13,174</b>	24,553	(6,226)	<b>18,327</b>
Financial result	(5,574)	2,225	<b>(3,349)</b>	(3,710)	2,778	<b>(932)</b>
Income tax	(4,783)	2,313	<b>(2,470)</b>	(5,520)	633	<b>(4,887)</b>
Share of net income from associates and joint-ventures	497	(240)	<b>257</b>	456	(1,139)	<b>(683)</b>
Net income of discontinued operations	-	-	-	29	-	29
- Deduction net income from minority interests	425	(2,829)	<b>(2,404)</b>	575	(127)	<b>448</b>
<b>Net income – Group share</b>	18,481	(8,465)	<b>10,016</b>	15,233	(3,827)	<b>11,406</b>

# Change in net financial debt

In millions of euros	2023	2024
<b>EBITDA</b>	<b>39,927</b>	<b>36,523</b>
Cancellation of non-monetary items included in EBITDA	3,939	(1,522)
<b>EBITDA Cash</b>	<b>43,866</b>	<b>35,001</b>
Change in net WCR	(7,785)	(1,452)
Net investments – excluding disposals	(19,100)	(22,402)
Dividends received from associates and joint ventures	702	582
Other elements	(755)	(528)
<b>Operating Cash Flow</b>	<b>16,928</b>	<b>11,200</b>
Assets disposals	80	9
Income taxes paid	(3,695)	(3,384)
Net financial expenses <sup>(1)</sup>	(2,241)	(2,362)
Dedicated assets	(378)	(344)
Dividends paid in cash	(1,113)	(1,252)
<b>Group Cash Flow</b>	<b>9,581</b>	<b>3,868</b>
Rights issue, hybrids and other monetary changes <sup>(1)</sup>	(357)	(2,536)
<b>Change in net financial debt</b>	<b>9,224</b>	<b>1,332</b>
Effects of change and exchange rates	(162)	(240)
Other non-monetary changes – IFRS 16	(815)	(920)
Other non-monetary changes	1,872	(137)
<b>Change in net financial debt from continuing operations</b>	<b>10,119</b>	<b>35</b>
<b>Net Financial Debt – Opening balance</b>	<b>64,500</b>	<b>54,381</b>
<b>Net Financial Debt – Closing balance</b>	<b>54,381</b>	<b>54,346</b>

# CSPE: change in support for renewables in mainland France for EDF



In 2022 and 2023, in the context of soaring energy prices, the valuation of energy produced by renewables has exceeded on average the amount of the support by the French State, leading to a negative compensation amount.

The compensation mechanism of public energy services charges<sup>(2)</sup> offsets the difference between the cost of support for renewables in mainland France and market prices. In 2023 and January 2024, the tariff shield was financed by the CSPE mechanism

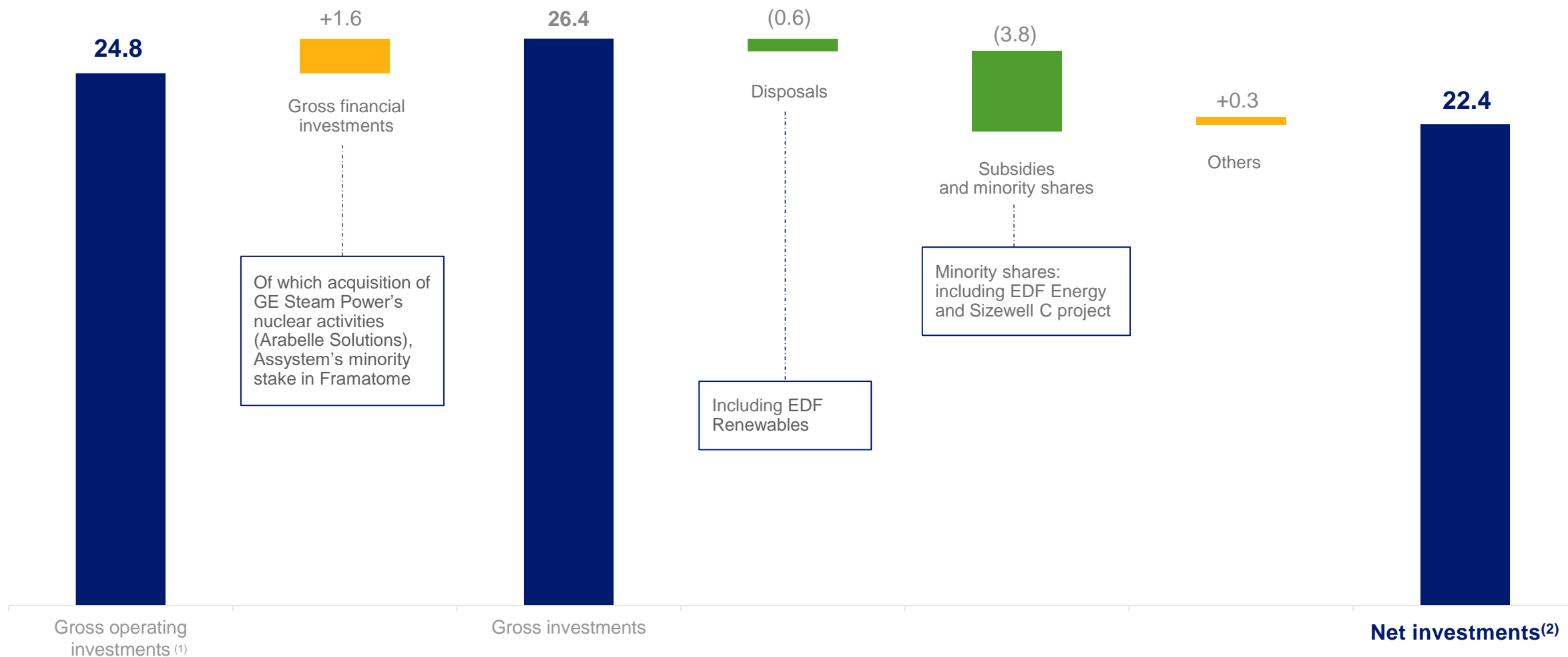
(1) EDF SA excluding island activities.

(2) The compensation mechanism of public energy services charges also covers the charges relating to the gas and electricity tariff cap, the tariff equalisation costs in the non-interconnected zones, and the solidarity programmes.



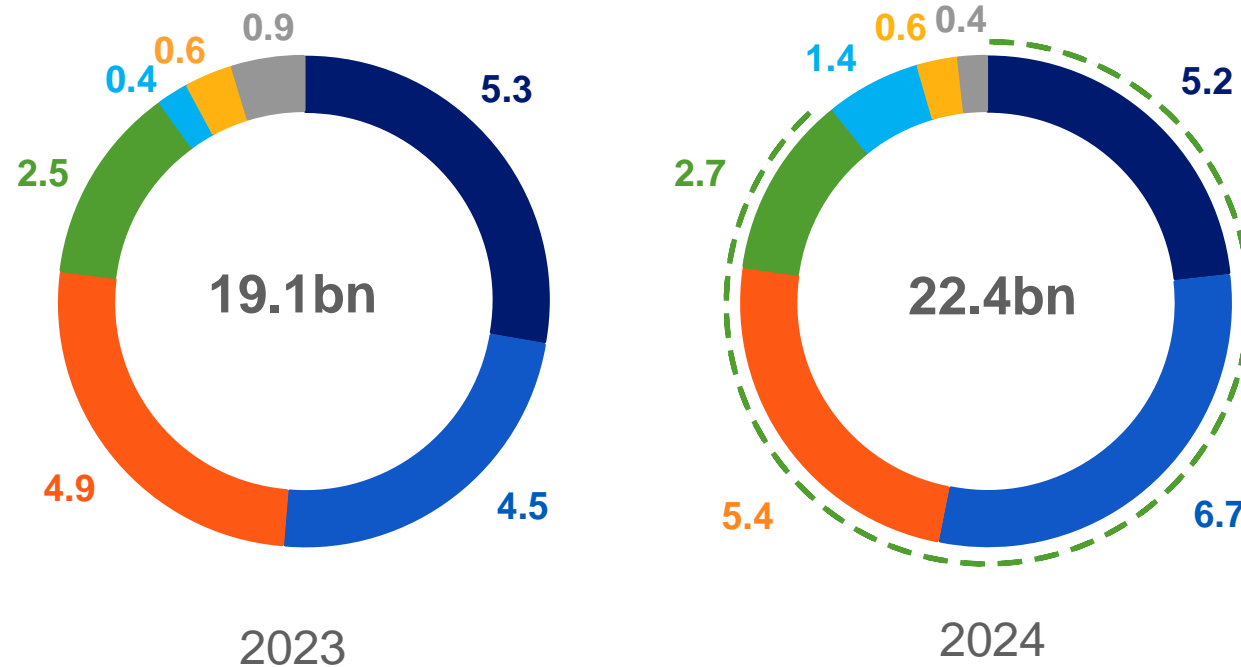
# Investments: from gross to net<sup>(1)</sup>

(in billions of euros)



# Net investments

In billions of euros



	Maintenance	Development	Total
Nuclear maintenance (France, UK and Belgium) including <i>Grand Carénage</i>	5.2	-	5.2
New nuclear (including HPC, Flamanville 3 and EPR2)	-	6.7	6.7
Enedis, SEI and ES	2.2	3.3	5.4
Renewables	0.5	2.3	2.7
Nuclear services	0.2	1.2	1.4
Services	-	0.6	0.6
Others <sup>(1)</sup>	0.2	0.1	0.4
<b>TOTAL</b>	<b>8.3</b>	<b>14.1</b>	<b>22.4</b>

63% of investments in development

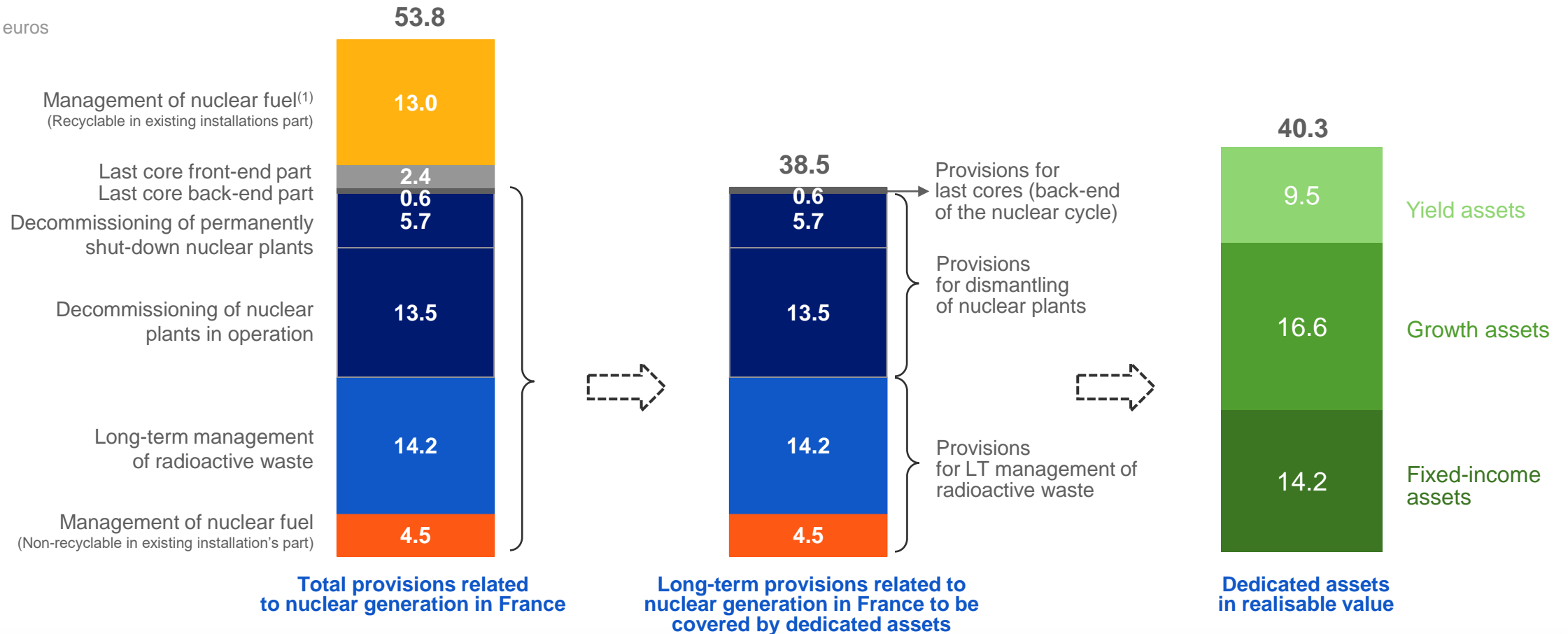
--- Including investments aligned with the green financing framework

Almost 94% of the Group's investments are made in accordance with its net zero emission target

(1) Mainly central functions, property, gas and fuel.

# Provisions related to nuclear generation in France and part to be covered by dedicated assets

In billions of euros



(1) Related to the operating cycle.

- At 31 December 2024, the regulatory coverage is **104,7%** (vs 108.5% at 31 December 2023)
- No allocation to dedicated assets to be made in 2025 in respect of 2024 owing to a coverage rate of over 100% at end of year, in accordance with the regulation

# 10-year inspections of the nuclear fleet in France

Number of 10-year inspections



In 2029, Tricastin 1 would be the first 900MW series reactor to realise its 5<sup>th</sup> 10-year inspection

# Financing and liquidity



# Stabilisation of the net financial debt

In millions of euros	31/12/2023	31/12/2024
Financial debt	86,647	81,802
Derivatives used to hedge debts	(1,379)	(1,872)
Cash and cash equivalents	(10,775)	(7,597)
Debt and equity securities (liquid assets)	(20,077)	(17,999)
Asset coverage derivatives	(35)	12
<b>Net financial debt<sup>(1)</sup></b>	<b>54,381<sup>(2)</sup></b>	<b>54,346<sup>(3)</sup></b>
<b>o/w green financial debt</b>	<b>9,322</b>	<b>19,802</b>

(1) After application of IFRS 16.

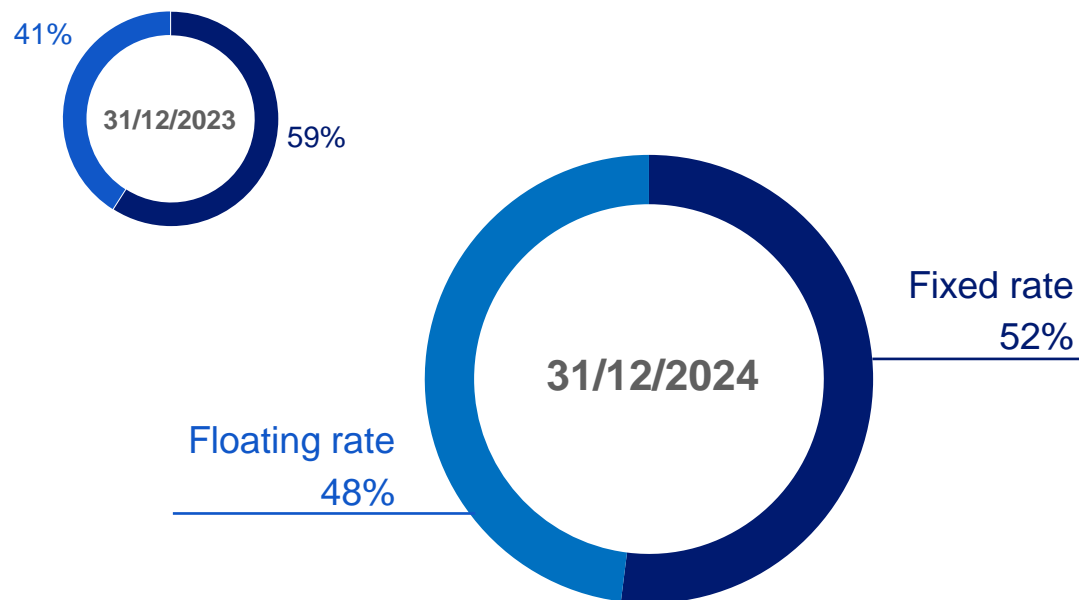
(2) Including €539M (\$596M) hybrid notes announced to be redeemed on 22/01/2024 (see press release of 14/12/2023).

(3) Including €1,250M hybrid notes announced to be redeemed on 29/01/2025 (see press release of 18/12/2024)

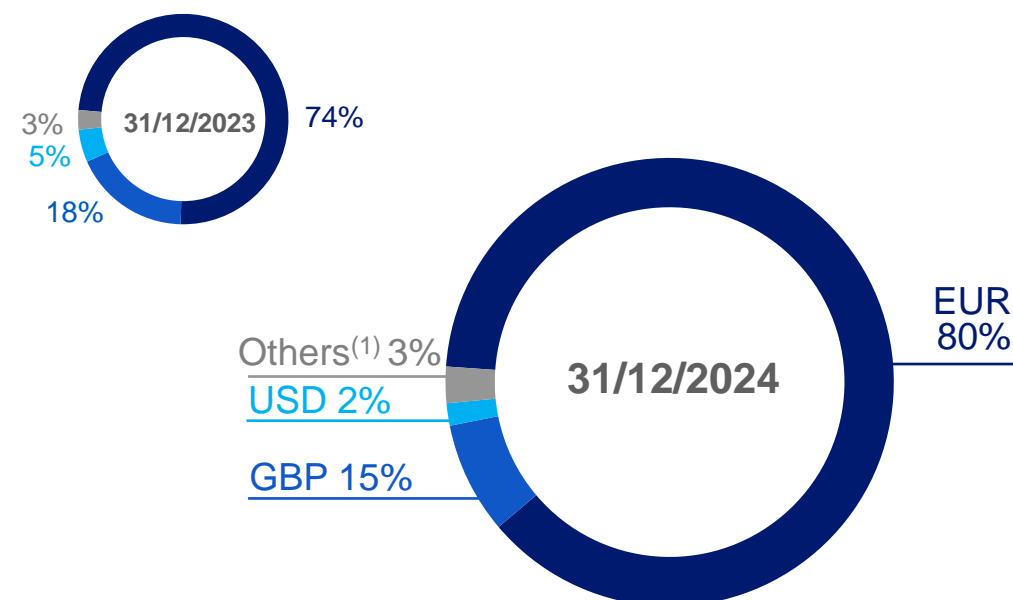
# Gross debt

	31/12/2023	31/12/2024	Δ
• Average maturity of gross debt	11.0 years	<b>13.0 years</b>	+2.0 years
• Average coupon	4.11%	<b>3.85%</b>	-0.26%

### Breakdown by type of rate after swaps



### Breakdown by currency after swaps



(1) Mainly JPY, CAD, CHF and BRL.

# High level of liquidity

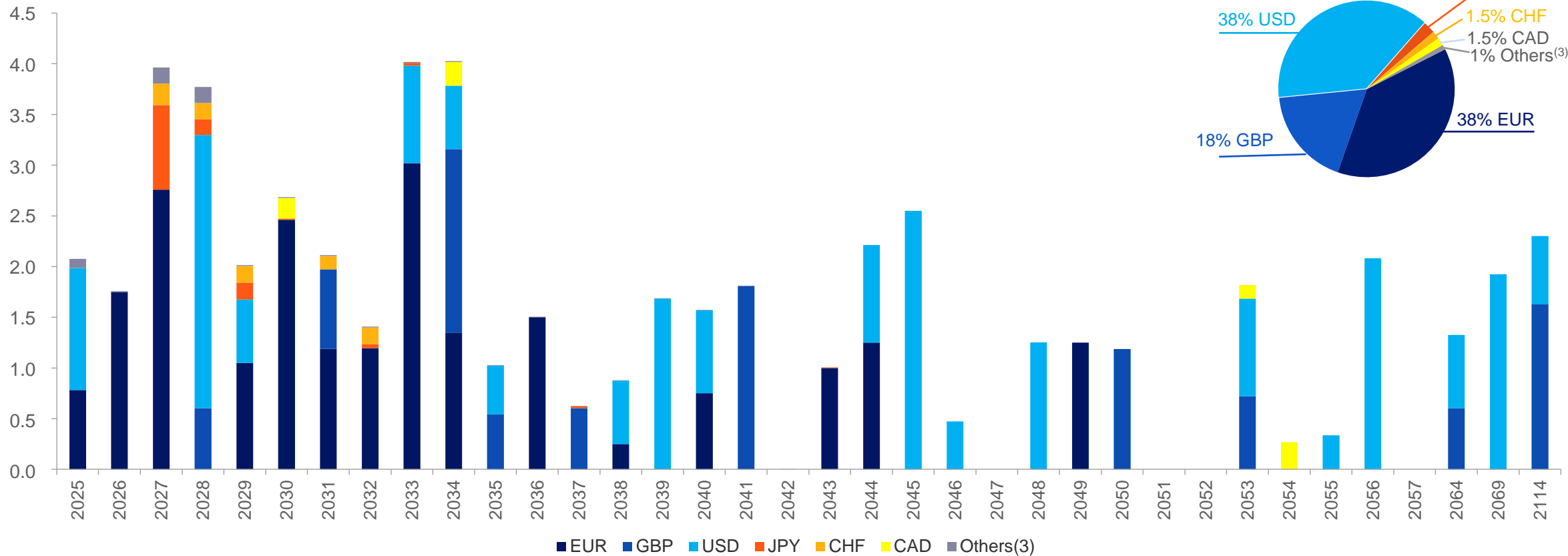
In billions of euros	31/12/2023	31/12/2024
Cash and cash equivalents	10.8	7.6
Liquid assets	20.1	18.0
Unused credit lines (off-balance sheet)	15.8	14.3
<b>Gross liquidity</b>	<b>46.7</b>	<b>39.9</b>
Financial debt – current part (maturing within one year)	(18.9)	(12.9)
<b>Net liquidity</b>	<b>27.8</b>	<b>27.0</b>



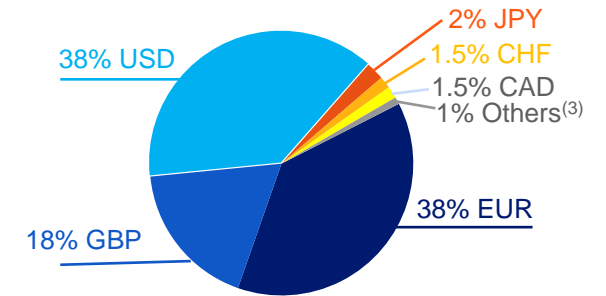
# Focus on bonds<sup>(1)</sup>

## Repayments by currency

In billions of euros, before swaps



## Stock of bonds as of 31/12/2024: €56.9bn<sup>(2)</sup>



(1) Nominal amounts only.

(2) €56.9bn vs €54.1bn in note 18 of the 2024 consolidated financial statement that includes accrued interests and depreciation.

(3) Mainly HKD, NOK and BRL.

# Green financing: allocation of the proceeds

Issue date	Instrument	Maturity	Nominal amount	New renewable capacities	Investments in hydro facilities	Biodiversity projects	Distribution of electricity projects <sup>(1)</sup>	Existing French nuclear reactors <sup>(2)</sup>
Nov. 2013	Bond	7.5Y	1,400M€	1,400	-	-	-	-
Oct. 2015	Bond	10Y	1,250M\$	1,250	-	-	-	-
Oct. 2016	Bond	10Y	1,750M€	1,248	502	-	-	-
Jan. 2017	Bond	12Y–15Y	26,000M¥	14,021	11,979	-	-	-
Sept. 2020	Bond	4Y	2,400M€	2,421	110	28	-	-
Nov. 2021	Bond	12Y	1,850M€	1,594	189	23	-	-
Oct. 2022	Bond	12	1,250M€	-	-	-	1,250	-
Jul-2023	REPO	Evergreen	565M€	-	-	-	565	-
Aug-2023	Bond	4Y–8Y	325MCHF	-	-	-	325	-
Nov. 2023	Bond	3.5Y	1,000M€	-	-	-	-	1,000
May-July 2024	Bank loans	3Y-5Y	6,185M€	-	-	-	-	6,185
2024	NeuCP <sup>(3)</sup>	5,5M	412M€	36	371	5	-	-
Jun. 2024	Bond	7Y - 12Y - 20Y	3,000M€	750	-	-	97 <sup>(4)</sup>	1,000
Sept. 2024	Bond	5Y-8Y	310MCHF	310	-	-	-	-
Sept. 2024	Hybrid bond	NC5-NC8	1,150M€	-	-	-	-	1,150
Sept. 2024	Hybrid bond	NC11	500M£	-	-	-	-	500

(1) Connection of renewable capacity & of smart meters, new grid lines built.

(2) In relation to their lifetime extension

(3) Allocation of the maximum amount issued during 2024

(4) 97M€ have financed 2023 Enedis capex, the 1,153M€ remaining are invested in SRI funds at end-2024

# Green financing: proceeds allocation and impact reporting

Technology	Total amount (in EUR eq.)	Total net <sup>(1)</sup> capacity of financed projects (in MW)	Expected net <sup>(1)</sup> avoided CO <sub>2</sub> emissions (in Mt/year)
<b>Onshore wind projects</b>	<b>4,751</b>	<b>3,587</b>	<b>4.31</b>
<b>Offshore wind projects</b>	<b>1,227</b>	<b>399</b>	<b>0.58</b>
<b>Solar projects</b>	<b>2,953</b>	<b>2,602</b>	<b>1.75</b>
<b>Hydro facilities</b>	<b>1,245</b>	<b>1,599</b>	<b>0.0</b>
Incl. biodiversity projects	<b>56</b>	<b>N/A</b>	<b>-</b>
<b>Nuclear: Existing French nuclear reactors in relation to their lifetime extension</b>	<b>9,927</b>	<b>N/A</b>	<b>6.05</b>

Technology	Total amount (in EUR)	Renewable capacity connected (in MW)	VE charging station connected	New grid lines built (in km)
<b>Distribution of electricity projects <sup>(2)</sup></b>	<b>2,210</b>	<b>12,419</b>	<b>32,126</b>	<b>5,907</b>

The detailed list of EDF Renewables projects and hydraulic investment operations by category will be published in EDF 2024 URD.

(1) Sum of the impacts of each project weighted by the share of total investment funded by the corresponding Green Bond.

(2) Impact reporting based on KPIs of Enedis on 2021 to 2023

# Focus on hybrids securities

## Hybrid bond issues

Hybrid bond issues contribute to strengthening the balance sheet through their qualification as equity under IFRS and 50/50 as debt and equity by rating agencies

EDF has exercised its option to redeem the hybrid notes issued on 4 October 2018 for a nominal amount of €1,250m on 5 July 2024. The equity content resulting from the conversion of the Oceane bonds in 2023 was used to avoid refinancing half of its nominal amount<sup>(1)</sup>

On 18 December 2024, EDF announced its intention to exercise its option to redeem the hybrid notes issued on 29 January 2013 for a nominal amount of €1,250m and to use the equity content resulting from the conversion of the Oceane bonds in 2023 to avoid having to refinance half of the nominal amount<sup>(2)</sup>.

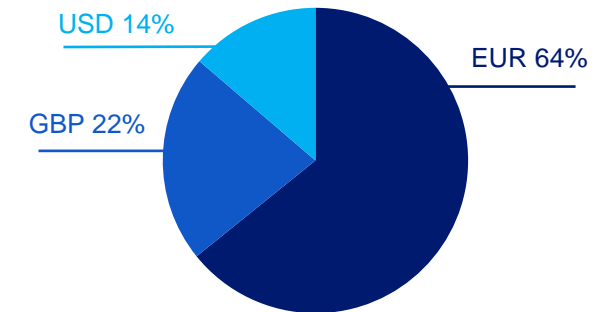
## Hybrid securities stock at 31 December 2024

Total amount: €10.0bn<sup>(1)</sup>

Average tenor: 4.87 years

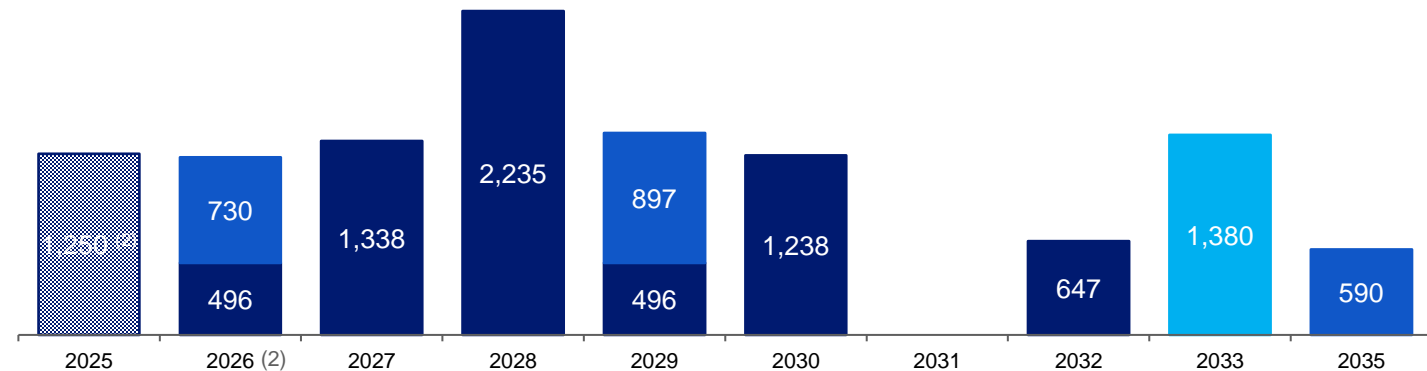
Average cost: 5.38%

## Hybrids stock breakdown by currency







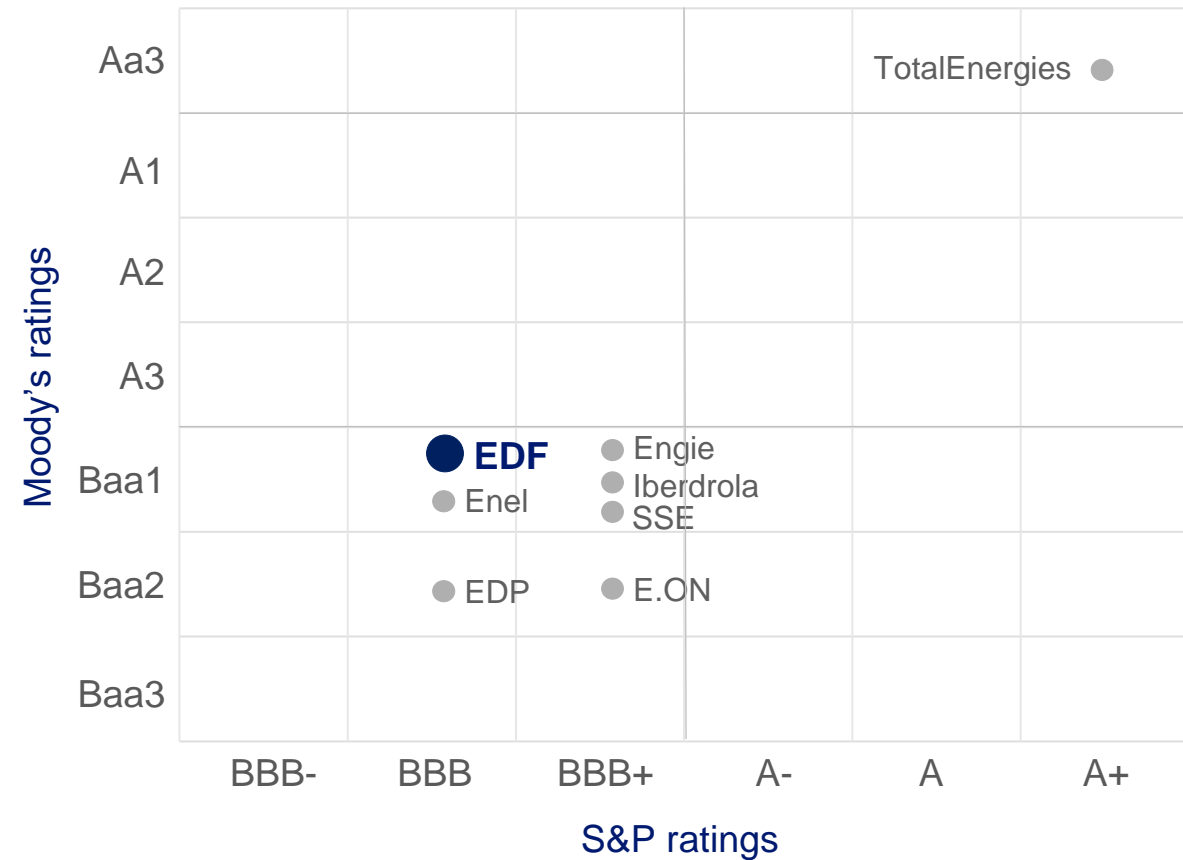
## Hybrid debt maturity schedule based on first call date

(in millions of euros)



# Comparative credit ratings<sup>(1)</sup>

Rating Agency		Latest changes
	<b>BBB</b> <i>Positive</i>	5 June 2024 <b>Outlook revised to Positive from Stable</b>
	<b>Baa1</b> <i>Stable</i>	1 June 2023 <b>Outlook revised to Stable from Negative</b> <i>(confirmed on 16 December 2024)</i>
	<b>BBB+</b> <i>Negative</i>	28 October 2024 <b>Outlook revised to Negative from Stable</b>



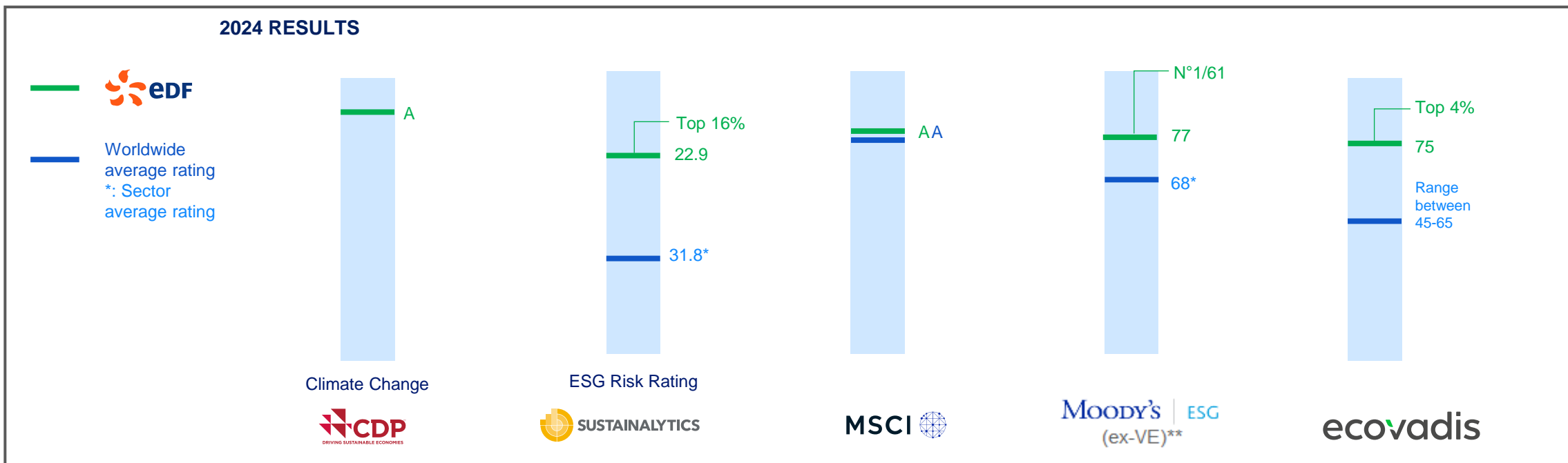
Sources: rating agencies as of 20/02/2025.

(1) See [EDF's ratings](#)

# ESG



# Non-financial ratings



**MAIN INTERNATIONAL COALITIONS of EDF**

# Environmental and social performance

## EDF's Trajectory 1.5°C validated by Moody's

Moody's **Net Zero Assessment** evaluates **EDF's emission reduction targets** to be consistent with the most ambitious Paris Agreement goals and **scores its ambition to 1.5 degree**

## EDF committed to responsible climate advocacy

EDF is **one of 41 corporate climate policy engagement 2024 leaders** according to InfluenceMap

## EDF's nature strategy

EDF's nature strategy has been validated within the **"It's Now for Nature" framework** managed by Business for Nature.

## EDF, sustainable company recognised worldwide

### EDF ranked:

- In the **top 10 among 300 companies in WBA's 2024 Urban Benchmark**, which assesses how major companies are helping to make cities more inclusive, sustainable and resilient.
- **6<sup>th</sup> at World's Best Companies** of 2024 by **Time** newspaper. This benchmark identifies the best companies changing the world (over 1,000 companies)
- EDF is the **preferred company** of young professionals with 2/3 years of higher education, and ranks **5<sup>th</sup>** among students with 2/3 years of higher education (Universum)

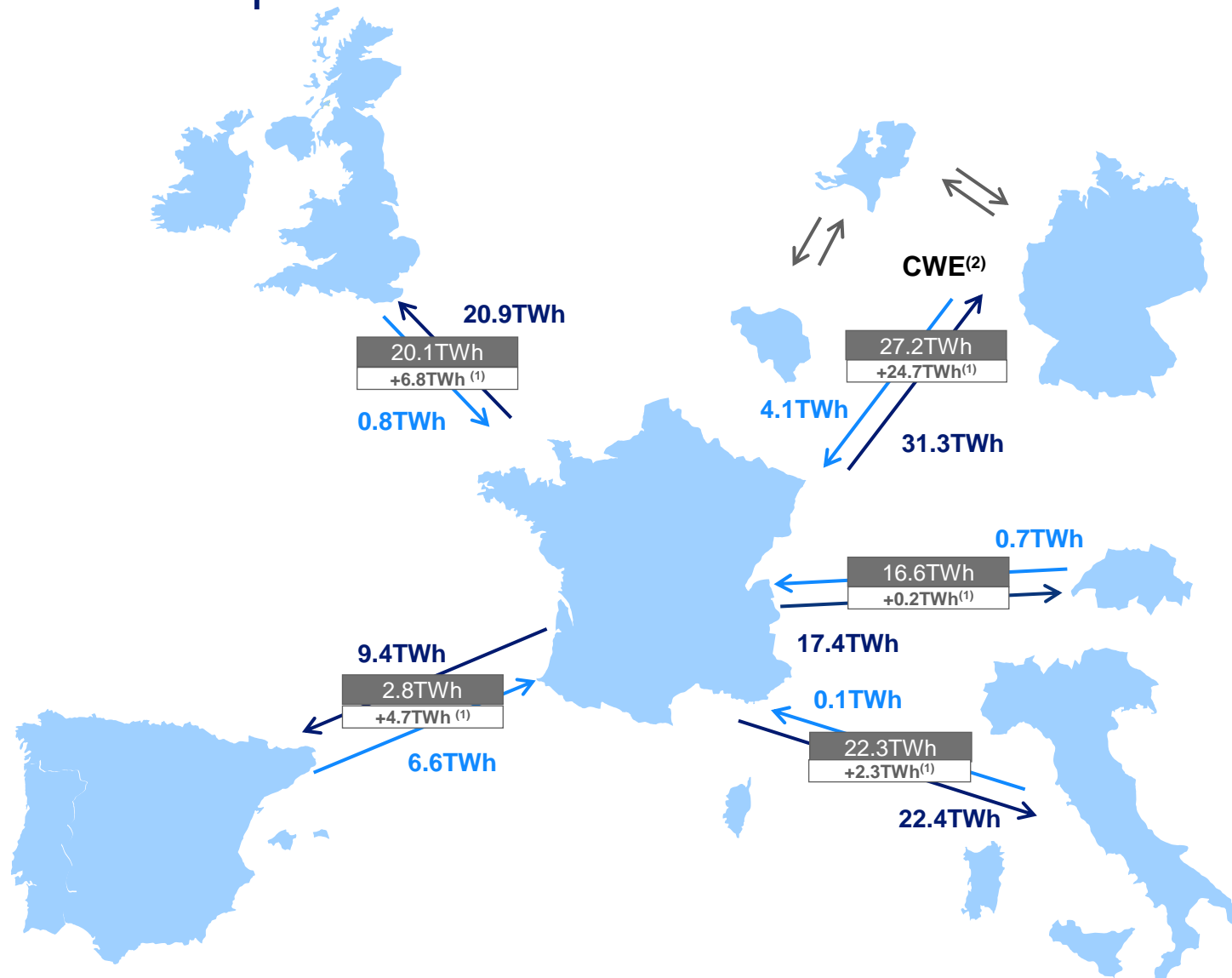




# Market data



# France export balance in 2024



**Export balance France: 89.0TWh**  
(balance in 2023: 50.3TWh)

**Exports: 101.2TWh** (74.8TWh in 2023)  
**Imports: 12.2TWh** (24.5TWh in 2023)

The rise in electricity generation to 536.5TWh and the level in demand at 437.2TWh led to higher exports (+35% vs 2023) and lower imports (-50% vs 2023)

NB: Data extracted the 02/01/2025 – source: RTE.

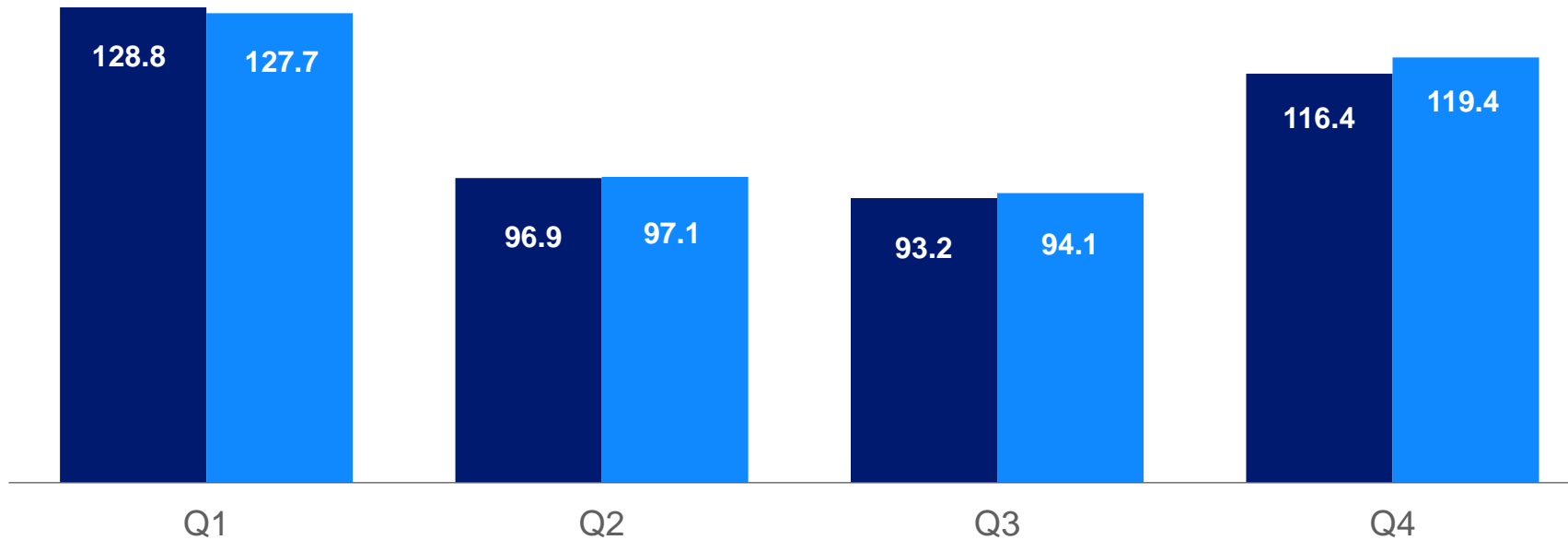
- (1) Variation export balance vs 2023
- (2) Flow-based coupling mechanism since 21.05.2015 for CWE (France, Benelux, Germany)

# Electricity consumption in France<sup>(1)</sup> well behind the pre-Covid crisis level

2023

2024

(In TWh)



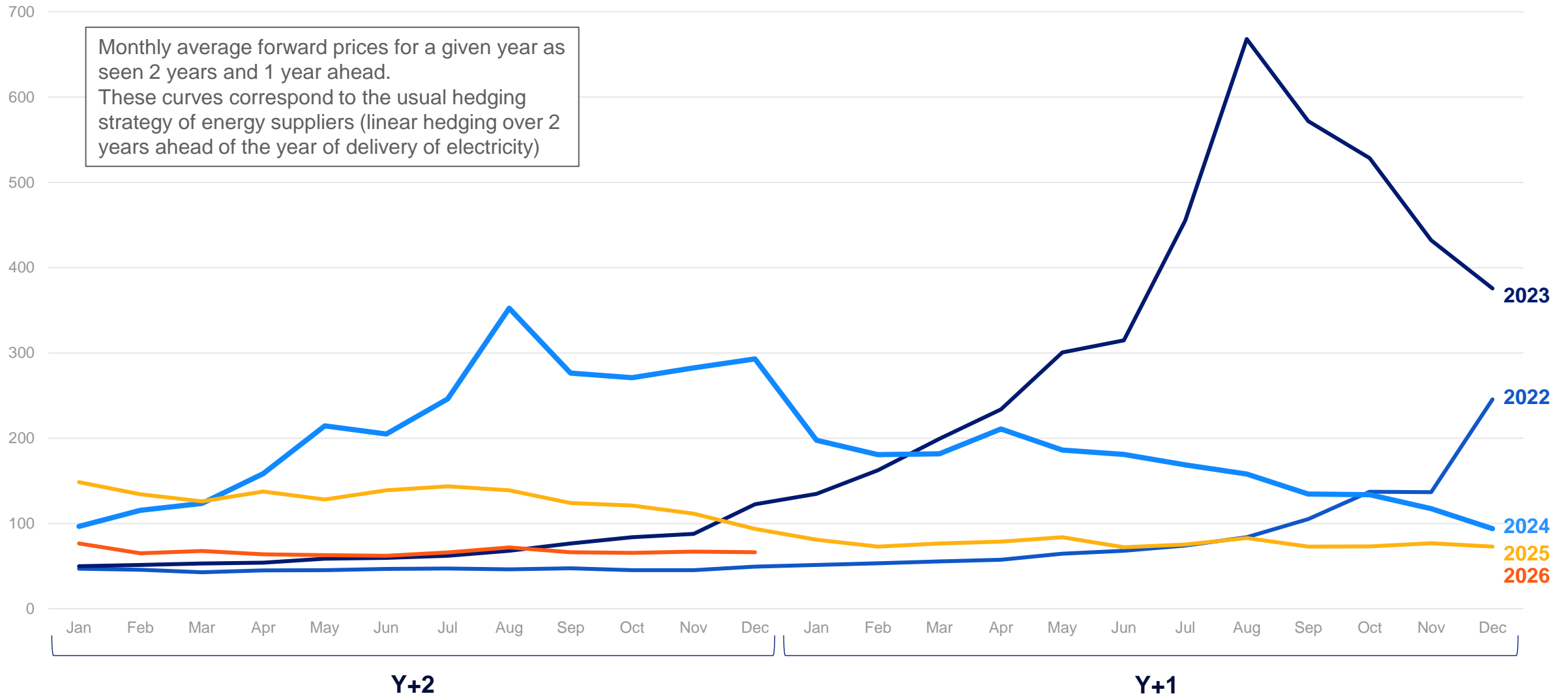
Electricity consumption  
in France in 2024:  
**438.3TWh**  
(vs 435.2 in 2023)

(1) Data unadjusted from weather effect, 29<sup>th</sup> February and interruptibility.

(2) Source: RTE (data as of 21 January 2025 subject to subsequent updates)

# Y+2 & Y+1 electricity forward prices in France for delivery years 2022 to 2026

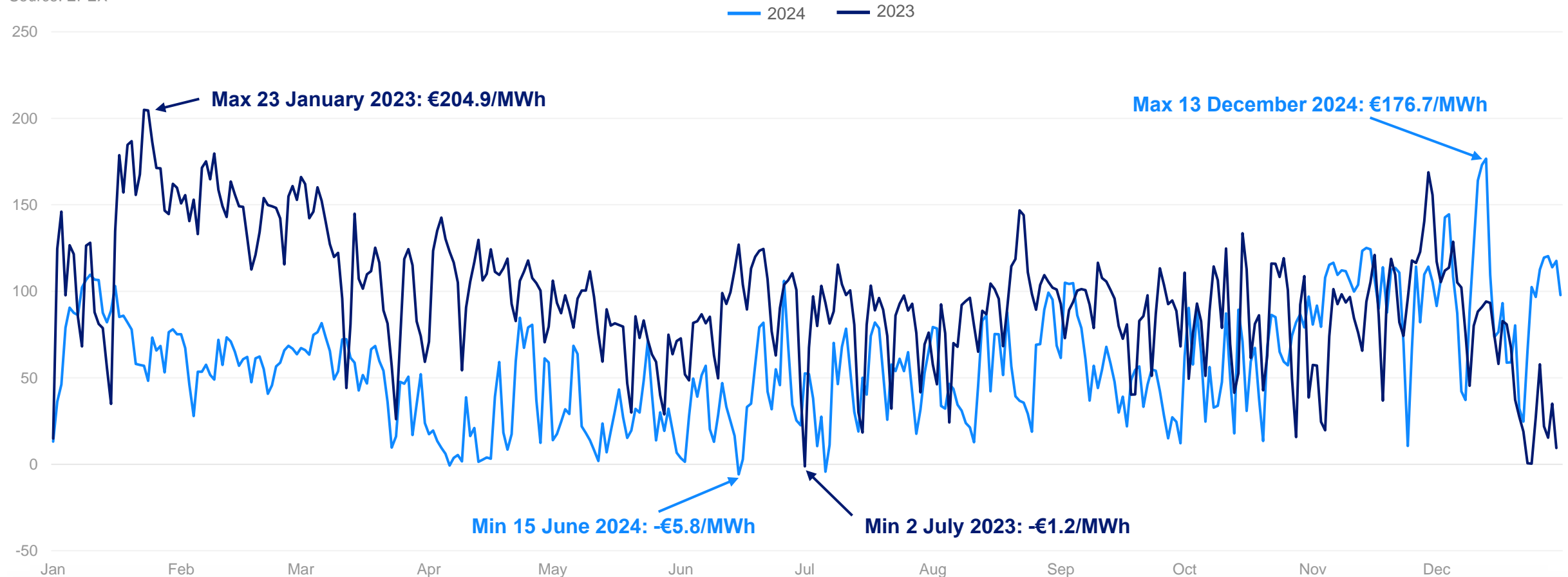
(in €/MWh)



# France: baseload electricity daily spot prices

(daily average in €/MWh)

Source: EPEX



Spot electricity prices in France averaged €57.7/MWh base load, down by 40.4% vs 2023 explained by the increase by 13% of nuclear output and by 27% of hydropower output.



# Annual results *2024*

