2024 MANAGEMENT REPORT AND ANNUAL CONSOLIDATED FINANCIAL STATEMENTS

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1 ENGIE FULL-YEAR 2024 RESULTS

ENGIE full-year financial results

Another year of strong operational and financial performance
Proposed dividend of €1.48 per share for 2024

Business highlights

- Record level of activity in Renewables with 4.2GW added in 2024, bringing total capacity to 46GW[1]
- Acceleration in battery storage with more than 5GW of capacity in operation or under construction at December 31, 2024
- Expansion in power transmission with the award of close to 1,200km in Brazil and Peru
- Continuous progress in our Net Zero 2045 trajectory with a 55% reduction in GHG emissions from energy production compared to 2017 to 48Mt in 2024
  Approval by the European Commission of the final agreement on Belgian nuclear

Financial performance

- High end of the 2024 Guidance achieved with NRIgs[2] of €5.5 billion, an organic increase of 3.4%
- EBIT excluding nuclear of €8.9 billion, down 5.6% organically versus a high 2023 basis for comparison
- Strong CFFO[3] generation at €13.1 billion
- Maintaining a solid balance sheet with economic net debt to EBITDA ratio at 3.1x stable vs. end-2023
- Net financial debt and economic net debt at €33.2 billion and €47.9 billion respectively
- Proposed increased dividend of €1.48 for 2024, corresponding to a pay-out ratio of 65%

1.1 Key financial figures at December 31, 2024

In billions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported basis)	% change (organic basis)
Revenues	73.8	82.6	-10.6%	-10.7%
EBITDA (excluding Nuclear)	13.4	13.7	-2.5%	-2.0%
EBITDA	15.6	15.0	+3.7%	+4.2%
EBIT (excluding Nuclear)	8.9	9.5	-6.2%	-5.6%
Net recurring income of continuing activities, Group share	5.5	5.4	+3.1%	+3.4%
Net income, Group share	4.1	2.2	+85.9%	
CAPEX (1)	10.0	10.6	-6.1%	
Cash Flow From Operations (CFFO)	13.1	13.1	-0.1%	
Net financial debt	33.2	+€3.7 billion versus Dec. 31, 2023		
Economic net debt	47.9	-€1,4 billion versus Dec. 31, 2023		
Net financial debt	3.1x	stable compared to Dec. 31, 2023		

(1) Net of DBSO sell down (Develop, Build, Share & Operate), US tax equity proceeds, including net debt acquired.

1.2 2025 – 2027 outlook and guidance

The objectives for the financial years ending December 31, 2025, 2026 and 2027 presented below are based on data, assumptions and estimates considered reasonable by the Group at the date of publication of this document.

These data and assumptions may change or be modified as a result of uncertainties relating to the financial, accounting, competitive, regulatory and tax environments, or other factors of which the Group is not aware at the date of registration

(1) Total capacity including a 0.8GW adjustment related to a change in definition.
(2) Net recurring income Group share.
(3) Cash Flow From Operations: Free Cash Flow before maintenance Capex and nuclear phase-out expenses.

of this document. Furthermore, the realization of forecasts depends on the success of the Group's strategy. Consequently, the Group neither undertakes nor gives any guarantee that the forecasts set out in this section will be achieved.

The objectives presented below and underlying assumptions have also been established in accordance with the provisions of Delegated Regulation (EU) No. 2019/980, a supplement to Regulation (EU) No. 2017/1129, and the ESMA recommendations on forecasts.

These objectives result from the budget and medium-term plan processes described in Note 13 to the consolidated financial statements; they have been established on a basis comparable to historical financial information and in accordance with the accounting policies applied to the Group's consolidated financial statements for the year ended December 31, 2024 described in the consolidated financial statements.

1.2.1. 2025 – 2027 outlook and guidance

In a context of reduced volatility and lower energy prices, and given a better-than-expected net recurring financial result for the full-year, ENGIE upgrades its net recurring income Group share target for 2025 to a range of €4.4-5.0bn, compared to the previous range of €3.9-4.5bn. EBIT excluding Nuclear is now expected to be within an indicative range of €8.0-9.0bn (compared to the previous range of €7.9-8.9bn).

2027: a year of growth for ENGIE

Following the significant reduction in the contribution of nuclear activity in 2026, the Group anticipates growth in its net recurring income (Group share) in 2027, reaching a range of €4.4-5.0bn.

ENGIE's outlook for 2025 – 2027 is as follows:

In billions of euros	2025	2026	2027
EBIT excluding Nuclear (new)	**8.0 - 9.0**	**8.2 - 9.2**	**9.0 - 10.0**
EBIT excluding Nuclear (previous)	7.9 - 8.9	8.2 - 9.2	n/a
NRIgs guidance (new)	**4.4 - 5.0**	**4.2 - 4.8**	**4.4 - 5.0**
NRIgs guidance (previous)	3.9 - 4.5	3.7 - 4.3	n/a

ENGIE is committed to a strong investment grade credit rating and continues to target a ratio below or equal to 4.0x economic net debt to EBITDA over the long-term.

1.2.2. Assumptions

The assumptions used are as follows:

- Guidance and indications based on continuing operations;
- No change in accounting policies;
- No major regulatory or macro-economic changes;
- Tax based on current legal texts and additional contingencies;
- Taking into account updated regulatory framework for 2024-2028 on French networks;
- Full pass through of supply costs in French B2C retail tariffs;
- Average temperature in France;
- Average hydro, wind, and solar production;
  - Average forex: €/USD: 1.05 – 1.07 – 1.09 for 2025-26-27,
  - €/BRL: 6.38 over 2025-27;
- Belgian nuclear availability: 81% for 2025 (reactors availabilities as published on REMIT as of 01/01/2025, excluding LTO);
- Nuclear phase-out: Doel 1, 2 and 4, Tihange 1 and 3 from Feb 2025 to Dec 2025, LTO start: Tihange 3 on September 1, 2025 / Doel 4 on November 1, 2025;

- Contingencies on Belgian operations - €0.15 billion for 2025;
- Market commodity prices as of December 31, 2024;
- Recurring net financial costs of €2.1 - 2.5 billion per year;
- Recurring effective tax rate: 22-25% over 2025-27.

1.3 Proposed dividend of €1.48 per share for 2024

For 2024, the Board has proposed a payout ratio of 65% of net recurring income Group share. This translates to a dividend of €1.48 per share, which will be proposed for shareholder approval at the Annual General Meeting on April 24, 2025.

1.4 Successful roll-out of the strategic plan

Renewables

The Group's installed renewable capacity increased by a record of 4.2GW in 2024, with 1.9GW added in Latin America, 0.9GW in Europe, 0.9GW in the United States and 0.5GW in AMEA. As of December 31, 2024, the Group has 6.8GW of capacity under construction (75 projects) of which 1.7GW partially commissioned. ENGIE's total installed capacity of Renewables is now at 46GW1.

The Group signed more than 85 power purchase agreements (PPAs) in 2024 for a total of 4.3GW (+59% vs. 2023), of which 3.6GW have a duration of more than five years. This performance includes new contracts with Meta in the United States, the expansion of the global partnership with Google, including new developments in Belgium and the United States, as well as agreements with other companies in the Tech sector, both in the US and in Europe.

During the fourth quarter 2024, ENGIE, through Ocean Winds, its 50-50 joint venture with EDP Renewables dedicated to offshore wind, won a 250MW floating project from the French Ministry of Industry and Energy. The project is located off the coast of Narbonne, in the Mediterranean Sea.

Networks - Renewable gas

After winning a new concession in the third quarter for the construction and operation of approximately 1,000km of electricity transmission lines and four substations in Brazil, ENGIE was awarded a contract for the construction of 170km across three projects in Peru. This also includes the construction of three new substations and the expansion of four existing stations.

The development of biomethane continues in France, with an annual production capacity reaching 13TWh connected to ENGIE's networks, an increase of 20% compared with December 31, 2023. ENGIE also continued its expansion in biomethane in the United Kingdom, Belgium, and the Netherlands.

Batteries

As of 31 December 2024, ENGIE had 2.6GW of installed battery capacity worldwide and 2.6GW under construction. Since the beginning of 2024, the Group has added approximately 1.0GW of new capacity to its operational portfolio in North America, due in particular to the successful integration of Broad Reach Power.

Energy Solutions

Energy Solutions has accelerated the development of District heating and cooling networks, securing over €5 billion in additional order intake, achieving a record average renewable energy rate of 90%, while renewing all expiring concessions in France, and acquiring a portfolio of projects in Spain.

In the industrial market, the development of decarbonized energy production continues, with more than 20 new on-site production units secured in 2024 across Europe and Southeast Asia.

Disciplined capital allocation

In 2024, total capex amounted to €10.0 billion. Growth Capex came to €7.3 billion, of which 84% in Renewables, Energy Solutions and Flex Gen.

Performance plan

The results of the performance plan contributed €231 million in 2024.

1.5 Nuclear in Belgium

On February 21, 2025, the European Commission approved under EU state aid rules the agreement between ENGIE and the Belgian government, announced on December 13, 2023, relating to the extension of the operation of the Tihange 3 and Doel 4 nuclear reactors and the obligations relating to nuclear waste. Pursuant thereto, ENGIE and the Belgian government are now concluding together various procedural steps with a view to closing the transaction on or before March 14, 2025.

1.6 Success of the Employee Shareholding Operation

On November 7, ENGIE successfully completed its employee shareholding operation, LINK 2024, with nearly 30,000 subscribing employees across about 20 countries for a total amount of €170 million (13.3 million shares). Thanks to LINK 2024, the share of ENGIE's capital held by employees now represents nearly 4%.

1.7 Strong progress on key ESG targets

In 2024, greenhouse gas (GHG) emissions related to energy production amounted to 48 million tonnes, a significant decrease of 55% compared to 2017. In addition to the structural levers of decarbonisation, this better-than-expected performance is also the result of a lower utilisation rate of combined cycle gas plants in Europe, which are increasingly used as a flexibility asset only running at peak hours.

The share of renewable energy in ENGIE's total power generation capacity increased from 41% at the end of 2023 to 43% at the end of December 2024, mainly due to the addition of 4.2GW of renewable capacity throughout the year.

Regarding gender diversity target, ENGIE had 32% women in management positions at the end of 2024, another increase compared to the previous year. The Group continues to implement action plans to achieve the objective of managerial parity of 40% to 60% between women and men.

1.8 Health and safety

In 2024, ENGIE continued the implementation of its global transformation plan, ENGIE One Safety, aimed at sustainably eliminating serious and fatal accidents. The plan for 2024 focused on strengthening the health and safety culture and emphasizing the importance of managerial practices in the field, alongside our employees and subcontractors. Despite the efforts dedicated to this transformation plan, three people lost their lives while working for the Group or its subcontractors in 2024. Achieving the zero-fatality goal will be at the heart of our priorities for 2025. In addition, the Group continued to improve the prevention of lost-time accidents, as the frequency rate of these accidents fell from 1.8 at the end of 2023 to 1.7 at the end of 2024.

1.9 Full-year 2024 financial review

1.9.3. Revenues

Contributive **Revenues,** after elimination of intercompany operations, at €73.8 billion was down 10.6% on a gross basis and down 10.7% on an organic basis.

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported basis)	% change (organic basis)
Renewables	5,467	5,512	-0.8%	-0.7%
Networks	7,231	6,873	+5.2%	+5.4%
Energy Solutions	9,853	10,405	-5.3%	-5.2%
FlexGen	4,937	5,264	-6.2%	-6.1%
Retail	14,070	16,443	-14.4%	-14.3%
Others	32,187	37,949	-15.2%	-15.3%
of which GEMS	*31,377*	*37,221*	*-15.7%*	*-15.9%*
TOTAL REVENUES (excluding Nuclear)	**73,744**	**82,447**	**-10.6%**	**-10.5%**
Nuclear	68	118	-42.8%	-42.8%
TOTAL REVENUES	**73,812**	**82,565**	**-10.6%**	**-10.7%**

1.9.4. EBITDA

EBITDA (ex. nuclear) at €13.4 billion, was down 2.5% on a gross basis and down 2.0% on an organic basis.

1.9.5. EBIT

EBIT (ex. nuclear) at €8.9 billion was down 6.2% on a gross basis and 5.6% on an organic basis.

- Foreign exchange: a net effect of -€82 million mainly driven by the depreciation of the Brazilian real, partly offset by the appreciation of the sterling pound.
- Scope: net effect of +€10 million.
- French temperatures: compared to the average, the temperature effect was a negative €93 million, generating a positive year-on-year variation of €28 million compared to FY 2023 across Networks, Retail and GEMS.

EBIT contribution by activity: decline due to GEMS partly offset by Renewables, Networks and Retail

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported basis)	% change (organic basis)	o/w temp. effect (France) vs. 2023
Renewables	2,198	2,005	+9.6%	+7.3%	
Networks	2,460	2,265	+8.6%	+15.3%	(63)
Energy Solutions	356	367	-3.0%	-3.1%	
FlexGen	1,467	1,513	-3.0%	-3.4%	
Retail	695	569	+22.0%	+22.5%	(22)
Others	1,718	2,761	-37.8%	-37.9%	(7)
of which GEMS	*2,382*	*3,551*	*-32.9%*	*-33.0%*	*(7)*
TOTAL EBIT (excluding Nuclear)	**8,893**	**9,479**	**-6.2%**	**-5.6%**	**(93)**
Nuclear	1,448	605	+139.4%	+139.4%	
TOTAL EBIT	**10,341**	**10,084**	**+2.5%**	**+3.3%**	**(93)**

Activity/geography matrix

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2024
Renewables	594	279	913	352	93	(33)	**2,198**
Networks	1,520	201	761	(4)	-	(18)	**2,460**
Energy Solutions	315	174	(2)	(158)	67	(40)	**356**
FlexGen	366	382	294	45	419	(38)	**1,467**
Retail	462	244	-	-	24	(36)	**695**
Others	-	(11)	-	(3)	-	1,732	**1,718**
Of which GEMS	-	-	-	-	-	*2,382*	***2,382***
TOTAL EBIT (excluding Nuclear)	**3,258**	**1,270**	**1,965**	**231**	**604**	**1,565**	**8,893**
Nuclear	423	1,025	-	-	-	-	**1,448**
TOTAL EBIT	**3,681**	**2,295**	**1,965**	**231**	**604**	**1,565**	**10,341**

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2023 (1)
Renewables	574	282	925	216	34	(27)	**2,005**
Networks	1,156	324	800	(5)	-	(9)	**2,265**
Energy Solutions	343	190	(1)	(142)	24	(46)	**367**
FlexGen	188	703	202	35	419	(34)	**1,513**
Retail	380	145	-	-	64	(20)	**569**
Others	-	1	1	(9)	-	2,767	**2,761**
Of which GEMS	-	-	-	-	-	*3,551*	***3,551***
TOTAL EBIT (excluding Nuclear)	**2,641**	**1,644**	**1,927**	**96**	**541**	**2,631**	**9,479**
Nuclear	324	281	-	-	-	-	**605**
TOTAL EBIT	**2,964**	**1,925**	**1,927**	**96**	**541**	**2,631**	**10,084**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2024. The internal reclassifications are not material and concern the transfer of Tractebel from Energy Solutions to Others. Comparative data at December 31, 2023 have been restated accordingly.

Renewables: strong growth driven by very good hydrology in Europe and the contribution of newly commissioned capacity

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported basis)	% change (organic basis)
EBIT	2,198	2,005	+9.6%	+7.3%
Total CAPEX	4,221	4,130	+2.2%	
CNR achieved prices (€/MWh) (1)	104	100	+4.0%	
Operational KPIs				
Capacity additions (GW at 100%)	4.2	3.9	0.3	
Hydro volumes France (TWh at 100%)	18.3	14.6	3.8	

(1) Before hydro tax on CNR.

Renewables reported 7.3% organic EBIT growth, driven by exceptional hydrological conditions in France and Portugal throughout the year, as well as a strong contribution from newly commissioned capacity, notably in the United States, Latin America, and Europe. These positive elements offset the decline in prices in Europe, the CNR tax in France, the non-renewal of a positive one-off in Latam in 2023, and the impact of the decline in DBSO margins in 2024.

Networks: strong growth driven by tariffs in Europe

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported basis)	% change (organic basis)
EBITDA	4,362	4,151	+5.1%	+8.5%
EBIT	2,460	2,265	+8.6%	+15.3%
Total CAPEX	2,343	2,173	+7.8%	
Operational KPIs				
Normative temp. effect (EBIT - France)	(63)	(81)	18	

Networks EBIT was up 15.3% on an organic basis driven by tariff increases in France and Romania as well as by the strong performance of gas and power assets in Latin America. These elements more than offset the lower revenues from capacity subscribed for gas transit between France and Germany that were particularly high in 2023 as well as the decrease in volatility on the wholesale markets after particularly favourable conditions for storage activities in Europe in 2023.

Energy Solutions: EBIT contribution hit by underperformance of contracts in the US

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported basis)	% change (organic basis)
Revenues	9,853	10,045	-5.3%	-5.2%
EBIT	356	367	-3.0%	-3.1%
Total CAPEX	1,076	1,086	-1.2%	
Operational KPIs				
Distrib. Infra installed cap. (GW)	25.7	25.3	0.4	
EBIT margin (excluding one-off)	+5.3%	+5.3%	-	
EBIT margin	+3.6%	+3.5%	10 bps	
Backlog - French concessions (bn€)	21.5	21.3	0.2	

The Energy Solutions' activities recorded an organic decrease in their EBIT of 3.1%, due to the decline in margins of cogeneration installations and gas prices. They were also penalized by the decrease in DBSO margins of decentralized solar in the United States. However, the improved performance of energy performance management activities and the contribution of new investments largely offset these effects. The year 2024 was also marked by a comprehensive review of the contract portfolio in the United States, leading to the recognition of provisions in the third quarter of 2024 (€163 million), mainly related to the construction of two cogeneration units. These provisions are comparable to those of 2023 (€150 million), which also included the recognition of a deferred tax liability on Tabreed (€38 million).

FlexGen: higher spreads captured in Europe offset by the impact of inframarginal tax and the normalisation of market conditions

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported basis)	% change (organic basis)
EBITDA	1,878	1,929	-2.7%	-3.6%
EBIT	1,467	1,513	-3.0%	-3.4%
Operational KPIs				
Average captured CSS Europe (€/MWh)	43	37	+16.2%	
Capacity (GW at 100%)	56.2	59.0	-4,7%	

Flex Gen EBIT experienced a slight organic decline of 3.4%, mainly due to the impact of the inframarginal tax in France and the decrease in CCGTs' load factors in Europe. By contrast, EBIT benefited from an increase in captured spreads in Europe, driven by the Group's hedging strategy and its ability to capture value from flexibility and volatility. Additionally, margins improved in Chile due to lower supply costs, supported by very good hydrology conditions.

Retail: good performance due to a one-off timing effect

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported basis)	% change (organic basis)
EBITDA	938	821	+14.2%	+14.6%
EBIT	695	569	+22.0%	+22.5%
Normative temp. effect (EBIT - France)	(22)	(29)	7	

The EBIT of Retail activities recorded an organic increase of 22.5%, primarily due to a one-off timing effect in energy sourcing and, to a lesser extent, colder temperatures combined with effective hedging portfolio optimization compared with 2023. This more than offset lower volumes resulting from continued sobriety effect and the impact of exceptional measures taken to support precarious clients.

Others: lower contribution from GEMS compared to a high level in 2023

GEMS EBIT amounted to €2,382 million, compared to €3,551 million in 2023. Excluding non-recurring effects, EBIT was supported by strong momentum in Client Risk Management & Supply activities, driven by historically favorable contract conditions materializing at delivery date. EBIT declined versus 2023 due to the normalization of market conditions and a decrease in inherent volatility.

EBIT was furthermore supported by several non-recurrent items including market reserve releases in 2024, albeit at a lower level than in 2023, as market conditions normalization continued.

Nuclear: strong growth mainly due to ending of infra-marginal tax in Belgium and higher captured prices

En millions d'+euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported basis)	% change (organic basis)
EBITDA	2,174	1,285	+69.2%	+69.2%
EBIT	1,448	605	+139.4%	+139.4%
Total Capex	244	174	+40.0%	
Operational KPIs				
Output (BE + FR, @ share, TWh)	31.5	32.0	-1.6%	
Availability (Belgium at 100%)	+86,2%	+88,8%	260 bps	

Nuclear reported €1,448m of EBIT in 2024 compared with €605m in 2023. This sharp rise is mainly due to the absence of inframarginal tax in Belgium, which ended in June 2023, as well as to higher captured prices. This positive effects more than offset the impact of the closure of the Tihange 2 reactor in February 2023 and a lower availability rate (86.2%) mainly due to the extension of the shutdown of the Doel 4 reactor.

1.9.6. Comparable basis organic growth analysis

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported/organic basis)
Revenues	**73,812**	**82,565**	**-10.6%**
Scope effect	(201)	(91)	-
Exchange rate effect	-	(80)	-
Comparable data	**73,611**	**82,396**	**-10.7%**

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported/organic basis)
EBITDA	**15,566**	**15,017**	**+3.7%**
Scope effect	(170)	(146)	-
Exchange rate effect	-	(95)	-
Comparable data	**15,396**	**14,777**	**+4.2%**

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported/organic basis)
EBIT	**10,341**	**10,084**	**+2.5%**
Scope effect	(152)	(142)	-
Exchange rate effect	-	(82)	-
Comparable data	**10,189**	**9,860**	**+3.3%**

The calculation of organic growth aims to present comparable data both in terms of the exchange rates used to convert the financial statements of foreign companies and in terms of contributing entities (consolidation method and contribution in terms of comparable number of months). Organic growth in percentage terms represents the ratio between the data for the current year (Y) and the previous year (Y-1) restated as follows:

- the Y-1 data are corrected by removing the contributions of entities transferred during the Y-1 period or prorata temporis for the number of months after the transfer in Y;

- the Y-1 data are converted at the exchange rate for the period Y;
- the Y data are corrected with the Y acquisition data or prorata temporis for the number of months prior to the Y-1 acquisition.

1.9.7. Other income statement items

The reconciliation between EBIT and Net income/(loss) is presented below:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	% change (reported basis)
EBIT	**10,341**	**10,084**	**+2.5%**
(+) Mark-to-Market on commodity contracts other than trading instruments	(309)	2,430	
(+) Non-recurring share in net income of equity method entities	(212)	(22)	
Current operating income including operating MtM and share in net income of equity method entities	**9,820**	**12,493**	**-21.4%**
Impairment losses	(709)	(1,318)	
Restructuring costs	(369)	(47)	
Changes in scope of consolidation	439	(85)	
Other non-recurring items	(151)	(4,945)	
Income/(loss) from operating activities	**9,030**	**6,098**	**+48.1%**
Net financial income/(loss)	(1,842)	(2,163)	
Income tax benefit/(expense)	(2,215)	(1,031)	
NET INCOME/(LOSS)	**4,973**	**2,903**	
Net recurring income/(loss), Group share	**5,531**	**5,366**	
Net recurring income/(loss) Group share per share	**2.25**	**2.18**	
Net income/(loss) Group share	**4,106**	**2,208**	
Non-controlling interests	**867**	**695**	

The reconciliation between Net recurring income/(loss) Group share and Net income/(loss) Group share is presented below:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Net recurring income/(loss), Group share	**5,531**	**5,366**
Impairment losses	(709)	(1,318)
Restructuring costs	(369)	(47)
Changes in scope of consolidation	439	(85)
Other non-recurring items	(151)	(4,945)
Mark-to-Market on commodity contracts other than trading instruments	(309)	2,430
Non recurring net financial income/(loss)	66	(189)
Non recurring income tax benefit/(expense)	(181)	872
Other	(211)	123
Net income/(loss) Group share	**4,106**	**2,208**

Net income from operating activities amounted to €9,030 million. This year-on-year increase mainly reflects recognition in 2023of the impact resulting from the review of nuclear provisions and lower net impairment losses during 2024, partly offset by the negative impact in mark-to-market on commodity contracts not qualifying as hedges.

In 2024, net income from operating activities was affected by:

- net impairment losses of €709 million (compared with net impairment losses of €1,318 million in 2023), mainly due to the effects of disposals, either in progress or finalized, as part of the Group's geographic or business refocus: two gas-fired power plants in Pakistan, a coal-fired power plant in Morocco and entities holding assets supplying solar solutions and mini-grids in Africa (*see Note 9.1 "Impairment losses");*
- restructuring costs of €369 million (compared with €47 million in 2023) (*see Note 9.2 "Restructuring"*);
- positive €439 million in "Changes in scope of consolidation" (compared with a negative €85 million in 2023), mainly related to the partial disposal of a 15% stake in Transportadora Associada de Gás S.A. ("TAG") in Brazil and the partial disposal of a shareholding in Mayakan in Mexico (*see Note 9.3 "Changes in scope of consolidation"*);
- other non-recurring items representing a negative €151 million, compared with a negative €4,945 million in 2023 (*see Note 9.4 "Other non-recurring items"*).

Net financial loss amounted to €1,842 million in 2024, compared with €2,163 million in 2023 (*see Note 10 "Net financial income/(loss)"*).

Adjusted for non-recurring items, net financial loss stood at €1,908 million in 2024, compared with €1,975 million in 2023. This €67 million improvement stems from a €240 million increase in other financial income, partly offset by a €173 million rise in the cost of net debt.

The **income tax expense** for 2024 amounted to €2,215 million (versus an income tax expense of €1,031 million in 2023).

Adjusted for these non-recurring items, the recurring effective tax rate was 27.6% at December 31, 2024 compared with 27.1% at December 31, 2023, mainly due to:

- the change in the tax situation in certain countries that only partially recognized their deferred tax assets in 2024 and/or 2023, notably Belgium, Mexico, Germany and the Netherlands (approximately +0.9 points);
- changes in the Group tax rate mix by country (approximately -0.5 points).

Net recurring income Group share came to €5,531 million, slightly up compared to 2023 (€5,366 million).

Net income Group share amounted to €4,106 million, compared with €2,208 million in 2023, mainly impacted by the change in income from operating activities.

Net income attributable to non-controlling interests amounted to €867 million, up €172 million compared to 2023.

2 CHANGES IN NET FINANCIAL DEBT

Net financial debt stood at €33.2 billion, up €3.7 billion compared to December 31, 2023.

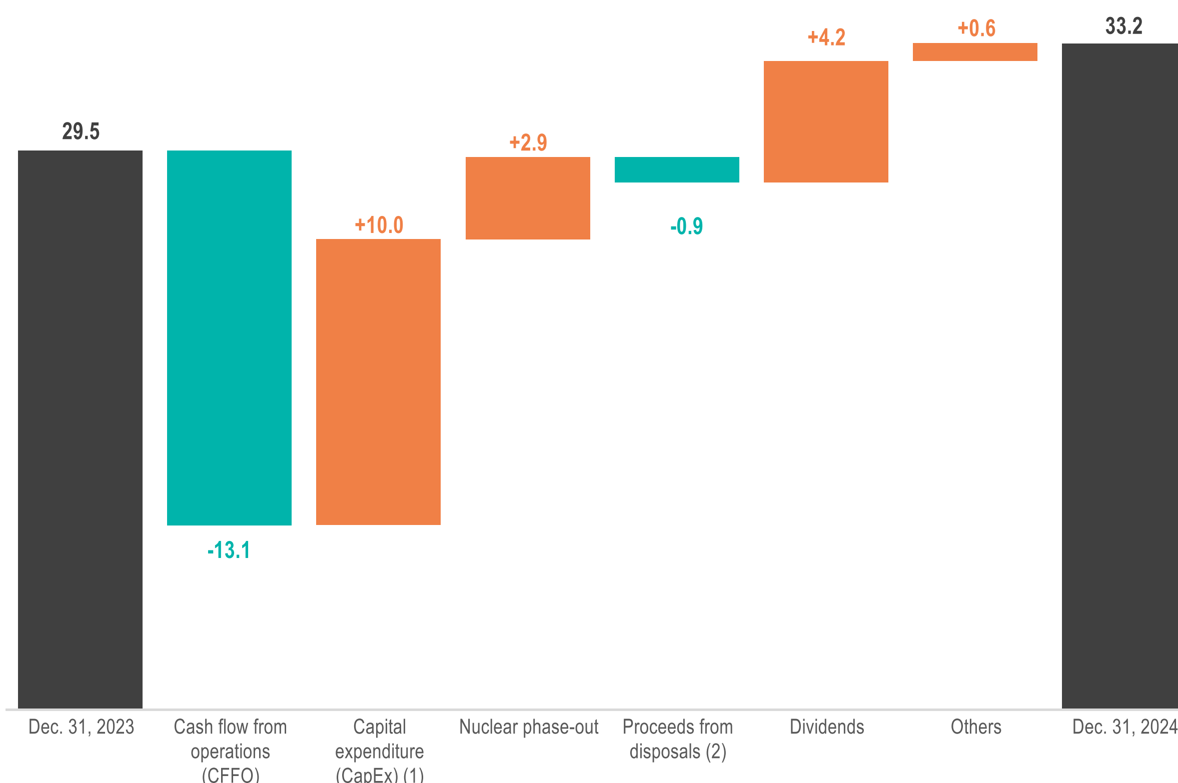
This increase was mainly driven by:

- capital expenditure of €10.0 billion;
- dividends paid to ENGIE SA shareholders and to non-controlling interests of €4.1 billion;
- Belgian nuclear funding and expenses of €2.9 billion.

These elements were mainly offset by Cash Flow From Operations of €13.1 billion.

Changes in net financial debt break down as follows:

In billions of euros



(1) *Capital expenditure net of DBSO and tax equity proceeds, as well as impacts of acquisitions.*
(2) *Including scope effects relating to disposals and acquisitions.*

The **net financial debt to EBITDA ratio** stood at 2.1x, up 0.2x compared to December 31,2023.
The average cost of gross debt was 4.59%.

In millions of euros	Dec 31, 2024	Dec 31, 2023
Net financial debt	33,223	29,493
EBITDA	15,566	15,017
NET DEBT/EBITDA RATIO	**2.13**	**1.96**

Excluding amortized cost but including the impact of foreign currency derivatives, at December 31, 2024, a total of 65% of net financial debt was denominated in euros, 18% in US dollars and 10% in Brazilian real.

Including the impact of financial instruments, 84% of net financial debt was at fixed rates.

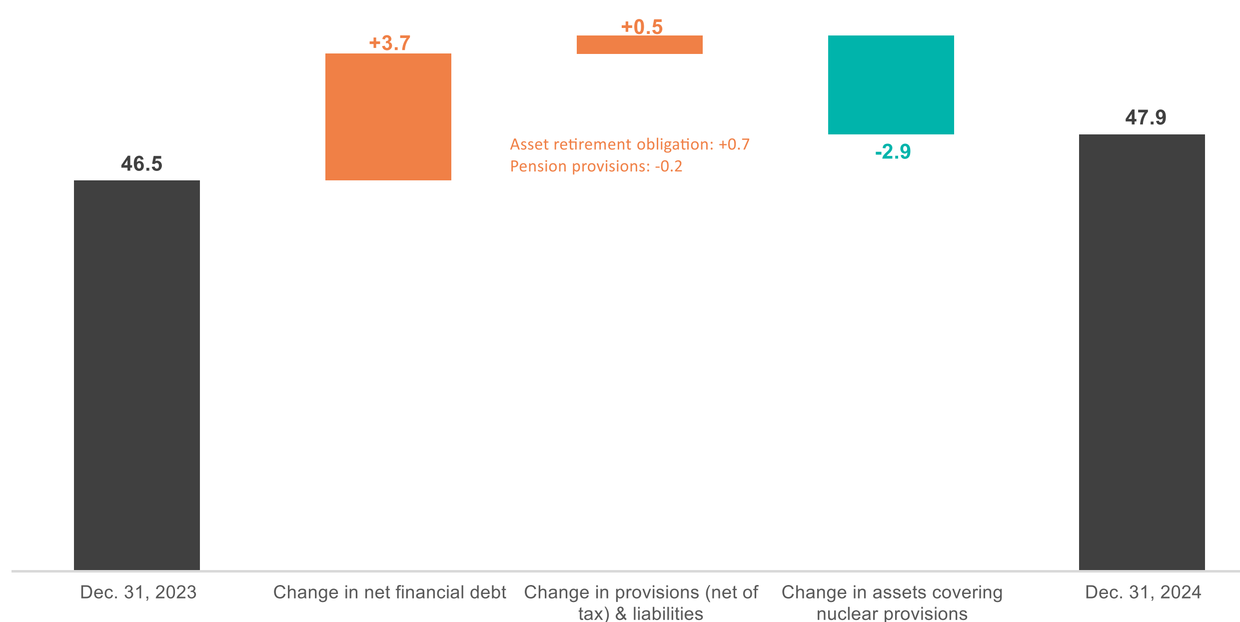
The average maturity of the Group's net financial debt is 13.0 years.

At December 31, 2024, the Group had total undrawn confirmed credit lines of €12.8 billion.

Economic net debt stood at €47.9 billion, up €1.4 billion compared to December 31, 2023.

Changes in economic net debt break down as follows:

In billions of euros



The **economic net debt to EBITDA** ratio stood at 3.1x, stable compared to December 31, 2023 and in line with the target ratio below or equal to 4.0x.

In millions of euros	Dec 31, 2024	Dec 31, 2023
Economic net debt	47,874	46,517
EBITDA	15,566	15,017
ECONOMIC NET DEBT/EBITDA RATIO	**3.08**	**3.10**

Rating

- S&P: BBB+ / A-2 with stable outlook
- Moody's: Baa1 / P-2 with stable outlook
- Fitch: BBB+ / F1 with stable outlook

2.1 Cash flow from operations (CFFO)

Cash Flow From Operations (CFFO) amounted to €13.1 billion in 2024, stable compared to a particularly high 2023.

Working Capital Requirements were negative at €0.2 billion, with an improvement year-on-year of €0.8 billion. Positive effects from net receivables (+€4.4 billion) and margin calls (+€0.8 billion) offset negative effects mainly related to gas withdrawal (-€1.9 billion), tariff shields (-€1.5 billion), unbilled energy volumes (-€1.0 billion) and impacts from nuclear (-€0.4 billion)

2.2 Liquidity

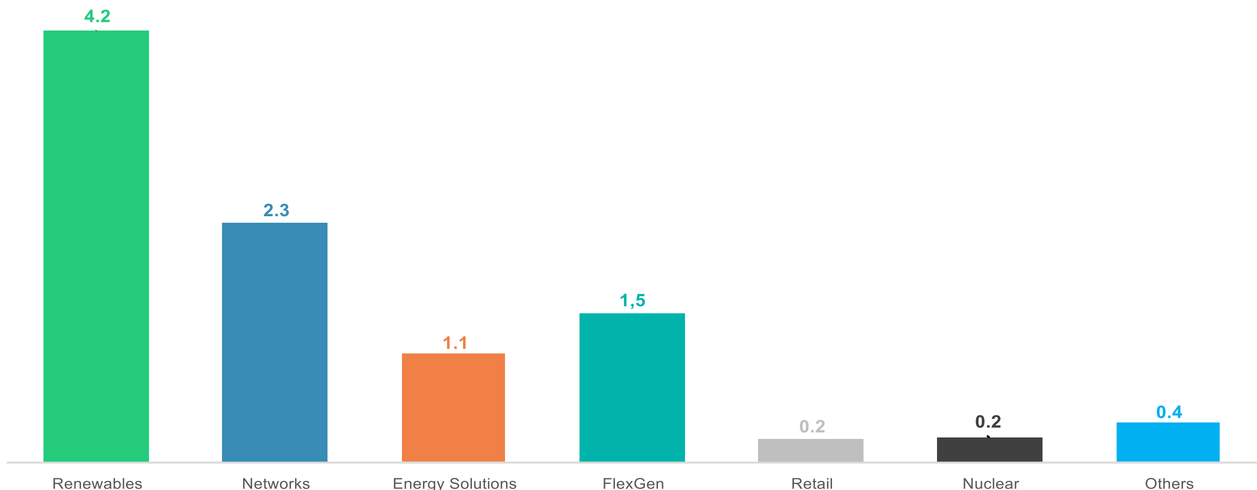
Liquidity stood at €25.5 billion as at 31 December 2024, including €17.7 billion of cash[(1)].

2.3 Capital expenditure (CapEx)

Total Capex amounted to €10.0 billion, including growth CapEx of €7.3 billion.

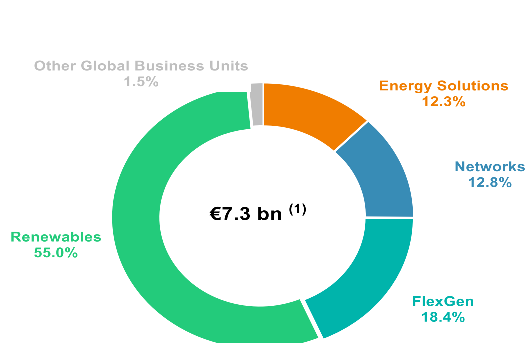
Capital expenditure (CapEx) by activity

In billions of euros



(1) Cash and cash equivalents plus liquid debt instruments held for cash investment purposes minus bank overdrafts.

Growth capital expenditure amounted to €7.3 billion, breaking down as follows by activity:



Main projects (€bn)	
Renewables	4.0
Brazil: Wind & Solar (Santo Agostinho, Assurua & Assu Sol)	1.1
Acquisitions Latam (Cruzeiro & Hat)	0.7
France Wind & Solar (mainly Engie Green)	0.5
Chile (Lomas de Taltal & Battery energy storage system projects)	0.4
Acquisitions Europe	0.3
Mexico (photovoltaic and wind projects)	0.2
Networks	0.9
French regulated infrastructures	0.4
AmericasTransmission Lines	0.2
Biomethane acquisitions	0.1
FlexGen	1.2
Broad Reach Power projects	0.7
Flemalle	0.2

(1) *Net of disposals under DBSO operations, excluding Corporate, and tax equity proceeds.*

The **geography/activity matrix** for growth capital expenditure is presented below:

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2024
Renewables	500	420	2,610	188	288	5	**4,012**
Networks	439	167	330	-	-	-	**935**
Energy Solutions	495	191	33	98	50	28	**895**
FlexGen	33	536	104	680	(164)	2	**1,191**
Retail	44	42	-	-	9	56	**152**
Nuclear	-	78	-	-	-	-	**78**
Others	-	-	-	15	-	15	**30**
Of which GEMS	-	-	-	-	-	*89*	***89***
TOTAL GROWTH CAPEX	**1,511**	**1,434**	**3,076**	**981**	**183**	**106**	**7,292**

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2023 (1)
Renewables	323	481	1,103	994	1,059	7	**3,966**
Networks	501	164	174	-	-	-	**839**
Energy Solutions	477	155	1	136	79	48	**895**
FlexGen	42	299	14	1,492	(8)	5	**1,843**
Retail	53	45	-	-	8	54	**160**
Nuclear	-	19	-	-	-	-	**19**
Others	-	8	-	1	6	354	**370**
Of which GEMS	-	-	-	-	-	*82*	***82***
TOTAL GROWTH CAPEX	**1,395**	**1,171**	**1,291**	**2,622**	**1,144**	**468**	**8,091**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2024. The internal reclassifications are not material and concern the transfer of Tractebel from Energy Solutions to Others. Comparative data at December 31, 2023 have been restated accordingly.

3 OTHER ITEMS IN THE STATEMENT OF FINANCIAL POSITION

In millions of euros	Dec. 31, 2024	Dec. 31, 2023	Net change
Non-current assets	**110,185**	**119,023**	**(8,838)**
Of which goodwill	*13,291*	*12,864*	*427*
Of which property, plant and equipment and intangible assets, net	*72,352*	*66,399*	*5,953*
Of which derivative instruments	*6,689*	*12,764*	*(6,075)*
Of which investments in equity method entities	*8,373*	*9,213*	*(841)*
Current assets	**79,359**	**75,617**	**3,742**
Of which trade and other payables	*16,173*	*20,092*	*(3,919)*
Of which derivative instruments	*6,366*	*8,481*	*(2,115)*
Of which assets classified as held for sale	*1,248*	-	*1,248*
Total equity	**41,458**	**35,724**	**5,734**
Provisions	33,621	32,593	1,028
Borrowings	52,006	47,287	4,720
Derivative instruments	13,646	24,561	(10,915)
Other liabilities	48,812	54,475	(5,663)
Of which liabilities directly associated with assets classified as held for sale	*560*	-	*560*

The carrying amount of property, plant and equipment and intangible assets amounted to €72.4 billion, up €6.0 billion compared with December 31, 2023. This change is mainly due to capital expenditure over the period (positive €10.8 billion), changes in the scope of consolidation (positive €0.7 billion), partially offset by depreciation/amortization expenses (negative €5.1 billion) and impairment losses recognized over the period (negative €0.9 billion).

Goodwill amounted to €13.3 billion, up slightly on 2023 (*see Note 13 "Fixed assets"*).

Investments in equity method entities amounted to €8.4 billion, down compared to December 31, 2023.

Total equity amounted to €41.5 billion, an increase of €5.7 billion compared with December 31, 2023. This increase stemmed mainly from net income for the period (positive €5.0 billion impact), other comprehensive income (positive €3.5 billion impact resulting mainly from cash flow hedges on commodities), partly offset by dividends paid (negative €4.1 billion impact).

Provisions amounted to €33.6 billion, slightly up compared with December 31, 2023 (*see Note 17 "Provisions"*).

4 PROFORMA DATA

ENGIE Group is changing its organization starting February 1, 2025

Since 2021, ENGIE has successfully implemented its energy transition strategy with major transformations of its asset portfolio, its organization and culture and the growth of its key businesses aligned with its commitment to be Net Zero Carbon in 2045.

At the same time, energy markets have been changing rapidly, with increased need for flexible assets to support the stability of power markets as renewables become a key source of generation, as well as growing demand from customers for green energy supply throughout the year and throughout the day.

To leverage these opportunities and maximize value from its integrated model, ENGIE is adjusting the scope of its Global Business Units (GBUs) (*see Note 24 "Subsequent events"*):

- to deliver more green and smart electrons, the GBU Renewables and Flex Power will combine renewables, power storage facilities (notably batteries) and CCGTs;
- to fully benefit from the central role of networks in the energy system, the GBU Networks will continue to develop power networks and adapt gas infrastructure to green molecules, while promoting their development (biomethane, H2, and e-molecules;
- to deliver the decarbonization of industries and cities, the GBU Energy Solutions, renamed GBU Local Energy Infrastructures, will build on its undisputed European leadership, while increasing selectivity in both business and geography;
- to leverage the Group's assets and deliver secure and sustainable energy to all customers, the GBU Supply & Energy Management will bring together energy management as well as downstream activities, BtoB and BtoC (Retail).

This change in the Group organization has no impact on the identification of operating and reportable segments at December 31, 2024. Nevertheless, the table below shows unaudited proforma EBIT figures for 2024 and 2023 based on the new organization effective from February 1, 2025.

In millions of euros (unaudited figures)	Dec. 31, 2024 proforma	Dec. 31, 2023 proforma
Renewables & Flex Power	**3,696**	**3,539**
Renewables & BESS	*2,413*	*2,310*
Gas generation	*1,283*	*1,229*
Infrastructures	**2,953**	**2,762**
Networks	*2,429*	*2,243*
Local Energy Infrastructures	*524*	*519*
Supply & Energy Management	**3,077**	**4,120**
BtoC	*695*	*569*
BtoB	*1,067*	*1,581*
Energy Management	*1,316*	*1,970*
Other	**(833)**	**(942)**
TOTAL EBIT (excluding Nuclear)	**8,893**	**9,479**
Nuclear	**1,448**	**605**
TOTAL EBIT	**10,341**	**10,084**

5 PARENT COMPANY FINANCIAL STATEMENTS

The figures provided below relate to the financial statements of ENGIE SA, prepared in accordance with French GAAP and applicable regulations.

Revenues for ENGIE SA in 2024 totaled €40,805 million, a decrease compared to 2023 (€54,149 million) on the gas and electricity market.

The company reported a net operating gain of €766 million in 2024, a sharp increase of €1,753 million compared with a loss of €987 million in 2023. The energy margin improved by €1,344 million.

Net financial income amounted to €654 million, stable compared to 2023.

Non-recurring income (€2,627 million) was mainly impacted the value of equity investments (including Electrabel SA).

The income tax benefit amounted to €412 million, versus an income tax benefit of €247 million in 2023, including a tax consolidation benefit of €378 million.

Net income for the year came in at €4,460 million.

Shareholders' equity amounted to €29,372 million compared with €28,376 million at the end of 2023. The €996 million increase was mainly due to the 2024 net income of €4,460 million, and to the 2023 dividend payment of €3,503 million.

At December 31, 2024, borrowings and debt stood at €49,341 million, and cash and cash equivalents totaled €13,494 million (of which €7,209 million relating to current accounts with subsidiaries).

Information relating to payment terms

Pursuant to Articles L.441-14 and D.441-6 of the French Commercial Code, companies whose annual financial statements are subject to a statutory audit must publish information regarding supplier and customer payment terms. The purpose is to demonstrate that there is no significant failure to comply with such terms.

Information relating to supplier and customer payment terms mentioned in Articles L.441-10 to L.441-16 of the French Commercial Code

	Articles L441-10 to L441-16 : Invoices received, unpaid and overdue at the reporting date						Articles L441-10 to L441-16 : Invoices issued, unpaid and overdue at the reporting date					
In millions of euros	0 day (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day or more)	0 day (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day or more)
(A) By aging category												
Number of invoices	-					21,581	-					5,077,152
Aggregate invoice amount (incl. VAT)	-	16.2	17.5	-	386.3	420.0	-	201.7	16.7	23.4	630.5	872.3
Percentage of total amount of purchases (incl. VAT) for	-	0.03%	0.04%	0.00%	0.83%	0.90%						
Percentage of total revenues (incl. VAT) for the							-	0.42%	0.03%	0.05%	1.31%	1.81%
(B) Invoices excluded from (A) relating to disputed or unrecognized receivables and payables												
Number of excluded invoices	460						243					
Aggregate amount of excluded invoices	(22.1)						0.6					
(C) Standard payment terms used (contractual or legal terms - Article L. 441-6 or Article L. 443-1 of the French Commercial Code)												
Payment terms used to calculate late payments	Legal payment terms: 30 days						Contractual payment terms: 14 days Legal payment terms: 30 days					

02 CONSOLIDATED FINANCIAL STATEMENTS

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INCOME STATEMENT

In millions of euros	Notes	Dec. 31, 2024	Dec. 31, 2023
REVENUES	**6.2 & 7**	**73,812**	**82,565**
Purchases and operating derivatives	8.1	(49,465)	(56,992)
Personnel costs	8.2	(8,623)	(8,149)
Depreciation, amortization and provisions	8.3	(5,547)	(4,911)
Taxes	8.4	(2,391)	(2,627)
Other operating income		1,185	1,541
Current operating income including operating MtM		**8,970**	**11,427**
Share in net income of equity method entities	6.2	850	1,066
Current operating income including operating MtM and share in net income of equity method entities		**9,820**	**12,493**
Impairment losses	9.1	(709)	(1,318)
Restructuring costs	9.2	(369)	(47)
Changes in scope of consolidation	9.3	439	(85)
Other non-recurring items	9.4	(151)	(4,945)
NET INCOME/(LOSS) FROM OPERATING ACTIVITIES		**9,030**	**6,098**
Financial expenses		(3,845)	(3,340)
Financial income		2,003	1,177
NET FINANCIAL INCOME/(LOSS)	**10**	**(1,842)**	**(2,163)**
Income tax benefit/(expense)	11	(2,215)	(1,031)
NET INCOME/(LOSS)		**4,973**	**2,903**
Net income/(loss) Group share		**4,106**	**2,208**
Non-controlling interests		**867**	**695**
BASIC EARNINGS/(LOSS) PER SHARE (EUROS) (1)	**12**	**1.66**	**0.88**
DILUTED EARNINGS/(LOSS) PER SHARE (EUROS) (1)	**12**	**1.65**	**0.88**

(1) In accordance with IAS 33 – Earnings Per Share, earnings per share and diluted earnings per share are based on net income/(loss) Group share after deduction of payments to holders of deeply-subordinated perpetual notes.

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

STATEMENT OF COMPREHENSIVE INCOME

In millions of euros	Notes	Dec. 31, 2024	Dec. 31, 2023
NET INCOME/(LOSS)		**4,973**	**2,903**
Debt instruments	14.1	(17)	325
Net investment hedges	15	(265)	148
Cash flow hedges (excl. commodity instruments)	15	(271)	(83)
Commodity cash flow hedges	15	4,261	(3,162)
Deferred tax on recyclable or recycled items		(763)	765
Share of equity method entities in recyclable items, net of tax		(175)	36
Translation adjustments		206	(343)
TOTAL RECYCLABLE ITEMS		**2,978**	**(2,315)**
Equity instruments	14.1	225	120
Actuarial gains and losses		404	(580)
Deferred tax on non-recyclable items		(75)	135
Share of equity method entities in actuarial gains and losses, net of tax		-	1
TOTAL NON-RECYCLABLE ITEMS		**554**	**(324)**
TOTAL RECYCLABLE ITEMS AND NON-RECYCLABLE ITEMS		**3,532**	**(2,639)**
TOTAL COMPREHENSIVE INCOME/(LOSS)		**8,505**	**264**
Of which owners of the parent		*7,586*	*(717)*
Of which non-controlling interests		*919*	*981*

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

STATEMENT OF FINANCIAL POSITION

ASSETS

In millions of euros	Notes	Dec. 31, 2024	Dec. 31, 2023
Non-current assets			
Goodwill	13.1	13,291	12,864
Intangible assets, net	13.2	7,964	8,449
Property, plant and equipment, net	13.3	64,388	57,950
Other financial assets	14	7,722	14,817
Derivative instruments	14	6,689	12,764
Assets from contracts with customers	7	3	1
Investments in equity method entities	3	8,373	9,213
Other non-current assets	22	908	990
Deferred tax assets	11	847	1,974
TOTAL NON-CURRENT ASSETS		**110,185**	**119,023**
Current assets			
Other financial assets	14	11,959	2,170
Derivative instruments	14	6,366	8,481
Trade and other receivables, net	7	16,173	20,092
Assets from contracts with customers	7	9,229	9,530
Inventories	22	5,061	5,343
Other current assets	22	12,395	13,424
Cash and cash equivalents	14	16,928	16,578
Assets classified as held for sale	4	1,248	-
TOTAL CURRENT ASSETS		**79,359**	**75,617**
TOTAL ASSETS		**189,544**	**194,640**

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

EQUITY AND LIABILITIES

In millions of euros	Notes	Dec. 31, 2024	Dec. 31, 2023
Shareholders' equity		34,556	30,057
Non-controlling interests	2	6,902	5,667
TOTAL EQUITY	**16**	**41,458**	**35,724**
Non-current liabilities			
Provisions	17	15,909	18,792
Long-term borrowings	14	42,880	37,920
Derivative instruments	14	7,695	16,755
Other financial liabilities	14	97	82
Liabilities from contracts with customers	7	153	93
Other non-current liabilities	22	2,591	3,614
Deferred tax liabilities	11	5,875	5,632
TOTAL NON-CURRENT LIABILITIES		**75,201**	**82,889**
Current liabilities			
Provisions	17	17,712	13,801
Short-term borrowings	14	9,127	9,367
Derivative instruments	14	5,951	7,806
Trade and other payables	14	19,153	22,976
Liabilities from contracts with customers	7	3,818	3,960
Other current liabilities	22	16,565	18,118
Liabilities directly associated with assets classified as held for sale	4	560	-
TOTAL CURRENT LIABILITIES		**72,884**	**76,027**
TOTAL EQUITY AND LIABILITIES		**189,544**	**194,640**

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

STATEMENT OF CHANGES IN EQUITY

In millions of euros	Share capital	Additional paid-in capital	Consolidated reserves	Deeply-subordinated perpetual notes	Changes in fair value and other	Translation adjustments	Treasury stock	Shareholders' equity	Non-controlling interests	Total
EQUITY AT DECEMBER 31, 2022	**2,435**	**25,667**	**5,036**	**3,393**	**(668)**	**(1,422)**	**(189)**	**34,253**	**5,032**	**39,285**
Net income/(loss)			2,208					2,208	695	2,903
Other comprehensive income/(loss)			(307)		(2,348)	(270)		(2,925)	286	(2,639)
TOTAL COMPREHENSIVE INCOME/(LOSS)			**1,901**		**(2,348)**	**(270)**		**(717)**	**981**	**264**
Share-based payment	-	-	53					53	-	53
Dividends paid in cash [1]		(1,752)	(1,675)					(3,427)	(522)	(3,949)
Purchase/disposal of treasury stock			(69)				12	(57)	-	(57)
Operations on deeply-subordinated perpetual notes			(80)	-				(80)		(80)
Transactions between owners [2]			(99)					(99)	(68)	(168)
Transactions with an impact on non-controlling interests			-					-	40	40
Share capital increases and decreases								-	201	201
Normative changes			(5)					(5)	-	(5)
Other changes [3]		-	137		-			137	4	140
EQUITY AT DECEMBER 31, 2023	**2,435**	**23,916**	**5,198**	**3,393**	**(3,015)**	**(1,693)**	**(177)**	**30,057**	**5,667**	**35,724**

(1) Transactions of the period are listed in Note 16 "Equity" to the consolidated financial statements for the year ended December 31, 2023.

(2) Mainly concerns the acquisition of the minority interest held by Mitsui & Co, Ltd ("Mitsui") in International Power (Australia) Holdings Pty Limited ("IPAH") (see Note 4 "Main changes in Group structure" to the consolidated financial statements for the year ended December 31, 2023).

(3) It mainly concerns the resolution of the dispute with the French tax authorities on the withholding tax receivable assigned without recourse by the Group in 2005. This dispute is presented in Note 23 "Legal and anti-trust proceedings" to the consolidated financial statements for the year ended December 31, 2023.

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

In millions of euros	**Share capital**	**Additional paid-in capital**	**Consolidated reserves**	**Deeply-subordinated perpetual notes**	**Changes in fair value and other**	**Translation adjustments**	**Treasury stock**	**Shareholders' equity**	**Non-controlling interests**	**Total**
EQUITY AT DECEMBER 31, 2023	**2,435**	**23,916**	**5,198**	**3,393**	**(3,015)**	**(1,693)**	**(177)**	**30,057**	**5,667**	**35,724**
Net income/(loss)			4,106					4,106	867	4,973
Other comprehensive income/(loss)			530		2,815	135		3,480	52	3,532
TOTAL COMPREHENSIVE INCOME/(LOSS)			**4,636**	**-**	**2,815**	**135**	**-**	**7,586**	**919**	**8,505**
Share-based payment		(9)	98					90	-	90
Dividends paid in cash [(1)]		(2,882)	(621)					(3,503)	(627)	(4,130)
Purchase/disposal of treasury stock			(105)				55	(49)	-	(49)
Operations on deeply-subordinated perpetual notes [(1)]			(80)	645				565	-	565
Transactions between owners [(1)]			(189)					(189)	912	724
Transactions with an impact on non-controlling interests								-	1	1
Share capital increases and decreases								-	30	30
Other changes			-					-	(1)	(1)
EQUITY AT DECEMBER 31, 2024	**2,435**	**21,025**	**8,937**	**4,038**	**(200)**	**(1,557)**	**(122)**	**34,556**	**6,902**	**41,458**

(1) Transactions of the period are listed in Note 16 "Equity".

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

STATEMENT OF CASH FLOWS

In millions of euros	Notes	Dec. 31, 2024	Dec. 31, 2023
NET INCOME/(LOSS)		**4,973**	**2,903**
- Share in net income/(loss) of equity method entities		(850)	(1,066)
+ Dividends received from equity method entities		1,097	1,031
- Net depreciation, amortization, impairment and provisions		5,991	11,020
- Impact of changes in scope of consolidation and other non-recurring items		(290)	136
- Mark-to-market on commodity contracts other than trading instruments		(136)	(2,430)
- Other items with no cash impact		(441)	(382)
- Income tax expense	11	2,215	1,031
- Net financial income/(loss)	10	1,842	2,163
Cash generated from operations before income tax and working capital requirements		**14,401**	**14,407**
+ Tax paid		(1,030)	(1,687)
Change in working capital requirements	**22.1**	**(227)**	**397**
CASH FLOW FROM OPERATING ACTIVITIES		**13,144**	**13,117**
Acquisitions of property, plant and equipment and intangible assets	13.2 &	(9,385)	(7,328)
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	4 & 14	(670)	(1,392)
Acquisitions of investments in equity method entities and joint operations	3 & 4	(66)	(237)
Acquisitions of equity and debt instruments	14	1,693	(1,675)
Disposals of property, plant and equipment, and intangible assets	13.2 &	75	122
Loss of controlling interests in entities, net of cash and cash equivalents sold	4 & 14	279	27
Disposals of investments in equity method entities and joint operations	3 & 4	529	131
Disposals of equity and debt instruments	14	32	(8)
Interest received on financial assets		475	118
Dividends received on equity instruments		(12)	9
Change in loans and receivables originated by the Group and other		(4,289)	(1,585)
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES		**(11,338)**	**(11,818)**
Dividends paid [(1)]		(4,147)	(4,067)
Repayment of borrowings and debt		(3,707)	(6,671)
Change in financial assets held for investment and financing purposes		(475)	15
Interest paid		(1,732)	(1,058)
Interest received on cash and cash equivalents		750	569
Cash flow on derivatives qualifying as net investment hedges and compensation payments on derivatives and on early buyback of borrowings		69	134
Increase in borrowings		6,087	10,716
Increase/decrease in capital		1,040	200
Purchase and/or sale of treasury stock		(86)	(57)
Changes in ownership interests in controlled entities	16	743	-
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES		**(1,457)**	**(218)**
Effects of changes in exchange rates and other		2	(73)
TOTAL CASH FLOW FOR THE PERIOD		**350**	**1,008**
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD		**16,578**	**15,570**
CASH AND CASH EQUIVALENTS AT END OF PERIOD		**16,928**	**16,578**

(1) The line "Dividends paid" includes the coupons paid to owners of deeply-subordinated perpetual notes (see Note 16 "Equity").

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

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ENGIE SA, the parent company of the Group, is a French *société anonyme* with a Board of Directors that is subject to the provisions of Book II of the French Commercial Code (*Code du commerce*), as well as to all other provisions of French law applicable to French commercial companies. It was incorporated on November 20, 2004 for a period of 99 years.

It is governed by current and future laws and by regulations applicable to *sociétés anonymes* and its bylaws.

The Group is headquartered at 1, place Samuel de Champlain, 92400 Courbevoie (France).

ENGIE shares are listed on the Paris, Brussels and Luxembourg stock exchanges.

On February 26, 2025, the Group's Board of Directors approved and authorized for issue the consolidated financial statements of the Group for the year ended December 31, 2024.

NOTE 1 ACCOUNTING FRAMEWORK AND BASIS FOR PREPARING THE CONSOLIDATED FINANCIAL STATEMENTS

1.1 Accounting standards

Pursuant to European Regulation (EU) 2019/980 dated March 14, 2019, financial information concerning the assets, liabilities, financial position profit or loss of ENGIE has been provided for the last two reporting periods (ended December 31, 2023 and 2024). This information was prepared in accordance with European Regulation (EC) 1606/2002 “on the application of international accounting standards” dated July 19, 2002. The Group's consolidated financial statements for the year ended December 31, 2024 have been prepared in accordance with IFRS Standards as published by the International Accounting Standards Board and endorsed by the European Union[1].

The accounting standards applied in the consolidated financial statements for the year ended December 31, 2024 are consistent with the policies used to prepare the consolidated financial statements for the year ended December 31, 2023, except for those described below.

1.1.1 IFRS Standards, amendments or IFRIC Interpretations applicable as from 2024

- Amendments to IAS 1 – *Presentation of Financial Statements:* classification of current or non-current liabilities and non-current liabilities with covenants.
- Amendments to IFRS 16 – *Leases*: Lease Liability in a Sale and Leaseback.
- Amendments to IAS 7 – *Statement of Cash Flows* and IFRS 7 – *Financial Instruments*: Disclosures – Supplier Finance Arrangements.

These amendments have no material impact on the Group's consolidated financial statements.

(2) Available on the European Commission’s website: http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=CELEX:02002R1606-20080410

1.1.2 IFRS Standards, amendments or IFRIC Interpretations effective from 2025 and that the Group has elected not to early adopt

- Amendments to IAS 21 – *The Effects of Changes in Foreign Exchange Rates*: Lack of Exchangeability.
- IFRS 18 – *Presentation and Disclosure in Financial Statements* [1].
- IFRS 19 – *Subsidiaries without Public Accountability*: Disclosures[1].
- Amendments to IFRS 9 – *Financial Instruments*; and IFRS 7 – *Financial Instruments: Disclosures* – Classification and measurement of financial instruments.
- Amendments to IFRS 9 – *Financial Instruments* and IFRS 7 – *Financial Instruments: Disclosures* – Contracts Referencing Nature-dependent Electricity[1].
- Annual Improvements to IFRSs – Volume 11[1].

The impact of these texts is currently being assessed.

1.2 Measurement and presentation basis

1.2.1 Historical cost convention

The Group's consolidated financial statements are presented in euros and have been prepared using the historical cost convention, except for financial instruments, which are accounted for under the financial instrument categories defined by IFRS 9.

1.2.2 Chosen options

1.2.2.1 Reminder of IFRS 1 transition options

The Group used some of the options available under IFRS 1 for its transition to IFRS in 2005. The options that continue to have an impact on the consolidated financial statements are:

- translation adjustments: the Group elected to reclassify cumulative translation adjustments within consolidated equity at January 1, 2004;
- business combinations: the Group elected not to restate business combinations that took place prior to January 1, 2004 in accordance with IFRS 3.

1.2.2.2 Business combinations

Business combinations carried out prior to January 1, 2010 were accounted for in accordance with IFRS 3 prior to the review. In accordance with IFRS 3 revised, these business combinations have not been restated.

Since January 1, 2010, the Group applies the purchase method as defined in IFRS 3 revised, which consists in recognizing the identifiable assets acquired and liabilities assumed at their fair values at the acquisition date, as well as any non-controlling interests in the acquiree. Non-controlling interests are measured either at fair value or at the entity's proportionate interest in the net identifiable assets of the acquiree. The Group determines on a case-by-case basis which measurement option to be used to recognize non-controlling interests.

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(1)These standards and amendments have not yet been adopted by the European Union.

1.2.2.3 Consolidated statement of cash flows

The consolidated statement of cash flows is prepared using the indirect method starting from net income.

"Interest received on financial assets" is classified within investing activities because it represents a return on investments. "Interest received on cash and cash equivalents" is shown as a component of financing activities because the interest can be used to reduce borrowing costs. This classification is consistent with the Group's internal organization, where debt and cash are managed centrally by the Group Treasury Department.

As impairment losses on current assets are considered to be definitive losses, changes in current assets are presented net of impairment.

Cash flows relating to the payment of income tax are presented on a separate line.

1.2.3 Foreign currency transactions

1.2.3.1 Translation of foreign currency transactions

Foreign currency transactions are recorded in the functional currency at the exchange rate prevailing on the date of the transaction.

Functional currency is the currency of the primary economic environment in which an entity operates, which in most cases corresponds to local currency. However, certain entities may have a functional currency different from the local currency when that other currency is used for an entity's main transactions and better reflects its economic environment.

At each reporting date:

- monetary assets and liabilities denominated in foreign currencies are translated at year-end exchange rates. The resulting translation gains and losses are recorded in the consolidated income statement for the year to which they relate;
- non-monetary assets and liabilities denominated in foreign currencies are recognized at the historical cost applicable at the date of the transaction.

1.2.3.2 Translation of the financial statements of subsidiaries with a functional currency other than the euro (the presentation currency)

The statements of financial position of these subsidiaries are translated into euros at the official year-end exchange rates. Income statement and cash flow statement items are translated using the average exchange rate for the year. Any differences arising from the translation of the financial statements of these subsidiaries are recorded under "Translation adjustments" as other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of foreign entities are classified as assets and liabilities of those foreign entities and are therefore denominated in the functional currencies of the entities and translated at the year-end exchange rate.

1.3 Use of estimates and judgment

1.3.1 Estimates

The preparation of consolidated financial statements requires the use of estimates and assumptions to determine the value of assets and liabilities and contingent assets and liabilities at the reporting date, as well as income and expenses reported during the period.

Developments in the economic and financial environment, particularly relating to volatile commodities markets, and the war in Ukraine have prompted the Group to step up its risk oversight procedures, mainly in measuring financial instruments, and assessing counterparty and liquidity risk. The estimates used by the Group, among other things, to test for impairment and to measure provisions, also take into account this environment and the market volatility.

Accounting estimates are made in a context that remains sensitive to energy market developments, therefore making it difficult to apprehend medium- and short-term economic prospects. Particular attention has been paid to the consequences of fluctuations in the price of gas and electricity.

Due to uncertainties inherent in the estimation process, the Group regularly revises its estimates in light of currently available information. Final outcomes could differ from those estimates.

The key estimates used in preparing the Group's consolidated financial statements relate mainly to:

- measurement of the recoverable amount of goodwill (*see Note 13.1*), other intangible assets (*see Note 13.2*) and property, plant and equipment (*see Note 13.3*);
- measurement of the fair value of financial assets and liabilities, and factoring in the uncertainty surrounding the key assumptions used, in particular updating the main valuation inputs of commodity derivatives (*see Notes 14 and 15*);
- measurement of provisions, and particularly provisions for dismantling facilities, disputes, and pensions and other employee benefits (*see Notes 17 and 18*);
- measurement of un-metered revenues (energy in the meter), for which the valuation techniques have been impacted by changes in certain customers' consumption habits in a context of fluctuations in commodity prices (*see Note 7*);
- measurement of recognized tax loss carry-forwards, taking into account, where applicable, taxable income revisions and projections (*see Note 11*).

1.3.2 Judgment

As well as relying on estimates, Group management also makes judgments to define the appropriate accounting policies to apply to certain activities and transactions, particularly when the IFRS Standards and IFRIC Interpretations in force do not specifically deal with the related accounting issues.

In particular, the Group exercised its judgment in:

- assessing the nature of control (*see Notes 2 and 3*);
- identifying the performance obligations of sales contracts (*see Note 7*);
- determining how revenues are recognized for distribution or transmission services invoiced to customers (*see Note 7*);
- identifying “own use contracts” as defined by IFRS 9 within non-financial purchase and sale contracts (electricity, gas, etc.) (*see Note 14*);
- identifying offsetting arrangements that meet the criteria set out in IAS 32 – *Financial Instruments: Presentation* (*see Note 14*);
- determining whether arrangements are or contain a lease (*see Note 13.3*).

Entities for which judgment on the nature of control has been exercised are listed in Note 2 “Main subsidiaries at December 31, 2024” and Note 3 “Investments in equity method entities”.

1.3.3 Consideration of Environmental, Social and Governance (ESG) issues in the preparation of the Group's financial statements

The risks and opportunities relating to Environmental, Social and Governance issues – identified during the double materiality assessment and described in Chapter 3 “Sustainability statement and other ESG information” – were taken into account when preparing the consolidated financial statements in order to determine any material impacts on the financial information presented.

The Group has exercised its judgment in selecting assumptions reflecting climate-related issues. In particular, it verified whether there were any indications that non-financial assets might be impaired or provisions needed to be recognized:

- the commitments made by France, Europe and various countries at international level, in particular with regard to medium- and long-term carbon neutrality, are taken into account (i) in assessing the value of the Group's assets, in particular through the long-term price scenarios used in impairment tests (*see Note 13.4*), and (ii) in assessing dismantling provisions, in particular by assessing the useful life of gas infrastructures in France based on the expected change in the energy mix (*see Note 17*);
- the commitments made specifically by ENGIE are also reflected in the assessment of the value of the Group's assets (*see Note 13.4.1*), in particular (i) the complete withdrawal from coal activities by 2027, which primarily concerns South America, depending on each asset's specific prospects (closure, conversion or disposal and discontinuation of sales) and (ii) the gradual decarbonization of the Group's power generation activities to net zero by 2045 and, more broadly, the Group's investment strategy in favor of the energy transition by expanding its renewable energy fleet, substituting natural gas with renewable gas, thereby confirming a mixed gas/electricity scenario in the Group's long-term projections under the present regulation/remuneration methods for regulated assets (in France in particular), and developing low-carbon services offerings.

Assumptions reflecting other ESG issues were assessed to determine whether a provision needed to be recognized *(see Note 17*) or to provide additional information *(see Note 23*) in relation to the following topics:

- rehabilitation or restoration of sites (e.g., infrastructure dismantling obligations, soil decontamination);
- the Group's exposure to risks relating to individuals, commercial disputes and other legal risks in the event of non-compliance with regulations or legislation, and its exposure to other disputes and investigations in connection with its own business activities *(see Note 23*).

NOTE 2 MAIN SUBSIDIARIES AT DECEMBER 31, 2024

Accounting standards

Controlled entities (subsidiaries) are fully consolidated in accordance with IFRS 10 – *Consolidated Financial Statements*. An investor (the Group) controls an entity and therefore must consolidate it if all of the following three criteria are met:

- it has the ability to direct the relevant activities of the entity;
- it has the rights and is exposed to variable returns from its involvement with the entity;
- it has the ability to use its power over the entity to affect the investor's return.

2.1 List of main subsidiaries at December 31, 2024

The following lists are made available by the Group to third parties, pursuant to Regulation No. 2016-09 of the French accounting standards authority (ANC) issued on December 2, 2016:

- list of companies included in consolidation;
- list of companies excluded from consolidation because their individual and cumulative incidence on the Group's consolidated financial statements is not material. They correspond to entities deemed not significant as regards the Group's main key figures (revenues, total equity, etc.) or entities that have ceased all activities and are undergoing liquidation/closure proceedings;
- list of main non-consolidated interests.

This information is available on the Group's website (www.engie.com, Investors/Regulated information section). Non-consolidated companies are classified as non-current financial assets (*see Note 14.1.1.1)* under "Equity instruments at fair value".

The list of the main subsidiaries consolidated under the full consolidation method presented below was determined, as regards operating entities, based on their contribution to Group revenues, EBITDA, net income and net financial debt. The main equity-accounted investments (associates and joint ventures) are presented in Note 3 "Investments in equity method entities".

Some entities such as ENGIE SA, ENGIE Énergie Services SA or Electrabel SA comprise both operating activities and headquarters functions which report to management teams of different reportable segments. In the following tables, these operating activities and headquarters functions are shown within their respective reportable segments under their initial company name followed by a (*) sign.

Renewables

Company name	Activity	Country	% interest Dec. 31, 2024	Dec. 31, 2023
BTE Renewables	Electricity distribution and generation	South Africa	60.0	60.0
Compagnie Nationale du Rhône	Electricity distribution and generation	France	50.0	50.0
ENGIE Energía Perú *	Electricity distribution and generation	Peru	61.8	61.8
ENGIE Green	Electricity distribution and generation	France	100.0	100.0
ENGIE Renouvelables	Electricity distribution and generation	France	100.0	100.0
ENGIE Romania *(1)	Energy sales	Romania	63.0	51.0
Groupe ENGIE Brasil Energia *	Electricity distribution and generation	Brazil	68.7	68.7
Groupe ENGIE Energía Chile *	Electricity distribution and generation	Chile	60.0	60.0
Jupiter Equity Holding	Electricity distribution and generation	United States	51.0	51.0
Kathu Solar Park	Electricity distribution and generation	South Africa	57.7	57.7
Mercury Equity Holding	Electricity distribution and generation	United States	51.0	51.0
Saturn Equity Holding (2)	Electricity distribution and generation	United States	51.0	100.0
Saturn Storage Equity Holdings (2)	Electricity distribution and generation	United States	51.0	100.0
Tacoma Equity Holdco (2)	Electricity distribution and generation	United States	51.0	-

(1) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.

(2) In September 2024, the Group finalized the sale of a minority stake in a 2.7 GW portfolio of storage and renewable energy assets in the United States.

Networks

Company name	Activity	Country	% interest Dec. 31, 2024	Dec. 31, 2023
Elengy	Natural gas, LNG	France	60.8	60.8
ENGIE Romania *(1)	Natural gas distribution	Romania	63.0	51.0
Fosmax LNG	Natural gas, LNG	France	60.8	60.8
GRDF	Natural gas distribution	France	100.0	100.0
Groupe ENGIE Brasil Energia *	Electricity distribution	Brazil	68.7	68.7
Groupe ENGIE Energía Chile *	Electricity distribution	Chile	60.0	60.0
Groupe GRTgaz (hors Elengy) (2)	Natural gas transportation	France, Germany	60.8	60.8
Storengy Deutschland	Underground natural gas storage	Germany	100.0	100.0
Storengy France	Underground natural gas storage	France	100.0	100.0

(1) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.

(2) NaTran since January 30, 2025.

Energy Solutions

Company name	Activity	Country	% interest Dec. 31, 2024	Dec. 31, 2023
CPCU	Urban heating networks	France	66.5	66.5
Energie SaarLorLux AG	Energy services	Germany	51.0	51.0
ENGIE Deutschland GmbH	Energy services	Germany	100.0	100.0
ENGIE Energie Services SA *	Energy services, Networks	France	100.0	100.0
ENGIE Servizi S.p.A	Energy services	Italy	100.0	100.0

FlexGen

Company name	Activity	Country	% interest Dec. 31, 2024	Dec. 31, 2023
Electrabel SA *	Electricity generation, Energy sales	Belgium	100.0	100.0
ENGIE Energía Perú *	Electricity generation, Energy sales	Peru	61.8	61.8
ENGIE Energie Nederland N.V. *	Electricity generation, Energy sales	Netherlands	100.0	100.0
ENGIE Italia S.p.A *	Electricity generation, Energy sales	Italy	100.0	100.0
ENGIE SA *	Electricity generation, Energy sales	France	100.0	100.0
ENGIE Thermique France	Electricity generation, Energy sales	France	100.0	100.0
First Hydro Holdings Company	Electricity generation, Energy sales	United Kingdom	75.0	75.0
Group Broad Reach Power	Electricity generation, Energy sales	United States	100.0	100.0
Groupe ENGIE Energía Chile *	Electricity generation, Energy sales	Chile	60.0	60.0
Pelican Point Power Limited	Electricity generation, Energy sales	Australia	100.0	100.0
UCH Power Limited	Electricity generation, Energy sales	Pakistan	100.0	100.0

Retail

Company name	Activity	Country	% interest Dec. 31, 2024	Dec. 31, 2023
Electrabel SA *	Electricity generation, Energy sales	Belgium	100.0	100.0
ENGIE Italia S.p.A *	Electricity generation, Energy sales	Italy	100.0	100.0
ENGIE Romania *[(1)]	Natural gas distribution, Energy sales	Romania	63.0	51.0
ENGIE SA *	Electricity generation, Energy sales	France	100.0	100.0
Simply Energy	Energy sales	Australia	100.0	100.0

(1) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.

Nuclear

Company name	Activity	Country	% interest Dec. 31, 2022	Dec. 31, 2022
Electrabel SA *	Electricity generation, Energy sales	Belgium	100.0	100.0
Synatom	Managing provisions relating to power plants and nuclear fuel	Belgium	100.0	100.0

Others

Company name	Activity	Country	% interest Dec. 31, 2024	Dec. 31, 2023
Cogac	Holding	France	100.0	100.0
Electrabel SA *	Electricity generation, Energy sales	Belgium	100.0	100.0
ENGIE CC	Financial subsidiaries, Central	Belgium	100.0	100.0
ENGIE Deutschland AG *	Holding, Energy management trading	Germany	100.0	100.0
ENGIE Energie Nederland Holding B.V.	Holding, Energy management trading	Netherlands	100.0	100.0
ENGIE Energie Nederland N.V. *	Electricity generation, Energy sales	Netherlands	100.0	100.0
ENGIE Energie Services SA *	Energy services, Networks	France	100.0	100.0
ENGIE Energy Management *	Energy management trading	France, Belgium,	100.0	100.0
Engie Energy Services International SA	Holding	Belgium	100.0	100.0
ENGIE Finance SA	Financial subsidiaries	France	100.0	100.0
ENGIE Global Markets	Energy management trading	France, Belgium,	100.0	100.0
ENGIE Holding Inc.	Holding - parent company	United States	100.0	100.0
ENGIE Italia S.p.A *	Holding, Energy management trading	Italy	100.0	100.0
ENGIE North America	Electricity distribution and generation,	United States	100.0	100.0
ENGIE Resources Inc.	Energy sales	United States	100.0	100.0
ENGIE Romania *[(1)]	Natural gas distribution, Energy sales	Romania	63.0	51.0
ENGIE SA *	Holding - parent company, Energy management trading, energy sales	France	100.0	100.0
ENGIE Group Participations	Holding	France	100.0	100.0
Genfina	Holding	Belgium	100.0	100.0
Groupe ENGIE Energía Chile *	Electricity distribution and generation	Chile	60.0	60.0
International Power Limited	Holding	United Kingdom	100.0	100.0
Tractebel Engineering International	Engineering	Belgium	100.0	100.0

(1) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.

2.2 Significant judgments exercised when assessing control

The Group primarily considers the following information and criteria when determining whether it has control over an entity:

- governance arrangements: voting rights and whether the Group is represented in the governing bodies, majority rules and veto rights;
- the nature of substantive or protective rights granted to shareholders, relating to the entity's relevant activities;
- deadlock resolution mechanisms;
- whether the Group is exposed, or has rights, to variable returns from its involvement with the entity.

The Group exercised its judgment regarding the following entities and sub-groups:

Entities in which the Group has the majority of the voting rights

GRTgaz (France Infrastructures) (1): 60.8%

The analysis of the shareholders' agreement concluded with Société d'Infrastructures Gazières, a subsidiary of *Caisse des Dépôts et Consignations* (CDC), which holds 38.6% of the share capital of GRTgaz, was completed by an assessment of the rights granted to the French Energy Regulatory Commission (*Commission de Régulation de l'Énergie* – CRE). As a regulated activity, GRTgaz has a dominant position on the gas transportation market in France. Accordingly, since the transposition of the Third European Directive of July 13, 2009 into French law (*Code de l'énergie* – Energy Code) on May 9, 2011, GRTgaz has been subject to independence rules as regards its directors and senior management team. The French Energy Code confers certain powers on the CRE in the context of its duties to control the proper functioning of the gas markets in France, including verifying the independence of the members of the Board of Directors and senior management and assessing the choice of investments. The Group considers that it exercises control over GRTgaz and its subsidiaries (including Elengy) based on the Group's ability to appoint the majority of the members of the Board of Directors and take decisions about the relevant activities, especially in terms of the level of investment and planned financing.

Entities in which the Group does not have the majority of the voting rights

For entities in which the Group does not have the majority of the voting rights, judgment is exercised with regard to the following items, in order to assess whether there is a situation of *de facto* control:

- dispersion of the shareholding structure: number of voting rights held by the Group relative to the number of rights held respectively by the other holders of voting rights and their dispersion;
- voting patterns at Shareholders' Meetings: the percentages of voting rights exercised by the Group at Shareholders' Meetings in recent years;
- governance arrangements: representation in the governing body with strategic and operational decision-making power over the relevant activities;
- rules for appointing key management personnel;
- contractual relationships and material transactions.

The main fully consolidated entity in which the Group does not have the majority of the voting rights at December 31, 2024 is Compagnie Nationale du Rhône (49.98%).

Compagnie Nationale du Rhône ("CNR" – Renewables France): 49.98%

The Group holds 49.98% of the share capital of CNR, with CDC holding 33.2%, and the balance of 16.82% being dispersed among around 200 local authorities. In view of the current provisions of the French "Murcef" law, under which a majority of CNR's share capital must remain under public ownership, the Group is unable to hold more than 50% of the share capital. However, the Group considers that it exercises *de facto* control as it holds the majority of the voting rights exercised at

(1) NaTran since January 30, 2025.

Shareholders' Meetings due to the widely dispersed shareholding structure and the absence of evidence of the minority shareholders acting in concert.

2.3 Main subsidiaries with non-controlling interests

The following table shows the subsidiaries with non-controlling interests that are deemed to be material, the respective contributions to equity and to net income at December 31, 2024 and December 31, 2023, as well as the dividends paid to non-controlling interests:

Company name	Activity	Percentage interest of non-controlling interests		Net income/(loss) of non-controlling interests		Equity of non-controlling interests		Dividends paid to non-controlling interests	
In millions of euros		Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023
Groupe GRTgaz (France Infrastructures, France) [1]	Regulated gas transportation activities and management of LNG terminals	39.2	39.2	121	158	1,581	1,611	175	194
ENGIE Energía Chile Group (Latin America, Chile) [2]	Electricity distribution and generation - thermal power plants	40.0	40.0	67	(147)	592	504	20	0
ENGIE Romania Group (Rest of Europe, Romania) [3]	Distribution of natural gas, Energy sales	37.0	49.0	82	70	567	671	16	(0)
ENGIE Brasil Energia Group (Latin America, Brazil) [2]	Electricity distribution and generation	31.3	31.3	204	145	686	569	83	58
ENGIE Energía Perú (Latin America, Peru) [2]	Electricity distribution and generation - thermal and hydroelectric power plants	38.2	38.2	33	5	441	412	11	12
Other subsidiaries with non-controlling interests				360	464	3,036	1,900	321	258
TOTAL				**867**	**695**	**6,902**	**5,667**	**627**	**522**

(1) NaTran since January 30, 2025.
(2) ENGIE Energia Chile, ENGIE Brasil Energia and ENGIE Energia Perú are listed in their respective countries.
(3) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.

2.3.1 Condensed financial information on main subsidiaries with non-controlling interests

The condensed financial information concerning these subsidiaries presented in the table below is based on a 100% interest and is shown before intragroup eliminations.

	Groupe GRTgaz (1)		ENGIE Energía Chile Group		ENGIE Romania Group (2)	
In millions of euros	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023
Income statement						
Revenues	2,562	2,623	1,597	1,732	1,747	2,111
Net income/(loss)	309	403	168	(367)	191	142
Net income/(loss) Group share	188	245	101	(220)	110	72
Other comprehensive income/(loss) – Group share	16	56	62	(43)	(26)	(7)
TOTAL COMPREHENSIVE INCOME/(LOSS) – GROUP SHARE	**204**	**301**	**163**	**(264)**	**83**	**65**
Statement of financial position						
Current assets	1,050	1,189	1,154	1,170	727	796
Non-current assets	9,675	9,780	3,885	3,058	1,270	1,062
Current liabilities	(1,418)	(1,325)	(586)	(655)	(345)	(398)
Non-current liabilities	(5,270)	(5,532)	(2,985)	(2,325)	(137)	(102)
TOTAL EQUITY	**4,036**	**4,112**	**1,469**	**1,247**	**1,515**	**1,358**
TOTAL EQUITY OF NON-CONTROLLING INTERESTS	**1,581**	**1,611**	**592**	**504**	**567**	**671**
Statement of cash flows						
Cash flow from operating activities	1,064	1,090	603	482	391	412
Cash flow from (used in) investing activities	(495)	(486)	(580)	(424)	(208)	(148)
Cash flow from (used in) financing activities	(588)	(616)	160	86	(137)	(254)
TOTAL CASH FLOW FOR THE PERIOD (3)	**(19)**	**(13)**	**183**	**144**	**47**	**11**

(1) NaTran since January 30, 2025.
(2) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.
(3) Excluding effects of changes in exchange rates and other.

	ENGIE Brasil Energia Group		ENGIE Energía Perú	
In millions of euros	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023
Income statement				
Revenues	1,924	1,979	664	704
Net income/(loss)	642	434	86	12
Net income/(loss) Group share	438	288	53	8
Other comprehensive income/(loss) – Group share	(176)	(73)	45	(24)
TOTAL COMPREHENSIVE INCOME/(LOSS) – GROUP SHARE	**262**	**216**	**98**	**(17)**
Statement of financial position				
Current assets	1,141	1,691	581	543
Non-current assets	6,404	5,571	1,842	1,778
Current liabilities	(897)	(1,081)	(375)	(372)
Non-current liabilities	(4,928)	(4,875)	(893)	(870)
TOTAL EQUITY	**1,720**	**1,306**	**1,155**	**1,079**
TOTAL EQUITY OF NON-CONTROLLING INTERESTS	**686**	**569**	**441**	**412**
Statement of cash flows				
Cash flow from operating activities	1,267	1,309	239	162
Cash flow from (used in) investing activities	(1,482)	(711)	(94)	(94)
Cash flow from (used in) financing activities	(3)	(39)	(60)	(72)
TOTAL CASH FLOW FOR THE PERIOD (1)	**(218)**	**559**	**86**	**(4)**

(1) Excluding effects of changes in exchange rates and other.

NOTE 3 INVESTMENTS IN EQUITY METHOD ENTITIES

Accounting standards

The Group accounts for its investments in associates and joint ventures using the equity method. Under IFRS 11 – *Joint Arrangements*, a joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. An associate is an entity over which the Group has significant influence.

The respective contributions of associates and joint ventures in the statement of financial position, the income statement and the statement of comprehensive income at December 31, 2024 and December 31, 2023 are as follows:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Statement of financial position		
Investments in associates	4,043	4,259
Investments in joint ventures	4,330	4,954
INVESTMENTS IN EQUITY METHOD ENTITIES	**8,373**	**9,213**
Income statement		
Share in net income/(loss) of associates	329	486
Share in net income/(loss) of joint ventures	522	580
SHARE IN NET INCOME/(LOSS) OF EQUITY METHOD ENTITIES	**850**	**1,066**
Statement of comprehensive income		
Share of associates in "Other comprehensive income/(loss)"	91	11
Share of joint ventures in "Other comprehensive income/(loss)"	(266)	26
SHARE OF EQUITY METHOD ENTITIES IN "OTHER COMPREHENSIVE INCOME/(LOSS)"	**(175)**	**37**

Impairment losses recognized on investments in equity method entities are commented on Note 13.4.

Significant judgments

The Group primarily considers the following information and criteria in determining whether it has joint control or significant influence over an entity:

- governance arrangements: voting rights and Group representation in the governing bodies, majority rules and veto rights;
- the nature of substantive or protective rights granted to shareholders, relating to the entity's relevant activities.
  This can be difficult to determine in the case of "project management" or "one-asset" entities, as certain decisions concerning the relevant activities are made upon the creation of the joint arrangement and remain valid throughout the project. Accordingly, the analysis of rights relates to the relevant residual activities of the entity (those that significantly affect the variable returns of the entity);
- deadlock resolution mechanisms;
- whether the Group is exposed, or has rights, to variable returns from its involvement with the entity.
  This can also involve analyzing the Group's contractual relations with the entity, in particular the conditions in which these contracts are entered into, their duration as well as the management of conflicts of interest that may arise when the entity's governing body casts votes.

The Group exercised its judgment regarding the following entities and sub-groups:

Project management entities in the Middle East and in Africa

The significant judgments made in determining the consolidation method to be applied to these project management entities related to the risks and rewards relating to contracts between ENGIE and the entity concerned, as well as an analysis of the residual relevant activities over which the entity retains control after its creation. The Group considers that it exercises significant influence or joint control over these entities, since the decisions taken throughout the term of the project about the relevant activities such as refinancing, or the renewal or amendment of significant contracts (sales,

purchases, operating and maintenance services) require, depending on the case, the unanimous consent of two or more parties sharing control.

Joint control – difference between joint ventures and joint operations

Classifying a joint arrangement requires the Group to use its judgment to determine whether the entity in question is a joint venture or a joint operation. IFRS 11 requires an analysis of “other facts and circumstances” when determining the classification of jointly controlled entities.

The IFRS Interpretations Committee (IFRS IC) (November 2014) decided that for an entity to be classified as a joint operation, other facts and circumstances must give rise to direct enforceable rights to the assets, and obligations for the liabilities, of the joint arrangement.

In view of this position and its application to our analyses, the Group has no material joint operations at December 31, 2024.

3.1 Investments in associates

3.1.1 Contribution of associates to the Group's financial statements

The table below shows the contribution of each material associate along with the aggregate contribution of associates deemed not material taken individually, in the consolidated statement of financial position, income statement, statement of comprehensive income, and the "Dividends received from equity method entities" line of the statement of cash flows.

The Group used qualitative and quantitative criteria to determine material associates. These criteria include the contribution to the consolidated line items "Share in net income/(loss) of associates" and "Investments in associates", the total assets of associates in Group share, and associates carrying major projects in the study or construction phase for which the related investment commitments are material (100% capacity).

Company name	Activity	Capacity	Consolidation percentage of investments in associates		Carrying amount of investments in associates		Share in net income/(loss) of associates		Other comprehensive income/(loss) of associates		Dividends received from associates	
In millions of euros			Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023
Project management entities in the Middle East (Middle-East, Asia & Africa, Saudi Arabia, Bahrain, Qatar, United Arab Emirates, Oman, Kuwait) (1)	Gas-fired power plants and seawater desalination facilities		-	-	1,326	1,346	174	176	29	24	205	143
Movhera	Hydro power plant	1 702 MW	40.00	40.00	549	556	23	31	(5)	11	26	8
Energia Sustentável do Brasil (Brazil)	Hydro power plant	3 675 MW	40.00	40.00	584	596	17	10	-	-	-	-
GASAG (Germany)	Gas and heat networks		31.57	31.58	289	255	18	26	33	(36)	17	15
Eolia Renovables	Wind power plant	963 MW	40.00	40.00	358	343	8	14	7	(3)	-	28
Other investments in associates that are not material taken individually					938	1,163	89	227	26	15	131	122
INVESTMENTS IN ASSOCIATES					**4,043**	**4,259**	**329**	**486**	**91**	**11**	**378**	**316**

(1) Investments in associates operating gas-fired power plants and seawater desalination facilities in the Arabian Peninsula have been grouped together under "Project management entities in the Middle East". This mainly includes around 40 associates operating thermal power plants with a total installed capacity of 26,386 MW (at 100%).
These associates have fairly similar business models and joint arrangements: the project management entities selected as a result of a competitive bidding process develop, build and operate power generation plants and seawater desalination facilities. The entire output of these facilities is sold to government-owned companies under power and water purchase agreements, over periods generally spanning 20 to 30 years.
In accordance with their contractual arrangements, the corresponding plants are recognized in accordance with IFRIC 12, IFRS 16 or IAS 16 as property, plant and equipment or as financial receivables. The shareholding structure of these entities systematically includes a government-owned company based in the same country as the project management entity. The Group's percentage interest and percentage voting rights in each of these entities varies between 20% and 50%.

The share in net income/(loss) of associates includes a net non-recurring expense of €89 million in 2024 (compared to net non-recurring income of €18 million in 2023), mainly including an impairment on thermal generation assets in Italy *(see Note 5.3 "Net recurring income Group share (NriGs)")*.

3.1.2 Financial information regarding material associates

The tables below provide condensed financial information for the Group's main associates. The amounts shown have been determined in accordance with IFRS, before the elimination of intragroup transactions and after (i) adjustments made in line with Group accounting policies and (ii) fair value measurements of the assets and liabilities of the associate performed at the acquisition date at the level of ENGIE, as required by IAS 28. All amounts are presented based on a 100% interest with the exception of "Total equity attributable to ENGIE".

In millions of euros	Revenues	Net income/(loss)	Other comprehensive income/(loss)	Total comprehensive income/(loss)	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Total equity	Consolidation % of Group	Total equity attributable to ENGIE
AT DECEMBER 31, 2024											
Project management entities in the Middle East	4,686	703	150	852	2,985	18,254	3,302	12,569	5,361	-	1,326
Energia Sustentável do Brasil	610	44	-	44	201	2,842	1,590	(7)	1,460	40.00	584
Movhera	402	58	(11)	46	212	2,015	93	763	1,372	40.00	549
GASAG	1,632	56	105	161	1,294	1,920	2,218	240	918	31.57	289
Eolia Renovables	128	20	17	37	119	2,130	195	1,147	894	40.00	358
AT DECEMBER 31, 2023											
Project management entities in the Middle East	4,886	714	88	802	2,635	18,229	2,856	12,785	5,223	-	1,346
Energia Sustentável do Brasil	625	24	-	24	286	3,276	2,077	(5)	1,489	40.00	596
Movhera	434	78	28	106	249	2,055	85	829	1,390	40.00	556
GASAG	2,283	84	(112)	(28)	1,640	2,058	2,643	247	809	31.57	255
Eolia Renovables	177	36	(7)	29	138	2,165	226	1,219	858	40.00	343

3.1.3 Transactions between the Group and its associates

The data below set out the impact of transactions with associates on the Group's 2024 consolidated financial statements.

In millions of euros	Purchases of goods and services	Sales of goods and services	Net financial income (excluding dividends)	Trade and other receivables	Loans and receivables at amortized cost	Trade and other payables	Borrowings and debt
Project management entities in the Middle East	-	223	7	59	149	-	-
Contassur [(1)]	-	-	-	260	2	-	-
Energia Sustentável do Brasil	127	-	-	-	-	12	-
Movhera	-	56	10	27	95	-	-
Other	95	60	11	49	109	17	4
AT DECEMBER 31, 2024	**221**	**338**	**28**	**396**	**356**	**29**	**4**

(1) Contassur is a life insurance company accounted for using the equity method. Contassur offers insurance contracts, chiefly with pension funds that cover post-employment benefit obligations for Group employees and also employees of other companies mainly engaged in regulated activities in the electricity and gas sector in Belgium. Insurance contracts entered into by Contassur represent reimbursement rights recorded within "Other assets" in the statement of financial position. These reimbursement rights amounted to €260 million at December 31, 2024 (€242 million at December 31, 2023).

3.2 Investments in joint ventures

3.2.1 Contribution of joint ventures to the Group

The table below shows the contribution of each material joint venture along with the aggregate contribution of joint ventures deemed not material taken individually to the consolidated statement of financial position, income statement, statement of comprehensive income, and the “Dividends received from equity method entities” line of the statement of cash flows.

The Group used qualitative and quantitative criteria to determine material joint ventures. These criteria include the contribution to the line items “Share in net income/(loss) of joint ventures” and “Investments in joint ventures”, the Group’s share in the total assets of joint ventures, and joint ventures conducting major projects in the study or construction phase for which the related investment commitments are material.

Company name	Activity	Capacity	Consolidation percentage of investments in joint ventures		Carrying amount of investments in joint ventures		Share in net income/(loss) of joint ventures		Other comprehensive income/(loss) of oint ventures		Dividends received from joint ventures	
In millions of euros			Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023
Transportadora Associada de Gás S.A. (TAG) (Brazil) [(1)]	Gas transmission network		50.00	65.00	582	1,059	343	368	(119)	29	417	387
National Central Cooling Company "Tabreed" (Middle-East, Asia & Africa, Abu Dhabi)	District cooling networks		40.00	40.00	925	872	56	34	(21)	35	44	39
EcoÉlectrica (Puerto Rico)	Combined-cycle gas-fired power plant and LNG terminal	534 MW	50.00	50.00	306	293	55	52	-	-	63	61
Portfolio of power generation assets in Portugal [(2)]	Electricity generation	2,396 MW	-	50.00	34	218	23	34	(16)	(2)	6	40
WSW Energie und Wasser AG (Germany)	Electricity distribution and generation		33.10	33.10	217	197	36	(33)	-	-	17	19
Iowa University partnership (United States)	Energy services		39.10	39.10	236	222	6	6	(1)	(1)	5	4
Ocean Winds [(3)]	Electricity generation	1,462 MW	50.00	50.00	187	415	(138)	6	(107)	(47)	-	-
Georgetown University partnership (United States)	Energy services		50.00	50.00	176	200	6	7	-	-	-	-
Ohio State Energy Partners (United States)	Energy services		50.00	50.00	22	50	(17)	(25)	2	9	16	17
Megal GmbH (Germany)	Gas transmission network		49.00	49.00	52	55	2	-	-	-	4	6
Transmisora Eléctrica del Norte (Chile) [(4)]	Electricity transmission line		50.00	50.00	134	114	5	3	-	(3)	-	-
Energia Mayakan (Mexique) [(5)]	Gas transmission network		50.00	-	355	-	12	-	-	-	4	-
Other investments in joint ventures that are not material taken individually					1,103	1,260	134	128	(4)	5	143	142
INVESTMENTS IN JOINT VENTURES					**4,330**	**4,954**	**522**	**580**	**(266)**	**26**	**719**	**715**

(1) The Group's interest in Transportadora Associada de Gás S.A. (TAG) is 44.52%.
(2) At the end of 2024, ENGIE, together with Marubeni, finalized a transaction to share the portfolio of production assets in Portugal, previously held by the joint venture TrustEnergy.
(3) Net income/(loss) for the period includes an impairment loss recorded on US offshore projects (see Note 13.4)
(4) The Group's interest inTransmisora Eléctrica del Norte is 30%.
(5) In December 2024, the Group finalized the partial sale of its interest in Mayakan to reach a50% stake at December 31, 2024 (see Note 4.1.2).

The share in net income/(loss) of joint ventures includes a non-recurring loss of €123 million in 2024 (non-recurring loss of €39 million in 2023), resulting chiefly from changes in the fair value of derivatives, impairment losses and disposal gains and losses, net of tax *(see Note 5.3 "Net recurring income Group share (NriGs)")*.

3.2.2 Financial information regarding material joint ventures

The amounts shown have been determined in accordance with IFRS before the elimination of intragroup items and after (i) adjustments made in line with Group accounting policies and (ii) fair value measurements of the assets and liabilities of

the joint venture performed at the date of acquisition at the level of ENGIE, as required by IAS 28. All amounts are presented based on a 100% interest with the exception of "Total equity attributable to ENGIE" in the statement of financial position.

3.2.2.1 Information on the income statement and statement of comprehensive income

In millions of euros	Revenues	Depreciation and amortization of intangible assets and property, plant and equipment	Net financial income/(loss)	Income tax benefit/(expense)	Net income/(loss)	Other comprehensive income/(loss)	Total comprehensive income/(loss)
AT DECEMBER 31, 2024							
Transportadora Associada de Gás S.A. (TAG)	1,554	(189)	(303)	(166)	686	(292)	394
National Central Cooling Company "Tabreed"	-	(8)	(2)	(13)	139	(52)	87
EcoÉlectrica	-	-	1	(1)	57	-	57
Portfolio of power generation assets in Portugal	175	(27)	(13)	(16)	56	(14)	42
WSW Energie und Wasser AG	1,064	(12)	-	(59)	106	1	107
Iowa University partnership	-	-	-	-	6	(1)	5
Ocean Winds	87	(20)	(71)	-	(289)	(214)	(503)
Georgetown University partnership	-	-	-	-	6	-	5
Ohio State Energy Partners	-	-	1	-	(16)	2	(14)
Megal GmbH	123	(66)	(3)	1	3	-	3
Transmisora Eléctrica del Norte	72	-	(29)	(5)	12	13	25
Energia Mayakan	60	(10)	(3)	(6)	24	1	25
AT DECEMBER 31, 2023							
Transportadora Associada de Gás S.A. (TAG)	1,672	(234)	(308)	(295)	566	45	610
National Central Cooling Company "Tabreed"	-	(8)	(5)	39	84	89	173
EcoÉlectrica	185	(31)	2	(6)	104	-	104
Portfolio of power generation assets in Portugal	456	(48)	(19)	(28)	97	(7)	90
WSW Energie und Wasser AG	2,338	(19)	(4)	8	(118)	-	(118)
Iowa University partnership	89	-	(21)	-	15	5	20
Ocean Winds	39	(7)	124	(5)	13	(94)	(81)
Georgetown University partnership	81	(2)	(21)	(1)	13	5	18
Ohio State Energy Partners	188	(1)	(66)	-	(50)	15	(35)
Megal GmbH	122	(70)	(4)	2	-	-	-
Transmisora Eléctrica del Norte	71	-	(32)	(5)	9	(4)	4

3.2.2.2 Information on the statement of financial position

In millions of euros	Cash and cash equivalents	Other current assets	Non-current assets	Short-term borrowings	Other current liabilities	Long-term borrowings	Other non-current liabilities	Total equity	Consolidation % of Group	Total equity attributable to ENGIE
AT DECEMBER 31, 2024										
Transportadora Associada de Gás S.A. (TAG)	360	370	4,531	533	151	2,555	1,419	1,165	50.00	582
National Central Cooling Company "Tabreed"	430	288	3,378	14	329	1,633	99	2,481	40.00	925
EcoÉlectrica	4	94	557	7	18	-	17	613	50.00	306
Portfolio of power generation assets in Portugal	35	139	274	58	52	262	7	69	50.00	34
WSW Energie und Wasser AG	206	327	510	90	405	97	146	634	33.10	217
Iowa University partnership	7	14	1,254	8	10	652	-	605	39.10	236
Ocean Winds	359	95	5,144	3,264	456	900	386	596	50.00	187
Georgetown University partnership	3	19	1,080	22	18	711	-	351	50.00	176
Ohio State Energy Partners	-	74	1,567	47	48	1,479	22	45	50.00	22
Megal GmbH	13	6	607	50	14	396	59	107	49.00	52
Transmisora Eléctrica del	77	26	757	38	5	549	-	268	50.00	134
Energia Mayakan	144	104	1,351	2	169	587	132	709	50.00	355
AT DECEMBER 31, 2023										
Transportadora Associada de Gás S.A. (TAG)	269	479	6,119	569	299	2,672	1,699	1,629	65.00	1,059
National Central Cooling Company "Tabreed"	450	254	3,713	-	233	1,737	94	2,352	40.00	872
EcoÉlectrica	4	76	543	3	17	-	17	587	50.00	293
Portfolio of power generation assets in Portugal	285	403	550	101	236	372	51	479	50.00	218
WSW Energie und Wasser AG	68	422	878	211	277	222	96	562	33.10	197
Iowa University partnership	1	17	1,146	4	7	586	-	568	39.10	222
Ocean Winds	313	-	3,786	1,670	514	773	314	830	50.00	415
Georgetown University partnership	-	6	964	-	-	569	2	399	50.00	200
Ohio State Energy Partners	12	71	1,452	-	64	1,353	19	99	50.00	50
Megal GmbH	48	15	644	170	39	341	46	112	49.00	55
Transmisora Eléctrica del Norte	75	12	625	36	7	585	-	83	50.00	42

3.2.3 Transactions between the Group and its joint ventures

The data below set out the impact of transactions with joint ventures on the Group's 2024 consolidated financial statements.

In millions of euros	Purchases of goods and services	Sales of goods and services	Net financial income (excluding dividends)	Trade and other receivables	Loans and receivables at amortized cost	Trade and other payables	Borrowings and debt
EcoÉlectrica	-	-	-	-	-	-	-
WSW Energie und Wasser AG	-	14	-	4	-	-	-
Megal GmbH	66	-	-	-	-	-	-
Futures Energies Investissements Holding	66	29	10	6	152	10	-
Ocean Winds	-	-	17	1	515	-	-
Other	51	136	17	28	92	5	1
AT DECEMBER 31, 2024	**184**	**179**	**44**	**39**	**759**	**15**	**1**

3.3 Other information on equity method investments

3.3.1 Unrecognized share of losses of associates and joint ventures

Cumulative unrecognized losses of associates (corresponding to the cumulative amount of losses exceeding the carrying amount of investments in the associates concerned) including other comprehensive income/(loss), amounted to €1 million in 2024 (versus €37 million in 2023).

3.3.2 Commitments and guarantees given by the Group in respect of equity method entities

At December 31, 2024, the main commitments and guarantees given by the Group in respect of equity method entities concern:

- Energia Sustentável do Brasil ("Jirau"), for an aggregate amount of BRL 3,782 million (€649 million). On December 31, 2024, the loans granted by Banco Nacional de Desenvolvimento Econômico e Social, the Brazilian Development Bank, to Energia Sustentável do Brasil amounted to BRL 9,455 million (€1,622 million). Each partner stands as guarantor for this debt to the extent of its ownership interest in the consortium.
- TAG, mainly for bank guarantees for an amount of €97 million.
- the project entities in the Middle East for an aggregate amount of €647 million. Commitments and guarantees given by the Group in respect of these project entities chiefly correspond to:
  - performance bonds and other guarantees for an amount of € 200 million
  - letters of credit to guarantee debt service reserve accounts for an aggregate amount of €167 million. The project financing set up in certain entities may require those entities to maintain a certain level of cash within the company (usually enough to service its debt for six months). This is particularly the case when the financing is without recourse. However, this level of cash may be replaced by letters of credit,
  - collateral given to lenders in the form of pledged shares in the project entities, for an aggregate amount of €287 million,
- Ocean Winds for an amount of €1,566 million mainly corresponding to equity contribution commitments for projects under construction for an amount of €1,179 million.

NOTE 4 MAIN CHANGES IN GROUP STRUCTURE

Accounting standards

In accordance with IFRS 5 – Non-Current Assets Held for Sale and Discontinued Operations, assets or groups of assets held for sale are presented separately on the face of the statement of financial position and are measured and accounted for at the lower of their carrying amount and fair value less costs to sell.

An asset is classified as "held for sale" when its sale is highly probable within twelve months from the date of classification, when it is available for immediate sale under its present condition and when management is committed to a plan to sell the asset and an active program to locate a buyer and complete the plan has been initiated. To assess whether a sale is highly probable, the Group takes into consideration among other things indications of interest and offers received from potential buyers as well as specific execution risks attached to certain transactions.

If an asset classified as "held for sale" no longer meets the above conditions it will be reclassified in accordance with the standard.

Furthermore, assets or groups of assets are presented as discontinued operations in the Group's consolidated financial statements when they are classified as "held for sale" and represent a separate major line of business under IFRS 5.

4.1 Disposals finalized in 2024

The table below shows the impact of the main disposals and sale agreements of 2024 on the Group's net debt, excluding partial disposals with respect to DBSO or DBOO [1] activities:

In millions of euros	Disposal price	Reduction in net debt
Disposal of a 15% stake in Transportadora de Gás S.A.	420	420
Disposal of a 50% stake in Energia Mayakan S. de R.L. de C.V.	193	206
Other disposals that are not material taken individually	236	321
Effects of classification as "assets classified as held for sale"	-	(65)
TOTAL	**849**	**882**

4.1.1 Disposal of a 15% stake in Transportadora Associada de Gás S.A. ("TAG")

In January 2024, ENGIE finalized the sale of a 15% stake in TAG to Caisse de dépôt et placement du Québec (CDPQ) (current partner). Following this transaction, TAG is still accounted for using the equity method. The Group's interest now stands at 50%, and its net interest at 44.5%. This partial disposal reduced the Group's net financial debt by €0.4 billion and generated capital gain, net of taxes of €0.2 billion.

4.1.2 Disposal of a 50% stake in Energia Mayakan S. de R.L. de C.V. ("Mayakan")

In December 2024, ENGIE finalized the sale of a 50% stake in Mayakan to Macquarie. As a result of this transaction, which involved ENGIE's purchase of the stake held by the non-controlling partner (EXI), the Group and Macquarie now own an equal shareholding in Mayakan. This disposal reduced the Group's net financial debt by €0.2 billion. The positive €0.2 billion impact on the income statement was already recorded under "Changes in scope of consolidation" in the financial statements for the six months to June 30, 2024 as a remeasurement of the retained interest in the company, given the change in governance in the first half of 2024 (loss of control of Mayakan and application of the equity method).

(1) Develop, Build, Share and Operate, or Develop, Build, Own and Operate: models used in renewable energies based on the continuous rotation of capital employed.

4.1.3 Assets classified as held for sale

Total "Assets classified as held for sale" and total "Liabilities directly associated with assets classified as held for sale" amounted to €1,248 million and €560 million, respectively, at December 31, 2024.

In millions of euros	Dec. 31, 2024
Property, plant and equipment and intangible assets, net	1
Other assets	1,247
TOTAL ASSETS CLASSIFIED AS HELD FOR SALE	**1,248**
Borrowings and debt, net	(65)
Other liabilities	625
TOTAL LIABILITIES DIRECTLY ASSOCIATED WITH ASSETS CLASSIFIED AS HELD FOR SALE	**560**

The following assets are classified as held for sale since a sale is highly likely to be completed within 12 months:

- **Touat** (E&P, Algeria) – agreement signed on December 20, 2024 with Thai group PTTEP and Italian energy company ENI (current shareholder). This transaction involves the sale of the Group's entire 46% equity interest in E&E Algeria Touat BV (the company which holds a 65% stake in the TouatGaz consortium, in partnership with Sonatrach, which operates the Touat gas field in Algeria). Due to the difference between the sale price and the equity consolidated value, an impairment loss of €0.2 billion was reversed in the December 31, 2024 financial statements. Once completed, this transaction is expected to decrease the Group's net financial debt by €0.4 billion;
- **Safi** (coal power plant, Morocco) – agreement signed on December 4, 2024 with Nareva (one of the current shareholders). This transaction involves the sale of part (15.66%) of the Group's equity-accounted stake in SAFIEC SA ("Safi"), which operates the Safi coal plant in Morocco. As the Group is not divesting all of its stake in Safi, only the stake sold is classified as held for sale. Due to the difference between the sale price and equity consolidated value, an impairment loss of €0.1 billion was recognized in the December 31, 2024 financial statements. The transaction was completed on January 21, 2025. In light of the changes in governance effective since the closing in 2025, the Group's residual interest in Safi (17.67%) will be accounted for as an equity instrument under IFRS 9;
- **Uch** (gas power plants, Pakistan) – agreement signed on July 12, 2024 with Mindbridge & Sapphire. This transaction involves the complete sale of the Group's two subsidiaries, Uch Power Limited and Uch-II Power Limited. The entities own and operate gas-fired power plants in Pakistan. Due to the difference between the sale price and the carrying amount of the assets, an impairment loss of €0.2 billion was recognized in the December 31, 2024 financial statements. Once completed, this transaction is expected to decrease the Group's net financial debt by €0.2 billion;
- **Gaztransport & Technigaz** – lastly, ENGIE's residual stake in GTT was also recognized under "Assets classified as held for sale" in view of the forward sale (maturing in September 2025) signed in March 2024. This transaction secures ENGIE's complete exit from the company's share capital.

4.2 Acquisitions completed in 2024

In total, financial CapEx in 2024 (mainly acquisitions, including financial investments in equity-accounted companies) had an impact of €1,415 million on net financial debt. The main transaction involved the acquisition of five photovoltaic complexes with a total installed capacity of 545MW in Brazil from Atlas in March 2024. This investment is fully consolidated. This transaction had an impact of €0.6 billion on the Group's net financial debt.

NOTE 5 FINANCIAL INDICATORS USED IN FINANCIAL COMMUNICATION

The purpose of this note is to present the main non-GAAP financial indicators used by the Group as well as their reconciliation with the indicators of the IFRS consolidated financial statements.

5.1 EBITDA

The reconciliation between EBITDA and current operating income including operating MtM and share in net income of equity method entities is as follows:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Current operating income including operating MtM and share in net income of equity method entities	**9,820**	**12,493**
Mark-to-market on commodity contracts other than trading instruments	309	(2,430)
Net depreciation and amortization/Other	5,129	4,886
Share-based payments (IFRS 2)	97	47
Non-recurring share in net income of equity method entities	212	22
EBITDA	**15,566**	**15,017**
Nuclear	2,174	1,285
EBITDA excluding Nuclear	**13,393**	**13,732**

5.2 EBIT

The reconciliation between EBIT and current operating income including operating MtM and share in net income of equity method entities is as follows:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Current operating income including operating MtM and share in net income of equity method entities	**9,820**	**12,493**
Mark-to-market on commodity contracts other than trading instruments	309	(2,430)
Non-recurring share in net income of equity method entities	212	22
EBIT	**10,341**	**10,084**
Nuclear	1,448	605
EBIT excluding Nuclear	**8,893**	**9,479**

5.3 Net recurring income Group share (NriGs)

Net recurring income Group share is a financial indicator used by the Group in its financial reporting to present net income Group share adjusted for unusual, abnormal or non-recurring items.

The reconciliation of net income/(loss) with net recurring income Group share is as follows:

In millions of euros	Notes	Dec. 31, 2024	Dec. 31, 2023
NET INCOME/(LOSS) GROUP SHARE		**4,106**	**2,208**
Net income attributable to non-controlling interests		867	695
NET INCOME/(LOSS)		**4,973**	**2,903**
Reconciliation items between "Current operating income including operating MtM and share in net income of equity method entities" and "Net income/(loss) from operating activities"		**790**	**6,395**
Impairment losses	*9.1*	*709*	*1,318*
Restructuring costs	*9.2*	*369*	*47*
Changes in scope of consolidation	*9.3*	*(439)*	*85*
Other non-recurring items	*9.4*	*151*	*4,945*
Other adjusted items		**636**	**(3,092)**
Mark-to-market on commodity contracts other than trading instruments	*8*	*309*	*(2,430)*
Ineffective portion of derivatives qualified as fair value hedges	*10*	*(16)*	*-*
Gains/(losses) on debt restructuring and early unwinding of derivative financial instruments	*10*	*-*	*(8)*
Change in fair value of derivatives not qualified as hedges and ineffective portion of derivatives qualified as cash flow hedges	*10*	*49*	*13*
Non-recurring income/(loss) from debt instruments and equity instruments	*10*	*(98)*	*183*
Other adjusted tax impacts		*181*	*(872)*
Non-recurring income/(loss) included in share in net income of equity method entities		*212*	*22*
NET RECURRING INCOME/(LOSS)		**6,399**	**6,206**
Net recurring income/(loss) attributable to non-controlling interests		867	839
NET RECURRING INCOME/(LOSS) GROUP SHARE		**5,531**	**5,366**

5.4 Industrial capital employed

The reconciliation of industrial capital employed with items in the statement of financial position is as follows:

In millions of euros		Dec. 31, 2024	Dec. 31, 2023
(+)	Property, plant and equipment and intangible assets, net	72,352	66,399
(+)	Goodwill	13,291	12,864
(-)	*Goodwill Gaz de France - SUEZ and International Power [1]*	*(7,188)*	*(7,229)*
(+)	IFRS 16 and IFRIC 12 receivables	2,861	3,348
(+)	Investments in equity method entities	8,373	9,213
(-)	*Goodwill arising on the International Power combination [1]*	-	*(39)*
(+)	Financial assets covering nuclear provisions	12,896	9,984
(+)	Initial Margins	*2,077*	*1,276*
(+)	Trade and other receivables, net	16,173	20,092
(-)	*Margin calls [1] [2]*	*(3,697)*	*(3,207)*
(+)	Inventories	5,061	5,343
(+)	Assets from contracts with customers	9,232	9,531
(+)	Other current and non-current assets	13,304	14,414
(+)	Deferred tax	(5,028)	(3,658)
(+)	*Cancellation of deferred tax on other recyclable items [1] [2]*	*(35)*	*(745)*
(-)	Provisions	(33,621)	(32,593)
(+)	*Actuarial gains and losses in shareholders' equity (net of deferred tax) [1]*	*1,170*	*1,500*
(-)	Trade and other payables	(19,153)	(22,976)
(+)	*Margin calls [1] [2]*	*1,877*	*3,269*
(-)	Liabilities from contracts with customers	(3,971)	(4,053)
(-)	Other current and non-current liabilities	(19,260)	(21,777)
INDUSTRIAL CAPITAL EMPLOYED		**66,714**	**60,957**

(1) For the purpose of calculating industrial capital employed, the amounts recorded in respect of these items have been adjusted from those appearing in the statement of financial position.

(2) Margin calls included in "Trade and other receivables, net" and "Trade and other payables" correspond to advances received or paid as part of collateralization agreements set up by the Group to manage counterparty risk on commodity transactions.

5.5 Cash flow from operations (CFFO)

The reconciliation of cash flow from operations (CFFO) with items in the statement of cash flows is as follows:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Cash generated from operations before income tax and working capital requirements	14,401	14,407
Tax paid	(1,030)	(1,687)
Change in working capital requirements	(227)	397
Interest received on financial assets	475	118
Dividends received on equity investments	(12)	9
Interest paid	(1,732)	(1,058)
Interest received on cash and cash equivalents	750	569
Nuclear - expenditure on power plant dismantling and reprocessing, fuel storage	435	321
Change in financial assets held for investment and financing purposes	(475)	15
(+) Change in financial assets held for investment or financing purposes recorded in the statement of financial position and other	*475*	*(15)*
CASH FLOW FROM OPERATIONS (CFFO)	**13,060**	**13,075**

5.6 Capital expenditure (CapEx) and growth CapEx

The reconciliation of capital expenditure (Capex) with items in the statement of cash flows is as follows:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Acquisitions of property, plant and equipment and intangible assets	9,385	7,328
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	670	1,392
(+) Cash and cash equivalents acquired	*184*	*204*
Acquisitions of investments in equity method entities and joint operations	66	237
Acquisitions of equity and debt instruments	(1,693)	1,675
Change in loans and receivables originated by the Group and other	4,289	1,585
(+) Other	*(4)*	-
Change in ownership interests in controlled entities	(743)	-
Disposal impacts relating to DBSO [1] activities	-	(62)
(-) Financial investments Synatom / Disposal of financial assets Synatom	(2,495)	(3,082)
(+) Change in scope - Acquisitions	311	1,338
TOTAL CAPITAL EXPENDITURE (CAPEX)	**9,970**	**10,614**
(-) Maintenance CapEx	(2,678)	(2,524)
TOTAL GROWTH CAPEX	**7,292**	**8,091**

(1) Develop, Build, Share & Operate; including Tax equity financing received.

5.7 Net financial debt

The reconciliation of net financial debt with items in the statement of financial position is as follows:

In millions of euros	Notes	Dec. 31, 2024	Dec. 31, 2023
(+) Long-term borrowings	14.2 & 14.3	42,880	37,920
(+) Short-term borrowings	14.2 & 14.3	9,127	9,367
(+) Derivative instruments - carried in liabilities	14.4	13,646	24,561
(-) Derivative instruments hedging commodities and other items		*(13,083)*	*(23,973)*
(-) Other financial assets	14.1	(19,681)	(16,987)
(+) Loans and receivables at amortized cost not included in net financial debt		*14,022*	*8,891*
(+) Equity instruments at fair value		*1,129*	*2,124*
(+) Debt instruments at fair value not included in net financial debt		*2,655*	*4,558*
(-) Cash and cash equivalents	14.1	(16,928)	(16,578)
(-) Derivative instruments - carried in assets	14.4	(13,055)	(21,245)
(+) Derivative instruments hedging commodities and other items		*12,510*	*20,854*
NET FINANCIAL DEBT		**33,223**	**29,493**

5.8 Economic net debt

Economic net debt is as follows:

In millions of euros	Notes	Dec. 31, 2024	Dec. 31, 2023
NET FINANCIAL DEBT	14.3	**33,223**	**29,493**
Provisions for back-end of the nuclear fuel cycle and dismantling of nuclear facilities	17	24,531	23,887
Other nuclear liabilities	17	822	816
Provisions for dismantling of non-nuclear facilities	17	1,569	1,384
Post-employment benefits - Pensions	18	827	957
(-) Infrastructures regulated companies		*239*	*253*
Post-employment benefits - Reimbursement rights	18	(260)	(242)
Post-employment benefits - Other benefits	18	3,765	3,962
(-) Infrastructures regulated companies		*(2,460)*	*(2,578)*
Deferred tax assets for pensions and related obligations	11	(918)	(1,013)
(-) Infrastructures regulated companies		*513*	*541*
Plan assets relating to nuclear provisions, inventories of uranium and receivables of Electrabel towards EDF	17 & 22	(13,978)	(10,944)
ECONOMIC NET DEBT		**47,874**	**46,517**

NOTE 6 SEGMENT INFORMATION

6.1 Operating segments and reportable segments

Until January 31, 2025, ENGIE is organized around:

- four Global Business Units (GBUs) representing the Group's four strategic activities: Renewables GBU, Networks GBU, Energy Solutions GBU, and FlexGen & Retail GBU;
- two operating entities: Nuclear and Global Energy Management & Sales ("GEMS");
- and "Other", mainly comprising Corporate functions, Tractebel since the change in managerial responsibility on May 1, 2024, and certain holding companies.

The reportable segments are identical to the operating segments and correspond to the activities of the GBUs.

- **Renewables**: comprises all centralized renewable energy generation activities, including financing, construction, operation and maintenance of renewable energy facilities, using various energy sources such as hydroelectric, onshore wind, photovoltaic solar, offshore wind, and battery storage combined with a renewable asset. The energy produced is fed into the grid and sold either on the open or regulated market or to third parties through electricity sale agreements.
- **Networks**: comprises the Group's electricity and gas infrastructure activities and projects. These activities include the management and development of (i) gas and electricity transportation networks and natural gas distribution networks in and outside of Europe, (ii) underground natural gas storage in Europe, and (iii) regasification infrastructure in France and Chile. Apart from the historical infrastructure management activities, its asset portfolio also contributes to energy decarbonization and network greening (gradual integration of green gas, hydrogen-based projects, etc.).
- **Energy Solutions**: encompasses the construction and management of decentralized energy networks to produce energy (heating and cooling networks, distributed power generation plants, distributed solar power parks, low-carbon mobility, low-carbon cities and public lighting, etc.) and related services (energy efficiency, technical maintenance, sustainable development consulting).
- **FlexGen**: includes activities to compensate for the intermittent nature of renewable energy by providing upstream flexibility (flexible thermal generation and electricity, pumping or battery storage) and downstream flexibility (shaving or shifting consumption for BtoC customers). They also provide solutions to decarbonize the industry with low-carbon hydrogen. It also includes the financing, construction and operation of desalination plants, whether or not connected to power plants.
- **Retail**: encompasses all the Group's activities relating to the sale of gas and electricity to end customers, whether professional or individual. It also includes all the Group's activities in services for residential clients.
- **Nuclear:** encompasses all of the Group's nuclear activities, with seven reactors in Belgium (four in Doel and three in Tihange) among which five in operation and drawing rights in France.
- **Others:** encompasses the activities of GEMS as well as Corporate, Tractebel and holding companies. The GEMS operating entity is responsible, at the global level, for the supply of energy and the management of risk and optimization of assets on the markets. It sells energy to companies and offers energy management services and solutions to support the decarbonization of the Group and its customers.

The Group's organization has changed with effect from February 1, 2025 (*see Note 24 "Subsequent events"*), with no impact on the segment information presented at December 31, 2024.

6.2 Key indicators by reportable segment

REVENUES

In millions of euros	Dec. 31, 2024 External revenues	Dec. 31, 2024 Intra-Group Revenues	Dec. 31, 2024 Total	Dec. 31, 2023 [(1)] External revenues	Dec. 31, 2023 [(1)] Intra-Group Revenues	Dec. 31, 2023 [(1)] Total
Renewables	5,467	170	5,637	5,512	172	5,684
Networks	7,231	1,045	8,276	6,873	1,032	7,905
Energy Solutions	9,853	280	10,133	10,405	357	10,762
FlexGen	4,937	1,390	6,327	5,264	2,508	7,772
Retail	14,070	406	14,476	16,443	367	16,810
Nuclear	68	3,664	3,732	118	2,325	2,444
Others	32,187	4,195	36,382	37,949	6,832	44,781
Of which GEMS [(2)]	*31,377*	*4,131*	*35,507*	*37,221*	*6,776*	*43,997*
Elimination of internal transactions	-	(11,151)	(11,151)	-	(13,593)	(13,593)
TOTAL REVENUES	**73,812**	**-**	**73,812**	**82,565**	**-**	**82,565**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2024. The internal reclassifications are not material and concern the transfer of Tractebel from Energy Solutions to Others. Comparative data at December 31, 2023 have been restated accordingly.

EBITDA

In millions of euros	Dec. 31, 2024	Dec. 31, 2023 [(1)]
Renewables	3,001	2,665
Networks	4,362	4,151
Energy Solutions	842	831
FlexGen	1,878	1,929
Retail	938	821
Others	2,372	3,335
Of which GEMS	*2,663*	*3,829*
TOTAL EBITDA excluding Nuclear	**13,393**	**13,732**
Nuclear	2,174	1,285
TOTAL EBITDA	**15,566**	**15,017**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2024. The internal reclassifications are not material and concern the transfer of Tractebel from Energy Solutions to Others. Comparative data at December 31, 2023 have been restated accordingly.

EBIT

In millions of euros	Dec. 31, 2024	Dec. 31, 2023 [(1)]
Renewables	2,198	2,005
Networks	2,460	2,265
Energy Solutions	356	367
FlexGen	1,467	1,513
Retail	695	569
Others	1,718	2,761
Of which GEMS	*2,382*	*3,551*
TOTAL EBIT excluding Nuclear	**8,893**	**9,479**
Nuclear	1,448	605
TOTAL EBIT	**10,341**	**10,084**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2024. The internal reclassifications are not material and concern the transfer of Tractebel from Energy Solutions to Others. Comparative data at December 31, 2023 have been restated accordingly.

SHARE IN NET INCOME/(LOSS) OF EQUITY METHOD ENTITIES

In millions of euros	Dec. 31, 2024	Dec. 31, 2023 (1)
Renewables	(4)	203
Networks	411	446
Energy Solutions	100	22
FlexGen	286	355
Retail	-	-
Nuclear	-	-
Others	57	40
Of which GEMS	*10*	*32*
TOTAL SHARE IN NET INCOME/(LOSS) OF EQUITY METHOD ENTITIES	**850**	**1,066**

Associates and joint ventures accounted for €329 million and €522 million respectively of share in net income of equity method entities at December 31, 2024 (compared to €486 million and €580 million at December 31, 2023).

INDUSTRIAL CAPITAL EMPLOYED

In millions of euros	Dec. 31, 2024	Dec. 31, 2023 (1)
Renewables	24,258	20,001
Networks	24,908	25,198
Energy Solutions	7,986	7,428
FlexGen	9,662	9,289
Retail	(88)	390
Nuclear	(9,655)	(11,210)
Others	9,642	9,861
Of which GEMS	*6,631*	*6,596*
TOTAL INDUSTRIAL CAPITAL EMPLOYED	**66,714**	**60,957**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2024. The internal reclassifications are not material and concern the transfer of Tractebel from Energy Solutions to Others. Comparative data at December 31, 2023 have been restated accordingly.

CAPITAL EXPENDITURE (CAPEX)

In millions of euros	Dec. 31, 2024	Dec. 31, 2023 (1)
Renewables	4,221	4,130
Networks	2,343	2,173
Energy Solutions	1,076	1,089
FlexGen	1,457	2,135
Retail	228	247
Nuclear	244	174
Others	402	665
Of which GEMS	*220*	*182*
TOTAL CAPITAL EXPENDITURE (CAPEX)	**9,970**	**10,614**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2024. The internal reclassifications are not material and concern the transfer of Tractebel from Energy Solutions to Others. Comparative data at December 31, 2023 have been restated accordingly.

GROWTH CAPEX

In millions of euros	Dec. 31, 2024	Dec. 31, 2023 (1)
Renewables	4,012	3,966
Networks	935	839
Energy Solutions	895	895
FlexGen	1,191	1,843
Retail	152	160
Nuclear	78	19
Others	30	370
Of which GEMS	*89*	*82*
TOTAL GROWTH CAPEX	**7,292**	**8,091**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2024. The internal reclassifications are not material and concern the transfer of Tractebel from Energy Solutions to Others. Comparative data at December 31, 2023 have been restated accordingly.

6.3 Key indicators by geographic area

The amounts set out below are analyzed by:

- destination of products and services sold for revenues;
- geographic location of consolidated companies for industrial capital employed.

	Revenues		Industrial capital employed	
In millions of euros	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023
France	32,623	36,676	33,438	32,802
Belgium	6,808	8,408	(6,953)	(9,259)
Other EU countries	15,868	18,303	8,624	9,713
Other European countries	4,966	4,480	2,163	1,991
North America	5,525	5,329	11,933	8,989
Asia, Middle East & Oceania	3,185	4,366	4,040	3,830
South America	4,458	4,715	11,801	11,212
Africa	379	289	1,668	1,679
TOTAL	**73,812**	**82,565**	**66,714**	**60,957**

Due to the variety of its businesses and their geographical location, the Group operates in a very diverse range of situations and for a variety of customer types (industry, local authorities and individual customers). Accordingly, no external customer represents individually 10% or more of the Group's consolidated revenues.

NOTE 7 REVENUES

7.1 Revenues

Accounting standards

Revenues from contracts with customers concern revenues from contracts that fall within the scope of IFRS 15 – *Revenue from Contracts with Customers*. Revenues are recognized when the customer obtains control of goods or services promised in the contract, for the amount of consideration to which an entity expects to be entitled in exchange for said promised goods or services.

A contractual analysis of the Group's sale contracts has led to the application of the following revenue recognition principles:

- **Gas, electricity and other energies**
  Revenues from sales of gas, electricity and other energies are recognized upon delivery of the power to the retail, business or industrial customer.
  Power deliveries are monitored in real time or on a deferred basis for those customers whose energy consumption is metered during the accounting period, in which case the portion of not yet metered revenues "in the meter" is estimated on the closing date.

- **Gas, electrical and other energy infrastructures**
  Revenues derived by gas and electricity infrastructure operators upon providing transportation or distribution or storage capacities, are recognized on a straight-line basis over the contract term.
  In the countries where the Group acts as an energy provider (supplier) without being in charge of its distribution or transportation, mainly in France and Belgium, an analysis of the energy sales contracts and of the related regulatory framework is carried out to determine whether the distribution or transportation services invoiced to the customers have to be excluded from the revenues recognized under IFRS 15.
  Judgment may be exercised by the Group for this analysis in order to determine whether the energy provider acts as an agent or a principal for the gas or electricity distribution or transportation services re-invoiced to the customers. The main criteria used by the Group to exercise its judgment and conclude, in certain countries, that the energy provider acts as an agent of the infrastructure operator are as follows: who is primarily responsible for fulfillment of the distribution or transportation services? Does the energy provider have the ability to commit to capacity reservation contracts towards the infrastructure operator? To what extent does the energy provider have discretion in establishing the price for the distribution or transportation services?

- **Constructions, installations, Operations and Maintenance (O&M)**
  Construction and installation contracts mainly concern assets built on the premises of customers such as cogeneration units, heaters or other energy-efficiency assets. The related revenues are usually recognized according to the percentage of completion on the basis of the costs incurred where the contracts fall within the scope of IFRS 15.
  O&M contracts generally require the Group to perform services ensuring the availability of power generating facilities. These services are performed over time and the related revenues are recognized according to the percentage of completion on the basis of the costs incurred.

If it is not possible to conclude from the contractual analysis that the contract falls within the scope of IFRS 15, the revenues are accounted for as non-IFRS 15 revenues.

Revenues from other contracts, corresponding to revenues from operations that do not fall within the scope of IFRS 15, presented in the "Others" column include trading, lease and concession income, as well as any financial component of operating services, and the effects of the tariff shield mechanisms

The table below shows a breakdown of revenues by type:

In millions of euros	Sales of gas	Sales of electricity and other energies	Sales of services linked to infrastructures	Constructions, installations, and O&M	Others	Dec. 31, 2024
Renewables	-	4,913	79	216	259	**5,467**
Networks	129	19	6,451	447	185	**7,231**
Energy Solutions	264	3,516	94	5,886	92	**9,853**
FlexGen	365	3,574	346	454	198	**4,937**
Retail	6,518	5,999	68	921	565	**14,070**
Nuclear	-	12	10	28	18	**68**
Others	11,436	17,424	311	839	2,177	**32,187**
Of which GEMS	*11,436*	*17,424*	*307*	*33*	*2,177*	***31,377***
TOTAL REVENUES	**18,712**	**35,455**	**7,359**	**8,792**	**3,494**	**73,812**

In millions of euros	Sales of gas	Sales of electricity and other energies	Sales of services linked to infrastructures	Constructions, installations, and O&M	Others	Dec. 31, 2023 (1)
Renewables	-	5,010	106	261	135	**5,512**
Networks	138	5	6,068	434	228	**6,873**
Energy Solutions	268	4,163	88	5,807	80	**10,405**
FlexGen	92	4,332	274	400	166	**5,264**
Retail	7,631	6,229	82	1,003	1,497	**16,443**
Nuclear	-	4	7	28	79	**118**
Others	13,943	19,619	246	770	3,372	**37,949**
Of which GEMS	*13,943*	*19,619*	*241*	*46*	*3,372*	**37,221**
TOTAL REVENUES	**22,072**	**39,362**	**6,872**	**8,703**	**5,557**	**82,565**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2024. The internal reclassifications are not material and concern the transfer of Tractebel from Energy Solutions to Others. Comparative data at December 31, 2023 have been restated accordingly.

7.2 Trade and other receivables, assets and liabilities from contracts with customers

Accounting standards

On initial recognition, trade and other receivables are recorded at their transaction price as defined in IFRS 15.

A contract asset is an entity's right to consideration in exchange for goods or services that have been transferred to a customer but for which payment is not yet due or is contingent on the satisfaction of a specific condition stipulated in the contract. When an amount becomes due, it is transferred to receivables.

A receivable is recorded when the entity has an unconditional right to consideration. A right to consideration is unconditional if only the passage of time is required before payment of that consideration.

A contract liability is an entity's obligation to transfer goods or services to a customer for which the entity has already received consideration from the customer. The liability is derecognized upon recognition of the corresponding revenue.

Trade and other receivables and assets from contracts with customers are tested for impairment in accordance with the provisions of IFRS 9 on expected credit losses.

The impairment model for financial assets is based on the expected credit loss model. To calculate expected losses, the Group uses a matrix for trade receivables and assets from contracts with customers, for which the change in credit

risk is monitored on a portfolio basis. The change in credit risk of for large customers and other large counterparties is monitored on an individual basis.

See Note 15 “Risks arising from financial instruments” for the Group’s assessment of counterparty risk.

7.2.1 Trade and other receivables, assets from contracts with customers

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Trade and other receivables, net	16,173	20,092
Of which IFRS 15	*6,880*	*8,083*
Of which non-IFRS15 (1)	*9,292*	*12,009*
Assets from contracts with customers	9,232	9,531
Accrued income and unbilled revenues	*6,874*	*6,989*
Energy in the meter [(2)]	*2,358*	*2,542*

(1) Most of which relate to financial or with physical delivery commodity contracts, accounted for as derivatives in accordance with IFRS 9.

(2) Net of advance payments.

In 2024, the most significant assets from contracts mainly concerned GEMS (€3,678 million), Energy Solutions (€2,277 million) and Retail (€1,811 million).

	Dec. 31, 2024			Dec. 31, 2023		
In millions of euros	Gross	Allowances and expected credit losses	Net	Gross	Allowances and expected credit losses	Net
Trade and other receivables, net	18,487	(2,314)	16,173	22,160	(2,068)	20,092
Assets from contracts with customers	9,290	(58)	9,232	9,558	(27)	9,531
TOTAL	**27,777**	**(2,372)**	**25,405**	**31,718**	**(2,094)**	**29,623**

Gas and electricity in the meter

For customers whose energy consumption is metered during the accounting period, the gas supplied but not yet metered at the reporting date is estimated based on historical data, consumption statistics and estimated selling prices.

For sales on networks used by a large number of grid operators, the Group is allocated a certain volume of energy transiting through the networks by the grid managers. As the final consumptions are sometimes only known several months down the line, revenue figures cannot be determined with absolute certainty. However, the Group has developed measuring and modeling tools allowing it to estimate revenues with a reasonable degree of accuracy and subsequently ensure that risks of error associated with estimating quantities sold and the related revenues can be considered as not significant.

In France and Belgium, un-metered revenues (“gas in the meter”) are calculated using a direct method taking into account customers’ estimated consumption since the last invoice or metering not yet billed. These estimates are in line with the volume of energy allocated by the grid managers over the same period. “Gas in the meter” is measured based on the contract price or average price depending on the delivery month and takes into account the category of customer and the age of the delivered unbilled “gas in the meter”.

The portion of unbilled revenues at the reporting date varies according to the assumptions about volume and average price.

“Electricity in the meter” is also determined using a direct allocation method similar to that used for gas, but taking into account specific factors related to electricity consumption. It is also measured on a customer-by-customer basis or by customer type.

Realized but not yet metered revenues (“un-metered revenues”) mainly related to France and Belgium for an amount of €4,996 million at December 31, 2024 (€5,279 million at December 31, 2023).

7.2.2 Liabilities from contracts with customers

	Dec. 31, 2024			Dec. 31, 2023		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Liabilities from contracts with customers	153	3,818	3,971	93	3,960	4,053
Advances and downpayments received	*50*	*2,995*	*3,045*	*23*	*2,998*	*3,020*
Deferred revenues	*103*	*822*	*926*	*71*	*963*	*1,033*

In 2024, the Global Business Units reporting the greatest amounts of liabilities from contracts with customers were Retail (€1,438 million) and Energy Solutions (€1,518 million).

7.3 Revenues relating to performance obligations not yet satisfied

Revenues relating to performance obligations only partially satisfied at December 31, 2024 amounted to €563 million (compared to €867 million at December 31, 2023). They mainly concern Energy Solutions for €325 million which encompass a large number of construction, installation, and maintenance contracts under which revenues are recognized over time.

NOTE 8 OPERATING EXPENSES

Accounting standards

Operating expenses include:

- purchases and operating derivatives including:
  - the purchase of commodities and associated costs (infrastructure, transport, storage, etc.),
  - the realized impact, as well as the change in fair value (MtM), of commodity transactions, with or without physical delivery, that fall within the scope of IFRS 9 – *Financial Instruments* and that do not qualify as trading or hedging. These contracts are set up as part of economic hedges of operating transactions in the energy sector;
- purchases of services and other items such as subcontracting and interim expenses, lease expenses (short-term lease contracts, leases with a low underlying asset value or leases with variable expenses), concession expenses, etc.;
- personnel costs;
- depreciation, amortization, and provisions; and
- taxes.

8.1 Purchases and operating derivatives

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Purchases and other income and expenses on operating derivatives other than trading [1]	(42,048)	(49,650)
Service and other purchases [2]	(7,417)	(7,342)
PURCHASES AND OPERATING DERIVATIVES	**(49,465)**	**(56,992)**

(1) *Of which a net expense of €309 million in 2024 relating to MtM on commodity contracts other than trading (compared to a net income of €2,430 million in 2023), notably on certain economic gas and electricity hedging positions not documented as cash flow hedges.*

(2) *Of which €72 million in 2024 in lease expenses not included in the IFRS 16 lease liability (compared to €75 million in lease expenses in 2023).*

The decrease in purchases and operating derivatives is mainly due to changes to MtM positions on commodity contracts other than trading and the return to normal energy prices.

8.2 Personnel costs

In millions of euros	Notes	Dec. 31, 2024	Dec. 31, 2023
Short-term benefits		(8,175)	(7,688)
Share-based payments	19	(97)	(47)
Costs related to defined benefit plans	18.3.4	(263)	(322)
Costs related to defined contribution plans	18.4	(88)	(92)
PERSONNEL COSTS		**(8,623)**	**(8,149)**

8.3 Depreciation, amortization and provisions

In millions of euros	Notes	Dec. 31, 2024	Dec. 31, 2023
Depreciation and amortization	13	(5,129)	(4,886)
Net change in write-downs of inventories, trade receivables and other assets		(469)	(203)
Net change in provisions	17	50	178
DEPRECIATION, AMORTIZATION AND PROVISIONS		**(5,547)**	**(4,911)**

At December 31, 2024, depreciation and amortization mainly break down as €1,107 million for intangible assets and €4,021 million for property, plant and equipment.

8.4 Taxes

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
TAXES	**(2,391)**	**(2,627)**

Taxes at December 31, 2024 totaled €-2,391 million, down €236 million on 2023. This decrease is mainly due to lower taxes and fees related to nuclear activity in Belgium, partially offset by higher French inframarginal taxes.

NOTE 9 OTHER ITEMS OF NET INCOME/(LOSS) FROM OPERATING ACTIVITIES

Accounting standards

Other items of Net income/(loss) from operating activities include:

- "Impairment losses": this line includes impairment losses on goodwill, other intangible assets, property, plant and equipment and investments in entities consolidated using the equity method;
- "Restructuring costs": this line concerns costs corresponding to a restructuring program planned and controlled by management that materially changes either the scope of a business undertaken by the entity, or the manner in which that business is conducted, based on the criteria set out in IAS 37;
- "Changes in scope of consolidation". This line includes:
  - direct costs related to acquisitions of controlling interests,
  - in a business combination achieved in stages, remeasurement at fair value at the acquisition date of the previously held interest,
  - subsequent changes in the fair value of contingent consideration,
  - gains or losses from disposals of investments which result in a change of consolidation method, as well as any impact from the remeasurement of retained interests with the exception of gains and losses arising from transactions realized in the framework of "Develop, Build, Share & Operate" (DBSO) or "Develop, Share, Build & Operate" (DSBO) business models. As they are part of the recurring rotation of the Group's capital employed, these transactions are recognized in current operating income subject to certain criteria being met (notably their recurrence).
- "Other non-recurring items": this line includes other elements of an unusual, abnormal or infrequent nature.

9.1 Impairment losses

In millions of euros	Notes	Dec. 31, 2024	Dec. 31, 2023
Impairment losses:			
Goodwill	13.1	(66)	(94)
Property, plant and equipment and intangible assets	13.2 & 13.3	(893)	(1,587)
Investments in equity method entities and related provisions		(124)	(72)
TOTAL IMPAIRMENT LOSSES		**(1,083)**	**(1,753)**
Reversal of impairment losses:			
Property, plant and equipment and intangible assets		39	435
Investments in equity method entities and related provisions		334	-
TOTAL REVERSALS OF IMPAIRMENT LOSSES		**373**	**435**
TOTAL		**(709)**	**(1,318)**

9.1.1 Impairment losses recognized in 2024

Impairment losses recognized in 2024 amounted to €709 million and related in particular to not yet finalized or completed disposals at December 31, 2024, representing €247 million:

- disposal of thermal power generation assets in Pakistan, not yet completed at December 31, 2024 (€205 million);
- disposal of part of the equity consolidated stake in Safi, Morocco, completed in January 2025 (€54 million);

- disposal of the entities holding solar supply solutions and mini-grid assets in Africa, not yet completed at December 31, 2024 (€225 million);
- disposal of the equity consolidated stake in E&E Algeria Touat BV in Algeria, not yet completed at December 31, 2024 (impairment reversal of €171 million);
- disposal of the equity consolidated stake in Senoko, Singapore, completed in the fourth quarter of 2024 (impairment reversal of €66 million).

Other impairment losses recognized in 2024 concerned:

- Energy Solutions assets in France (€108 million) and North America (€73 million);
- onshore renewable energy production assets in North America (€91 million) and hydro assets in Brazil (reversal of impairment recognized against an equity consolidated company for €80 million);
- EVBox assets (€96 million) following the decision to cease the operations;
- other production or support assets for less significant amounts taken individually.

These impairment losses mainly concern intangible assets, property, plant and equipment and entities consolidated using the equity method. Considering the effects of deferred taxes and the portion of impairment losses attributable to non controlling interests, the impact of the impairment losses on net income Group share amounted to €644 million.

With the exception of the effects arising from the decisions to dispose of non-strategic assets, no impairment losses were recognized on non-financial assets as a result of measures to prevent or mitigate climate risks or to achieve the 2045 net zero-carbon objective.

Impairment tests are carried out in accordance with the procedures described in Note 13.4.

9.1.2 Impairment losses recognized in 2023

Net impairment losses recognized in 2023 amounted to €1,318 million and related mainly to:

- renewable energy production assets in North America (€714 million);
- coal-fired generation assets in South America, for which the Group has decided to accelerate decommissioning from end 2025, in line with the Group's decarbonization plan (€515 million);
- a reversal of impairment losses on dismantling assets for Belgian nuclear power plants in the amount of €400 million;
- other production or support assets for less significant amounts taken individually.

9.2 Restructuring costs

In 2024, restructuring costs amounted to €369 million (versus €47 million in 2023), mainly including costs related to staff reduction plans and measures to adapt to the economic situation (notably in Energy Solutions for a total of €80 million), as well as costs related to the shutdown or sale of operations and the closure or restructuring of certain facilities. Restructuring costs notably include the consequences of the decision to cease EVBox activities (€134 million).

9.3 Changes in scope of consolidation

At December 31, 2024, the impact of changes in scope of consolidation was a positive €439 million and mainly comprised:

- capital gain of €248 million on the partial disposal of a 15% stake in Transportadora Associada de Gás (“TAG”) in Brazil, completed in January 2024 (*see Note 4.1.1*);
- capital gain of €218 million on the partial disposal of a 50% stake in Mayakan in Mexico, completed in December 2024 (see Note 4.1.2). Most of this amount had already been recognized in the first half of 2024 in connection with the remeasurement of the Group's interest following the effective loss of control in the first half of 2024;
- a negative impact of €27 million relating to miscellaneous disposals that are not individually significant.

9.4 Other non-recurring items

Other non-recurring items amounted to €151 million in 2024.

Other non-recurring items amounted to a negative €4,945 million in 2023 and included the €4,750 million negative impact of the review of nuclear provisions to take account of agreements reached with the Belgian government on December 13, 2023 (*see Note 17 "Provisions"*).

NOTE 10 NET FINANCIAL INCOME/(LOSS)

In millions of euros	Expense	Income	Dec. 31, 2024	Expense	Income	Dec. 31, 2023
Interest expense on gross debt and hedges	*(2,107)*	*-*	*(2,107)*	*(1,708)*	*-*	*(1,708)*
Cost of lease liabilities	*(126)*	*-*	*(126)*	*(105)*	*-*	*(105)*
Foreign exchange gains/losses on borrowings and hedges	*(12)*	*-*	*(12)*	*(10)*	*-*	*(10)*
Ineffective portion of derivatives qualified as fair value hedges	*-*	*16*	*16*	*-*	*-*	*-*
Gains and losses on cash and cash equivalents and liquid debt instruments held for cash investment purposes	*-*	*803*	*803*	*-*	*596*	*596*
Capitalized borrowing costs	*308*	*-*	*308*	*268*	*-*	*268*
Cost of net debt	**(1,936)**	**819**	**(1,117)**	**(1,557)**	**596**	**(961)**
Gains/(losses) on debt restructuring transactions	*-*	*-*	*-*	*-*	*8*	*8*
Gains/(losses) on debt restructuring and early unwinding of derivative financial instruments	**-**	**-**	**-**	**-**	**8**	**8**
Net interest expense on post-employment benefits and other long-term benefits	*(157)*	*-*	*(157)*	*(161)*	*-*	*(161)*
Unwinding of discounting adjustments to other long-term provisions	*(885)*	*-*	*(885)*	*(772)*	*-*	*(772)*
Change in fair value of derivatives not qualified as hedges and ineffective portion of derivatives qualified as cash flow hedges	*(53)*	*-*	*(53)*	*(15)*	*-*	*(15)*
Gains/(losses) from debt and equity instruments	*(73)*	*120*	*47*	*(239)*	*-*	*(239)*
Interest income on loans and receivables at amortized cost	*-*	*306*	*306*	*-*	*106*	*106*
Other	*(740)*	*757*	*17*	*(596)*	*467*	*(130)*
Other financial income and expenses	**(1,909)**	**1,184**	**(725)**	**(1,783)**	**573**	**(1,210)**
NET FINANCIAL INCOME/(LOSS)	**(3,845)**	**2,003**	**(1,842)**	**(3,340)**	**1,177**	**(2,163)**

In 2024, the average cost of debt after hedging came out at 4.6% compared to 4.3% at December 31, 2023.

Gains/(losses) from debt and equity instruments amounted to a net gain of €47 million and included, the gain on bonds and money market funds held by Synatom for €120 million.

NOTE 11 INCOME TAX EXPENSE

Accounting standards

The Group calculates taxes in accordance with prevailing tax legislation in the countries where income is taxable.

In accordance with IAS 12, deferred taxes are recognized according to the liability method on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and their tax bases, using tax rates that have been enacted or substantively enacted by the reporting date. However, under the provisions of IAS 12, no deferred tax is recognized for temporary differences arising from goodwill for which impairment losses are not deductible for tax purposes, or from the initial recognition of an asset or liability in a transaction which (i) is not a business combination and (ii) at the time of the transaction, affects neither accounting income nor taxable income. In addition, deferred tax assets are only recognized to the extent that it is probable that taxable income will be available against which the deductible temporary differences can be utilized.

A deferred tax liability is recognized for all taxable temporary differences associated with investments in subsidiaries, associates, joint ventures and branches, except if the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Net balances of deferred taxes are calculated based on the tax position of each company or on the total income of companies included within the relevant consolidated tax group, and are presented in assets or liabilities for their net amount per tax entity.

Deferred taxes are reviewed at each reporting date to take into account factors including the impact of changes in tax laws and the prospects of recovering deferred tax assets arising from deductible temporary differences.

Deferred tax assets and liabilities are not discounted.

Tax effects relating to coupon payments on deeply-subordinated perpetual notes are recognized in profit or loss.

11.1 Income tax expense recognized in the income statement

11.1.1 Breakdown of actual income tax expense recognized in the income statement

The income tax expense recognized in the income statement for 2024 amounted to €2,215 million (compared to a €1,031 million income tax expense in 2023). It breaks down as follows:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Current income taxes	(1,679)	(833)
Deferred taxes	(536)	(198)
TOTAL INCOME TAX BENEFIT/(EXPENSE) RECOGNIZED IN INCOME	**(2,215)**	**(1,031)**

11.1.2 Reconciliation of theoretical income tax expense with actual income tax expense

A reconciliation of theoretical income tax expense with the Group's actual income tax expense is presented below:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Net income/(loss)	**4,973**	**2,903**
Share in net income of equity method entities	1,060	993
Income tax expense	(2,215)	(1,031)
Income/(loss) before income tax of consolidated companies (A)	**6,128**	**2,941**
Of which French companies	*654*	*1,532*
Of which companies outside France	*5,474*	*1,409*
Statutory income tax rate of the parent company (B)	25.8%	25.8%
THEORETICAL INCOME TAX BENEFIT/(EXPENSE) (C) = (A) X (B)	**(1,582)**	**(759)**
Reconciling items between theoretical and actual income tax expense		
Difference between statutory tax rate applicable to the parent and statutory tax rate in force in jurisdictions in France and abroad	(15)	(14)
Permanent differences (1)	(57)	(120)
Income taxed at a reduced rate or tax-exempt (2)	(2)	(22)
Additional tax expense (3)	(75)	(60)
Effect of unrecognized deferred tax assets on tax loss carry-forwards and other tax-deductible temporary differences (4)	(577)	(430)
Recognition or utilization of tax income on previously unrecognized tax loss carry-forwards and other tax-deductible temporary differences (5)	62	93
Impact of changes in tax rates (6)	(4)	8
Tax credits and other tax reductions (7)	56	360
Other (8)	(21)	(86)
INCOME TAX BENEFIT/(EXPENSE) RECOGNIZED IN INCOME	**(2,215)**	**(1,031)**

(1) *Mainly includes disallowable impairment losses on goodwill, disallowed operating expenses and the deduction of interest expenses arising from hybrid debt.*
(2) *Mainly includes capital gains on disposals of securities exempt from tax or taxed at a reduced rate in some tax jurisdictions, the impact of the specific tax regimes used by some entities, disallowable impairment losses and capital losses on securities, and the impact of untaxed income from remeasuring previously-held (or retained) equity interests in connection with acquisitions and changes in consolidation methods.*
(3) *Mainly includes tax on dividends resulting from the parent company tax regime, withholding tax on dividends and interest levied in several tax jurisdictions, allocations to provisions for income tax, and regional and flat-rate corporate taxes.*
(4) *Includes (i) the cancellation of the net deferred tax asset position for some tax entities in the absence of sufficient profit being forecast and (ii) the impact of disallowable impairment losses on fixed assets.*
(5) *Includes the impact of the recognition of net deferred tax asset positions for some tax entities.*
(6) *Mainly includes the impact of tax rate changes on deferred tax balances, notably in Luxembourg for 2024 and in the United Kingdom for 2023.*
(7) *Mainly includes, tax credits in the United States and in France and other tax reductions, and, in 2023, the reversals of provisions for tax litigation in Luxembourg.*
(8) *Mainly includes the correction of previous tax charges.*

The implementation of the OECD Pillar 2 rules, establishing a minimum tax, led the Group to recognize an additional income tax expense of €4 million for 2024.

11.1.3 Analysis of the deferred tax income/(expense) recognized in the income statement, by type of temporary difference

In millions of euros	Impact in the income statement	
	Dec. 31, 2024	Dec. 31, 2023
Deferred tax assets:		
Tax loss carry-forwards	54	(103)
Pension and related obligations	37	(3)
Non-deductible provisions	(985)	976
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(241)	(84)
Measurement of assets and liabilities at fair value (IAS 32/IFRS 9)	1,073	(2,373)
Other	194	265
TOTAL	**132**	**(1,322)**
Deferred tax liabilities:		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	455	61
Measurement of assets and liabilities at fair value (IAS 32/IFRS 9)	(1,293)	1,326
Other	169	(263)
TOTAL	**(668)**	**1,124**
DEFERRED TAX INCOME/(EXPENSE)	**(536)**	**(198)**
Of which continuing activities	*(536)*	*(198)*

11.2 Deferred tax income/(expense) recognized in “Other comprehensive income”

Net deferred tax income/(expense) recognized in “Other comprehensive income” is broken down by component as follows:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Equity and debt instruments	-	(6)
Actuarial gains and losses	(74)	141
Net investment hedges	68	(41)
Cash flow hedges on other items	(862)	802
Cash flow hedges on net debt	32	4
TOTAL EXCLUDING SHARE OF EQUITY METHOD ENTITIES AND DISCONTINUED OPERATIONS	**(837)**	**900**
Share of equity method entities	54	(28)
TOTAL	**(784)**	**872**

11.3 Deferred taxes presented in the statement of financial position

11.3.1 Change in deferred taxes

Changes in deferred taxes recognized in the statement of financial position, after netting deferred tax assets and liabilities by tax entity, break down as follows:

In millions of euros	Assets	Liabilities	Net position
AT DECEMBER 31, 2023	**1,974**	**(5,632)**	**(3,658)**
Impact on net income for the year	132	(668)	(536)
Impact on other comprehensive income items	370	(1,216)	(847)
Impact of changes in scope of consolidation	119	(136)	(18)
Impact of translation adjustments	3	35	38
Other	228	(234)	(7)
Impact of netting by tax entity	(1,978)	1,978	-
AT DECEMBER 31, 2024	**847**	**(5,875)**	**(5,028)**

11.3.2 Analysis of the net deferred tax position recognized in the statement of financial position (before netting deferred tax assets and liabilities by tax entity), by type of temporary difference

Accounting standards

Measurement of recognized tax loss carry-forwards

Deferred tax assets are recognized on tax loss carry-forwards when it is probable that taxable profit will be available against which the tax loss carry-forwards can be utilized. The probability that taxable profit will be available against which the unused tax losses can be utilized, is based on taxable temporary differences relating to the same taxation authority and the same taxable entity and estimates of future taxable profits. These estimates and utilizations of tax loss carry-forwards were prepared on the basis of profit and loss forecasts over a six-year tax projection period as included in the medium-term business plan approved by Management, subject to exceptions justified by a particular context and, if necessary, on the basis of additional forecasts.

	Statement of financial position at	
In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Deferred tax assets:		
Tax loss carry-forwards	2,217	2,121
Pension obligations	918	1,013
Non-deductible provisions	1,048	1,485
Difference between the carrying amount of PP&E and intangible assets and their tax bases	1,493	1,659
Measurement of assets and liabilities at fair value (IAS 32/IFRS 9)	9,088	7,649
Other	639	626
TOTAL	**15,403**	**14,553**
Deferred tax liabilities:		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(9,802)	(9,893)
Measurement of assets and liabilities at fair value (IAS 32/IFRS 9)	(9,853)	(7,419)
Other	(776)	(897)
TOTAL	**(20,431)**	**(18,210)**
NET DEFERRED TAX ASSETS/(LIABILITIES)	**(5,027)**	**(3,658)**

In accordance with the amendment to IAS 12, no deferred tax is recognized in respect of the future implementation of the OECD Pillar 2 rules.

11.4 Unrecognized deferred taxes

At December 31, 2024, the tax effect of unused tax loss carry-forwards not recognized in the statement of financial position amounted to €4,660 million (€4,563 million at December 31, 2023). Most of these unrecognized tax losses relate to companies based in countries which allow losses to be carried forward indefinitely (mainly Belgium, the Netherlands, the United States and Australia). These tax losses carried forward did not give rise to the full or partial recognition of a deferred tax asset due to the absence of sufficient profit forecasts in the medium term.

The tax effect of other tax-deductible temporary differences not recorded in the statement of financial position was €1,783 million at end-December 2024 versus €1,778 million at end-December 2023.

NOTE 12 EARNINGS PER SHARE

Accounting standards

Basic earnings per share is calculated by dividing net income Group share for the year by the weighted average number of ordinary shares outstanding during the year. The average number of ordinary shares outstanding during the year is the number of ordinary shares outstanding at the beginning of the year, adjusted by the number of ordinary shares bought back or issued during the year.

For the diluted earnings per share calculation, the weighted average number of shares and basic earnings per share are adjusted to take into account the impact of the conversion or exercise of any dilutive potential ordinary shares (options, warrants and convertible bonds, etc.).

In compliance with IAS 33 – *Earnings per Share,* earnings per share and diluted earnings per share are based on net income/(loss) Group share after deduction of payments to bearers of deeply-subordinated perpetual notes *(see Note 16.2.1 "Issuance of deeply-subordinated perpetual notes").*

The Group's dilutive instruments included in the calculation of diluted earnings per share include bonus shares and performance shares granted in the form of ENGIE securities.

	Dec. 31, 2024	Dec. 31, 2023
Numerator (in millions of euros)		
Net income/(loss) Group share	**4,106**	**2,208**
Interest from deeply-subordinated perpetual notes	(76)	(80)
Net income/(loss)used to calculate earnings per share	**4,030**	**2,129**
Net recurring income/(loss) Group share	**5,531**	**5,366**
Interest from deeply-subordinated perpetual notes	(76)	(80)
Net recurring income/(loss)used to calculate earnings per share	**5,455**	**5,287**
Denominator (in millions of shares)		
Average number of outstanding shares	**2,425**	**2,422**
Impact of dilutive instruments:		
Bonus share plans reserved for employees	11	11
Diluted average number of outstanding shares	**2,436**	**2,433**
Earnings per share (in euros)		
Basic earnings/(loss) per share	**1.66**	**0.88**
Diluted earnings/(loss) per share	**1.65**	**0.88**
Basic recurring earnings/(loss) per share	**2.25**	**2.18**
Diluted recurring earnings/(loss) per share	**2.24**	**2.17**

NOTE 13 FIXED ASSETS

13.1 Goodwill

Accounting standards

Upon a business combination, goodwill is measured as the difference between:

- on the one hand the sum of:
  - the consideration transferred,
  - the amount of non-controlling interests in the acquiree, and
  - in a business combination achieved in stages, the acquisition-date fair value of the previously held equity interest in the acquiree;
- on the other hand the net fair value of the identifiable assets acquired and liabilities assumed. The key assumptions and estimates used to determine the fair value of assets acquired and liabilities assumed include the market outlook for the measurement of future cash flows as well as applicable discount rates. These assumptions reflect management's best estimates at the acquisition date.

The amount of goodwill recognized at the acquisition date cannot be adjusted after the end of the 12-month measurement period.

Goodwill relating to interests in associates is included in the carrying amount of the investment consolidated under the equity method entities.

13.1.1 Movements in the carrying amount of goodwill

In millions of euros	Net amount
AT DECEMBER 31, 2023	**12,864**
Impairment losses	(67)
Changes in scope of consolidation and other [(1)]	432
Translation adjustments	62
AT DECEMBER 31, 2024	**13,291**

(1) The increase in goodwill is mainly due to the purchase price allocation (PPA) exercise performed on the acquisition of US-based Broad Reach Power in 2023. At December 31, 2023, this amount (€0.4 billion) was recorded under intangible assets, pending completion of the PPA process.

13.1.2 Information on goodwill

For the purposes of impairment testing, goodwill is allocated to operating segments, which represent the lowest level at which it is monitored for internal management purposes.

The table below shows the amount of goodwill at December 31, 2024:

In millions of euros	Dec. 31, 2024
Networks	5,277
Renewables	2,289
Retail	1,843
FlexGen	1,483
Energy Solutions [(1)]	1,091
Nuclear	797
Other [(1)]	512
TOTAL	**13,291**

(1) Tractebel's internal transfer from Energy Solutions to Other led to a reclassification of the associated goodwill.

13.2 Intangible assets

Accounting standards

Initial measurement

Intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses.

Amortization

Intangible assets are amortized on the basis of the expected pattern of consumption of the estimated future economic benefits embodied in the asset. Amortization is calculated mainly on a straight-line basis over the following useful lives:

	Useful life	
Main depreciation periods (years)	**Minimum**	**Maximum**
Concession rights	10	30
Customer portfolio	3	20
Other intangible assets	1	50

Intangible rights arising on concession contracts

IFRIC 12 – *Service Concession Arrangements* deals with the treatment to be applied by the concession operator in respect of certain concession arrangements.

For a concession arrangement to fall within the scope of IFRIC 12, usage of the infrastructure must be controlled by the concession grantor. This requirement is satisfied when the following two conditions are met:

- the grantor controls or regulates what services the operator must provide with the infrastructure, to whom it must provide them, and at what price; and
- the grantor controls any residual interest in the infrastructure at the end of the term of the arrangement, for example it retains the right to take back the infrastructure at the end of the concession.

The intangible asset model according to paragraph 17 of IFRIC 12 applies if the operator receives a right (a license) to charge the users, or the grantor, depending on the use made of the public service. There is no unconditional right to receive cash, as the amounts depend on the extent to which the public uses the service.

Concession infrastructures that do not meet the requirements of IFRIC 12 are presented as property, plant and equipment. This is the case of gas distribution infrastructures in France. The related assets are recognized in accordance with IAS 16, given that GRDF operates its network under long-term concession arrangements, most of which are mandatorily renewed upon expiration pursuant to French law No. 46-628 of April 8, 1946.

Research and development costs

Research costs are expensed as incurred.

Development costs are capitalized when the asset recognition criteria set out in IAS 38 are met. Capitalized development costs are amortized over the useful life of the intangible asset.

13.2.1 Movements in intangible assets

In millions of euros	Intangible rights arising on concession contracts	Capacity entitlements	Others	Total
GROSS AMOUNT				
AT DECEMBER 31, 2023	**3,906**	**3,293**	**15,223**	**22,422**
Acquisitions	331	-	1,109	1,440
Disposals	(108)	(39)	(479)	(626)
Translation adjustments	(30)	-	(69)	(98)
Changes in scope of consolidation	3	-	(275)	(272)
Other changes	30	107	(349)	(212)
AT DECEMBER 31, 2024	**4,132**	**3,361**	**15,161**	**22,654**
ACCUMULATED AMORTIZATION AND IMPAIRMENT				
AT DECEMBER 31, 2023	**(1,838)**	**(2,314)**	**(9,821)**	**(13,973)**
Amortization	(114)	(105)	(889)	(1,107)
Impairment	(19)	-	(150)	(169)
Disposals	82	39	402	523
Translation adjustments	3	-	(19)	(17)
Changes in scope of consolidation	-	-	(39)	(39)
Other changes	4	-	90	93
AT DECEMBER 31, 2024	**(1,882)**	**(2,380)**	**(10,427)**	**(14,689)**
CARRYING AMOUNT				
AT DECEMBER 31, 2023	**2,067**	**979**	**5,403**	**8,449**
AT DECEMBER 31, 2024	**2,250**	**981**	**4,734**	**7,964**

In 2024, the net decrease in “Intangible assets” was mainly attributable to:

- amortization (negative €1,107 million);
- a net effect resulting from changes in the scope of consolidation (negative €311 million), mainly due, to the purchase price allocation (PPA) exercise performed on Broad Reach Power, a company acquired by the Group in 2023. Recognized temporarily within intangible assets in 2023, the amount at stake (negative €720 million) has been allocated to property, plant and equipment for €0.4 billion and to goodwill for €0.4 billion. The allocation to intangible assets and property, plant and equipment results from the remeasurement of operating assets (property, plant and equipment), assets under construction (property, plant and equipment) and projects under development (intangible assets) at their fair value as of the acquisition date. Changes in the Group's scope of consolidation also result from the acquisition of five solar plants in Brazil from Atlas for a total of €248 million (*see Note 4 “Main changes in Group structure”*);
- impairment losses (negative €169 million).

The net decrease was primarily offset by capital expenditure of €1,440 million over the period relating to concession contracts (€383 million) in the Energy Solutions sector, as well as intangible assets in progress (€805 million) – notably transportation and distribution network extensions and maintenance (€209 million), mainly in France – IT projects (€171 million), mainly at ENGIE corporate level in France, and capitalized costs for renewable energy projects in the US, Australia, France and Brazil (€84 million).

13.2.2 Capacity entitlements

The Group has acquired capacity entitlements from power stations operated by third parties. These power station capacity rights were acquired in connection with transactions or within the scope of the Group's involvement in financing the construction of certain power stations. In consideration, the Group received the right to purchase a share of the production over the useful life of the underlying rights. These rights are amortized over the useful life of the underlying assets, not exceeding 50 years. The Group currently holds rights in the Chooz B and Tricastin power plants in France and in the virtual power plant (VPP) in Italy.

13.2.3 Other

At December 31, 2024, this caption mainly relates to software and licenses for €1,405 million, as well as intangible assets in progress for €843 million and intangible assets (client portfolio) acquired for €2,164 million as a result of business combinations and capitalized acquisition costs for customer contracts.

13.2.4 Information regarding research and development costs

Research and development activities primarily relate to various studies regarding technological innovation, improvements in plant efficiency, safety, environmental protection, service quality, and the use of energy resources. Research and development priorities are focused on climate change adaptation and mitigation, including renewable energy systems (photovoltaic solar, onshore and offshore wind), the production and use of green gases (hydrogen, biomethane) or the development of decentralized energy infrastructure (district heating and cooling, decentralized solar energy and mobility).

Capitalized development costs, related to projects in the development phase that meet the criteria for recognition as an intangible asset as defined in IAS 38, totaled €28 million in 2024.

13.3 Property, plant and equipment

Accounting standards

Initial recognition and subsequent measurement

Items of property, plant and equipment are recognized at historical cost less any accumulated depreciation and any accumulated impairment losses.

The carrying amount of these items is not revalued as the Group has elected not to apply the allowed alternative method, which consists of regularly revaluing one or more categories of property, plant and equipment.

Investment subsidies are deducted from the gross value of the assets concerned.

In accordance with IAS 16, the initial cost of the item of property, plant and equipment includes an initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, when the entity has a present, legal or constructive obligation to dismantle the item or restore the site. A corresponding provision for this obligation is recorded for the amount of the asset component.

Borrowing costs that are directly attributable to the construction of the qualifying asset are capitalized as part of the cost of that asset.

Leases

In accordance with IFRS 16, the Group recognizes a right-of-use asset and a corresponding lease liability with respect to contracts considered as a lease in which the Group acts as lessee, except for leases with a term of 12 months or less (“short-term leases”), and leases for which the underlying asset is of a low value (“low-value asset”). Payments associated with these leases are recognized on a straight-line basis as expenses in profit or loss. The lease contracts in the Group mainly concern real estate, vehicles, LNG vessels, an hydroelectric concession contract and other equipment.

The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The lease liability is initially measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate. This rate is calculated based on the Group's incremental borrowing rate adjusted in accordance with IFRS 16, taking into account (i) the economic environment of the subsidiaries, and in particular their credit risk, (ii) the currency in which the contract is concluded and (iii) the duration of the contract at inception (or the remaining duration for contracts existing upon the initial application of IFRS 16). The methodology applied to determine the incremental borrowing rate reflects the profile of the lease payments (duration method).

The lease term is assessed, including whether a renewal option is reasonably certain to be exercised or a termination option is reasonably certain not to be exercised, on a case-by-case basis. The lease term is reassessed if a significant event or a significant change in circumstances that is within the control of the lessee occurs and may affect the assessment made. In determining the enforceable period of a lease, the Group applies a broad interpretation of the term penalty and takes into consideration not only contractual penalties arising from termination, but also ancillary costs that could arise in case of an early termination of the lease.

Cushion gas

"Cushion" gas stored in underground storage facilities is essential for ensuring that reservoirs can be operated effectively, and is therefore inseparable from these reservoirs. Unlike "working" gas which is included in inventories (*see Note 22.2 "Inventories"*), cushion gas is reported in other property, plant and equipment.

Depreciation

In accordance with the components approach, each significant component of an item of property, plant and equipment with a different useful life from that of the main asset to which it relates is depreciated separately over its own useful life.

Property, plant and equipment is depreciated mainly using the straight-line method over the following useful lives:

	Useful life	
Main depreciation periods (years)	**Minimum**	**Maximum**
Plant and equipment		
• Storage - Production - Transport - Distribution	5	60(*)
• Installation - Maintenance	3	10
• Hydraulic plant and equipment	20	65
Solar and wind farms	25	30
Other property, plant and equipment	2	33

(*) Excluding cushion gas.

The range of useful lives is due to the diversity of the assets in each category. The minimum periods relate to smaller equipment and furniture, while the maximum periods concern network infrastructures and storage facilities.

Fixtures and fittings relating to hydro plants operated by the Group are depreciated over the shorter of the contract term and the useful life of the assets, taking into account the renewal of the concession period if such renewal is considered to be reasonably certain.

The right-of-use asset related to leases is depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term. In that case the right-of-use asset is depreciated over the useful life of the underlying asset, which is determined on the same basis as that used for property, plant and equipment mentioned above.

13.3.1 Movements in property, plant and equipment

In millions of euros	Land	Buildings	Plant and equipment	Vehicles	Dismantling costs	Assets in progress	Right of use	Other	Total
GROSS AMOUNT									
AT DECEMBER 31, 2023	**673**	**2,765**	**101,300**	**328**	**5,395**	**6,716**	**5,454**	**1,198**	**123,829**
Acquisitions/Increases	6	533	156	27	-	7,792	982	(96)	9,399
Disposals	(3)	(28)	(713)	(19)	(8)	(15)	(124)	(100)	(1,010)
Translation adjustments	3	45	294	1	19	47	129	4	542
Changes in scope of consolidation	(23)	2	1,319	(1)	22	336	16	(180)	1,492
Transfer to "Assets classified as held for sale and discontinued operations"	-	-	-	(5)	-	-	(2)	(8)	(15)
Other changes	41	157	5,558	8	97	(5,645)	(251)	57	22
AT DECEMBER 31, 2024	**696**	**3,474**	**107,914**	**339**	**5,525**	**9,232**	**6,204**	**875**	**134,259**
ACCUMULATED DEPRECIATION AND IMPAIRMENT									
AT DECEMBER 31, 2023	**(158)**	**(1,793)**	**(56,306)**	**(239)**	**(4,467)**	**(229)**	**(1,893)**	**(794)**	**(65,879)**
Depreciation	(6)	(183)	(2,874)	(31)	(371)	-	(427)	(129)	(4,021)
Impairment	(5)	(1)	(452)	-	(4)	(67)	(29)	(164)	(722)
Disposals	(1)	22	650	17	8	6	136	93	932
Translation adjustments	1	(20)	(145)	(1)	(13)	(6)	(37)	(8)	(229)
Changes in scope of consolidation	-	-	(483)	1	(2)	(5)	(1)	35	(455)
Transfer to "Assets classified as held for sale and discontinued operations"	-	-	-	5	-	-	2	7	13
Other changes	(4)	(118)	463	2	(18)	-	31	135	491
AT DECEMBER 31, 2024	**(173)**	**(2,094)**	**(59,148)**	**(245)**	**(4,868)**	**(301)**	**(2,220)**	**(824)**	**(69,871)**
CARRYING AMOUNT									
AT DECEMBER 31, 2023	**516**	**971**	**44,993**	**90**	**928**	**6,487**	**3,561**	**404**	**57,950**
AT DECEMBER 31, 2024	**523**	**1,380**	**48,766**	**94**	**657**	**8,932**	**3,985**	**52**	**64,388**

In 2024, the net increase in "Property, plant and equipment" essentially takes into account:

- maintenance and development investments for a total amount of €8,417 million mainly related to the construction and the development of wind and solar farms primarily in Brazil, the US, France and Chile (€3,997 million), the extension of the transportation and distribution networks in the Networks sector in France, Latin America and Romania (€1,862 million), FlexGen operating segment assets (€1,623 million), and activities in the Energy Solutions operating segment (€588 million);
- a net positive effect of changes in the scope of consolidation amounting to €1,037 million, related mainly to the acquisition of five solar power plants in Brazil from Atlas for a total of €389 million (*see Note 4 "Main changes in Group structure"*) and to the finalization of the purchase price allocation (PPA) for Broad Reach Power (€374 million, *see Note 13.2.1*);
- positive foreign exchange effects of €313 million, mainly resulting from the appreciation of the US dollar (positive €948 million), partially countered by the depreciation of the Brazilian real and the pound sterling (negative €692 million) against the euro.

These effects are offset by depreciation and amortization expense totaling €4,021 million.

13.3.2 Pledged and mortgaged assets

Items of property, plant and equipment pledged by the Group to guarantee borrowings and debt amounted to €1,490 million at December 31, 2024 compared to €1,625 million at December 31, 2023.

13.3.3 Contractual commitments to purchase property, plant and equipment

In the ordinary course of their operations, some Group companies have entered into commitments to purchase, and the related third parties to deliver plant and equipment. These commitments relate mainly to orders for equipment and material related to the construction of energy production units and to service agreements.

Contractual investment commitments made by the Group to purchase property, plant and equipment totaled €2,461 million at December 31, 2024 compared to €2,859 million at December 31, 2023.

The net reduction in contractual commitments relates mainly to renewable assets in Brazil for €859 million, offset by Energie Solution assets in France for €411 million.

13.3.4 Other information

Borrowing costs included in the cost of property, plant and equipment amounted to €308 million at December 31, 2024 compared to €268 million at December 31, 2023.

13.4 Impairment testing of goodwill, intangible assets, property, plant and equipment and equity method entities

Accounting standards

Risk of impairment

Goodwill

Goodwill is not amortized but is tested for impairment each year in accordance with IAS 36, or more frequently where an indication of impairment is identified. All goodwill is tested for impairment based on data at the end of June, supplemented by a review of events in the second half.

Impairment tests are carried out at the level of cash-generating units (CGUs) or groups of CGUs, which constitute groups of assets which generate cash flows that are largely independent from cash flows generated by other CGUs.

Goodwill is impaired if the net carrying amount of the CGU (or group of CGUs) to which the goodwill is allocated is greater than the recoverable amount of that CGU.

Impairment losses in relation to goodwill cannot be reversed and are shown as “Impairment losses” in the income statement.

Intangible assets and property, plant and equipment

In accordance with IAS 36, impairment tests are carried out on items of property, plant and equipment and intangible assets where there is an indication that the assets may be impaired. Such indications may be based on events or changes in the market environment, or on internal sources of information. Intangible assets that are not amortized are tested for impairment annually.

Property, plant and equipment and intangible assets with finite useful lives are only tested for impairment when there is an indication that they may be impaired. This is generally the result of significant changes in the environment in which the assets are operated or when economic performance is lower than expected.

Items of property, plant and equipment and intangible assets are tested for impairment at the level of the cash-generating unit (CGU), as appropriate and determined in accordance with IAS 36. If the recoverable amount of an asset is lower than its carrying amount, the carrying amount is written down to the recoverable amount by recording an impairment loss. Upon recognition of an impairment loss, the depreciable amount and possibly the useful life of the asset concerned is revised.

Impairment losses recorded in relation to property, plant and equipment or intangible assets may be subsequently reversed if the recoverable amount of the asset increases to exceed the carrying amount. The increased carrying amount of an item of property, plant or equipment following the reversal of an impairment loss may not exceed the

carrying amount that would have been determined (net of depreciation/amortization) had no impairment loss been recognized in prior periods.

Equity method entities

The total carrying amount of equity method entities is tested for impairment as an individual asset in accordance with IAS 36, by comparing the recoverable amount (i.e., the higher of value in use and fair value less costs to sell) with the carrying amount, whenever there is an indication that it may be impaired.

Indicators of impairment

The main indicators of impairment used by the Group are:

- using external sources of information
  - a decline in an asset's value over the period that is significantly more than would be expected from the passage of time or normal use,
  - significant adverse changes that have taken place over the period, or will take place in the near future, in the technological market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated,
  - an increase over the period in market interest rates or other market rates of return on investments if such increase is likely to affect the discount rate used in calculating an asset's value in use and decrease its recoverable amount materially,
  - the carrying amount of the net assets of the entity exceeds its market capitalization;
- using internal sources of information:
  - evidence of obsolescence or physical damage to an asset,
  - significant changes in the extent to which, or manner in which, an asset is used or is expected to be used, that have taken place in the period or soon thereafter and that will adversely affect it. These changes include the asset becoming idle, plans to dispose of an asset sooner than expected, reassessing its useful life as finite rather than indefinite or plans to restructure the operations to which the asset belongs;,internal reports that indicate that the economic performance of an asset is, or will be, worse than expected.

Measurement of recoverable amount

For operating entities which the Group intends to hold on a long-term and going concern basis, the recoverable amount of a CGU corresponds to the higher of its fair value less costs to sell and its value in use. Value in use is primarily determined based on the present value of future operating cash flows including a terminal value. Standard valuation techniques are used based on the following main economic assumptions:

- market perspectives and developments in the regulatory framework;
- discount rates based on the specific characteristics of the operating entities concerned;
- terminal values in line with available market data specific to the operating segments concerned and growth rates associated with these terminal values, not exceeding the inflation rate.

Discount rates are determined on a post-tax basis and applied to post-tax cash flows. The recoverable amounts calculated on the basis of these discount rates are the same as the amounts obtained by applying the pre-tax discount rates to cash flows estimated on a pre-tax basis, as required by IAS 36.

For operating entities which the Group has decided to sell, the related recoverable amount of the assets concerned is based on market value less disposal costs. Where negotiations are ongoing, this value is determined based on the best estimate of their outcome as of the reporting date.

13.4.1 General assumptions

The impairment tests were performed in the context of a highly volatile economic environment, as described in Note 1.3 “Use of estimates and judgments”.

In most cases, the recoverable amounts are determined by reference to a value in use that is calculated using cash flow projections drawn up on the basis of the 2025 budget and the 2026-2027 medium-term business plan, as approved by the Executive Committee and the Board of Directors, and on the basis of extrapolated cash flows beyond that time frame.

Cash flow projections beyond the medium-term business plan period are determined on the basis of macroeconomic assumptions (inflation, exchange rates and growth rates), and price forecasts resulting from the Group's reference scenario for 2028-2050 as revised and validated by the Group Executive Committee in June 2024. The forecasts and projections included in the reference scenario were determined on the basis of the following inputs:

- forward market prices over the liquidity period for fuel (coal, oil and gas), CO_2 and electricity on each market in a context of changing energy prices;
- beyond this period, medium- and long-term energy prices were determined by the Group based on macroeconomic assumptions and fundamental supply and demand equilibrium models, the results of which are regularly compared against forecasts prepared by external energy sector specialists. Long-term projections for CO_2 prices are in line with the 2030 emissions reduction target of 55% and the 2050 climate neutrality objectives set by the European Commission as part of the “European Green Deal” presented in December 2019 and July 2021. Among the external scenarios, the Group's scenario can be considered as intermediate between the STEPS (Stated Energy Policies Scenario) and APS (Announced Pledges Scenario) scenarios of the International Energy Agency or ADEME (“green technology”) in the case of France;
- more specifically, medium- and long-term electricity prices were determined by the Group using electricity demand forecasting models, medium- and long-term forecasts of fuel and CO_2 prices, and expected trends in installed capacity and in the technology mix of the production assets within each power generation system. ENGIE has opted for a balanced mix, integrating renewable gas and carbon dioxide capture and storage in order to guarantee an energy system with the best levels of efficiency and resilience. This trajectory has been included in the Group's report as part of the “Task Force on Climate Related Financial Disclosures” (TCFD) initiative. The risk factors arising from climate and environmental issues are also detailed in the Group's Universal Registration Document.

Lastly, to take into account the climate issues (*see Note 1.3.3 “Consideration of environmental, social and governance (ESG)”*), in measuring its non-financial assets, ENGIE considered its commitment to completely withdraw from coal activities by 2027 (*see Note 13.4.5*), and updated its reference scenario to include changes in energy (heating and cooling) demand in Europe.

This section also discusses the impairment losses recognized in the carrying amount of equity method entities (under the “Impairment losses” line of the income statement) as well as impairment losses recognized within these companies (under the “Share in net income of equity method entities” line of the income statement) (*see Note 3 “Investments in equity method entities”*).

13.4.2 Renewables

At December 31, 2024, goodwill amounted to €2,289 million, intangible assets to €1,839 million, property, plant and equipment to €21,462 million and equity method entities to €2,818 million.

Renewables comprises all centralized renewable energy generation activities, including financing, construction, operation and maintenance of renewable energy facilities, using various energy sources such as hydropower, onshore wind, photovoltaic solar, biomass, offshore wind, and battery storage linked to a renewable asset. The energy produced is fed into the grid and sold either on the open or regulated market or to third parties through electricity sale agreements.

The main assumptions and key estimates relate primarily to discount rates, assumptions as to the renewal of the hydropower concession agreements and changes in electricity prices beyond the liquidity period.

The value in use of the Compagnie Nationale du Rhône and SHEM was calculated based on assumptions including the extension or renewal through a tender process for the concession agreements.

The cash flows for the periods covered by the renewal of the concession agreements are based on a number of assumptions relating to the economic and regulatory conditions for operating these assets (royalty rates, required level of investment, etc.) during this period.

In 2024, the discount rates applied to these activities ranged between 5.4% and 11.3%. In 2023, they ranged between 5.3% and 10.3%. These rates vary according to geography and associated risks (primarily country risk and risk associated with the economic environment of the underlying business: merchant/contracted/regulated cash flows).

Results of the impairment tests

At December 31, 2024, no impairment losses were recognized on goodwill in consideration of the recoverable amount of the cash generating unit to which it belongs.

Impairment losses totaling €15 million were recognized in 2024 on the “Impairment losses” line of the income statement.

These impairment losses mainly concern onshore renewables in North America for €91 million, and were offset by an €80 million impairment reversal on an equity method entity in Brazil.

Regarding US renewables more specifically:

- onshore renewable assets were tested based on applicable unchanged regulations (notably tax regulations);
- at December 31, 2024, the Ocean Winds joint venture's total investment in US offshore projects was around €0.5 billion (ENGIE Group share, before impairment). They have been valued by the Group taking into account a four-year time lag in their development, in a context where the impact of any changes in US regulations, and specifically the Executive Order of January 20, 2025, is not yet known. At December 31, 2024, an impairment loss of €133 million (ENGIE Group share) has been recognized under “Share in net income/(loss) of equity method entities”.

Sensitivity analysis

The sensitivity of the hydropower generation business in France and the renewable power generation business in North America to changes in electricity prices and changes in discount rates (impact on the recoverable amount) is shown in the table below:

	Dec. 31, 2024			
	Electricity prices		Discount rates	
In billions of euros	+10€/MWh [(1)]	-10€/MWh [(1)]	+50 bp	-50bp
Hydropower generation in France	0.3	(0.3)	(0.2)	0.2
Renewables assets in North America	0.5	(0.5)	(0.1)	0.2

(1) Non-linear increase or decrease due to the method of calculating water-power fees.

An increase of 50 basis points in the discount rates and a decrease of €10/MWh in the electricity price would have a negative impact on the recoverable amount. However, the recoverable amount of goodwill would remain above the carrying amount.

13.4.3 Networks

Networks comprises the Group's electricity and gas infrastructure activities and projects. These activities include the management and development of (i) gas and electricity transportation networks and natural gas distribution networks in and outside of Europe, (ii) underground natural gas storage in Europe, and (iii) regasification infrastructure in France and Chile.

Apart from the historical infrastructure management activities, its asset portfolio also contributes to the challenges of the energy transition and network greening (biomethane, hydrogen, etc.).

At December 31, 2024, goodwill amounted to €5,277 million, intangible assets to €1,032 million, property, plant and equipment to €30,011 million and equity method entities to €1,609 million. French regulated infrastructure assets amounted to €902 million for intangible assets and €26,953 million for property, plant and equipment.

The valuation of activities in France is mainly based on cash flow projections determined on the basis of tariffs negotiated with the French energy regulator (CRE) and terminal values corresponding to the expected value of the Regulated Asset Base (RAB). The RAB is the value assigned by the CRE to the assets operated by distributors.

The Regulated Asset Base (or RAB) groups together all assets commissioned by an infrastructure operator to carry out its regulated activity. It establishes an economic value for these assets, which is used by the regulator to set tariffs for access to this infrastructure. It includes the assets needed to provide the service, such as infrastructure and equipment. It serves as the basis for calculating investment costs that must be covered by the infrastructure access tariff, including amortization of the investment initially made by the operator and a reasonable return on investment for the related industrial activity. In other words, it forms the basis of the tariff-setting methodology used by the regulator to ensure that companies can cover their costs and make a fair income, while protecting consumers from excessive tariffs.

In respect of the valuation of activities in France, the energy mix scenario for 2050, adopted by the Group and detailed in Note 17.3.1 "Dismantling obligations arising on non-nuclear plant and equipment", will not lead to any significant change in RAB. Given the vital role of gas, which is a reliable energy source able to supplement renewable energies that are inherently intermittent, uncontrollable and difficult to store, the Group plans to maintain its gas network infrastructures for the transportation of green methane (biomethane in particular) and natural gas for carbon capture, or to convert them to allow for the transportation of hydrogen. These green gases (biomethane, hydrogen, etc.) will gradually replace natural gas. This strategic role will be further strengthened by the new opportunities offered in terms of CO_2 storage, transportation and exportation.

To achieve this, the Group plans to maintain its current level of investment. This approach is largely supported by a rapidly developing regulatory framework supporting the sharp rise in the use of hydrogen and biomethane in the European Union. The EU gas package adopted in April 2024 sets a European biomethane production target (35 bpm by 2030), and defines low-carbon gases and a regulatory framework for hydrogen infrastructure and infrastructure planning obligations (including annually updated ten-year plans for operators of gas and hydrogen transportation networks), the implementation of which is entrusted to States and operators.

France's political and social strategy concerning the energy transition aims to achieve carbon neutrality by 2050. The priorities of France's climate and energy policy are being updated to reflect the French Energy-Climate Strategy (*Stratégie Française sur l'Énergie et le Climat* – SFEC)[1]. The scenario adopted by the Group is supported by the main findings of the CRE report of April 2023 on the future of gas infrastructures, the conclusions of the public consultation on "decarbonizing the building industry" organized in summer 2023 (highlighting the difficulties associated with a possible ban on the installation of new gas boilers in existing homes), and, to a certain extent, by the latest public outlook for the future Pluriannual Energy Program (*Programmation Pluriannuelle de l'Énergie*). These reinforce France's biomethane production targets (44 TWh by 2030) and reaffirm the importance of gas storage for the country's energy supply security. However, the draft PPE3 introduces a significant target for the replacement of gas-fired boilers by another energy solution, notably electric. The Group considers this target to be unrealistic for reasons of economic sustainability for households, or due to technical constraints that prevent the installation of efficient electrical solutions or connection to a heating network in almost half of all homes. Consequently, the Group considers that the draft PPE3 does not call into question the energy mix scenario for 2050.

In 2024, the discount rates applied to all these activities, both in France and internationally, generally ranged between 5.1% and 10.0%. In 2023, they ranged between 4.9% and 9.4%. These rates vary according to the geography and

(8) The SFEC comprises three documents: the Energy and Climate Planning Bill (LPEC), which defines the objectives and priorities for action; the Multi-Annual Energy Plan (PPE), which is used to manage energy policy over two successive five-year periods; and the National Low-Carbon Strategy (SNBC), which defines a greenhouse gas emissions reduction roadmap by industry through to 2050.

associated risks (notably country risk and risk associated with the economic environment of the underlying business: merchant/contracted/regulated cash flows).

Results of the impairment tests

At December 31, 2024, no impairment losses were recognized on goodwill owing to the recoverable amount of the cash-generating unit to which it belongs.

Impairment losses totaling €29 million were recognized in 2024 on the “Impairment losses” line of the income statement. These impairment losses mainly concern certain biomethane production assets for a total of €18 million.

Sensitivity analysis

Given the regulated nature of the Networks business in France, as well as the progressive transition from natural gas to green gas, a reasonable change in any of the valuation inputs (discount rate, inflation rate and rate of return on assets) would not result in any impairment losses.

As mentioned above, the latest public outlook of the future Multi-Annual Energy Plan (PPE) and the Energy Performance of Buildings Directive (EPBD) point to potential measures detrimental to gas boilers (removal of financial incentives for installing boilers, ongoing aid for installing heat pumps). These measures will have a much smaller impact on the gas customer portfolio, and therefore on the value of gas infrastructure assets in France, than a ban on installations of gas boilers, which was withdrawn after being proposed in 2023.

A more substantial change in the regulatory framework could have a significant impact on the valuation of gas infrastructure assets in France, including on the goodwill of the Infrastructure CGU. Gas infrastructures in France account for 86% of the recoverable value of the Infrastructure CGU.

The 2024 (and 2023) regulatory asset base (RAB) for gas infrastructure assets in France and the net carrying amount of intangible assets and property, plant and equipment along with the associated depreciation and amortization expense, are set out below:

In millions of euros	2024 BAR	2023 BAR	Carrying amount of PP&E and intangible assets (excluding goodwill)	Depreciation and amortization
GRDF	17,281	16,941	14,736	(1,098)
GRTgaz	9,384	9,362	7,744	(554)
Storengy	4,302	4,120	4,448	(163)
Elengy	912	930	348	(52)

13.4.4 Energy Solutions

At December 31, 2024, goodwill amounted to €1,091 million, intangible assets to €2,540 million, property, plant and equipment to €2,907 million and equity method companies to €1,915 million.

Energy Solutions encompasses the construction and management of decentralized energy networks to produce energy (heating and cooling networks, distributed power generation plants, distributed solar power parks, low-carbon mobility, low-carbon cities and public lighting, etc.) and related services (energy efficiency, technical maintenance, sustainable development consulting).

The terminal value used to calculate the value in use of the services and energy sales businesses in France was determined by extrapolating the cash flows beyond the medium-term business plan period using a long-term growth rate of 2% per year.

The main assumptions and key estimates relate primarily to discount rates and changes in price beyond the liquidity period.

In 2024, the discount rates applied to these activities ranged between 5.1% and 9.8%. In 2023, they ranged between 5.3% and 9%. These rates vary according to geography and associated risks (notably country risk and risk associated with the economic environment of the underlying business: merchant/contracted/regulated cash flows).

Results of the impairment tests

At December 31, 2024, no impairment losses were recognized on goodwill in consideration of the recoverable amount of the cash generating unit to which it belongs.

Impairment losses totaling €232 million were recognized in 2024 on the “Impairment losses” line of the income statement. These impairment losses mainly relate to assets in France (€108 million) and North America (€73 million) whose medium- and long-term outlook was revised or in relation to which operational difficulties have arisen.

Sensitivity analysis

Given the essentially contractual nature of Energy Solutions activities, a reasonable change in any of the valuation inputs would not result in impairment losses on goodwill.

13.4.5 FlexGen

At December 31, 2024, goodwill amounted to €1,483 million, intangible assets to €204 million, property, plant and equipment to €7,744 million, and equity method companies to €1,889 million.

FlexGen encompasses all the Group's the activities involved in compensating the intermittent nature of renewable energies by providing upstream flexibility (flexible generation as well as pump- or battery- operated storage plants) and downstream flexibility (shaving or shifting the consumption of BtoC customers). They also provide solutions to decarbonize the industry with low-carbon hydrogen. The GBU plays a key role in the energy transition. It also includes the financing, construction and operation of desalination plants, whether or not connected to power plants.

The main assumptions and key estimates relate to discount rates, estimated demand for electricity and changes in the margin captured beyond the liquidity period (i.e., changes in the margin comprising electricity prices, less the price of CO_2 and fossil fuels beyond the liquidity period).

In 2024, the discount rates applied to these activities ranged between 6.7% and 12.0%. In 2023, they ranged between 6.4% and 10.4%. These rates vary according to geography and associated risks (notably country risk and risk associated with the economic environment of the underlying business: merchant/contracted/regulated cash flows).

Results of the impairment tests

At December 31, 2024, no impairment losses were recognized on goodwill in consideration of the recoverable amount of the cash generating unit to which it belongs.

Impairment losses totaling €223 million were recognized in 2024 on the “Impairment losses” line of the income statement.

These impairment losses mainly relate to disposals, either in progress or completed, carried out as part of the shift in the Group’s geographic and/or business focus:

- disposal – not yet completed at December 31, 2024 – of two power plants in Pakistan (€205 million, including an impairment loss of €67 million on goodwill allocated in application of IFRS 5 – *Non-current Assets Held for Sale and Discontinued Operations*);
- disposal – completed in January 2025 – of part of the stake held in the equity method company SAFIEC SA (“Safi”) in Morocco (€54 million);
- disposal – completed in 2024 – of the stake held in Senoko in Singapore (impairment reversal of €66 million).

The Group also recognized an impairment loss on thermal generation assets in Italy (€88 million) under "Share in net income/(loss) of equity method entities", due to a poorer positioning of assets in the order of merit, against a backdrop of falling price forecasts.

Sensitivity analysis

An increase of 50 basis points in the discount rates used would have a negative 2% impact on the recoverable amount of thermal power plants in France, Belgium, the Netherlands and Spain. However, the recoverable amount of goodwill would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 2% impact on the calculation.

A 10% decrease in the margin captured by thermal power plants in France, Belgium, the Netherlands and Spain would have a negative impact of 6% on the recoverable amount. An increase of 10% in the margin captured would have a positive 6% impact on this calculation.

13.4.6 Retail

At December 31, 2024, goodwill amounted to €1,843 million, intangible assets to €519 million, and property, plant and equipment to €97 million.

Retail encompasses all the Group's activities relating to the sale of gas and electricity to end customers. It also includes all the Group's activities in services for residential clients;

The terminal value used to calculate the value in use of the main services and energy sales businesses in Europe was determined by extrapolating cash flows beyond the medium-term business plan period using a long-term growth rate of approximately 2% per year.

In 2024, the discount rates applied to these activities ranged between 7.8% and 10.3%. In 2023, they ranged between 8% and 10.6%. These rates vary according to geography and associated risks (notably country risk and risk associated with the economic environment of the underlying business: merchant/contracted/regulated cash flows).

Results of the impairment tests

At December 31, 2024, no impairment losses were recognized on goodwill in consideration of the recoverable amount of the cash generating unit to which it belongs.

Impairment losses totaling €250 million were recognized in 2024 on the "Impairment losses" line of the income statement. These impairment losses are mainly due to the impact of the disposal, not yet completed at December 31, 2024, of the entities holding solar supply solutions and mini-grid assets in Africa (€0.2 billion).

Sensitivity analysis

Given the capital-light nature of Retail activities, a reasonable change in any of the valuation inputs would not result in any impairment losses on goodwill.

13.4.7 Nuclear

At December 31, 2024, goodwill amounted to €797 million, intangible assets to €981 million, property, plant and equipment to €670 million, and equity method companies to €62 million.

Key assumptions used for the impairment test

On December 13, 2023, ENGIE and the Belgian State signed an agreement to extend the Doel 4 and Tihange 3 nuclear facilities by 10 years (*see Note 17.2 "Obligations relating to nuclear power generation facilities"*). This agreement also provides for the establishment of a legal structure dedicated to the two extended nuclear units, equally owned by the Belgian State and ENGIE, aligning the interests of the two parties and ensuring the sustainability of their commitments. The business model of the extension is based on a balanced allocation of risks, notably through a Contract for Difference mechanism guaranteeing the value of extension investments, with a limited incentive for the industrial operator to achieve a favorable technical and economic performance at the plants. On February 21, 2025, the European Commission approved under EU state aid rules the agreement between ENGIE and the Belgian government, announced on December 13, 2023,

relating to the extension of the operation of the Tihange 3 and Doel 4 nuclear reactors and the obligations relating to nuclear waste. Pursuant thereto, ENGIE and the Belgian government are now concluding together various procedural steps with a view to closing the transaction on or before March 14, 2025 *(see Note 24.2)*. The Belgian Parliament approved on April 18, 2024 the legislative amendments necessary to create the framework required to implement this agreement (*see Note 17.2*).

In addition, for the period up to the extension of the two Belgian nuclear units, and for the period covering drawing rights on nuclear power plants in France, the cash flow projections are based on a large number of key assumptions, such as prices of fuel and CO_2, expected trends in electricity prices, availability of power plants, market outlook, and changes in the regulatory environment (especially concerning the extension of drawing rights agreements for French nuclear plants). Lastly, the key assumptions also include the discount rate used to calculate the value in use of these activities, which amounted to 7.1% for 2024.

Cash flow projections beyond the medium-term business plan for drawing rights on the Chooz B and Tricastin power plants have been determined on the basis of the residual term of the contracts and the assumption of a 10-year extension.

In France, the Nuclear Safety Authority authorized the start-up of Tricastin 1 on December 20, 2019 after its shutdown for its fourth 10-yearly inspection and, on December 3, 2020, published a draft decision setting out the conditions for the 900MW reactors to continue operating beyond 40 years. Confirmation of a 10-year extension of the operating life of the 900MW series reactors is therefore expected to be formalized in the next few years, once the conditions for continued operation have been determined by the French Nuclear Safety Authority (*Autorité de Sûreté Nucléaire*) and a public inquiry has been held. In August 2023, the French Nuclear Safety Authority issued its opinion on the continued operation of Tricastin unit no. 1 for a further 10 years. The reactor, commissioned in 1980, is therefore authorized to operate for 50 years. The Group has therefore considered the 10-year extension of the nuclear units, and the corresponding drawing rights, beyond their fourth 10-yearly inspection. The fourth ten-yearly inspection of Tricastin was completed in 2024 by unit no. 4, while the third ten-yearly inspection of Chooz B took place in 2019. The assumption of an extension was already considered in the impairment tests of previous years.

Results of the impairment test

The recoverable amount of the Nuclear assets remains above the value of goodwill, particularly due to the excess value attached to the plants in France.

Impairment losses totaling €2 million were recognized in 2024 under “Impairment losses” on the income statement.

Sensitivity analysis

A decrease of €10/MWh in electricity prices for nuclear-generated power in France beyond the liquidity period would lead to a decrease of €0.5 billion in the recoverable amount and a resulting goodwill impairment loss of €0.3 billion.

In light of the Contract for Difference mechanism put in place in connection with the extension of the Doel 4 and Tihange 3 nuclear facilities, the recoverable amount of these facilities is fairly insensitive to changes in electricity prices for nuclear-generated power in Belgium.

A 5% reduction in the availability rate of the French plants would lead to a decrease of €0.2 billion in the recoverable amount, but without any impairment.

13.4.8 Other

At December 31, 2024, goodwill amounted to €512 million, intangible assets to €850 million, property, plant and equipment to €1,496 million and equity method entities to €80 million.

The Other segment encompasses energy management and optimization activities, the BtoB supply activities in France of Entreprises & Collectivités (E&C), Tractebel, as well as the Corporate and holding activities and other entities. These entities present a significant difference between recoverable amount and the carrying amount of the segment's operating activities carrying goodwill at December 31, 2024.

A €42 million impairment reversal was recognized in 2024 on the "Impairment losses" line of the income statement, mainly concerning:

- the impairment loss recognized on EVBox assets following the decision to cease operations (€96 million);
- a €171 million impairment reversal to take account of the impacts of the disposal – not yet completed at December 31, 2024 – of the Group's stake in E&E Algeria Touat BV, which owns 65% of the TouatGaz consortium operating the Touat gas field in Algeria.

NOTE 14 FINANCIAL INSTRUMENTS

14.1 Financial assets

Accounting standards

In accordance with the principles of IFRS 9 – *Financial Instruments*, financial assets are recognized and measured either at amortized cost, at fair value through equity or at fair value through profit or loss based on the following two criteria:

- a first criterion relating to the contractual cash flow characteristics of the financial asset. The analysis of contractual cash flow characteristics makes it possible to determine whether these cash flows are "only payments of principal and interest on the outstanding amounts" (known as the "SPPI" test or Solely Payments of Principal and Interest);
- a second criterion relating to the business model used by the Group to manage its financial assets. IFRS 9 defines three different business models: a first business model whose objective is to hold assets in order to collect contractual cash flows (hold to collect), a second model whose objective is achieved by both collecting contractual cash flows and selling financial assets (hold to collect and sell), and other business models.

The identification of the business model and the analysis of the contractual cash flow characteristics require judgment to ensure that the financial assets are classified in the appropriate category.

Where the financial asset is an investment in an equity instrument and is not held for trading, the Group may irrevocably elect to present the gains and losses on that investment in other comprehensive income.

Except for trade receivables, which are measured at their transaction price in accordance with IFRS 15, financial assets are measured, on initial recognition, at fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to their acquisition.

At the end of each reporting period, the credit risks of fixed-income financial assets measured using the amortized cost method or at fair value through other comprehensive income are subject to a provision based on the expected credit losses method.

Financial assets also include derivatives that are measured at fair value in accordance with IFRS 9.

In accordance with IAS 1, the Group presents current and non-current assets and current and non-current liabilities separately in the statement of financial position. In view of the majority of the Group's activities, it was considered that the criterion to be used to classify assets is the expected time to realize the asset or settle the liability: the asset is classified as current if this period is less than 12 months and as non-current if it is more than 12 months after the reporting period.

The following table presents the Group's different categories of financial assets, broken down into current and non-current items:

		Dec. 31, 2024			Dec. 31, 2023		
In millions of euros	Notes	Non-current	Current	Total	Non-current	Current	Total
Other financial assets	14.1	7,722	11,959	19,681	14,817	2,170	16,987
Equity instruments at fair value through other comprehensive income		*903*	*-*	*903*	*1,902*	*-*	*1,902*
Equity instruments at fair value through profit or loss		*226*	*-*	*226*	*222*	*-*	*222*
Debt instruments at fair value through other comprehensive income		*1,414*	*24*	*1,438*	*1,753*	*119*	*1,873*
Debt instruments at fair value through profit or loss		*1,468*	*785*	*2,253*	*2,915*	*654*	*3,569*
Loans and receivables at amortized cost		*3,711*	*11,150*	*14,861*	*8,024*	*1,397*	*9,421*
Trade and other receivables	7.2	-	15,880	15,880	-	20,092	20,092
Assets from contracts with customers	7.2	3	9,229	9,232	1	9,530	9,531
Cash and cash equivalents		-	16,928	16,928	-	16,578	16,578
Derivative instruments	14.4	6,689	6,366	13,055	12,764	8,481	21,245
TOTAL		**14,413**	**60,362**	**74,776**	**27,582**	**56,850**	**84,433**

14.1.1 Other financial assets

14.1.1.1 Equity instruments at fair value

Accounting standards

Equity instruments at fair value through other comprehensive income (OCI)

Under IFRS 9 an irrevocable election can be made to present subsequent changes in the fair value of an investment in an equity instrument that is not held for trading in other comprehensive income. This choice is made on an instrument by instrument basis. Amounts presented in other comprehensive income should not be transferred to profit or loss including proceeds of disposals. However, IFRS 9 authorizes the transfer of the accumulated profits and losses to another component of equity. Dividends from such investments are recognized in profit or loss unless the dividend clearly represents the recovery of a portion of the cost of the investment.

The equity instruments recognized under this line item mainly concern investments in companies that are not controlled by the Group and for which OCI measurement has been selected given their strategic and long-term nature.

Upon initial recognition, these equity instruments are recognized at fair value, which is generally their acquisition cost, plus transaction costs.

At each reporting date, for listed securities, fair value is determined based on the quoted market price at the reporting date. For unlisted securities, fair value is measured using valuation models based primarily on the latest market transactions, the discounting of dividends or cash flows and the net asset value.

Equity instruments at fair value through profit or loss

Equity instruments that are held for trading or for which the Group has not elected for measurement at fair value through other comprehensive income are measured at fair value through profit or loss.

This category mainly includes investments in companies not controlled by the Group.

Upon initial recognition, these equity instruments are recognized at fair value, which is generally their acquisition cost.

At each reporting date, for listed and unlisted securities, the same measurement method as described above should be applied.

In millions of euros	**Equity instruments at fair value through other comprehensive income**	**Equity instruments at fair value through profit or loss**	**Total**
AT DECEMBER 31, 2023	**1,902**	**222**	**2,124**
Acquisitions	371	76	447
Disposals	(1,582)	(47)	(1,628)
Changes in fair value	224	(23)	201
Changes in scope of consolidation, translation adjustments and other	(13)	(2)	(15)
AT DECEMBER 31, 2024	**903**	**227**	**1,129**
Dividends	3	5	**8**

Equity instruments break down as €653 million of listed equity instruments (€1,653 million at December 31, 2023) and €476 million of unlisted equity instruments (€473 million at December 31, 2023).

During the period, the Group sold equity instruments with a view to reinvesting the proceeds related to the financial assets set aside to cover the nuclear provisions, with the "Loans and receivables at amortized cost" line.

14.1.1.2 Debt instruments at fair value

Accounting standards

Debt instruments at fair value through other comprehensive income

Financial assets that are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and for which the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the outstanding amount (SPPI), are measured at fair value through OCI (with a recycling mechanism). This involves a measurement through profit or loss for interest (at amortized cost using the effective interest method), impairment and foreign exchange gains and losses, and through OCI (with a recycling mechanism) for other gains or losses.

This category mainly includes bonds.

Fair value gains and losses on these instruments are recognized in other comprehensive income, except for the following items which are recognized in profit or loss:

- expected credit losses and reversals;
- foreign exchange gains and losses.

When the financial asset is derecognized, the cumulative gain or loss that was previously recognized in other comprehensive income is reclassified from equity to profit or loss.

Debt instruments at fair value through profit or loss

Financial assets whose contractual cash flows do not consist solely of payments of principal and interest on the amount outstanding (SPPI) or that are held in view of an "other" business model are measured at fair value through profit or loss.

The Group's investments in UCITS are accounted for in this caption. They are considered as debt instruments, according to IAS 32 – *Financial Instruments*: *Presentation*, given the existence of an obligation for the issuer to redeem units, at the request of the holder. They are measured at fair value through profit or loss because the contractual cash flow characteristics do not meet the SPPI test.

In millions of euros	Debt instruments at fair value through other comprehensive income	Liquid debt instruments held for cash investment purposes at fair value through other comprehensive income	Debt instruments at fair value through profit or loss	Liquid debt instruments held for cash investment purposes at fair value through profit or loss	Total
AT DECEMBER 31, 2023	**1,873**	**-**	**2,685**	**884**	**5,441**
Acquisitions	2,203	-	652	280	3,135
Disposals	(2,649)	(1)	(844)	(154)	(3,649)
Changes in fair value	5	-	191	26	222
Changes in scope of consolidation, translation adjustments and other	6	1	(1,466)	-	(1,458)
AT DECEMBER 31, 2024	**1,438**	**-**	**1,218**	**1,035**	**3,691**

Debt instruments at fair value at December 31, 2024 primarily included bonds and money market funds held by Synatom for €2,633 million (*see Note 17.2.4 "Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material"*) and liquid instruments deducted from net financial debt for €1,035 million (respectively €4,536 million and €884 million at December 31, 2023).

During the period, the Group sold debt instruments with a view to reinvesting the proceeds related to the financial assets set aside to cover nuclear provisions, with the "Loans and receivables at amortized cost" line.

14.1.1.3 Loans and receivables at amortized cost

Accounting standards

Loans and receivables held by the Group under a business model consisting in holding the instrument in order to collect the contractual cash flows, and whose contractual cash flows consist solely of payments of principal and interest on the principal amount outstanding (SPPI test) are measured at amortized cost. Interest is calculated using the effective interest method.

The following items are recognized in profit or loss:

- interest income using the effective interest method;
- expected credit losses and reversals;
- foreign exchange gains and losses.

The Group has entered into concession agreements with certain public authorities under which the construction, extension or improvement of infrastructure is carried out in return for an unconditional right to receive payment from the concession holder in cash or other financial assets. In this case, the Group recognizes a financial receivable from the concession holders.

The Group has entered into services or take-or-pay contracts that are, or contain, a lease and under which the Group acts as lessor and its customers as lessees. Leases are analyzed in accordance with IFRS 16 in order to determine whether they constitute an operating lease or a finance lease. Whenever the terms of the lease transfer substantially all the risk and rewards of ownership of the related asset, the contract is classified as a finance lease and a finance receivable is recognized to reflect the financing deemed to be granted by the Group to the customer.

Leasing security deposits are presented in this caption and recognized at their nominal value.

See Note 15 "Risks arising from financial instruments" regarding the assessment of counterparty risk.

In millions of euros	Dec. 31, 2024			Dec. 31, 2023		
	Non-current	Current	Total	Non-current	Current	Total
Loans granted to affiliated companies and other debt instruments at amortized cost	914	10,020	10,934	5,021	350	5,371
Other receivables at amortized cost	264	874	1,139	219	648	867
Amounts receivable under concession contracts	2,222	195	2,417	2,349	211	2,559
Amounts receivable under finance leases	310	61	370	435	188	624
TOTAL	**3,711**	**11,150**	**14,861**	**8,024**	**1,397**	**9,421**

Loans granted to affiliated companies and other debt instruments at amortized cost include the cash of the debt instruments held by Synatom, awaiting investment for €9,622 million (€3,777 million at December 31, 2023) (*see Note 17.2.4. "Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material"*). The change over the period is mainly due to the reinvestment of financial assets set aside to cover nuclear provisions, the assets of which were previously invested in equity and debt instruments measured at fair value.

Amounts receivable under concession contracts amounted to €2,417 million at December 31, 2024 (€2,559 million at December 31, 2023). They are mainly related to the Novo Estado and Gralha Azul electric power transmission networks in Brazil, as well as Kathu's Solar Park (RF) Proprietary Trading concession in South-Africa.

Other net gains and losses recognized in the income statement relating to loans and receivables at amortized cost break down as follows:

In millions of euros	Interest income	Post-acquisition measurement	
		Impact of translation adjustments	Expected credit loss
AT DECEMBER 31, 2024	**531**	**1**	**(1)**
AT DECEMBER 31, 2023	280	(35)	(6)

Amounts receivables under finance leases

Finance leases are covered under IFRS 16. They relate to energy purchase and sale contracts where the contract conveys an exclusive right to use a production asset, and certain contracts with industrial customers relating to assets held by the Group.

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Undiscounted future minimum lease payments	1,011	1,006
Unguaranteed residual value accruing to the lessor	54	46
TOTAL GROSS INVESTMENT IN THE LEASE	**1,065**	**1,052**
Unearned financial income	**440**	**276**
NET INVESTMENT IN THE LEASE (STATEMENT OF FINANCIAL POSITION)	**624**	**776**
Of which present value of future minimum lease payments	*578*	*733*
Of which present value of unguaranteed residual value	*46*	*43*

Undiscounted minimum lease payments receivable under finance leases can be analyzed as follows:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Year 1	243	222
Years 2 to 5 inclusive	405	360
Beyond year 5	363	423
TOTAL	**1,011**	**1,006**

14.1.2 Trade and other receivables, assets from contracts with customers

Information on trade and other receivables and assets from contracts with customers are provided in Note 7.2."Trade and other receivables, assets and liabilities from contracts with customers".

14.1.3 Cash and cash equivalents

Accounting standards

This item includes cash equivalents as well as short-term investments that are considered to be readily convertible into a known amount of cash and where the risk of a change in their value is deemed to be negligible based on the criteria set out in IAS 7.

Bank overdrafts are not included in the calculation of cash and cash equivalents and are recorded under "Short-term borrowings".

At the end of each reporting period, the credit risk of cash and cash equivalent items is subject to a provision calculated in accordance with the expected credit losses model.

"Cash and cash equivalents" totaled €16,928 million at December 31, 2024 (€16,578 million at December 31, 2023). This item comprises standard money market funds with daily liquidity (50%), term deposits with a maturity of less than one month (36%), and deposits with a maturity of less than three months and other products (14%).

This amount included funds related to the issuance of the green bond, which remain unallocated to the funding of eligible projects (*see Chapter 5 of the Universal Registration Document*).

Gains recognized in respect of "Cash and cash equivalents" amounted to €803 million in 2024 compared to €596 million in 2023.

14.1.4 Transfer of financial assets

At December 31, 2024, the outstanding amount of disposals without recourse of financial assets as part of transactions leading to full derecognition, amounted to approximately €0.5 billion (compared with €1.3 billion at December 31, 2023).

14.1.5 Financial assets and equity instruments pledged as collateral for borrowings and debt

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Financial assets and equity instruments pledged as collateral	**3,308**	3,685

This item mainly includes the carrying amount of equity instruments and shares pledged as collateral for borrowings and debt, mainly in Brazil.

14.2 Financial liabilities

Accounting standards

Borrowings and other financial liabilities are measured at amortized cost using the effective interest rate method.

On initial recognition, any issue or redemption premiums and discounts and issuing costs are added to/deducted from the nominal value of the borrowings concerned. These items are taken into account when calculating the effective interest rate and are therefore recorded in the consolidated income statement over the life of the borrowings using the amortized cost method.

As regards structured debt instruments that do not have an equity component, the Group may be required to separate an “embedded” derivative instrument from its host contract. When an embedded derivative is separated from its host contract, the initial carrying amount of the structured instrument is broken down into an embedded derivative component, corresponding to the fair value of the embedded derivative, and a financial liability component, corresponding to the difference between the amount of the issue and the fair value of the embedded derivative. The separation of components upon initial recognition does not give rise to any gains or losses.

The debt is subsequently recorded at amortized cost using the effective interest method while the derivative is measured at fair value, with changes in fair value recognized in profit or loss.

Financial liabilities are recognized either:

- as “Amortized cost liabilities” for borrowings, trade s and other payables, and other financial liabilities;
- as “Liabilities measured at fair value through profit or loss” for derivative financial instruments and for financial liabilities designated as such.

The following table presents the Group’s different financial liabilities at December 31, 2024, broken down into current and non-current items:

		Dec. 31, 2024			Dec. 31, 2023		
In millions of euros	Notes	Non-current	Current	Total	Non-current	Current	Total
Borrowings and debt	14.3	42,880	9,127	52,006	37,920	9,367	47,287
Trade and other payables	14.2	-	19,007	19,007	-	22,976	22,976
Liabilities from contracts with customers	7.2	153	3,818	3,971	93	3,960	4,053
Derivative instruments	14.4	7,695	4,893	12,588	16,755	7,806	24,561
Other financial liabilities		97	-	97	82	-	82
TOTAL		**50,826**	**36,844**	**87,670**	**54,851**	**44,108**	**98,959**

14.2.1 Trade and other payables

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Trade payables	17,966	22,188
Payable on fixed assets	1,041	787
TOTAL	**19,007**	**22,976**

The carrying amount of these financial liabilities represents a reasonable estimate of their fair value.

14.2.2 Liabilities from contracts with customers

Information on liabilities from contracts with customers are provided in Note 7.2. “Trade and other receivables, assets and liabilities from contracts with customers”.

14.3 Net financial debt

14.3.1 Net financial debt by type

In millions of euros		Dec. 31, 2024 Non-current	Dec. 31, 2024 Current	Dec. 31, 2024 Total	Dec. 31, 2023 Non-current	Dec. 31, 2023 Current	Dec. 31, 2023 Total
Borrowings and debt	Bond issues	33,341	1,409	34,750	29,217	1,039	30,256
	Bank borrowings	6,003	844	6,847	5,985	763	6,748
	Negotiable commercial paper	-	5,001	5,001	-	5,606	5,606
	Lease liabilities	3,270	473	3,743	2,677	470	3,147
	Other borrowings (1)	266	1,138	1,404	41	1,034	1,074
	Bank overdrafts and current account	-	262	262	-	455	455
	BORROWINGS AND DEBT	**42,880**	**9,127**	**52,006**	**37,920**	**9,367**	**47,287**
Other financial assets	Other financial assets deducted from net financial debt (2)	**(319)**	**(1,555)**	**(1,874)**	**(303)**	**(1,111)**	**(1,414)**
Cash and cash equivalents	Cash and cash equivalents	**-**	**(16,928)**	**(16,928)**	**-**	**(16,578)**	**(16,578)**
Derivative instruments	Derivatives hedging borrowings (3)	**(41)**	**60**	**19**	**177**	**20**	**198**
NET FINANCIAL DEBT		**42,520**	**(9,296)**	**33,223**	**37,795**	**(8,302)**	**29,493**

(1) This item corresponds to the revaluation of the interest rate component of debt in a qualified fair value hedging relationship for a negative €-42 million, margin calls on debt hedging derivatives carried in liabilities for €433 million and the impact of amortized cost for €452 million (compared to, respectively, a negative €-41 million, a positive €481 million and a positive €268 million at December 31, 2023).

(2) This item notably corresponds to assets related to financing for €66 million, liquid debt instruments held for cash investment purposes for €1,035 million and margin calls (assets) on derivatives hedging borrowings for €772 million (compared to, respectively, €105 million, €884 million and €425 million at December 31, 2023).

(3) This item represents the interest rate component of the fair value of derivatives hedging borrowings in a designated fair value hedging relationship. It also represents the exchange rate and outstanding accrued interest rate components of the fair value of all debt-related derivatives irrespective of whether or not they qualify as hedges.

The fair value of gross borrowings and debt (excluding lease liabilities) amounted to €46,792 million at December 31, 2024, compared with a carrying amount of €48,143 million.

Financial income and expenses related to borrowings and debt are presented in Note 10 “Net financial income/(loss)”.

14.3.2 Reconciliation between net financial debt and cash flow from (used in) financing activities

In millions of euros		Dec. 31, 2023	Cash flow from (used in) financing activities	Cash flow from operating and investing activities and change in cash and cash equivalents	Change in fair value	Translation adjustments	Changes in scope of consolidation and Others	Dec. 31, 2024
Borrowings and	Bond issues	30,256	4,083	-	-	(32)	443	34,750
	Bank borrowings	6,748	(170)	-	-	(261)	530	6,847
	Negotiable commercial paper	5,606	(635)	-	-	30	-	5,001
	Lease liabilities [(1)] [(2)]	3,147	(461)	-	-	59	998	3,743
	Other borrowings	1,074	2,690	-	383	1	(2,745)	1,404
	Bank overdrafts and current account	455	(2,779)	-	-	(4)	2,591	262
	BORROWINGS AND DEBT	**47,287**	**2,727**	**-**	**383**	**(207)**	**1,816**	**52,006**
Other financial	Other financial assets deducted from	**(1,414)**	**(475)**	**-**	**(28)**	**8**	**35**	**(1,874)**
Cash and cash	Cash and cash equivalents	**(16,578)**	**-**	**(95)**	**-**	**8**	**(263)**	**(16,928)**
Derivative	Derivatives hedging borrowings	**198**	**(338)**	**-**	**(57)**	**217**	**(1)**	**19**
NET FINANCIAL DEBT		**29,493**	**1,915**	**(95)**	**299**	**26**	**1,587**	**33,223**

(1) Lease liabilities: the negative amount of €-461 million included in the "Cash flow from (used in) financing activities" column corresponds to lease payments, excluding interest (total cash outflow for leases amounted to a negative €-544 million, of which €83 million relating to interest).

(2) Lease liabilities: the amount of €998 million in the "Changes in scope of consolidation and Other" column corresponds mainly to the recognition of new right-of-use assets, of which those relating to the future ENGIE Campus site as well as new LNG vessel leasing contracts.

14.3.3 Main events of the period

14.3.3.1 Impact of changes in the scope of consolidation and in exchange rates on net financial debt

In 2024, changes in exchange rates resulted in a €+26 million increase in net financial debt, including a €+504 million increase in relation to the US dollar and a €-558 million decrease in relation to the Brazilian real.

Disposals and acquisitions during 2024 (including the effects of changes in the scope of consolidation) impacted net financial debt by a positive €533 million. This change mainly reflects:

- asset disposals during the period, resulting in a €-882 million decrease in net financial debt (*see Note 4.1 "Disposals completed in 2024"*), of which the sale in January 2024 of a 15% share held in TAG for €0.4 billion.
- acquisitions carried out in 2024 which increased net financial debt by €1,415 million (*see Note 4.2 "Acquisitions completed in 2024"*). The main operation includes the acquisition in March 2024 of five photovoltaic complexes in Brazil for €0.6 billion.

14.3.3.2 Financing and refinancing transactions

The Group carried out the following main transactions in 2024:

	Entity	Type	Currency	Coupon	Issue date	Maturity date	Outstanding amount (in millions of currency)	Outstanding amount (in millions of euros)
Issuances								
	ENGIE SA	bonds	€	3.625%	3/6/2024	3/6/2031	600	600
	ENGIE SA	green bonds	€	3.875%	3/6/2024	3/6/2036	800	800
	ENGIE SA	green bonds	€	4.250%	3/6/2024	3/6/2044	600	600
	ENGIE SA	US bonds	$	5.250%	4/10/2024	4/10/2029	750	693
	ENGIE SA	US bonds	$	5.625%	4/10/2024	4/10/2034	750	693
	ENGIE SA	US bonds	$	5.875%	4/10/2024	4/10/2054	500	462
	ENGIE SA	GBP green bonds	£	5.750%	10/28/2024	10/28/2050	500	600
	EECL	bonds	$	6.375%	4/17/2024	4/17/2034	500	469
	EECL	green bonds	CHF	2.128%	9/26/2024	9/26/2029	190	201
	EBE SA	bonds	BRL	12.4974%	6/15/2024	8/15/2029	863	
	EBE SA	bonds	BRL	IPCA+6.375%	6/15/2024	6/15/2034	637	514
	EBE SA	bonds	BRL	12.2372%	9/25/2024	9/25/2030	1,500	
Reimbursements								
	ENGIE SA	bonds	JPY	0.535%	9/16/2015	1/16/2024	20,000	122
	ENGIE SA	bonds	€	0.875%	3/27/2017	3/27/2024	480	480
	ENGIE SA («GDF SUEZ»)	bonds	NOK	4.020%	4/22/2013	4/22/2024	500	44
	ENGIE SA («GDF SUEZ»)	bonds	CHF	1.625%	9/10/2012	9/10/2024	175	184
	EECL [1]	bonds	$	4.5%		1/29/2025	214	198

(1) Out of a total outstanding amount of US$350 million.

14.4 Derivative instruments

Accounting standards

Derivative financial instruments are measured at fair value. This fair value is determined on the basis of market data, available from external contributors. In the absence of an external benchmark, a valuation based on internal models recognized by market participants and favoring data directly derived from observable data such as OTC quotations is used.

The change in fair value of derivative financial instruments is recorded in the income statement except when they are designated as hedging instruments in a cash flow hedge or net investment hedge. In this case, changes in the value of the hedging instruments are recognized directly in equity, excluding the ineffective portion of the hedges.

The Group uses derivative financial instruments to manage and reduce its exposure to market risks arising from fluctuations in interest rates, foreign currency exchange rates and commodity prices, mainly for gas and electricity. The use of derivative instruments is governed by a Group policy for managing interest rate, currency and commodity risks (*see Note 15 – Risks arising from financial instruments*).

Derivative financial instruments are contracts (i) whose value changes in response to the change in one or more observable variables, (ii) that do not require any material initial net investment, and (iii) that are settled at a future date.

Derivative instruments include swaps, options, futures and swaptions, as well as forward commitments to purchase or sell listed and unlisted securities, and firm commitments or options to purchase or sell non-financial assets that involve physical delivery of the underlying.

For purchases and sales of electricity and natural gas, the Group systematically analyzes whether the contract was entered into in the “normal” course of operations and therefore falls outside the scope of IFRS 9. This analysis consists firstly in demonstrating that the contract is entered into and continues to be held for the purpose of physical delivery or receipt of the commodity in accordance with the Group’s expected purchase, sale or usage requirements for volumes intended to be used or sold by the Group within a reasonable time frame, as part of its operations.

The second step is to demonstrate that the Group has no practice of settling similar contracts on a net basis and that these contracts are not equivalent to written options. In particular, in the case of electricity and gas sales allowing the buyer a certain degree of flexibility concerning the volumes delivered, the Group distinguishes between contracts that are equivalent to capacity sales considered as transactions falling within the scope of ordinary operations and those that are equivalent to written financial options, which are accounted for as derivative financial instruments.

Only contracts that meet all of the above conditions are considered as falling outside the scope of IFRS 9. Adequate specific documentation is compiled to support this analysis.

Hedging instruments: recognition and presentation

Derivative instruments qualifying as hedging instruments are recognized in the consolidated statement of financial position and measured at fair value. However, their accounting treatment varies according to whether they are classified as (i) a fair value hedge of an asset or liability; (ii) a cash flow hedge, or (iii) a hedge of a net investment in a foreign operation.

Fair value hedges

A fair value hedge is defined as a hedge of the exposure to changes in fair value of a recognized asset or liability such as a fixed-rate loan or borrowing, or of assets, liabilities or an unrecognized firm commitment denominated in a foreign currency.

The gain or loss from remeasuring the hedging instrument at fair value is recognized in profit or loss. The gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the hedged item and is also recognized

in profit or loss even if the hedged item is in a category in respect of which changes in fair value are recognized through other comprehensive income. These two adjustments are presented net in the consolidated income statement, with the net effect corresponding to the ineffective portion of the hedge.

Cash flow hedges

A cash flow hedge is a hedge of the exposure to variability in cash flows that could affect the Group's income. The hedged cash flows may be attributable to a particular risk associated with a recognized financial or non-financial asset or a highly probable forecast transaction.

The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognized directly in other comprehensive income, net of tax, while the ineffective portion is recognized in profit or loss. The gains or losses accumulated in equity are reclassified to the consolidated income statement under the same caption as the loss or gain on the hedged item – i.e., current operating income for operating cash flows and financial income or expenses for other cash flows – in the same periods in which the hedged cash flows affect income.

If the hedging relationship is discontinued, in particular because the hedge is no longer considered effective, the cumulative gain or loss on the hedging instrument remains recognized in equity until the forecast transaction occurs. However, if a forecast transaction is no longer expected to occur, the cumulative gain or loss on the hedging instrument is immediately recognized in profit or loss.

Hedge of a net investment in a foreign operation

In the same way as for a cash flow hedge, the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge of the currency risk is recognized directly in other comprehensive income, net of tax, while the ineffective portion is recognized in profit or loss. The gains or losses accumulated in other comprehensive income are transferred to the consolidated income statement when the investment is liquidated or sold.

Hedging instruments: identification and documentation of hedging relationships

The hedging instruments and hedged items are designated at the inception of the hedging relationship. The hedging relationship is formally documented in each case, specifying the hedging strategy, the hedged risk and the method used to assess hedge effectiveness. Only derivative contracts entered into with external counterparties are considered as being eligible for hedge accounting.

Hedge effectiveness is assessed and documented at the inception of the hedging relationship and on an ongoing basis throughout the periods for which the hedge was designated.

Hedge effectiveness is demonstrated both prospectively and retrospectively using various methods, based mainly on a comparison between changes in fair value or cash flows between the hedging instrument and the hedged item. Methods based on an analysis of statistical correlations between historical price data are also used.

Derivative instruments not qualifying for hedge accounting: recognition and presentation

These items mainly concern derivative financial instruments used in economic hedges that have not been – or are no longer – documented as hedging relationships for accounting purposes.

When a derivative financial instrument does not qualify or no longer qualifies for hedge accounting, changes in fair value are recognized directly in profit or loss under (i) current operating income for derivative instruments with non-financial assets as the underlying, and (ii) financial income or expenses for currency, interest rate and equity derivatives.

Derivative instruments not qualifying for hedge accounting used by the Group in connection with proprietary commodity trading activities and other derivatives expiring in less than 12 months are recognized in the consolidated statement of financial position in current assets and liabilities, while derivatives expiring after this period are classified as non-current items.

Fair value measurement

The fair value of instruments listed on an active market is determined by reference to the market price. In this case, these instruments are presented in level 1 of the fair value hierarchy.

The fair value of unlisted financial instruments for which there is no active market and for which observable market data exist is determined based on valuation techniques such as option pricing models or the discounted cash flow method.

The models used to evaluate these instruments take into account assumptions based on market inputs:

- the fair value of interest rate swaps is calculated based on the present value of future cash flows;
- the fair value of forward foreign exchange contracts and currency swaps is calculated by reference to current prices for contracts with similar maturities by discounting the future cash flow spread (difference between the forward exchange rate under the contract and the forward exchange rate recalculated in line with the new market conditions applicable to the nominal amount);
- the fair value of currency and interest rate options is calculated using option pricing models;
- commodity derivatives are valued by reference to listed market prices based on the present value of future cash flows (commodity swaps or commodity forwards) and option pricing models (options), for which market price volatility may be a factor. Contracts with maturities exceeding the depth of transactions for which prices are observable, or which are particularly complex, may be valued based on internal assumptions;
- exceptionally, for complex contracts negotiated with independent financial institutions, the Group uses the values established by its counterparties.

These instruments are presented in level 2 of the fair value hierarchy except when the evaluation is based mainly on data that are not observable, in which case they are presented in level 3 of the fair value hierarchy. Most often, this is the case for derivatives with a maturity that falls outside the observability period for market data relating to the underlying or when certain inputs such as the volatility of the underlying are not observable.

Except in case of enforceable master netting arrangements or similar agreements, counterparty risk is included in the fair value of financial derivative instrument assets and liabilities. It is calculated according to the “expected loss” method and takes into account the exposure at default, the probability of default and the loss given default. The probability of default is determined on the basis of credit ratings assigned to each counterparty (“historical probability of default” approach).

Offsetting of financial assets and liabilities in the statement of financial position

Financial assets and liabilities are presented net in the statement of financial position when the offsetting criteria of IAS 32 are met. Offsetting relates to instruments entered into with counterparties for which the contractual terms provide for a net settlement of transactions and a collateralization agreement (margin calls). In particular, commodity derivative assets and liabilities are offset for transactions with the same counterparty, in the same currency, by type of commodity and delivery point and with identical maturities.

Derivative instruments recognized in assets and liabilities are measured at fair value and break down as follows:

	Dec. 31, 2024						Dec. 31, 2023					
	Assets			Liabilities			Assets			Liabilities		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total	Non-current	Current	Total	Non-current	Current	Total
Derivatives hedging borrowings	472	73	545	431	133	564	279	111	390	457	131	588
Derivatives hedging commodities	4,948	6,577	11,525	5,715	5,887	11,602	10,984	8,344	19,328	15,132	7,516	22,648
Derivatives hedging other items [(1)]	1,269	79	1,348	1,549	77	1,626	1,501	26	1,526	1,167	159	1,325
TOTAL	**6,689**	**6,730**	**13,418**	**7,695**	**6,096**	**13,792**	**12,764**	**8,481**	**21,245**	**16,755**	**7,806**	**24,561**

(1) Derivatives hedging other items mainly include the interest rate component of interest rate derivatives (not qualifying as hedges or qualifying as cash flow hedges) that are excluded from net financial debt, as well as net investment hedge derivatives.

The net amount of derivatives hedging commodities recognized in the statement of financial position is measured after taking into account offsetting agreements that meet the criteria set out in paragraph 42 of IAS 32. This offsetting generated balance sheet effects of around €3.4 billion in 2024 and mainly concerned OTC derivatives concluded with counterparties for which the contractual terms provide for a net settlement of the transactions as well as a collateralization agreement (margin calls).

The balance of derivative hedging commodities is lower than at December 31, 2023 due to the return to normal levels of commodity prices in 2024. Most of these derivatives mature in 2025 and 2026.

14.4.1 Offsetting of derivative instrument assets and liabilities

The net amount of derivative instruments after taking into account enforceable master netting arrangements or similar agreements, whether or not they are offset in accordance with paragraph 42 of IAS 32, are presented in the table below:

		Dec. 31, 2024				Dec. 31, 2023			
In millions of euros		Gross amount	**Net amount recognized in the statement of financial position (1)**	Other offsetting agreements (2)	**Total net amount**	Gross amount	**Net amount recognized in the statement of financial position (1)**	Other offsetting agreements (2)	**Total net amount**
Assets	Derivatives hedging commodities	14,924	**11,525**	(2,509)	**9,016**	28,522	**19,328**	(4,927)	**14,401**
	Derivatives hedging borrowings and other items	1,893	**1,893**	(132)	**1,761**	1,917	**1,917**	(469)	**1,448**
Liabilities	Derivatives hedging commodities	(15,000)	**(11,602)**	1,332	**(10,270)**	(31,843)	**(22,648)**	3,898	**(18,750)**
	Derivatives hedging borrowings and other items	(2,190)	**(2,190)**	605	**(1,584)**	(1,913)	**(1,913)**	415	**(1,498)**

(1) *Net amount recognized in the statement of financial position after taking into account offsetting agreements that meet the criteria set out in paragraph 42 of IAS 32. This offsetting mainly concerns OTC derivatives entered into with counterparties for which the contractual terms provide for a net settlement of the transactions as well as a collateralization agreement (margin calls).*

(2) *Other offsetting agreements include collateral and other guarantee instruments, as well as offsetting agreements that do not meet the criteria set out in paragraph 42 of IAS 32.*

14.5 Fair value of financial instruments by level in the fair value hierarchy

14.5.1 Financial assets

The table below shows the allocation of financial instruments carried in assets to the different levels in the fair value hierarchy:

In millions of euros	Dec. 31, 2024				Dec. 31, 2023			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Other financial assets (excluding loans and receivables at amortized cost)	4,796	3,285	-	1,511	7,552	6,189	-	1,363
Equity instruments at fair value through other comprehensive income	*903*	*653*	*-*	*250*	*1,902*	*1,653*	*-*	*249*
Equity instruments at fair value through profit or loss	*226*	*-*	*-*	*226*	*222*	*-*	*-*	*222*
Debt instruments at fair value through other comprehensive income	*1,438*	*1,438*	*-*	*-*	*1,873*	*1,873*	*-*	*-*
Debt instruments at fair value through profit or loss	*2,229*	*1,195*	*-*	*1,034*	*3,555*	*2,663*	*-*	*891*
Derivative instruments	13,418	47	11,975	1,397	21,245	43	20,087	1,114
Derivatives hedging borrowings	*545*	*-*	*545*	*-*	*390*	*-*	*390*	*-*
Derivatives hedging commodities - relating to portfolio management activities (1)	*7,526*	*-*	*6,905*	*620*	*16,614*	*-*	*16,263*	*351*
Derivatives hedging commodities - relating to trading	*4,000*	*47*	*3,176*	*776*	*2,714*	*43*	*1,907*	*764*
Derivatives hedging other items	*1,348*	*-*	*1,348*	*-*	*1,526*	*-*	*1,526*	*-*
TOTAL	**18,214**	**3,332**	**11,975**	**2,908**	**28,796**	**6,232**	**20,087**	**2,477**

(1) Derivative financial instruments relating to commodities classified in level 3 mainly include long-term gas supply contracts and electricity contracts measured at fair value through profit or loss.

A definition of these three levels is presented in Note 14.4 “Derivative instruments”.

Other financial assets (excluding loans and receivables at amortized cost)

Changes in level 3 equity and debt instruments at fair value can be analyzed as follows:

In millions of euros	Equity instruments at fair value through other comprehensive income	Debt instruments at fair value through other comprehensive income	Equity instruments at fair value through profit or loss	Debt instruments at fair value through profit or loss	Other financial assets (excluding loans and receivables
AT DECEMBER 31, 2023	**249**	**-**	**222**	**891**	**1,363**
Acquisitions	12	-	76	280	367
Disposals	(2)	(1)	(47)	(192)	(242)
Changes in fair value (1)	4	-	(23)	24	6
Changes in scope of consolidation, translation adjustments and other	(13)	1	(2)	31	16
AT DECEMBER 31, 2024	**250**	**-**	**226**	**1,034**	**1,511**
Gains/(losses) recorded in income relating to instruments held at the end of the period					(30)

Derivative instruments

Changes in level 3 commodity derivatives can be analyzed as follows:

In millions of euros	**Net Asset/(Liability)**
AT DECEMBER 31, 2023	**(1,188)**
Changes in fair value recorded in income	500
Settlements	314
Transfer from level 3 to levels 1 and 2	77
Net fair value recorded in income	**(297)**
Deferred Day-One gains/(losses)	3
AT DECEMBER 31, 2024	**(295)**

14.5.2 Financial liabilities

The table below shows the allocation of financial instruments carried in liabilities to the different levels in the fair value hierarchy:

	Dec. 31, 2024				**Dec. 31, 2023**			
In millions of euros	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**	**Level 1**	**Level 2**	**Level 3**
Borrowings used in designated fair value hedges	9,555	-	9,555	-	5,755	-	5,755	-
Borrowings not used in designated fair value hedges	37,237	23,711	13,527	-	37,239	23,251	13,988	-
Derivative instruments	13,792	30	12,071	1,691	24,561	112	22,063	2,385
Derivatives hedging borrowings	*564*	*-*	*564*	*-*	*588*	*-*	*588*	*-*
Derivatives hedging commodities - relating to portfolio management activities[(1)]	*8,114*	*-*	*7,094*	*1,020*	*20,933*	*-*	*20,081*	*852*
Derivatives hedging commodities - relating to trading activities[(1)]	*3,488*	*30*	*2,787*	*671*	*1,715*	*112*	*70*	*1,533*
Derivatives hedging other items	*1,626*	*-*	*1,626*	*-*	*1,325*	*-*	*1,325*	*-*
TOTAL	**60,584**	**23,740**	**35,152**	**1,691**	**67,555**	**23,363**	**41,806**	**2,385**

(1) Derivative financial instruments relating to commodities classified in level 3 mainly include long-term gas supply contracts and electricity contracts measured at fair value through profit or loss.

A definition of these three levels is presented in Note 14.4 “Derivative instruments”.

Borrowings used in designated fair value hedges

This caption includes bonds in a designated fair value hedging relationship, which are presented in level 2 in the above table. Only the interest rate component of the bonds is remeasured, with fair value determined by reference to observable inputs.

Borrowings not used in designated fair value hedges

Listed bond issues are included in level 1.

Other borrowings not used in a designated hedging relationship, are presented in level 2 in the above table. The fair value of these borrowings is determined on the basis of future discounted cash flows and relies on directly or indirectly observable data.

NOTE 15 RISKS ARISING FROM FINANCIAL INSTRUMENTS

The Group mainly uses derivative instruments to manage its exposure to market risks. Financial risk management procedures are set out in Chapter 2 "Risk factors" of the Universal Registration Document.

15.1 Market risks

15.1.1 Commodity risk

Commodity risk arises primarily from the following activities:

- portfolio management; and
- trading.

The Group has primarily identified two types of commodity risks: price risk resulting from fluctuations in market prices, and volume risk inherent to the business.

In the ordinary course of its operations, the Group is exposed to commodity risks, mainly on natural gas and electricity.

15.1.1.1 Portfolio management activities

Portfolio management seeks to optimize the market value of assets (power plants, gas supply contracts, energy sales and gas storage by pump and battery and transportation) over various timeframes (short-, medium- and long-term). Market value is optimized by:

- guaranteeing supply and ensuring the balance between physical needs and resources;
- managing market risks (price, volume) to unlock optimum value from portfolios within a specific risk framework.

The risk framework aims to safeguard the Group's financial resources over the budget period and smooth out medium-term earnings (over three or five years, depending on the maturity of each market). It encourages portfolio managers to take out economic hedges on their portfolio.

Sensitivities of the commodity-related derivatives portfolio used as part of the portfolio management activities at December 31, 2024 are detailed in the table below. These sensitivities have been established in the current uncertain context.

These assumptions do not constitute an estimate of future market prices and are not representative of future changes in consolidated earnings and equity, insofar as they do not include the sensitivities relating to the purchase and sale contracts for the underlying commodities, which are not recognized at fair value.

Sensitivity analysis [(1)]

		Dec. 31, 2024		Dec. 31, 2023	
In millions of euros	Changes in price	Pre-tax impact on income	Pre-tax impact on equity	Pre-tax impact on income	Pre-tax impact on equity
Oil-based products	+USD 10/bbl	-	42	-	64
Natural gas - Europe	-€10/MWh	(284)	(957)	(411)	(1,288)
Natural gas - Europe	+€10/MWh	278	957	398	1,288
Natural gas - Rest of the world	+€3/MWh	28	199	37	138
Electricity - Europe	-€20/MWh	65	(598)	(353)	338
Electricity - Europe	+€20/MWh	(65)	598	353	(338)
Electricity - Rest of the world	+€5/MWh	(448)	-	(166)	-
Greenhouse gas emission rights	+€2/ton	29	4	12	9
EUR/USD	+10%	75	(183)	(40)	(111)
EUR/GBP	+10%	(1)	-	66	-

(1) The sensitivities shown above apply solely to financial commodity derivatives used for hedging purposes as part of the portfolio management activities.

15.1.1.2 Trading activities

Revenues from trading activities totaled €2,253 million in 2024 (€3,441 million in 2023).

The Group's trading activities are primarily conducted within:

- ENGIE Global Markets. Its role is to manage the risks of the physical and financial energy portfolio for the Group or external customers, providing them with access to the market and implementing customized hedging strategies;
- ENGIE SA mainly for the optimization of part of its long-term gas supply contracts.

These entities operate on organized or OTC markets in derivative instruments such as futures, forwards, swaps, or options. Exposure to trading activities is strictly controlled by daily monitoring of compliance with Value at Risk (VaR) limits.

The use of VaR to quantify market risk arising from trading activities provides a transversal measure of risk, taking all markets and products into account. VaR represents the maximum potential loss on a portfolio over a specified holding period based on a given confidence interval. It is not an indication of expected results but is back-tested on a regular basis.

The Group uses a one-day holding period and a 99% confidence interval to calculate VaR, as well as stress tests, in accordance with banking regulatory requirements.

The VaR shown below corresponds to the global VaR of the Group's entities with trading activities.

Value at Risk

In millions of euros	Dec. 31, 2024	2024 average(1)	2024 maximum(2)	2024 minimum(2)	2023 average(1)
Trading activities	7	13	27	5	15

(1) *Average daily VaR.*
(2) *Maximum and minimum daily VaR observed in 2024.*

VaR limits are set within the framework of Group governance, which was strengthened since the beginning of the crisis to take into account the more volatile market environment. The minimum and the maximum, in 2024, are to be compared respectively with €4 million and with €39 million in 2023.

The continuous monitoring of market risks and the strict application of these measures have enabled the Group to perform its trading activities in a supervised environment during the year.

15.1.2 Hedges of commodity risks

Hedging instruments and sources of hedge ineffectiveness

The Group enters into cash flow hedges, using derivative instruments (firm or option contracts) contracted over the counter or on organized markets, to reduce its commodity risks, which relate mainly to future cash flows from contracted or expected sales and purchases of commodities. These instruments may be settled net or involve physical delivery of the underlying.

Sources of hedge ineffectiveness are mainly related to uncertainty regarding the timing and potential mismatches in settlement dates, and, in a context of volatile commodity market prices, indices between the derivative instruments and the associated underlying exposures.

The fair values of commodity derivatives are indicated in the table below:

	Dec. 31, 2024				Dec. 31, 2023			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Derivative instruments relating to portfolio management activities	4,948	2,577	(5,715)	(2,399)	10,984	5,630	(15,132)	(5,801)
Cash flow hedges	*520*	*1,570*	*(575)*	*(811)*	*1,648*	*4,268*	*(2,321)*	*(5,782)*
Other derivative instruments	*4,428*	*1,007*	*(5,140)*	*(1,588)*	*9,336*	*1,362*	*(12,811)*	*(19)*
Derivative instruments relating to trading activities	-	4,000	-	(3,488)	-	2,714	-	(1,715)
TOTAL	**4,948**	**6,577**	**(5,715)**	**(5,887)**	**10,984**	**8,344**	**(15,132)**	**(7,516)**

The fair values shown in the table above reflect the amounts for which assets could be exchanged, or liabilities settled, at the end of the reporting period. They are not representative of an operational performance measure insofar as positions (i) are sensitive to changes in prices, (ii) can be modified by subsequent transactions, and (iii) will be offset by future cash flows arising for the underlying hedged transactions.

15.1.2.1 Cash flow hedges

The fair values of cash flow hedges by type of commodity are as follows:

	Dec. 31, 2024				Dec. 31, 2023			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Natural gas	313	1,014	(277)	(516)	760	1,848	(1,052)	(2,733)
Electricity	199	251	(297)	(69)	660	2,081	(1,057)	(2,664)
Oil	-	304	-	(225)	227	338	(211)	(384)
Other (1)	8	1	(1)	(1)	1	1	(1)	(1)
TOTAL	**520**	**1,570**	**(575)**	**(811)**	**1,648**	**4,268**	**(2,321)**	**(5,782)**

(1) Mainly includes foreign currency hedges on commodities.

Notional amounts (net) [1]

	Unit	2025	2026	2027	2028	2029	Beyond 5 years	Total at Dec. 31, 2024
Natural gas	*GWh*	115,535	29,444	5,460	(9,518)	(16,007)	(30)	**124,884**
Electricity	*GWh*	7,184	8,952	6,242	2,027	71	-	**24,476**
Oil-based products	*Thousands of barrels*	(11,191)	-	-	-	-	-	**(11,191)**
Forex	*Millions of euros*	-	-	-	-	-	-	**-**
Greenhouse gas emission rights	*Thousands of tons*	(141)	(207)	32	52	20	-	**(244)**

(1) Long/(short) position.

Effects of hedge accounting on the Group's financial position and performance

	Dec. 31, 2024				Dec. 31, 2023	
	Fair value			Nominal	Fair value	Nominal
In millions of euros	Assets	Liabilities	Total	Total	Total	Total
Cash flow hedges	2,091	(1,386)	705	4,885	(2,187)	10,553
TOTAL	**2,091**	**(1,386)**	**705**	**4,885**	**(2,187)**	**10,553**

The fair values shown in the table above are positive for assets and negative for liabilities.

In millions of euros		Nominal amount	Fair Value	Change in fair value used for calculating hedge ineffectiveness	Change in the value of the hedging instrument recognized in other comprehensive income [1]	Ineffective portion recognized in profit or loss [1]	Amount reclassified from the hedge reserve to profit or loss [1]	Line item of the income statement
Cash flow hedges	Hedging instruments	4,885	705		675	(330)	3,587	Current operating income
	Hedged items			4,835				

(1) Gains/(losses).

Hedge inefficiency is calculated based on the change in fair value of the hedging instrument compared to the change in fair value of the hedged items since inception of the hedging relationship. The fair value of the hedging instruments at December 31, 2024 reflects the cumulative change in fair value of the hedging instruments since their inception.

Maturity of commodity derivatives designated as cash flow hedges

In millions of euros	2025	2026	2027	2028	2029	Beyond 5 years	Dec. 31, 2024	Dec. 31, 2023
Fair value of derivatives by maturity	607	104	(8)	1	7	(6)	705	(2,187)

Amounts presented in the statement of changes in equity and the statement of comprehensive income

The following table provides a reconciliation of each component of equity and an analysis of other comprehensive income:

	Cash flow hedges
In millions of euros	Derivatives hedging commodities
AT DECEMBER 31, 2023	**(3,852)**
Effective portion recognized in equity	675
Amount reclassified from hedge reserve to profit or loss	3,587
Translation adjustments	-
Changes in scope of consolidation and other	-
AT DECEMBER 31, 2024	**409**

15.1.2.2 Other commodity derivatives

Other commodity derivatives include:

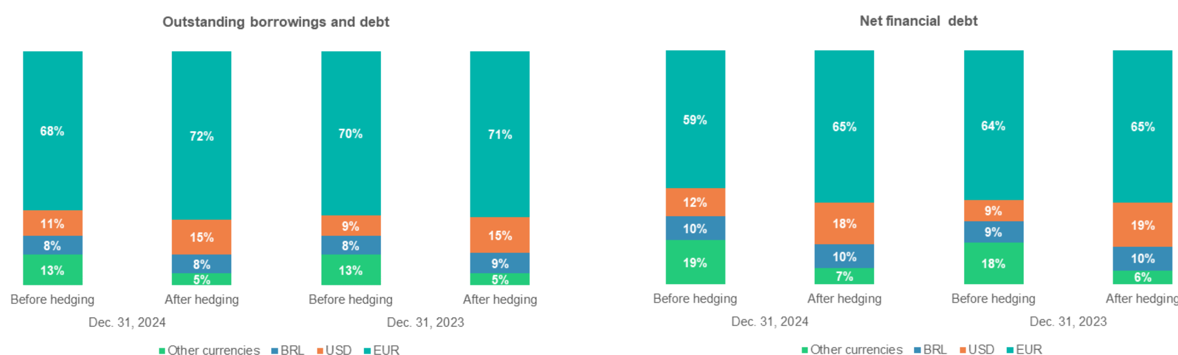
- commodity purchase and sale contracts that were not entered into or are no longer held for the purpose of the receipt or delivery of commodities in accordance with the Group's expected purchase, sale or usage requirements;
- embedded derivatives; and
- derivative financial instruments that are not eligible for hedge accounting in accordance with IFRS 9 or for which the Group has elected not to apply hedge accounting.

15.1.3 Currency risk

The Group is exposed to currency risk, defined as the impact on its statement of financial position and income statement of fluctuations in exchange rates affecting its operating and financing activities. Currency risk comprises (i) transaction risk arising in the ordinary course of business, (ii) specific transaction risk related to investments, mergers and acquisitions or disposal projects, and (iii) translation risk arising from the conversion into euros of income statement and statement of financial position items from subsidiaries with a functional currency other than the euro. The main translation risk exposures correspond to assets in US dollars, Brazilian real and pounds sterling.

15.1.3.1 Analysis of financial instruments by currency

The following tables present a breakdown by currency of outstanding borrowings and debt and net financial debt, before and after hedging:



15.1.3.2 Currency risk sensitivity analysis

A sensitivity analysis to currency risk on financial income/(loss) – excluding the income statement translation impact of foreign subsidiaries – was performed based on all financial instruments managed by the Treasury Department and representing a currency risk (including derivative financial instruments).

A sensitivity analysis to currency risk on equity was performed based on all financial instruments qualified as net investment hedges at the reporting date.

For currency risk, sensitivity corresponds to a 10% rise or fall in exchange rates of foreign currencies against the euro compared to closing rates.

	Dec. 31, 2024			
	Impact on income		Impact on equity	
In millions of euros	+10%(1)	-10%(1)	+10%(1)	-10%(1)
Exposures denominated in a currency other than the functional currency of companies carrying the liabilities on their statements of financial position(2)	(6)	6	NA	NA
Financial instruments (debt and derivatives) qualified as net investment hedges(3)	NA	NA	673	(673)

(1) +(-)10%: depreciation (appreciation) of 10% of all foreign currencies against the euro.
(2) Excluding derivatives qualified as net investment hedges.
(3) This impact is offset by the change in the net investment hedged.

15.1.4 Interest rate risk

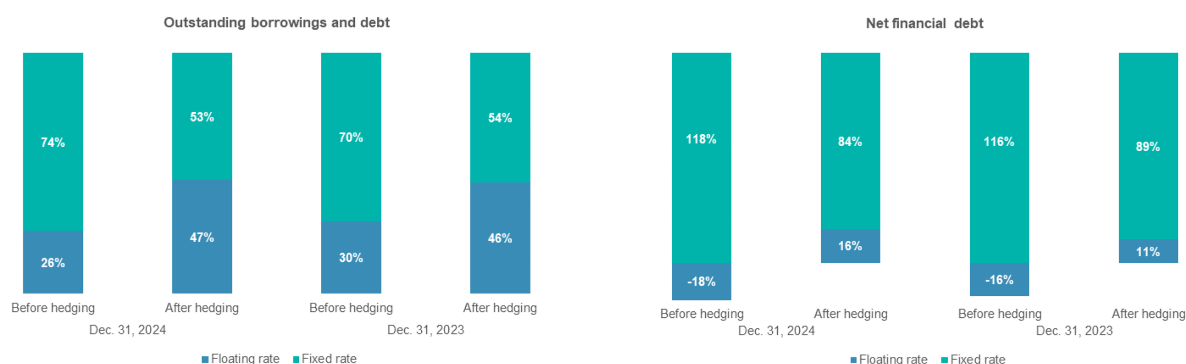
The Group seeks to manage its borrowing costs by limiting the impact of interest rate fluctuations on its income statement. The Group’s policy is therefore to arbitrate between fixed rates, floating rates and capped floating rates for its net financial debt. The interest rate mix may shift within a range defined by Group Management in line with market trends.

In order to manage the interest rate structure for its net debt, the Group uses hedging instruments, particularly interest rate swaps and options.

The Group also uses forward interest rate pre-hedges to protect the refinancing rate of part of its debt.

15.1.4.1 Analysis of financial instruments by type of interest rate

The following tables present a breakdown by type of interest rate of outstanding borrowings and debt and net financial debt before and after hedging:



15.1.4.2 Interest rate risk sensitivity analysis

Sensitivity was analyzed based on the Group's net financial debt position (including the impact of interest rate and foreign currency derivatives relating to net debt) at the reporting date.

For interest rate risk, sensitivity corresponds to a 100-basis-point rise or fall in the yield curve compared to year-end interest rates.

	Dec. 31, 2024			
	Impact on income		Impact on equity	
In millions of euros	+100 basis points	-100 basis points	+100 basis points	-100 basis points
Net interest expense on floating-rate net debt (nominal amount) and on floating-rate leg of derivatives	(46)	46	NA	NA
Change in fair value of derivatives not qualifying as	17	(17)	NA	NA
Change in fair value of derivatives qualifying as cash flow hedges	NA	NA	47	(167)

15.1.5 Currency and interest rate hedges

15.1.5.1 Currency risk management

Foreign currency exchange risk (or "FX" risk) is managed based on a policy approved by Group Management. The policy distinguishes between the three following main sources of currency risk:

- **regular transaction risk**

  FX risks related to operational activities are systematically hedged when the related cash flows are certain, with a hedging horizon that corresponds at least to the medium-term plan horizon. For cash flows that are not certain, in their entirety, the hedge is initially based on a "no regret" volume.

  For FX risks related to financial activities, all significant exposures related to cash, financial debt, etc. are systematically hedged.

- **project transaction risk**

  Management of these FX risks (i.e. investment projects, acquisitions, disposals and other restructuring projects) takes into account the likelihood of the risk's occurrence and its evolution, as well as the availability of hedging instruments and their associated cost.

- **translation risk**

  The relevance of hedging this translation risk (i.e. risk on a net asset whose functional currency is not the euro) is assessed regularly for each currency (as a minimum) or each set of assets in the same currency, taking into account notably the value of the assets and the hedging costs.

Hedging instruments and sources of hedge ineffectiveness

The Group principally uses the following instruments:

- derivative instruments: these mostly correspond to over-the-counter contracts and include FX forward transactions, FX swaps, currency swaps, cross currency swaps, plain vanilla FX options or combinations (calls, puts or collars);
- monetary items such as debt, cash and loans.

Sources of hedge ineffectiveness are mainly related to uncertainty regarding the timing and in some cases the amount of the future cash flows in foreign currency that are being hedged.

15.1.5.2 Interest rate risk management

The Group is exposed to interest rate risk through its financing and investing activities. Interest rate risk is defined as a financial risk resulting from fluctuations in base interest rates that may increase the cost of debt and affect the viability of investments. Base interest rates are market interest rates, such as EURIBOR, SOFR, etc., that do not include the borrower's credit spread.

The two main sources of interest rate risk are as follows:

- **interest rate risk relating to Group net debt**
  Interest rate risk is actively managed by monitoring changes in market rates and their impact on the Group's gross and net debt;

- **project interest rate risk**
  The interest rate risk management for specific projects (i.e. investment projects, acquisitions, disposals and other restructuring projects) is implemented, on the basis of a number of factors including the likelihood of completion, the availability of hedging instruments and their associated cost.

Hedging instruments and sources of hedge ineffectiveness

The Group principally uses the following instruments:

- derivative instruments: these mostly correspond to over-the-counter contracts that are used to manage base interest rates. Such instruments include:

  - swaps, to change the nature of interest payments on debts, typically from fixed to floating rates or vice versa,
  - plain vanilla interest rate options;

- caps, floors and collars that allow the impact of interest rate fluctuations to be limited by setting minimum and/or maximum limits on floating interest rates.

Sources of hedge ineffectiveness are mainly related to changes in the credit quality of the counterparties and related charges, as well as potential gaps in settlement dates and in indices between the derivative instruments and the related underlying exposures.

15.1.5.3 Currency and interest rate hedges

The Group has elected to apply hedge accounting (cash flow hedges, fair value hedges and net investment hedges) whenever possible and suitable, and also manages a portfolio of undesignated derivatives, corresponding to economic hedges relating to net financial debt and foreign currency exposures.

Net investment hedging instruments are mainly FX swaps, forwards and cross-currency swaps, but also debt denominated in foreign currencies.

The fair values of derivatives (excluding commodity instruments) are indicated in the table below:

	Dec. 31, 2024				Dec. 31, 2023			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Derivatives hedging borrowings	472	73	(431)	(133)	279	111	(457)	(131)
Fair value hedges	*273*	*48*	*(318)*	*(36)*	*190*	*43*	*(289)*	*(21)*
Cash flow hedges	*147*	*3*	*(66)*	*(9)*	*43*	*-*	*(120)*	*(45)*
Derivative instruments not qualifying for hedge accounting	*52*	*22*	*(46)*	*(88)*	*47*	*68*	*(48)*	*(66)*
Derivatives hedging other items	1,269	79	(1,549)	(77)	1,501	26	(1,167)	(159)
Cash flow hedges	*205*	*30*	*(739)*	*(23)*	*189*	*2*	*(351)*	*(91)*
Net investment hedges	*37*	*-*	*(115)*	*-*	*180*	*-*	*(1)*	*-*
Derivative instruments not qualifying for hedge accounting	*1,027*	*49*	*(696)*	*(54)*	*1,131*	*23*	*(815)*	*(67)*
TOTAL	**1,741**	**152**	**(1,980)**	**(209)**	**1,780**	**137**	**(1,623)**	**(290)**

The fair values shown in the table above reflect the amounts relating to the price that would be received for the sale of an asset or paid for the transfer of a liability between market participants in the normal course of business. They are not representative of an operational performance measurement insofar as the positions (i) are sensitive to changes in prices or to changes in credit ratings, (ii) can be modified by subsequent transactions, and (iii) will be offset, for cash flow hedges, by future cash flows arising for the underlying hedged transactions.

Amounts, timing and uncertainty of future cash flows

In millions of euros

Buy/Sell	Interest rate type	Derivative instrument type	Currency	Total	2025	2026	2027	2028	2029	Beyond 5 years
Buy	Fixed	CCS	USD	(755)	(45)	(99)	-	(226)	(48)	(337)
			GBP	(2,714)	-	-	-	(603)	-	(2,111)
			EUR	(553)	-	-	-	(222)	-	(331)
			CHF	(643)	-	-	(202)	-	(202)	(239)
			HKD	(285)	-	-	(112)	-	-	(174)
			PEN	(188)	-	(64)	(65)	(59)	-	-
			AUD	(119)	(69)	-	-	-	-	(51)
	Floating	CCS	CNH	(221)	-	-	(28)	(111)	(83)	-
Sell	Fixed	CCS	EUR	4,093	75	-	125	968	125	2,799
			USD	995	-	73	74	294	217	337
	Floating	CCS	EUR	195	-	-	195	-	-	-
			BRL	121	39	82	-	-	-	-

In millions of euros

Buy/Sell	Interest rate type	Derivative instrument type	Currency	Total	2025	2026	2027	2028	2029	Beyond 5 years
Sell	Fixed	IRS	EUR	10,979	813	1,247	378	(94)	72	8,562
			MYR	66	4	4	4	4	4	47
			USD	1,518	42	775	253	38	76	334
			ZAR	177	39	7	9	10	12	100
	Floating	IRS	BRL	515	-	-	-	49	133	332
			EUR	21,105	4,467	1,950	800	138	300	13,450
			GBP	302	-	-	-	-	-	302
			USD	963	-	-	-	-	481	481

The tables presented above exclude currency derivatives (except for cross currency swaps – CCS). Their maturity dates are aligned with those of the hedged items.

Pursuant to the FX and interest rate risk management policy, FX sensitivity is presented in Note 15.1.3.2 “Currency risk sensitivity analysis” and the average cost of gross debt is 4.6% as presented in Note 10 “Net financial income/(loss)”.

Effects of hedge accounting on the Group’s financial position and performance

Currency derivatives

	Dec. 31, 2024				Dec. 31, 2023	
	Fair value			Nominal amount	Fair value	Nominal amount
In millions of euros	Assets	Liabilities	Total	Total	Total	Total
Cash flow hedges	193	(803)	(611)	4,256	(530)	4,708
Net investment hedges	37	(115)	(78)	5,531	179	5,596
Derivative instruments not qualifying for hedge accounting	48	(146)	(65)	13,026	16	12,086
TOTAL	**278**	**(1,064)**	**(753)**	**22,813**	**(335)**	**22,391**

Interest rate derivatives

	Dec. 31, 2024				Dec. 31, 2023	
	Fair value			Nominal amount	Fair value	Nominal amount
In millions of euros	Assets	Liabilities	Total	Total	Total	Total
Fair value hedges	321	(354)	(33)	12,020	(77)	7,975
Cash flow hedges	193	(35)	140	2,928	158	3,399
Derivative instruments not qualifying for hedge accounting	1,102	(737)	390	26,081	258	25,438
TOTAL	**1,616**	**(1,126)**	**497**	**41,029**	**339**	**36,812**

The fair values shown in the table above are positive for assets and negative for liabilities.

In millions of euros		Nominal amount	Fair value [1]	Change in fair value used for calculating hedge ineffectiveness	Change in the value of the hedging instrument recognized in other comprehensive income [2]	Ineffective portion recognized in profit or loss [2]	Amount reclassified from the hedge reserve to profit or loss [2]	Line item of the income statement
Fair value hedges	Hedging instruments	12,020	(33)	(33)	-	16	NA	Cost of net debt
	Hedged items [3] [4]	9,422	(42)	3,800	NA		NA	
Cash flow hedges	Hedging instruments	7,184	(470)	(523)	308	4	(35)	Other financial income and expenses / Current operating income including operating MtM
	Hedged items			525				
Net investment hedges	Hedging instruments	5,531	(78)	(58)	303	NA	(38)	Other financial income and expenses / Current operating income including operating MtM
	Hedged items			58				

(1) The adjustment of the fair value of hedged items is presented as long term and short-term borrowings and debt for a negative amount of €33 million.

(2) Gains/(losses).

(3) The difference between the fair value used to determine the ineffective portion relating to hedging instruments and that relating to the hedged items corresponds to the amortized cost of borrowings and debt that are part of a fair value hedge relationship.

(4) Of which €23 million relating to hedging items that are no longer adjusted as a result of discontinuation of the fair value hedge relationship.

Hedge inefficiency is calculated based on the change in the fair value of the hedging instrument compared to the change in the fair value of the hedged items since inception of the hedging relationship. The fair value of the hedging instruments at December 31, 2024 reflects the cumulative change in their fair value since inception of the hedges. The same principle applies to the hedged items.

No significant impact in terms of ineffectiveness or discontinuation of certain hedges was recognized at December 31, 2024.

Foreign currency and interest rate derivatives designated as cash flow hedges can be analyzed as follows by maturity

In millions of euros	2025	2026	2027	2028	2029	Beyond 5 years	Total at Dec. 31, 2024	Total at Dec. 31, 2023
Fair value of derivatives by maturity	19	27	17	(78)	8	(463)	**(470)**	**(371)**

Amounts presented in the statement of changes in equity and the statement of comprehensive income

The following table provides a reconciliation of each component of equity and an analysis of other comprehensive income:

	Cash flow hedges			Net investment
In millions of euros	Derivatives hedging borrowings - currency risk hedging [(1)]	Derivatives hedging other items - interest rate risk hedging [(1)] [(3)]	Derivatives hedging other items - currency risk hedging [(2)]	Derivatives hedging other items - currency risk hedging [(2)] [(4)]
AT DECEMBER 31, 2023	**45**	**97**	**14**	**(238)**
Effective portion recognized in equity		(389)	81	(303)
Amount reclassified from the hedge reserve to profit or loss		35	-	38
Translation adjustments	-	-	-	-
Changes in scope of consolidation and other	(1)	4	-	-
AT DECEMBER 31, 2024	**44**	**(254)**	**95**	**(502)**

(1) Cash flow hedges for given periods.

(2) Cash flow hedges for given transactions.

(3) Comprises a positive €313 million of cumulated reserves related to hedge transactions (a positive €275 million at December 31, 2023) for which hedge accounting has been discontinued (instruments canceled prior to their maturity).

(4) All of the reserves relate to continuing hedging relationships.

15.2 Counterparty risk

Due to its financial and operational activities, the Group is exposed to the risk of default of its counterparties (customers, suppliers, EPC contractors, partners, intermediaries, and banks). Default could affect payments, delivery of goods and/or asset performance.

Depending on the nature of the business, the Group is exposed to different types of counterparty risk. As a result some businesses use collateral instruments – particularly the Energy Management business, where the use of margin calls and other types of financial collateral (standardized legal framework) is a market standard. In addition, other businesses may request guarantees from their counterparties in certain cases (parent company guarantees, bank guarantees, etc.).

Under IFRS 9, the Group has defined and applied a Group-wide methodology, which includes two different approaches:

- a portfolio approach, whereby the Group determines that:
  - coherent customer portfolios and sub-portfolios have to be considered (i.e., portfolios that have comparable credit risk and/or comparable payment behavior) depending on the type of counterparty (public or private; domestic or BtoB), geographical location, type of activity, etc.
  - impairment rates must be determined based on historical aging balances and, when correlation is proven and documentation possible, historical data must be adjusted by forward-looking elements; and
- an individualized approach for significant counterparties, for which the Group has set rules for defining the stage of the concerned asset for Expected Credit Loss (ECL) calculations:
  - stage 1: financial assets that have not deteriorated significantly since initial recognition (ECL calculated on a 12-month rolling basis),
  - stage 2: financial assets for which the credit risk has significantly increased (ECL calculated on a lifetime basis). The reclassification from stage 1 to stage 2 is based on the analysis of different criteria, notably (i) a significant downgrade in the creditworthiness of a counterparty and/or its parent company (if any), (ii) a significant adverse change in the regulatory environment, (iii) changes in political or country-related risk.

    Regarding financial assets that are more than 30 days past due, the move to stage 2 is not systematically applied as long as the Group has reasonable and verifiable information that demonstrates that, even if payments become more than 30 days past due, this does not represent a significant increase in the credit risk since initial recognition.

- stage 3: assets for which default has already been observed (significant and ongoing financial difficulty of the counterparty, possible failure in credit support from a parent company legal proceedings initiated for non-payment – etc.)

Regarding financial assets that are more than 90 days past due, the presumption can be rebutted if the Group has reasonable and supportable information that demonstrates that even if payments become more than 90 days past due, this does not indicate counterparty default.

The ECL formula applicable in stages 1 and 2 is ECL = EAD x PD x LGD, where:

- for 12-month ECL, Exposure At Default (EAD) equals the carrying amount of the financial asset, to which the relevant Probability of Default (PD) and the Loss Given Default (LGD) are applied;

- for lifetime ECL, the calculation method consists in identifying changes in exposure for each year, especially the expected timing and amount of the contractual repayments, then applying to each repayment the relevant PD and the LGD, and discounting the figures obtained. ECL is then the sum of the discounted figures; and

- probability of default: information is based on external data from a reputable rating agency. The PD depends on the time horizon and of the rating of the counterparty. The Group uses external ratings if they are available. ENGIE’s credit risk experts determine an internal rating for major counterparties with no external rating.

LGD levels are notably based on Basel standards:

- 75% for subordinated assets; and
- 45% for standard assets.

For assets considered to be of strategic importance for the counterparty, such as essential public services or goods, LGD is set at 30%.

The Group has decided that write-offs apply in the following situations:

- assets for which a legal recovery procedure is pending once the procedure has been completed, and
- assets for which no legal recovery procedure is pending once the trade receivable is 3 years overdue (5 years overdue for public counterparties).

In the context of its market activities (mainly concerning BtoB customers), the Group takes into account forward-looking information when assessing its expected credit losses, in order to best reflect the situation in a series of economic sectors deemed to be the most critical.

15.2.1 Counterparty risk arising on operating activities

Counterparty risk arising on operating activities is managed via standard mechanisms such as third-party guarantees, netting agreements and margin calls, using dedicated hedging instruments or special prepayment and debt recovery procedures, particularly for retail customers.

15.2.1.1 Trade and other receivables, assets from contracts with customers

The total outstanding exposures presented in the tables below do not include impacts relating to VAT or to any other item not subject to credit risk, which amounted to €4,841 million at December 31, 2024 (compared to €4,579 million at December 31, 2023).

Individual approach

In millions of euros		Dec. 31, 2024 Individual approach	Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total by risk level	Investment Grade [(1)]	Other	Total by counterparty type
Trade and other receivables, net	Gross	**9,289**	8,244	625	421	**9,289**	7,620	1,669	**9,289**
	Expected credit losses	**(1,044)**	(489)	(135)	(421)	**(1,044)**	(474)	(570)	**(1,044)**
TOTAL		**8,245**	**7,755**	**490**	**-**	**8,245**	**7,146**	**1,099**	**8,245**
Assets from contracts with customers	Gross	**3,836**	3,767	69	-	**3,836**	2,599	1,237	**3,836**
	Expected credit losses	**(42)**	(34)	(8)	-	**(42)**	(33)	(9)	**(42)**
TOTAL		**3,794**	**3,733**	**62**	**-**	**3,794**	**2,566**	**1,228**	**3,794**

In millions of euros		Dec. 31, 2023 Individual approach	Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total by risk level	Investment Grade [(1)]	Other	Total by counterparty type
Trade and other receivables, net	Gross	**13,653**	12,304	1,248	101	**13,653**	11,533	2,121	**13,653**
	Expected credit losses	**(909)**	(696)	(116)	(97)	**(909)**	(594)	(315)	**(909)**
TOTAL		**12,745**	**11,609**	**1,132**	**4**	**12,745**	**10,939**	**1,806**	**12,745**
Assets from contracts with customers	Gross	**4,377**	4,374	2	-	**4,377**	3,299	1,078	**4,377**
	Expected credit losses	**(22)**	(22)	-	-	**(22)**	(15)	(7)	**(22)**
TOTAL		**4,354**	**4,352**	**2**	**-**	**4,354**	**3,284**	**1,070**	**4,354**

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's.

Collective approach

In millions of euros		Dec. 31, 2024 Collective approach	0 to 6 months	6 to 12 months	beyond	Total past due assets at Dec. 31, 2022
Trade and other receivables, net	Gross	4,076	497	186	422	1,105
	Expected credit losses	(1,242)	(53)	(48)	(363)	(465)
TOTAL		**2,833**	**444**	**138**	**59**	**641**
Assets from contracts with customers	Gross	5,458	357	36	47	440
	Expected credit losses	(16)	-	-	-	-
TOTAL		**5,442**	**357**	**36**	**47**	**440**

		Dec. 31, 2023				
In millions of euros		Collective approach	0 to 6 months	6 to 12 months	beyond	Total past due assets at Dec. 31, 2021
Trade and other receivables, net	Gross	3,953	420	212	199	831
	Expected credit losses	(1,153)	(20)	(40)	(216)	(275)
TOTAL		**2,800**	**400**	**173**	**(16)**	**557**
Assets from contracts with customers	Gross	5,194	31	85	3	119
	Expected credit losses	(5)	-	(2)	-	(2)
TOTAL		**5,189**	**31**	**83**	**3**	**117**

15.2.1.2 Commodity derivatives

In the case of commodity derivatives, counterparty risk arises from positive fair value. When calculating the fair value of these derivative instruments, counterparty risk (CVA) is based on default probabilities whose parameters have been updated, in a context of uncertainty, to take account of an increased risk of default.

The volatility of commodity prices and the impact on the valuation of derivatives on the assets side of the balance sheet have not significantly altered the Group's exposure due to the credit quality of its counterparties.

	Dec. 31, 2024		Dec. 31, 2023	
In millions of euros	Investment Grade[(1)]	Total	Investment Grade[(1)]	Total
Gross exposure [(2)]	9,757	11,522	15,954	19,324
Net exposure [(3)]	4,107	4,961	6,385	8,050
% of credit exposure to "Investment Grade" counterparties	82.8%		79.3%	

(1) Investment Grade corresponds to transactions with counterparties that are rated at least BBB- by Standard & Poor's, Baa3 by Moody's, or equivalent by Dun & Bradstreet. "Investment Grade" is also determined based on an internal rating tool that has been rolled out within the Group, and covers its main counterparties.
(2) Corresponds to the maximum exposure, i.e. the value of the derivatives shown under assets (positive fair value).
(3) After taking into account the liability positions with the same counterparties (negative fair value), collateral, netting agreements and other credit enhancement techniques.

15.2.2 Counterparty risk arising on financing activities

For its financing activities, the Group has put in place procedures for managing and monitoring risk based on (i) the accreditation of counterparties according to external credit ratings, objective market data (credit default swaps, market capitalization) and financial structure, and (ii) counterparty risk exposure limits.

To reduce its counterparty risk exposure, the Group has drawn increasingly on a structured legal framework based on master agreements (including netting clauses) and collateralization contracts (margin calls).

15.2.2.1 Loans and receivables at amortized cost

The total outstanding exposures presented in the tables below do not include impacts relating to VAT or to any other item not subject to credit risk, which amounted to €772 million at December 31, 2024 (compared to €425 million at December 31, 2023).

	Dec. 31, 2024						
In millions of euros	Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total by risk level	Investment Grade [(1)]	Other	Total by counterparty type
Gross	14,296	43	685	**15,024**	11,367	3,657	**15,024**
Expected credit losses	(88)	(35)	(1,175)	**(1,298)**	(74)	(1,224)	**(1,298)**
TOTAL	**14,208**	**9**	**(491)**	**13,726**	**11,292**	**2,434**	**13,726**

In millions of euros	Dec. 31, 2023 Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total by risk level	Investment Grade (1)	Other	Total by counterparty type
Gross	8,879	285	700	**9,865**	5,754	4,111	**9,865**
Expected credit losses	(78)	(45)	(1,180)	**(1,302)**	(174)	(1,128)	**(1,302)**
TOTAL	**8,802**	**240**	**(479)**	**8,563**	**5,580**	**2,983**	**8,563**

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's.

15.2.2.2 Counterparty risk arising on investing activities and the use of derivative financial instruments

The Group is exposed to counterparty risk arising on investments of surplus cash and from the use of derivative financial instruments. In the case of financial instruments at fair value through income, counterparty risk arises on instruments with a positive fair value. Counterparty risk is taken into account when calculating the fair value of these derivative instruments.

In millions of euros	Dec. 31, 2024 Total	Investment Grade (1)	Unrated (2)	Non Investment-Grade (2)	Dec. 31, 2023 Total	Investment Grade (1)	Unrated (2)	Non-Investment Grade (2)
Exposure	17,429	95.9%	2.5%	1.6%	17,577	89.6%	3.3%	7.1%

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's or Baa3 by Moody's.

(2) The bulk of these two exposures is carried by consolidated companies that include non-controlling interests, or by Group companies that operate in emerging countries, where cash cannot be pooled and is therefore invested locally.

Furthermore, at December 31, 2024, Crédit Agricole SA is the main Group counterparty and represents 27.6% of cash surpluses. This relates mainly to a depositary risk. BNP Paribas comes next with 10.1%. No other counterparty represents more than 10%.

15.3 Liquidity risk

In the context of its operating activities, the Group is exposed to a risk of having insufficient liquidity to meet its contractual obligations. As well as the risks inherent in managing working capital requirements (WCR), margin calls are required in certain market activities, which are a way of mitigating counterparty risk on hedging instruments through the use of collateral.

The Group has set up a committee that meets weekly and is tasked with managing and monitoring liquidity risk throughout the Group, by maintaining a broad range of investments and sources of financing, and preparing forecasts of cash investments and divestments. ENGIE has set up a comprehensive framework to monitor and streamline cash movements related to OTC margin calls and margin calls via clearing houses, based on the use of liquidity swaps with its key counterparties, as well as the issuing of letters of credit.

The Group centralizes virtually all the financing needs and cash flow surpluses of the companies it controls, as well as most of their medium- and long-term external financing requirements. Centralization is provided by financing vehicles (long-term and short-term) and by dedicated Group cash pooling vehicles based in France, Belgium and Luxembourg.

Surpluses held by these structures are managed in accordance with a uniform policy. In accordance with this policy, unpooled cash surpluses are invested in instruments selected on a case-by-case basis in light of local financial market imperatives and the financial strength of the counterparties concerned.

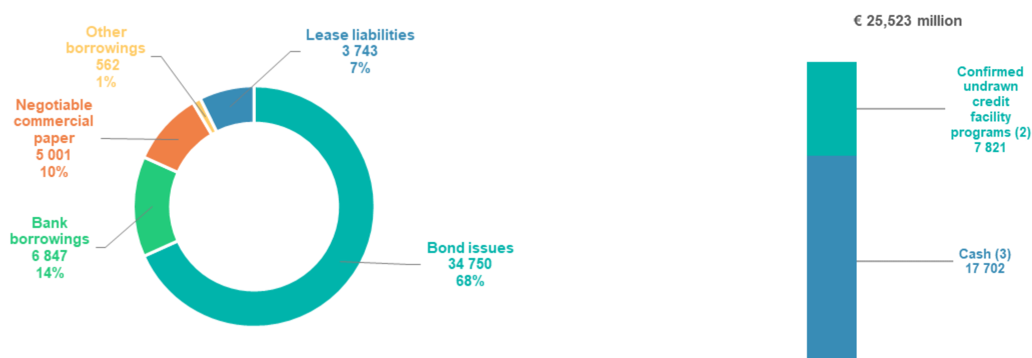
The Group uses an investment policy with the aim of keeping an extremely high level of liquidity and protecting invested capital, with a daily monitoring of performance and counterparty risk, allowing the Group to take immediate action where required. Consequently, 87% of the cash pooled at December 31, 2024 was invested in overnight bank deposits and standard money market funds with daily liquidity.

The Group's financing policy is based on:

- centralizing external financing;
- diversifying sources of financing between credit institutions and capital markets;
- achieving a balanced debt repayment profile.

The Group seeks to diversify its sources of financing by carrying out public or private bond issues within the scope of its Euro Medium Term Notes program. It also issues negotiable commercial paper in France (Negotiable European Commercial Paper) and in the United States (US Commercial Paper) as well as deeply-subordinated perpetual notes. As negotiable commercial paper is relatively inexpensive and highly liquid, it is used by the Group in a cyclical or structural manner to finance its short-term cash requirements. However, the refinancing of all outstanding negotiable commercial paper remains secured by confirmed bank lines of credit – mainly centralized – allowing the Group to continue to finance its activities if access to this financing source were to dry up. These facilities are appropriate for the scale of its operations and for the timing of contractual debt repayments.

Diversifying sources of financing and liquidity (1)
In millions of euros



(1) *These sources of financing and liquidity do not include the deeply-subordinated perpetual notes recognized in equity (see Note 16.2.1 "Issuance of deeply-subordinated perpetual notes").*
(2) *Negotiable commercial paper, net.*
(3) *Cash corresponds to cash and cash equivalents for €16,928 million, other financial assets reducing net financial debt for €1,035 million, net of bank overdrafts and cash current accounts for €262 million; of which 74% was invested in the Eurozone.*

At December 31, 2024, all Group entities whose debt is consolidated complied with the covenants and declarations included in their financial documentation, except for some non-significant entities for which compliance actions are being implemented. There are no defaults linked to financial ratios or rating levels on available centralized credit lines.

15.3.1 Undiscounted contractual payments relating to financial activities

Undiscounted contractual payments on outstanding borrowings and debt by maturity

In millions of euros	2025	2026	2027	2028	2029	Beyond 5 years	Total at Dec. 31, 2024	Total at Dec. 31, 2023
Bond issues	1,409	2,753	3,051	3,206	3,388	20,944	34,750	30,256
Bank borrowings	844	432	659	246	303	4,363	6,847	6,748
Negotiable commercial paper	5,001	-	-	-	-	-	5,001	5,606
Lease liabilities	473	477	418	335	324	2,551	3,743	3,147
Other borrowings	105	10	11	9	228	199	562	366
Bank overdrafts and current accounts	262	-	-	-	-	-	262	455

Other financial assets and cash and cash equivalents deducted from net financial debt have a liquidity of less than one year.

Undiscounted contractual interest payments on outstanding borrowings and debt by maturity

In millions of euros	2025	2026	2027	2028	2029	Beyond 5 years	Total at Dec. 31, 2024	Total at Dec. 31, 2023
Undiscounted contractual interest payments on outstanding borrowings and debt	1,166	825	1,083	8,546	169	1,032	12,822	16,900

Undiscounted contractual payments on outstanding derivatives (excluding commodity instruments) by maturity

In millions of euros	2025	2026	2027	2028	2029	Beyond 5 years	Total at Dec. 31, 2024	Total at Dec. 31, 2023
Derivatives (excluding commodity instruments)	(5)	51	66	-	37	971	1,120	527

To better reflect the economic substance of these transactions, the cash flows linked to the derivatives recognized in assets and liabilities shown in the table above relate to net positions.

Undiscounted contractual payments related to leases

At December 31, 2024, the Group, as lessee, was potentially exposed to future cash outflows not reflected in the measurement of lease liabilities for €1,647 million (of which approximately 68% relate to potential cash outflows beyond 2029). This amount relates to leases not yet in force to which the Group is committed (LNG vessels and real estate).

In addition, the Group is also exposed to future cash outflows in the form of variable lease payments in connection with the extension of the Rhone concession. These variable lease payments are dependent on revenue from electricity sales.

Undrawn credit facility programs

In millions of euros	2025	2026	2027	2028	2029	Beyond 5 years	Total at Dec. 31, 2024	Total at Dec. 31, 2023
Confirmed undrawn credit facility programs	1,166	825	1,083	8,546	169	1,032	12,822	12,231

Of these undrawn programs, an amount of €5,001 million is allocated to covering negotiable commercial paper.

At December 31, 2024, no single counterparty represented more than 10% of the Group's confirmed undrawn credit lines.

15.3.2 Undiscounted contractual payments relating to operating activities

The table below provides an analysis of undiscounted fair values due and receivable in respect of commodity derivatives recorded in assets and liabilities at the reporting date.

The Group provides an analysis of residual contractual maturities for commodity derivative instruments included in its portfolio management activities. Derivative instruments relating to trading activities are considered to be liquid in less than one year, and are presented under current items in the statement of financial position.

In millions of euros	2025	2026	2027	2028	2029	Beyond 5 years	Total at Dec. 31, 2024	Total at Dec. 31, 2023
Derivative instruments carried in								
relating to portfolio management activities	*(2,462)*	*(3,507)*	*(1,125)*	*(398)*	*(180)*	*(672)*	*(8,343)*	*(21,080)*
relating to trading activities	*(3,502)*	-	-	-	-	-	*(3,502)*	*(1,787)*
Derivative instruments carried in assets								
relating to portfolio management activities	*2,597*	*3,155*	*957*	*242*	*162*	*520*	*7,632*	*16,734*
relating to trading activities	*4,052*	-	-	-	-	-	*4,052*	*2,766*
TOTAL	**684**	**(352)**	**(168)**	**(156)**	**(18)**	**(152)**	**(161)**	**(3,366)**

15.3.3 Commitments relating to commodity purchase and sale contracts entered into in the ordinary course of business

Some Group operating companies have entered into long-term contracts, some of which include "take-or-pay" clauses. These consist of firm commitments to purchase or sell specified quantities of gas, electricity or steam as well as related services, in exchange for a firm commitment from the other party to deliver or purchase said quantities and services. These contracts were documented as falling outside the scope of IFRS 9. The table below shows the main future commitments arising from contracts entered into by GBU Renewables and GEMS (expressed in TWh).

In TWh	**2025**	**2026-2029**	**Beyond 5 years**	**Total at Dec. 31, 2024**	**Total at Dec. 31, 2023**
Firm purchases	(309)	(658)	(1,188)	(2,155)	(2,150)
Firm sales	437	544	217	1,198	1,310

NOTE 16 EQUITY

16.1 Share capital

	Number of shares			Value (in millions of euros)		
	Total	**Treasury stock**	**Outstanding**	**Share capital**	**Additional paid-in capital**	**Treasury stock**
AT DECEMBER 31, 2023	**2,435,285,011**	**(13,835,367)**	**2,421,449,644**	**2,435**	**23,916**	**(177)**
Dividend paid in cash	-	-	-	-	(2,882)	-
Link 2024 employee share plan	-	11,017,316	11,017,316	-	-	175
Capital increase Link 2024	2,259,865	-	2,259,865	2	25	-
Capital decrease Link 2024	(2,259,865)	2,259,865	-	(2)	(34)	36
Purchase/disposal of treasury stock	-	(13,410,300)	(13,410,300)	-	-	(213)
Delivery of treasury stock (bonus)	-	4,524,797	4,524,797	-	-	57
AT DECEMBER 31, 2024	**2,435,285,011**	**(9,443,689)**	**2,425,841,322**	**2,435**	**21,025**	**(122)**

Changes in the number of shares during 2024 resulted from:

- share issues under the “Link 2024” worldwide employee share plan. In total, 13.3 million shares were subscribed. At October 17, 2024 the transaction resulted in the sale to employees of 11 million shares purchased on the market for €175 million and a capital increase of €27.2 million. The latter is divided into a capital increase of €2.3 million and additional paid-in capital of €25 million;
- a capital decrease of €36 million through the cancellation of 2.3 million shares in the form of a capital decrease and €33.7 million charged to additional paid-in capital;
- the delivery of 4.5 million treasury shares as part of bonus share plans.

16.1.1 Potential share capital and instruments providing a right to subscribe for new ENGIE SA shares

Since 2017, the Group no longer has any stock purchase or subscription option plans.

Shares to be allocated under the performance share award plans described in Note 19 “Share-based payments” are covered by existing ENGIE SA shares.

16.1.2 Treasury stock

Accounting standards

Treasury shares are recognized at acquisition cost and deducted from equity. Gains and losses on disposals of treasury shares are recorded directly in equity and do not, therefore, impact income for the period.

The Group has a stock repurchase program as a result of the authorization granted to the Board of Directors by the Ordinary and Extraordinary Shareholders’ Meeting of April 30, 2024. This program provides for the repurchase of up to 10% of the shares comprising the share capital of ENGIE SA at the date of the said Shareholders’ Meeting. The aggregate amount of acquisitions net of expenses under the program may not exceed €7.3 billion, and the purchase price must be less than €30 per share excluding acquisition costs.

At December 31, 2024, the Group held 9.4 million treasury shares. To date, all the shares have been allocated to cover the Group's share commitments to employees and corporate officers.

The liquidity agreement signed with an investment service provider assigns to the latter the role of operating on the market on a daily basis, to buy or sell ENGIE SA shares, in order to ensure liquidity and an active market for the shares on the Paris and Brussels stock exchanges. To date, the resources allocated to the implementation of this agreement amount to €55 million.

16.2 Other disclosures concerning additional paid-in capital, consolidated reserves and issuance of deeply-subordinated perpetual notes (Group share)

Total additional paid-in capital, consolidated reserves and issuance of deeply-subordinated perpetual notes (including net income for the year), amounted to €34,000 million at December 31, 2024, including €21,025 million in additional paid-in capital. Additional paid-in capital includes a portion of the cash dividend payment for 2023 in an amount of €2,882 million.

Consolidated reserves include the cumulative income of the Group, the legal and statutory reserves of ENGIE SA, cumulative actuarial gains and losses, net of tax and the change in fair value of equity instruments at fair value through OCI.

Under French law, 5% of the net income of French companies must be allocated to the legal reserve until the latter reaches 10% of share capital. This reserve can only be distributed to shareholders in the event of liquidation. The ENGIE SA legal reserve amounts to €244 million.

16.2.1 Issuance of deeply-subordinated perpetual notes

In June 2024, ENGIE SA carried out a redemption of deeply subordinated perpetual notes for a total amount of €1,190 million, resulting in:

- a €338 million redemption of deeply-subordinated perpetual notes (PERP NC 06/2024, a 3,875% coupon, ISIN code: FR0011942283) ;
- a partial early redemption of two other tranches of deeply-subordinated perpetual notes for a total amount of €852 million, i.e.:
  - €545 million (PERP NC 02/2025, a 3,25% coupon, ISIN code: FR0013398229) out of an initial nominal amount of green deeply subordinated perpetual notes of €1,000 million;
  - €307 million (PERP NC 07/2025, a 1,625% coupon, ISIN code: FR0013431244) out of an initial nominal amount of €500 million.

At the same time, ENGIE SA carried out an issuance of non-ended green deeply-subordinated perpetual notes for a total amount of €1,835 million, resulting in:

- a €800 million issue (4.75% coupon) with a redemption option from March 2030 (ISIN code: FR001400QOK5);
- a €1,035 million issue (5.125% coupon) with a redemption option from March 2033 (ISIN code: FR001400QOL3).

In accordance with IAS 32 *(Financial Instruments: Presentation)*, and given their characteristics, these instruments are recognized in equity in the Group's consolidated financial statements.

At December 31, 2024, the outstanding nominal value of deeply subordinated perpetual notes amounted to €4,038 million, versus €3,393 million at December 31, 2023.

In 2024, the Group paid €80 million to the holders of these notes, i.e., €88 million in coupons, net of €8 million early redemption allowances received. This amount is accounted for as a deduction from equity in the Group's consolidated financial statements; the related tax saving is accounted for in the income statement.

16.2.2 Distributable capacity of ENGIE SA

ENGIE SA's distributable capacity totaled €25,535 million at December 31, 2024 (compared with €24,537 million at December 31, 2023), including €21,025 million of additional paid-in capital.

16.2.3 Dividends

On April 30, 2024, the Shareholders' Meeting approved the payment of a €1.43 dividend per share for 2023. In accordance with Article 26.2 of the bylaws, a 10% loyalty bonus dividend of €0.143 per share was awarded to shares registered for at least two years at December 31, 2023 and that remained registered in the name of the same shareholder until the payment date of the dividend. This bonus dividend may not apply to a number of shares to one shareholder holding more than 0.5% of the share capital. On May 6, 2024, the Group paid a cash dividend of €3,469 million, representing the dividend of €1.43 per share for shares eligible for the ordinary dividend, and a loyalty bonus of €34 million.

Proposed dividend in respect of 2024

At the Shareholders' Meeting convened to approve the ENGIE Group financial statements for the year ended December 31, 2024, the shareholders will be asked to approve a dividend of €1.48 per share, representing a total payout of €3,604 million based on the number of shares outstanding at December 31, 2024. It will be increased by 10% for all shares held for at least two years at December 31, 2024 and up to the 2024 dividend payment date. Based on the number of outstanding shares at December 31, 2024, this increase is valued at €44 million.

Subject to the approval by the Shareholders' Meeting of Thursday April 24, 2025, the dividend ex-coupon date is Friday April 25, 2025 and it will be paid on Tuesday April 29, 2025. It is not recognized as a liability in the financial statements at December 31, 2024, since the financial statements at the end of 2024 were presented before the appropriation of earnings.

16.2.4 Main transactions affecting shareholders' equity in 2024

On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania. This transaction increased the Group's net financial debt by €85 million.

In September 2024, ENGIE North America finalized the sale to the Ares Management Infrastructure Opportunities (Ares) fund of a minority stake in a 2.7 GW portfolio of storage and renewable energy assets in the United States (variable percentage in the capital, given the preferred share structure subscribed by Ares). This transaction reduced the Group's net financial debt by €830 million.

16.3 Recyclable gains and losses recognized in equity (Group share)

All items shown in the table below correspond to cumulative gains and losses (Group share) at December 31, 2024 and December 31, 2023, which are recyclable to income in subsequent periods.

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Debt instruments	(61)	(44)
Net investment hedges [1]	(502)	(238)
Cash flow hedges (excl. commodity instruments) [1]	(149)	145
Commodity cash flow hedges [1]	340	(3,998)
Deferred taxes on the items above	6	786
Share of equity method entities accounted in recyclable items, net of tax [2]	167	334
TOTAL RECYCLABLE ITEMS BEFORE TRANSLATION ADJUSTMENTS	**(200)**	**(3,015)**
Translation adjustments	(1,557)	(1,693)
TOTAL RECYCLABLE ITEMS	**(1,758)**	**(4,708)**

(1) See Note 15 “Risks arising from financial instruments”.
(2) See Note 3 “Investments in equity method entities”.

16.4 Capital management

ENGIE SA seeks to optimize its financial structure at all times by pursuing an optimal balance between its economic net debt and its EBITDA. The Group's key objective in managing its financial structure is to maximize value for shareholders and reduce the cost of capital, while ensuring that the Group has the financial flexibility required to continue its expansion. The Group manages its financial structure and makes any necessary adjustments in light of prevailing economic conditions. In this context, it may choose to adjust the amount of dividends paid to shareholders, reimburse a portion of capital, carry out share buybacks *(see Note 16.1.2 "Treasury stock")*, issue new shares, launch share-based payment plans, recalibrate its investment budget, or sell assets in order to scale back its net debt.

The Group's policy is to maintain an "strong investment grade" rating from the rating agencies. To achieve this, it manages its financial structure in line with the indicators usually monitored by these agencies, namely the Group's operating profile, financial policy and a series of financial ratios. One of the most commonly used ratios is the ratio where the numerator includes operating cash flows less cost of debt and taxes paid, and the denominator includes adjusted net financial debt. Net financial debt is mainly adjusted for nuclear provisions and provisions for pensions, as well as for 50% of hybrid debt (deeply-subordinated notes). In addition, the Group has issued a guidance targeting an "economic net debt to EBITDA" ratio less than or equal to 4x.

The Group's objectives and processes for managing capital have remained unchanged over the past few years.

ENGIE SA is not obliged to comply with any external minimum capital requirements except those provided for by law.

NOTE 17 PROVISIONS

Accounting standards

General principles related to the recognition of a provision

The Group recognizes a provision where it has a present obligation (legal or constructive) towards a third party arising from past events and where it is probable that an outflow of resources will be necessary to settle the obligation with no expected consideration in return.

A provision for restructuring costs is recognized when the general criteria for setting up a provision are met, i.e., when the Group has a detailed formal plan relating to the restructuring and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

Provisions with a maturity of over 12 months are discounted when the effect of discounting is material. The Group's main long-term provisions are provisions for the back-end of the nuclear fuel cycle, provisions for dismantling facilities, provisions for site restoration costs, and provisions for post-employment and other long-term benefits. The discount rates used reflects current market assessments of the time value of money and the risks specific to the liability concerned. Expenses with respect to unwinding the discount on the provision are recognized as other financial income and expenses.

Estimates of provisions

Factors having a significant influence on the amount of provisions, and particularly, but not solely, those relating to the back-end of the nuclear fuel cycle, to the dismantling of nuclear facilities and of gas infrastructures in France, include:

- cost estimates (*see Note 17.2*);
- the timing of expenditure (notably the timetable for the end of gas operations regarding the main gas infrastructure businesses in France) (*see Notes 17.2 and 17.3*); and
- the discount rate applied to cash flows.

These factors are based on information and estimates deemed by the Group to be the most appropriate as of today.

Modifications to certain factors could lead to a significant adjustment in these provisions.

In millions of euros	Post-employment and other long-term benefits	Back-end of the nuclear fuel cycle and dismantling of nuclear facilities	Dismantling of non-nuclear facilities	Other contingencies	Total
AT DECEMBER 31, 2023	**5,208**	**23,887**	**1,384**	**2,114**	**32,593**
Additions	230	318	40	811	1,399
Utilizations	(328)	(364)	(67)	(570)	(1,330)
Reversals	-	-	-	68	68
Changes in scope of consolidation	-	-	42	45	87
Impact of unwinding discount adjustments	168	672	47	18	905
Translation adjustments	(10)	-	9	(1)	(1)
Other	(289)	18	114	58	(99)
AT DECEMBER 31, 2024	**4,979**	**24,531**	**1,569**	**2,541**	**33,621**
Non-current	4,885	9,126	1,490	408	**15,909**
Current [1]	95	15,405	79	2,133	**17,712**

(1) *The classification of liabilities as current or non-current reflects the effects of the agreements signed with the Belgian government on December 13, 2023. The Group will settle a large portion of this liability (€11.5 billion$_{2022}$) when the agreement come into force, and will settle the remaining balance (€3.5 billion$_{2022}$) when the Tihange 3 and Doel 4 units are restarted, which is scheduled for the fourth quarter of 2025.*

The impact of unwinding discount adjustments in respect of post-employment and other long-term benefits relates to the interest expense on the benefit obligation, net of interest income on plan assets.

The “Other” line mainly comprises actuarial gains and losses arising on post-employment benefit obligations in 2024 which are recorded in “Other comprehensive income”.

Additions, utilizations, reversals and the impact of unwinding discount adjustments are presented as follows in the consolidated income statement:

In millions of euros	Dec. 31, 2024
Net income/(loss) from operating activities	(113)
Other financial income and expenses	(929)
TOTAL	**(1,042)**

The different types of provisions and the calculation principles applied are described below.

17.1 Post-employment benefits and other long-term benefits

See Note 18 “Post-employment benefits and other long-term benefits”.

17.2 Obligations relating to nuclear power generation facilities

17.2.1 Current legal context and expected developments following the agreements signed with the Belgian State in 2023

The Belgian law of April 11, 2003, partially repealed and amended by the law of July 12, 2022, granted Group subsidiary Synatom the responsibility for managing provisions set aside to cover the costs of dismantling nuclear power plants and managing spent fuel.

The tasks of the Commission for Nuclear Provisions (CNP), set up pursuant to the above-mentioned law, are to oversee the process of computing and managing these provisions. In accordance with the law, every three years the CNP conducts an audit of the application and adequacy of the calculation methods used to compute nuclear provisions. The next triennial review will take place in 2025.

The agreements signed with the Belgian State in 2023 provide for:

- the 10-year extension of the Doel 4 and Tihange 3 nuclear reactors as part of a 50/50 partnership between the Belgian State and the Group, contingent upon the implementation of a contract for difference protecting ENGIE against market risks; and
- the transfer of financial responsibility to the Belgian State for managing nuclear waste and spent fuel in return for the payment of a lump-sum discharge amount of €15 $billion_{2022}$, within the limit of a volumetric credit covering all nuclear waste produced by the Belgian power plants during their legal operating life, from commissioning to dismantling.

The transfer of financial responsibility for the management of nuclear waste and spent fuel meeting the transfer criteria will take place at the closing, expected in March 2025 (*see Note 24 "Subsequent events"*) and cannot be called into question unless the units are not restarted before November 1, 2027 due to serious negligence on the part of ENGIE. In this highly unlikely event, the Belgian State may cancel the agreement on the lump-sum discharge and revert to the current system in which the nuclear operator bears the financial responsibility. The amounts already paid by the Group would accordingly be held in escrow for the benefit of the transferred nuclear provisions until the end of the dismantling program, including nuclear waste and back-end nuclear fuel cycle management.

The Group will settle its liability of €15 $billion_{2022}$ (including the share of its Electrabel partners in certain power generation facilities) by means of a payment of €11.5 $billion_{2022}$ for category B and C waste (highly radioactive waste, that is intended for geological storage), at the time of closing, after which it will settle the remaining €3.5 $billion_{2002}$ for category A waste (low-level radioactive waste, that is intended for surface storage) when the extended units are restarted in the second half of 2025. These amounts are subject to a 3% indexation effective from January 1, 2023 until the date of payment.

At the end of this agreement, the Group will essentially retain responsibility for the on-site storage of spent fuel waste until the end of the dismantling operations and until 2050 at the latest, as well as for the conditioning of all waste in accordance with the contractual agreement. The Group will also remain responsible for the final shutdown of the reactors, their dismantling and the clean-up of the site at the end of their operating life. The process of setting up and managing all these provisions, for which the Group is responsible, will continue to be reviewed by the CNP every three years.

17.2.2 Provisions for the back-end of the nuclear fuel cycle

When spent nuclear fuel is removed from a reactor and temporarily stored on-site, it requires conditioning, before being consigned to long-term storage.

As part of the implementation of a lump-sum discharge payment for the transfer of financial responsibility for managing the storage and disposal of nuclear waste and spent fuel, as provided for in the agreement, the risks associated with this liability have been considerably reduced, since the agreement stipulates that the State will be financially responsible for all spent fuel management operations after its transfer to the Belgian agency for radioactive waste and enriched fissile materials (ONDRAF – *Organisme national des déchets radioactifs et des matières fissiles enrichies*), in return for the lump-sum discharge payment of €10.5 $billion_{2022}$ for category C waste.

With regard to waste management, the Group's responsibility will be essentially limited to on-site storage of fuel elements until the end of dismantling operations, and until 2050 at the latest, as well as compliance with the contractual criteria for transferring waste to ONDRAF, with the liability estimated at €1.7 $billion_{2022}$, as indicated in the draft law implementing the agreement.

Provisions not covered by the lump-sum discharge payment are calculated based on the following principles and inputs:

- storage costs primarily comprise the costs of building and operating additional dry storage facilities and operating existing facilities, along with the costs of purchasing containers;
- radioactive spent fuel that has not been reprocessed is to be conditioned, which requires conditioning facilities to be built according to ONDRAF's approved criteria. All ONDRAF's recommendations regarding the cost of these facilities were taken into account at the time of the previous triennial review;

- a discount rate of 3.0% (including inflation of 2.0%) was used by the CNP (Commission for Nuclear Provisions) at the time of the previous triennial review, for the portion of the provision not covered by the lump-sum discharge payment.

The costs effectively incurred in the future may differ from the estimates in terms of their nature and timing of payment.

Sensitivity

Following the takeover by the Belgian State of all obligations relating to nuclear waste after its transfer to ONDRAF, the Group will only remain exposed to changes in future storage and conditioning costs and the corresponding discounting inputs prior to the transfer (as mentioned above, liability estimated at €1.7 billion$_{2022}$):

- the costs of building dry storage facilities and purchasing fuel element containers at the Group's sites could differ from those covered by the provisions. A 10% change in these costs, still to be incurred would represent a €60 million change in provisions;
- a 10% change in the annual operating costs of the storage facilities would result in a €30 million change in the provision;
- a 25 basis point change in the discount rate would result in a €40 million adjustment to non-transferred provisions. A fall in the discount rate would lead to an increase in outstanding provisions, while a rise in the discount rate would reduce the provisions' amount.

It should be noted that the risk of exceeding volumetric credits is considered, at this stage, to be highly unlikely, as the volumetric credits established in the agreement have incorporated the volumetric contingencies estimated as part of the provision review in 2022.

17.2.3 Provisions for dismantling nuclear facilities

Accounting standards

A provision is recognized when the Group has a present legal or constructive obligation to dismantle facilities or to restore a site. The present value of the obligation at the time of commissioning represents the initial amount of the provision for dismantling with, as the counterpart, an asset for the same amount, which is included in the carrying amount of the facilities concerned. This asset is depreciated over the operating life of the facilities and is included in the scope of assets subject to impairment tests. Adjustments to the provision due to subsequent changes in (i) the expected outflow of resources, (ii) the timing of dismantling expenses or (iii) the discount rate, are deducted from or subject to specific conditions, added to the cost of the corresponding asset. The impacts of unwinding the discount each year are recognized in expenses for the period.

A provision is also recorded for nuclear units for which the Group holds a capacity right up to its share of the expected dismantling costs to be borne by the Group.

At the end of their operating life, the nuclear power plants must be shut down for the period during which spent fuel is unloaded from the plant, and until the site is decommissioned and cleaned up.

The dismantling strategy is based on the facilities being dismantled (i) immediately after the reactor is shut down, (ii) on a mass basis rather than on a unit-by-unit basis, and (iii) completely, the land being subsequently returned to greenfield status.

As a result of the agreement, financial responsibility for all Category A and B waste management operations conditioned in accordance with the contractual transfer criteria will henceforth lie with the State, in return for payment of the lump sum discharge amount described in Note 17.2.2 above. The Group will transfer this liability when the closing of the transaction will take place (*see Note 24 "Subsequent events"*), for a total of €1 billion$_{2022}$ for category B waste, and when the extended units are restarted at the end of 2025, for a total of €3.5 billion$_{2022}$ for category A waste.

The Group only remains responsible for the final shutdown and dismantling (as well as for the conditioning of category A and B waste from these operations, as described in Note 17.2.2). The Group's remaining liability for the final shutdown and dismantling is estimated at €6.7 billion$_{2022}$, as set out in the law implementing the agreement. At December 31, 2024, provisions for dismantling nuclear facilities are calculated based on the following inputs:

- the start of the technical shutdown procedures depends on the unit concerned and on the timing of operations for the whole nuclear reactor. The shutdown procedures are immediately followed by dismantling operations;
- the scenario adopted is based on a dismantling program and on timetables that must be approved by the nuclear safety authorities. The safety conditions for the shutdown phases have been defined with the Belgian Federal Agency for Nuclear Control (AFCN) for the Doel 3 and Tihange 2 units that have already been shut down. The safety conditions for the dismantling phase have not yet been determined. The costs may change depending on the outcome of these discussions and the detailed schedule for the implementation of these phases which is currently being defined;
- costs payable over the long term are calculated by reference to the estimated costs for each nuclear facility, based on a study conducted by independent experts under the assumption that the facilities will be dismantled on a mass basis. The costs effectively incurred in the future may differ from the estimates in terms of their nature and timing of payment;
- for the various phases, margins for contingencies, reviewed by ONDRAF and the Commission for Nuclear Provisions, are included;
- an inflation rate of 2.0% is applied until the dismantling obligations expire in order to determine the value of the future obligation;
- the discount rate used by the CNP is 2.5% (including inflation of 2.0%).

The 10-year extension of the Doel 4 and Tihange 3 units provided for in the agreement “deoptimizes” the systematic dismantling of the various units. The agreement stipulates that the Belgian State will bear the increase in dismantling costs relating to the dis-synergies generated by the change to the initial scenario, which provided for two of the units to be dismantled on a mass basis rather than on a deferred basis. The Group therefore recognized an additional provision for dismantling of €0.2 billion, against a receivable from the Belgian State. This amount was confirmed by the Commission for Nuclear Provisions (CNP) in its opinion of June 24, 2024. This amount will be settled upon closing of the agreement with the Belgian State.

The costs effectively incurred in the future may differ from the estimates in terms of their nature and timing of payment. Certain ONDRAF recommendations from the 2022 triennial review of nuclear provisions that could not yet be quantified will be specifically examined under the oversight of the CNP within the context of the triennial review in 2025.

Lastly, the Group sets aside provisions to cover the costs relating to the final shutdown phase of its drawing rights in Tricastin and Chooz B, as well as for the dismantling period leading to the decommissioning and clean-up of the Chooz B site, in accordance with the respective agreements with EDF. These are based on provisions for Belgian assets that most closely resemble these power plants, and are updated in line with revisions by the CNP.

Sensitivity

In light of the agreement, the Group will only be responsible for shutdown and dismantling, including conditioning of the nuclear waste arising from these operations, in accordance with the contractual transfer criteria (as indicated above, liability estimated at €6.7 billion$_{2022}$):

- a 10% change in shutdown costs of the units would lead to a change in the provisions of around €200 million;
- a 10% change in unit dismantling costs would lead to a change of around €400 million in nuclear provisions;
- a 25 basis point change in the discount rate would lead to an adjustment of approximately €170 million in the provisions. A fall in the discount rate would lead to an increase in outstanding provisions, while a rise in the discount rate would reduce the provisions amount.

17.2.4 Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material

As indicated above, the Belgian law of July 12, 2022, partially repealing and amending the law of April 11, 2003, granted the Group's wholly-owned subsidiary Synatom responsibility for managing and investing funds received from operators of nuclear power plants in Belgium and intended to cover the costs of dismantling nuclear power plants and managing spent fuel. Pursuant to the law of April 11, 2003, Synatom could lend up to 75% of these funds to nuclear power plant operators provided that certain credit quality criteria are met.

The amount of outstanding loans between Synatom and nuclear operators, representing the countervalue of provisions for spent fuel management, will be repaid to Synatom by December 31, 2025, and the amount of outstanding loans between Synatom and Electrabel, representing the countervalue of provisions for dismantling, will be repaid by September 30, 2031.

The percentage of the provisions not subject to loans to nuclear operators is invested by Synatom either in external financial assets or in loans to legal entities meeting the "credit quality" criteria imposed by law.

The Synatom Board of Directors and its Investment Committee are responsible for defining Synatom's investment policy after consultation with the CNP, in accordance with the law of July 12, 2022. Based on a rigorous risk control policy, the Investment Committee oversees investment decisions, which are managed by a team headed by an Investment Director.

Synatom invested some €2.5 billion in such assets in 2024.

The value of financial assets dedicated to covering nuclear provisions amounted to €12,871 million at December 31, 2024, and their return was 4.8% for the year. A reorganization of the portfolio took place in 2024, with a split between:

- assets related to provisions for nuclear waste processing: these assets will be transferred to Hedera, a public institution set up by the Belgian State, upon closing of the agreements signed with the Belgian State. The objective set for Synatom to date is to maintain the value of the underlying assets by investing in money-market instruments, providing a return at least equivalent to the indexation rate of 3%;
- assets related to residual provisions for dismantling and on-site storage: the aim is to guarantee a sufficient return, with an acceptable level of risk, to cover dismantling and spent fuel storage costs. This portfolio complies with the diversification, risk minimization and availability requirements defined by the law of July 12, 2022.

The portfolio reorganization led to the liquidation of a significant portion of the funds and their reallocation to various Synatom investment vehicles in order to ensure sufficient liquidity to settle the lump-sum discharge payments due to the Belgian State.

17.2.4.1 Valuation of financial assets in 2024

Loans to entities outside the Group and other cash investments are shown in the table below:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Loans to third parties	**-**	**3**
Cash awaiting investment and cash UCITS	**9 624**	**3 777**
Total loans and receivables at amortized cost	**9 624**	**3 780**
Equityinstruments at fair value through other comprehensive income	640	1 640
Equity instruments at fair value throughprofit or loss	-	25
Equity instruments at fair value through income	**640**	**1 665**
Debt instruments at fair value through other comprehensive income	1,438	1,873
Debt instruments at fair value through profit or loss	1,195	2,663
Debt instruments at fair value	**2,632**	**4,536**
Total equity and debt instruments at fair value	**3,273**	**6,201**
Derivative instruments	**(25)**	**3**
TOTAL (1)	**12,871**	**9,984**

(1) Not including €301 million in uranium inventories at December 31,2024 (€307 million at December 31, 2023).

Loans to legal entities outside the Group and the cash held by the Undertaking for Collective Investment in Transferable Securities (UCITS) are presented in the statement of financial position under “Loans and receivables at amortized cost”. Bonds and associated

hedging instruments held by Synatom through the UCITS are presented under equity or debt instruments (*see Note 14.1 "Financial assets"*).

The breakdown in the change in the cumulative fair value of Synatom's assets is presented as follows:

	Cumulative change in the fair value of dedicated financial assets	
In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Equity instruments at fair value through other comprehensive income	81	88
Debt instruments at fair value through other comprehensive income	(19)	(101)
Debt instruments at fair value through profit or loss	83	122
TOTAL	**145**	**108**

The net gain for the period generated by these assets amounted to €324 million in 2024 (net loss of €184 million in 2023).

	Effects on the result of the return on dedicated financial assets	
In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Disposal proceeds	(61)	(312)
Return on assets	329	71
Change in fair value of derivatives not designated as hedges	(212)	(108)
Change in fair value of dedicated assets through income	268	167
TOTAL	**324**	**(184)**

17.3 Dismantling of non-nuclear plant and equipment and site rehabilitation

17.3.1 Dismantling obligations arising on non-nuclear plant and equipment

Certain items of plant and equipment, including conventional power stations, transmission and distribution pipelines, storage facilities and LNG terminals, have to be dismantled at the end of their operational lives or at least safely shut down. These obligations are the result of prevailing environmental regulations in the countries concerned, contractual agreements, or an implicit Group commitment. The most important challenge for the Group concerns gas infrastructures in France.

France's political and societal guidelines for the energy transition aim to achieve carbon neutrality by 2050, by reducing greenhouse gas emissions and promoting renewable or so-called "green" energies, particularly biomethane and hydrogen. The various scenarios that make it possible to achieve carbon neutrality, in particular the National Low Carbon Strategy in France, the French Environment and Energy Management Agency (ADEME) scenarios, and the "Energy Futures" prospective study by the electricity transmission system operator, RTE, all lead to a significant decrease in the quantities of gas consumed, while maintaining a high number of gas connection points to manage peak electricity demand. The Group is closely analyzing this prospect, particularly for the purpose of defining its strategy and assessing the useful life of assets and evaluating provisions for their possible dismantling.

The future French Strategy for Energy and Climate (SFEC) will set out France's updated roadmap to achieve carbon neutrality by 2050 and ensure that France can adapt to the impacts of climate change. The SFEC will encompass the National Low-Carbon Strategy (SNBC, 3rd condition), the National Climate Change and Adaptation Plan (PNACC, 3rd condition) and the Mult-Annual Energy Plan (PPE 2024-2033), which are all to be adopted in 2025 (*see Note 13.4.2*).

In line with the objective of carbon neutrality by 2050, the long-term scenario adopted by the Group, which governs the implementation of its strategy, is one that combines reasonable electrification, i.e. just under 50% of final demand in 2050, with the development of a diversified range of green gases (biomethane, synthesized e-CH4, natural gas with the Carbon Capture and Storage process, pure hydrogen). The Group's scenario is close to that of the International Energy Agency, with its APS (Announced Pledges Scenario) model, and that of ADEME ("green technology").

Due to the importance of green gases in the French energy mix scheduled for 2050 and beyond, gas infrastructures will remain largely necessary and will be essential to provide flexibility to the energy system. The adaptation and conversion of these infrastructures to green gas mean that they can be used in the very distant future, which means that the present value of dismantling provisions is almost zero, except in the specific cases of LNG terminals and reduced operation and non-regulated storage sites mainly in France and Germany, for which provisions for dismantling amounted to €353 million at December 31, 2024 versus €326 million at December 31, 2023.

Given its time horizon and developments in the French and European public policies, the Group will continue to assess the long-term scenario that will enable it to achieve carbon neutrality by 2050 on a regular basis. These assessments will be accompanied by a review of the valuation of dismantling provisions.

A more substantial change in the regulatory framework could have an impact on the sizing, operating life and dismantling schedule of gas infrastructures in France, and could have a significant impact on the amount of the provision for dismantling.

17.3.2 Hazelwood Power Station & Mine (Australia)

The Group and its partner Mitsui announced in November 2016 their decision to close the coal-fired Hazelwood Power Station, and cease coal extraction operations from the adjoining mine from late March 2017. The Group holds a 72% interest in the former 1,600MW power station and adjoining coal mine, which has been consolidated as a joint operation.

At December 31, 2024, the Group's share (72%) of the provision covering the obligation to dismantle and rehabilitate the mine amounted to €239 million, versus €280 million at December 31, 2023.

Dismantling and site rehabilitation work commenced in 2017 and focused on: managing site contamination; planning site wide environmental clean-up; the demolition and dismantling of all of the site's industrial facilities, including the former power station; and ongoing aquifer pumping and designated earthworks within the mine to ensure mine floor and batter stability with a view to long-term rehabilitation into a pit lake.

The ultimate regulatory obligations are likely to be revised during the life of the project and could therefore have an impact on provisions.

The amount of the provision recognized is based on the Group's best current estimate of the demolition and rehabilitation costs that Hazelwood is expected to incur. However, the amount of this provision may be adjusted in the future to take into account any changes in the key inputs.

17.4 Other contingencies

This caption essentially includes provisions for commercial litigation, tax claims and disputes (except income tax, pursuant to IFRIC 23), provisions for restructuring and provisions for onerous contracts relating to storage and transport capacity reservation contracts.

NOTE 18 POST-EMPLOYMENT BENEFITS AND OTHER LONG-TERM BENEFITS

Accounting standards

Depending on the laws and practices in force in the countries where the Group operates, Group companies have obligations in terms of pensions, early retirement payments, retirement bonuses and other benefit plans. Such obligations generally apply to all employees within the companies concerned.

The Group's obligations in relation to pensions and other employee benefits are recognized and measured in compliance with IAS 19. Accordingly:

- the cost of defined contribution plans is expensed based on the amount of contributions payable in the period;
- the Group's obligations concerning pensions and other employee benefits payable under defined benefit plans are assessed on an actuarial basis using the projected unit credit method. These calculations are based on assumptions relating to mortality, staff turnover and estimated future salary increases, as well as the economic conditions specific to each country or entity of the Group. Discount rates are determined by reference to the yield, at the measurement date, on investment grade corporate bonds in the related geographical area (or on government bonds in countries where no representative market for such corporate bonds exists).

Pension commitments are measured on the basis of actuarial assumptions. The Group considers that the assumptions used to measure its obligations are relevant and documented. However, any change in these assumptions could have a significant impact on the resulting calculations.

Provisions are recorded when commitments under these plans exceed the fair value of plan assets. Where the value of plan assets (capped where appropriate) is greater than the related commitments, the surplus is recorded as an asset under "Other assets" (current or non-current).

As regards post-employment benefit obligations, actuarial gains and losses are recognized in other comprehensive income. Where appropriate, adjustments resulting from applying the asset ceiling to net assets relating to overfunded plans are treated in a similar way. However, actuarial gains and losses on other long-term benefits such as long-service awards, are recognized immediately in profit or loss.

Net interest on the net defined benefit liability (asset) is presented in net financial income/(loss).

18.1 Description of the main pension plans

18.1.1 Companies belonging to the Electricity and Gas Industries sector in France

Since January 1, 2005, the CNIEG (*Caisse Nationale des Industries Électriques et Gazières*) has operated the pension, disability, death, occupational accident and occupational illness benefit plans for electricity and gas industry (hereinafter "EGI") companies in France. The CNIEG is a social security legal entity under private law placed under the joint responsibility of the ministries in charge of social security and the budget.

Employees and retirees of EGI sector companies have been fully affiliated to the CNIEG since January 1, 2005. The main affiliated Group entities are ENGIE SA, GRDF, GRTgaz, Elengy, Storengy, ENGIE Thermique France, CPCU, CNR and SHEM.

Following the funding reform of the special EGI pension plan introduced by Law No. 2004-803 of August 9, 2004 and its implementing decrees, specific benefits (pension benefits on top of the standard benefits payable under ordinary law) already vested at December 31, 2004 ("past specific benefits") were allocated between the various EGI entities. Past

specific benefits (benefits vested at December 31, 2004) relating to regulated transmission and distribution businesses ("regulated past specific benefits") are funded by the levy on gas and electricity transmission and distribution services (*Contribution Tarifaire d'Acheminement*) and therefore no longer represent an obligation for the ENGIE Group. Unregulated past specific benefits (benefits vested at December 31, 2004) are funded by EGI sector companies to the extent defined by Decree No. 2005-322 of April 5, 2005.

The specific benefits vested under the plan since January 1, 2005 are wholly financed by EGI sector companies in proportion to their respective weight in terms of payroll costs within the EGI sector.

As this plan is a defined benefit plan, the Group has set aside a pension provision in respect of specific benefits payable to employees of unregulated businesses and specific benefits vested by employees of regulated businesses since January 1, 2005. This provision also covers the Group's early retirement obligations. The provision amount may be subject to fluctuations based on the weight of the Group's companies within the EGI sector.

The special EGI pension plan, unlike other EGI benefits, has been closed to new entrants since September 1, 2023.

Pension benefit obligations and other "mutualized" obligations are assessed by the CNIEG.

At December 31, 2024, the projected benefit obligation in respect of the special pension plan for EGI sector companies amounted to €2.78 billion.

The duration of the pension benefit obligation of the EGI pension plan is 18 years.

18.1.2 Companies belonging to the electricity and gas sector in Belgium

In Belgium, the rights of employees in electricity and gas sector companies, principally Electrabel, Laborelec and some ENGIE Energy Management Trading and ENGIE CC employee categories, are governed by collective bargaining agreements.

These agreements, applicable to "wage-rated" employees recruited prior to June 1, 2002 and managerial staff recruited prior to May 1, 1999, specify the benefits entitling employees to a supplementary pension equivalent to 75% of their most recent annual income, for a full career and in addition to the statutory pension. These top-up pension payments provided under defined benefit plans are partly reversionary. In practice, the benefits are paid in the form of a lump sum for the majority of plan participants. Most of the obligations resulting from these pension plans are financed through pension funds set up for the electricity and gas sector and by certain insurance companies. Pre-funded pension plans are financed by employer and employee contributions. Employer contributions are calculated annually based on actuarial assessments.

The actuarial "pension" liability relating to these plans amounted to €1.2 billion at December 31, 2024. The average duration of these plans is 10 years.

"Wage-rated" employees recruited after June 1, 2002 and managerial staff (i) recruited after May 1, 1999 or (ii) having opted for the transfer through defined contribution plans, are covered under defined contribution plans. Prior to January 1, 2017, the law specified a minimum average annual return (3.75% on wage contributions and 3.25% on employer contributions) when savings are liquidated.

The law on supplementary pensions, approved on December 18, 2016 and enforced on January 1, 2017 henceforth specifies a minimum rate of return, depending on the actual rate of return of Belgian government bonds, within a range of 1.75%-3.25% (the rates are now identical for employee and employer contributions). In 2024, the minimum rate of return stood at 1.75%.

An expense of €44 million was recognized in 2024, and €42 million in 2023 in respect of these defined contribution plans.

18.1.3 Other pension plans

Most other Group companies also grant their employees retirement benefits. In terms of financing, pension plans within the Group are almost equally split between defined benefit and defined contribution plans.

The Group's main pension plans outside France and Belgium concern:

- the United Kingdom: the large majority of defined benefit pension plans are now closed to new entrants and future benefits no longer vest under these plans. All entities run a defined contribution scheme. The pension obligations of International Power's subsidiaries in the United Kingdom are covered by the special Electricity Supply Pension Scheme (ESPS). The assets of this defined benefit scheme are invested in separate funds. Since June 1, 2008, the scheme has been closed and a defined contribution plan has been set up for new entrants;
- Germany: the Group's German subsidiaries have closed their defined benefit plans to new entrants and now offer defined contribution plans;
- Brazil: ENGIE Brasil Energia operates its own pension scheme. This scheme has been split into two parts, one for the (closed) defined benefit plan, and the other for the defined contribution plan that has been available to new entrants since the beginning of 2005.

18.2 Description of other post-employment benefit obligations and other long-term benefits

18.2.1 Other benefits granted to current and former EGI sector employees

Other benefits granted to EGI sector employees are:

- Post-employment benefits:
  - reduced energy prices;
  - end-of-career indemnities;
  - bonus leave;
  - death capital benefits.
- Long-term benefits:
  - allowances for occupational accidents and illnesses;
  - temporary and permanent disability allowances;
  - long-service awards.

The Group's main obligations are described below.

18.2.1.1 Reduced energy prices

Under Article 28 of the national statute for electricity and gas industry personnel, all employees (current and former employees, provided they meet certain length-of-service conditions) are entitled to benefits in kind, which take the form of reduced energy prices known as "employee rates".

This benefit entitles employees to electricity and gas supplies at a reduced price. For retired employees, this provision represents a post-employment defined benefit. Retired employees are only entitled to the reduced rate if they have completed at least 15 years' service within EGI sector companies.

In accordance with the agreements signed with EDF in 1951, ENGIE provides gas to all current and former employees of ENGIE and EDF, while EDF supplies electricity to these same beneficiaries. ENGIE pays (or benefits from) the balancing contribution payable in respect of its employees as a result of energy exchanges between the two utilities.

The obligation to provide energy at a reduced price to current and former employees during their retirement is measured as the difference between the energy sale price and the preferential rate granted to employees.

The provision set aside in respect of reduced energy prices stood at €2.75 billion at December 31, 2024. The duration of the obligation is 18 years.

18.2.1.2 End-of-career indemnities

Retiring employees (or their dependents in the event of death during active service) are entitled to end-of-career indemnities, which increase in line with the length of service within the EGI sector.

18.2.1.3 Compensation for occupational accidents and illnesses

EGI sector employees are entitled to compensation for accidents at work and occupational illnesses. These benefits cover all employees or the dependents of employees who die as a result of occupational accidents or illnesses, or injuries undergone on the way to work.

The amount of the obligation corresponds to the likely present value of the benefits to be paid to current beneficiaries, taking into account any reversionary annuities.

18.2.2 Other benefits granted to employees of the gas and electricity sector in Belgium

Electricity and gas sector companies also grant other post-employee benefits such as the reimbursement of medical expenses, electricity and gas price reductions, as well as length-of-service awards and early retirement schemes. These benefits are not prefunded, with the exception of the special "*allocation transitoire*" termination indemnity, considered as an end-of-career indemnity.

18.2.3 Other collective agreements

Most other Group companies also grant their staff post-employment benefits (early retirement plans, medical coverage, benefits in kind, etc.) and other long-term benefits such as jubilee and length-of-service awards.

18.3 Defined benefit plans

18.3.1 Amounts presented in the statement of financial position and statement of comprehensive income

In accordance with IAS 19, the information presented in the statement of financial position relating to post-employment benefit obligations and other long-term benefits results from the difference between the gross projected benefit obligation and the fair value of plan assets. A provision is recognized if this difference is positive (net obligation), while a prepaid benefit cost is recorded in the statement of financial position when the difference is negative, provided that the conditions for recognizing the prepaid benefit cost are met.

Changes in provisions for pension plans, post-employment benefits and other long-term benefits, plan assets and reimbursement rights recognized in the statement of financial position are as follows:

In millions of euros	Provisions	Plan assets	Reimbursement rights
AT DECEMBER 31, 2023	**(5,208)**	**289**	**244**
Exchange rate differences	32	1	-
Changes in scope of consolidation and other	(1)	2	14
Actuarial gains and losses	281	125	(1)
Periodic pension cost	(391)	(37)	8
Contributions/benefits paid	309	7	(6)
AT DECEMBER 31, 2024	**(4,979)**	**386**	**260**

Plan assets and reimbursement rights are presented in the statement of financial position under “Other non-current assets” or “Other current assets”.

The cost recognized for the period amounted to €428 million in 2024 (€492 million in 2023). The components of this defined benefit cost in the period are set out in Note 18.3.3 “Components of the net periodic pension cost”.

The Eurozone represented 99% of the Group’s net obligation at December 31, 2024, (97% at December 31, 2023).

Cumulative actuarial gains and losses recognized in equity amounted to €1,576 million at December 31, 2024, compared to €1,979 million at December 31, 2023.

Net actuarial gains and losses arising in the period and presented on a separate line in the statement of comprehensive income represented a net actuarial gain of €406 million in 2024 versus a net actuarial loss of €601 million in 2023.

18.3.2 Change in benefit obligations and plan assets

The table below shows the amount of the ENGIE Group's projected benefit obligations and plan assets, changes in these items during the periods presented, and their reconciliation with the amounts reported in the statement of financial position:

		Dec. 31, 2024				Dec. 31, 2023			
In millions of euros		Pension benefit obligations (1)	Other post-employment benefit obligations (2)	Long-term benefit obligations (3)	Total	Pension benefit obligations (1)	Other post-employment benefit obligations (2)	Long-term benefit obligations (3)	Total
A - CHANGE IN PROJECTED BENEFIT OBLIGATION									
Projected benefit obligation at January 1		**(5,966)**	**(3,529)**	**(433)**	**(9,928)**	**(5,565)**	**(3,308)**	**(395)**	**(9,268)**
Current service cost		(174)	(57)	(38)	(269)	(168)	(48)	(33)	(248)
Interest expense		(228)	(124)	(14)	(367)	(245)	(123)	(16)	(384)
Contributions paid		(8)	-	-	(8)	(9)	-	-	(9)
Amendments		2	-	-	2	(82)	27	(1)	(56)
Changes in scope of consolidation		1	-	-	1	-	-	-	-
Curtailments/settlements		-	-	-	-	8	5	1	14
Financial actuarial gains and losses		(62)	2	(4)	(64)	(163)	(233)	(33)	(430)
Demographic actuarial gains and losses		8	245	7	261	(110)	25	-	(85)
Benefits paid		358	133	46	537	378	127	43	549
Other (of which translation adjustments)		47	-	1	47	(11)	-	(1)	(11)
Projected benefit obligation at December 31	**A**	**(6,022)**	**(3,332)**	**(435)**	**(9,788)**	**(5,966)**	**(3,529)**	**(433)**	**(9,928)**
B - CHANGE IN FAIR VALUE OF PLAN ASSETS									
Fair value of plan assets at January 1		**5,067**	**-**	**-**	**5,067**	**5,181**	**-**	**-**	**5,181**
Interest income on plan assets		202	-	-	202	214	-	-	214
Financial actuarial gains and losses		213	-	-	213	(119)	-	-	(119)
Contributions received		80	-	-	80	91	-	-	91
Benefits paid		(293)	-	-	(293)	(308)	-	-	(308)
Other (of which translation adjustments)		(2)	-	-	(2)	9	-	-	9
Fair value of plan assets at December 31	**B**	**5,267**	**-**	**-**	**5,267**	**5,067**	**-**	**-**	**5,067**
C - FUNDED STATUS	**A+B**	**(754)**	**(3,332)**	**(435)**	**(4,521)**	**(899)**	**(3,529)**	**(433)**	**(4,861)**
Asset ceiling		(71)	-	-	(71)	(58)	-	-	(58)
NET PENSION BENEFIT OBLIGATION		**(827)**	**(3,332)**	**(435)**	**(4,593)**	**(957)**	**(3,529)**	**(433)**	**(4,918)**
ACCRUED BENEFIT LIABILITY		(1,214)	(3,330)	(435)	(4,979)	(1,246)	(3,529)	(433)	(5,208)
PREPAID BENEFIT		386	-	-	386	289	-	-	289

(1) *Pensions and retirement bonuses.*
(2) *Reduced energy prices, healthcare, gratuities and other post-employment benefits.*
(3) *Length-of-service awards and other long-term benefits.*

18.3.3 Components of the net periodic pension cost

The net periodic cost recognized in respect of defined benefit obligations for the years ended December 31, 2024 and 2023 breaks down as follows:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Current service cost	269	248
Actuarial gains and losses [(1)]	(4)	32
Gains or losses on pension plan curtailments, terminations and settlements [(2)]	(2)	42
Total accounted for under current operating income including operating MtM and share in net income of equity method entities	**263**	**322**
Net interest expense	165	170
Total accounted for under net financial income/(loss)	**165**	**170**
TOTAL	**428**	**492**

(1) On the long-term benefit obligation.

(2) Including the €56 million impact of the pension reform in 2023 on the EGI plan.

18.3.4 Funding policy and strategy

When defined benefit plans are funded, the related plan assets are invested in pension funds and/or with insurance companies, depending on the investment practices specific to the country concerned. The investment strategies underlying these defined benefit plans are aimed at striking the right balance between return on investment and acceptable levels of risk.

The objectives of these strategies can be summarized as follows: to maintain sufficient liquidity to cover pension and other benefit payments; and as part of risk management, to achieve a long-term rate of return higher than the discount rate or, where appropriate, at least equal to future required returns.

When plan assets are invested in pension funds, investment decisions are the responsibility of the fund management concerned. For French companies, where plan assets are invested with an insurance company, the latter manages the investment portfolio for unit-linked policies or euro-denominated policies, in a manner adapted to the risk and long-term profile of the liabilities.

The funding of these obligations for each of the periods presented can be analyzed as follows:

In millions of euros	Projected benefit obligation	Fair value of plan assets	Asset ceiling	Total net obligation
Underfunded plans	(4,063)	3,393	(68)	(738)
Overfunded plans	(1,469)	1,874	(3)	402
Unfunded plans	(4,256)	-	-	(4,256)
AT DECEMBER 31, 2024	**(9,788)**	**5,267**	**(71)**	**(4,593)**
Underfunded plans	(4,063)	3,382	(56)	(737)
Overfunded plans	(1,365)	1,686	(2)	319
Unfunded plans	(4,501)	-	-	(4,501)
AT DECEMBER 31, 2023	**(9,929)**	**5,068**	**(58)**	**(4,919)**

The allocation of plan assets by principal asset category can be analyzed as follows:

In %	Dec. 31, 2024	Dec. 31, 2023
Equity investments	27	26
Sovereign bond investments	23	26
Corporate bond investments	34	33
Money market securities	3	4
Real estate	2	3
Other assets	11	8
TOTAL	**100**	**100**

All plan assets were quoted on an active market at December 31, 2024.

The actual return on assets of EGI sector companies stood at a positive 4.23% in 2024.

In 2024, the actual return on plan assets of Belgian entities amounted to approximately a positive 5.3% in Group insurance and a positive 6.8% in pension funds.

The allocation of plan asset categories by geographic area of investment can be analyzed as follows:

In %	Europe	North America	Latin America	Asia - Oceania	Rest of the World	Total
Equity investments	48	37	1	12	2	100
Sovereign bond investments	77	1	18	-	3	100
Corporate bond investments	65	27	1	5	3	100
Money market securities	61	3	-	10	26	100
Real estate	95	3	-	1	1	100
Other assets	35	1	-	-	64	100

18.3.5 Actuarial assumptions

Actuarial assumptions are determined individually by country and company in conjunction with independent actuaries. Weighted discount rates for the main actuarial assumptions are presented below:

		Pension benefit obligations		Other post-employment benefit obligations		Long-term benefit obligations		Total benefit obligations	
		2024	2023	2024	2023	2024	2023	2024	2023
Discount rate	Eurozone	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
	UK Zone	5.1%	5.2%	-	-	-	-	-	-
Inflation rate	Eurozone	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
	UK Zone	3.5%	3.5%	-	-	-	-	-	-

18.3.5.1 Discount and inflation rates

The discount rate applied is determined based on the yield, at the date of the calculation, of investment grade corporate bonds with maturities mirroring the term of the plan.

The rates were determined for each monetary area based on data for AA corporate bond yields. For the Eurozone, data (from Bloomberg) are extrapolated on the basis of government bond yields for long maturities.

According to the Group’s estimates, a 100-basis-point increase (decrease) in the discount rate would result in a decrease (increase) of approximately 13% in the projected benefit obligation.

The inflation rates were determined for each monetary area. A 100-basis-point increase (decrease) in the inflation rate (with an unchanged discount rate) would result in an increase (decrease) of approximately 13% in the projected benefit obligation.

18.3.6 Estimated employer contributions payable in 2025 under defined benefit plans

The Group expects to pay around €194 million in contributions into its defined benefit plans in 2025, including €129 million for EGI sector companies. Annual contributions in respect of EGI sector companies will be made by reference to rights vested during the year, taking into account the funding level for each entity in order to even out contributions over the medium term.

18.4 Defined contribution plans

In 2024, the Group recorded a €88 million expense in respect of amounts paid into Group defined contribution plans of which €9 million concerning multi-employer plans in Netherlands (compared with €92 million in 2023, of which €8 million concerned multi-employer plans in the Netherlands). These contributions are recorded under “Personnel costs” in the consolidated income statement.

NOTE 19 SHARE-BASED PAYMENTS

Accounting standards

Under IFRS 2, share-based payments made in consideration for services provided are recognized as personnel costs. These services are measured at the fair value of the instruments awarded.

The fair value of bonus share plans is estimated by reference to the share price at the grant date, taking into account the fact that no dividend is payable over the vesting period, and based on the estimated turnover rate for the employees concerned and the probability that the Group will meet its performance targets. The cost of shares granted to employees is expensed over the vesting period of the rights and offset against equity.

A Monte Carlo pricing model is used for performance shares granted on a discretionary basis and subject to external performance criteria.

Expenses recognized in respect of share-based payments break down as follows:

	Expense for the year	
In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Employee share issues [1]	(51)	1
Bonus/performance share plans [2] [3]	(45)	(46)
TOTAL	**(96)**	**(45)**

(1) *Including Share Appreciation Rights set up within the scope of employee share issues in certain countries.*

(2) *Following a review of the performance and presence conditions of plans whose vesting period ended in 2024, an additional expense of €3.5 million was recognized in 2024. No adjustment in respect of these conditions had been recognized for plans delivered in 2023.*

19.1 Link 2024

19.1.1 Description of available ENGIE share plans

In 2024, Group employees and former Group employees were entitled to purchase ENGIE shares as part of the "Link 2024" worldwide employee share ownership plan. The offering mainly involved the sale of treasury shares. Employees could subscribe to either:

- the Link Classique Plan: this plan allows employees to subscribe to shares at a discount, either directly or via an employee mutual fund and with an employer top-up contribution;
- the Link Multiple Plan: under this plan, employees may subscribe to shares at a discount, either directly or via a mutual fund, and also benefit from any increase in the share price (leverage effect) in addition to the amounts invested. Through a Swap Agreement with the bank that structures the Plan, employees benefit from a guarantee on their contribution as well as a minimum guaranteed return;
- Share Appreciation Rights (SAR): this is a leveraged scheme under which, by acquiring a share, an employee is entitled to a performance multiplier on that share, which will be paid to the employee in cash at the end of a period of five years after the scheme was set up. The resulting liability to employees is covered by warrants.

The Link Classique Plan featured an employer top-up contribution corresponding to 200% of the employee contribution up to €250 and hence limited to €500.

19.1.2 Accounting impacts

The subscription price for the 2024 plan represents the average closing price of the ENGIE share on Euronext Paris between August 26, 2024 and September 30, 2024 inclusive. The reference price is set at €15.86 less 20% for the Link Classique and the Link Multiple plans, i.e. €12.69.

The expense recognized in the consolidated financial statements in respect of the Link Classique, and Link Multiple plans corresponds to the difference between the fair value of the shares subscribed and the subscription price.

The accounting impacts break down as follows:

	Link Classique	Link Multiple	Link Classique France - employer top up contribution	Total
Amount subscribed (in millions of euros)	55	100	-	155
Number of shares subscribed (in millions of shares)	4.3	7.8	1.1	13.3
Discount (€/share)	3.2	3.2	15.9	-
Cost for the Group (in millions of euros)	**14**	**25**	**12**	**50**

Subscriptions to the Link 2024 plan amounted to €155 million and break down as follows:

- the sale of treasury shares to employees amounted to €128 million;
- a capital increase and additional paid-in capital of €27 million (excluding issuance costs).

The Group recognized a total expense of €50 million for 2024 in respect of the 12.2 million shares subscribed and the 1.1 million bonus shares awarded under employer top-up contributions (for which an expense of €4 million remains to be recognized over the residual period of the plan).

The accounting impact of cash-settled Share Appreciation Rights consists in recognizing a payable to the employee over the vesting period, with a corresponding adjustment recorded in profit or loss.

19.2 Performance shares

19.2.1 New awards in 2024

ENGIE Performance Share plan of April 30, 2024

On April 30, 2024, the Board of Directors approved the award of 5.7 million performance shares to members of the Group's executive and senior management. This plan consists of performance shares vesting on April 29, 2027. At April 30, 2027, the shares are transferable without further restriction.

In addition to a condition requiring employees to be employed with the Group at the vesting date, each tranche is made up of instruments subject to three different conditions, excluding the first 500 performance shares granted to beneficiaries (excluding senior management), which are exempt from performance conditions. The performance conditions are as follows:

- representing 35% of the total award: a condition relating to the evolution of the Total Shareholder Return (TSR) of the ENGIE share over three years, the reference price corresponding to the average of the index and the last 40 quoted prices for the ENGIE share preceding the first day of the month of the grant, this average being compared with the same measurement three years later;
- representing 35% of the total award: a condition relating to the level of Return On Average Capital Employed (ROACE);

- representing 30% of the total award a condition relating to non-financial criteria in terms of greenhouse gas emissions linked to energy production, an increase in the proportion of renewable capacities and an increase in the proportion of women in management.

Under this plan, performance shares without conditions were also awarded notably to the winners of the Innovation and Incubation programs (86,050 shares awarded).

ENGIE Bonus Share plan of September 30, 2024

As part of the Link 2024 employee share plan, bonus shares were awarded to subscribers of the Link Classique plan (outside France). A total of 359,469 bonus shares were awarded under this plan (*see Note 19.1.1 "Description of available ENGIE share plans"*).

19.2.2 Fair value of bonus share plans with or without performance conditions

The following assumptions were used to calculate the unitary fair value of the new plans awarded by ENGIE in 2024:

Award date	Vesting date	End of the lock-up period	Price at the award date	Expected dividend	Market-related performance condition	Unitary fair value
April 30, 2024	April 30, 2024	April 29, 2027	16.3	1.20	yes	11.37
September 30, 2024	November 7, 2029	November 7, 2029	15.9	1.12	no	10.69

19.2.3 Review of internal performance conditions applicable to the plans

In addition to the condition of continuing employment within the Group, eligibility for certain bonus share and performance share plans is subject to an internal performance condition. When this condition is not fully met, the number of bonus shares granted to employees is reduced in accordance with the plans' regulations, leading to a decrease in the total expense recognized in relation to the plans in accordance with IFRS 2. Performance conditions are reviewed at each reporting date.

NOTE 20 RELATED PARTY TRANSACTIONS

This note describes material transactions between the Group and its related parties.

Compensation payable to key management personnel is disclosed in Note 21 “Executive compensation”.

Transactions with joint ventures and associates are described in Note 3 “Investments in equity method entities”.

Only material transactions are described below.

20.1 Relations with the French State and with entities owned or partly owned by the French State

20.1.1 Relations with the French State

The French State’s interest in the Group at December 31, 2024 remained unchanged at 23.64% compared with the previous year. This entitles it to three of the 14 seats on the Board of Directors (one Director representing the State appointed by decree, and two Directors appointed by the Shareholders’ Meeting at the proposal of the State).

The French State holds 34.13% of the theoretical voting rights (34.23 % of exercisable voting rights) compared with 33.80% at end-2023.

On May 22, 2019, the PACTE Law (“Action plan for business growth and transformation”) was enacted, enabling the French State to dispose of its ENGIE shares without restriction.

In addition, the French State holds a golden share aimed at protecting France’s critical interests and ensuring the continuity and safeguarding of supplies in the energy sector. The golden share is granted to the French State indefinitely and entitles it to veto decisions taken by ENGIE if it considers they could harm France’s interests.

Public service engagements in the energy sector are defined by the law of January 3, 2003.

Transmission rates on the GRTgaz transportation network and the gas distribution network in France, as well as rates for accessing the French LNG terminals and revenues from storage capacities, are all regulated.

The Law on Energy and Climate enacted on November 8, 2019 provided for the phase out of regulated gas tariffs and the restriction of regulated electricity tariffs to residential consumers and small businesses. Regulated gas tariffs were phased out on July 1, 2023.

20.1.2 Relations with EDF

Following the creation on July 1, 2004 of the French gas and electricity distribution network operator (EDF Gaz de France Distribution), Gaz de France SA and EDF entered into an agreement on April 18, 2005 setting out their relationship as regards the distribution business. The December 7, 2006 law on the energy sector reorganized the natural gas and electricity distribution networks. Enedis SA, a subsidiary of EDF SA, and GRDF SA, a subsidiary of ENGIE SA, were created on January 1, 2007 and December 31, 2007, respectively, and act in accordance with the agreement previously signed by the two incumbent operators.

With the deployment of smart meters for both electricity and gas, the “common” businesses deployed by the two distributors evolved significantly. Since 2024, the remaining mixed activities have been reduced to occupational medicine, medical advice and the management of rates for residential customers. A project coordinated by the two distributors aims to finalize the unbundling of these activities.

20.2 Relations with the CNIEG (*Caisse Nationale des Industries Électriques et Gazières*)

The Group's relations with the CNIEG, which manages all old-age, death and disability benefits for active and retired employees of the Group who belong to the special EGI pension plan, employees of EDF and Non-Nationalized Companies (*Entreprises Non Nationalisées* – ENN), are described in Note 18 "Post-employment benefits and other long-term benefits".

NOTE 21 EXECUTIVE COMPENSATION

The executive compensation presented below includes the compensation of the members of the Group's Executive Committee and Board of Directors.

The Executive Committee had 10 members at December 31, 2024 unchanged compared to December 31, 2023.

Their compensation breaks down as follows:

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Short-term benefits	27	23
Share-based payments	6	4
TOTAL	**33**	**27**

NOTE 22 WORKING CAPITAL REQUIREMENTS, INVENTORIES, OTHER ASSETS AND OTHER LIABILITIES

Accounting standards

In accordance with IAS 1, the Group's current and non-current assets and liabilities are shown separately in the consolidated statement of financial position. For most of the Group's activities, the breakdown into current and non-current items is based on when assets are expected to be realized, or liabilities extinguished. Assets expected to be realized or liabilities extinguished within 12 months of the reporting date are classified as current, while all other items are classified as non-current.

Inventories

Inventories are measured at the lower of cost and net realizable value. Net realizable value corresponds to the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

The cost of inventories is determined based on the first-in, first-out method or the weighted average cost formula.

Nuclear fuel purchased is consumed in the process of producing electricity over a number of years. The consumption of this nuclear fuel inventory is recorded based on estimates of the quantity of electricity produced per unit of fuel.

Gas inventories

Gas injected into underground storage facilities includes working gas, which can be extracted without adversely affecting the subsequent operation of the reservoirs, and cushion gas, which is inseparable from the reservoirs and essential for their operation (*see Note 13.3 "Property, plant and equipment"*).

Working gas is classified in inventories and measured at weighted average purchase cost upon entering the transportation network regardless of its source, including any regasification costs.

Group inventory outflows are valued using the weighted average unit cost method.

Certain inventories are used for trading purposes and are recognized at fair value less selling costs, in accordance with IAS 2. Any changes in said fair value are recognized in the consolidated income statement for the year in which they occur.

Greenhouse gas emission rights, energy saving certificates and green certificates

In the absence of specific IFRS standards or IFRIC interpretations on accounting for greenhouse gas emission allowances, energy saving certificates and green certificates, the Group has decided to recognize certificates in inventories at their acquisition or production cost. At the reporting date, a liability is recognized if the certificates held by the Group are insufficient to meet the obligation to return certificates to the French government. When not covered by the certificates held in inventories, the liability is measured at the market value or based on the price of any future contracts that have been entered into, when applicable.

Tax equity

The ENGIE Group finances its renewables projects in the United States through tax equity structures, in which part of the necessary funds is provided by a tax partner. The tax partner obtains, up to a pre-determined level, a preferential right essentially to the project's tax credits, which it can deduct from its own tax base.

The tax partner's investments meet the definition of a liability under IFRS. Since the tax equity liability corresponding to these tax benefits does not give rise to any cash outflow for the project entity, it does not represent a financial debt and is accounted for in "Other liabilities".

Besides the unwinding effect, the liability changes mainly in line with the tax credits allocated to the tax partner and recognized in profit or loss.

22.1 Composition of change in working capital requirements

In millions of euros	Change in working capital requirements at Dec. 31, 2024	Change in working capital requirements at Dec. 31, 2023
Inventories	1,140	3,003
Trade and other receivables, net	4,266	12,507
Trade and other payables, net	(2,564)	(13,554)
Tax and employee-related receivables/payables	(601)	(325)
Margin calls and derivative instruments hedging commodities relating to trading activities	(1,198)	(1,113)
Other	(1,270)	(120)
TOTAL	**(227)**	**397**

22.2 Inventories

In millions of euros	Dec. 31, 2024	Dec. 31, 2023
Inventories of natural gas, net	2,139	2,218
Inventories of uranium [(1)]	301	307
CO_2 emissions allowances, green certificates and energy saving certificates, net	1,546	1,535
Inventories of commodities other than gas and other inventories, net	1,074	1,283
TOTAL	**5,061**	**5,343**

(1) Financial hedging instruments are backed by these uranium inventories and represented a negative amount of €13 million at December 31, 2024.

22.3 Other assets and other liabilities

	Dec. 31, 2024				Dec. 31, 2023			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Other assets and liabilities	908	12,395	(2,591)	(16,565)	990	13,424	(3,614)	(18,118)
Tax receivables/payables	*-*	*7,906*	*-*	*(8,711)*	*-*	*9,436*	*-*	*(10,415)*
Employee receivables/payables	*646*	*20*	*(3)*	*(2,638)*	*531*	*16*	*(2)*	*(2,503)*
Dividend receivables/payables	*-*	*170*	*-*	*(190)*	*-*	*127*	*-*	*(20)*
Other	*262*	*4,299*	*(2,588)*	*(5,026)*	*459*	*3,845*	*(3,613)*	*(5,178)*

At December 31, 2024, other assets included a receivable towards EDF in respect of nuclear provisions amounting to €637 million (€654 million at December 31, 2023).

Other liabilities include €1,975 million in investments made by tax partners as part of the financing of renewable projects in the United States by tax equity (€2,140 million at December 31, 2023).

NOTE 23 LEGAL AND ANTI-TRUST PROCEEDINGS

The Group is party to a number of legal and anti-trust proceedings with third parties or with legal and/or administrative authorities (including tax authorities) in the normal course of its business.

The main disputes and investigations presented hereafter are recognized as liabilities or give rise to contingent assets or liabilities.

In the ordinary course of its business, the Group is involved in a number of disputes and investigations before state courts, arbitral tribunals or regulatory authorities. The disputes and investigations that could have a material impact on the Group are presented below.

23.1 Networks

23.1.1 Brazil – Challenge regarding goodwill amortization and financial expenses

The Brazilian tax authorities are challenging the deduction by Transportadora Associada de Gas ("TAG") of goodwill amortization and financial expenses recognized in 2019 following the merger of TAG's acquisition company with TAG.

The reassessment amounts to approximately BRL 767 million (BRL 499 million attributable to ENGIE) and BRL 2,448 million (BRL 1,591 million attributable to ENGIE) respectively for 2019 and 2020. The company has lodged an administrative appeal against these reassessments.

23.2 Energy Solutions

23.2.1 Spain – Púnica

In the Púnica case (procedure concerning the awarding of contracts), 15 Cofely España employees, as well as the company itself, were placed under investigation by the examining judge in charge of the case. The criminal investigation was closed on July 19, 2021 with the referral of Cofely España and eight (former) employees before the criminal court. Cofely España lodged an appeal against this decision on September 30, 2021. On March 9, 2022, the appeal was dismissed and the referral decision upheld. The hearings are expected to begin in spring 2025.

23.2.2 Italy – Manitalidea

In 2012, ENGIE Servizi formed a temporary association ("*associazione temporanea di imprese*" or "ATI") with Manitalidea with the aim of submitting a bid for a public contract launched by CONSIP. ENGIE Servizi had an 85% stake in the ATI, with Manitalidea holding the remaining 15%. The purpose of the contract was to provide energy and maintenance services to hospitals.

In September 2012, three lots of the contract were awarded to the ATI.

On March 11, 2022, Manitalidea filed for damages against ENGIE Servizi in the Rome Civil Court, claiming that (i) ENGIE Servizi had not complied with the provisions of the temporary association agreement relating to the distribution of contracts between the partners, and (ii) as a result, Manitalidea had missed an opportunity to increase its revenue. After Manitalidea filed for bankruptcy, the claim was extended to include the alleged responsibility of ENGIE Servizi for Manitalidea's financial difficulties and bankruptcy.

As part of the first-instance proceedings, a technical assessment by a court-appointed expert is currently underway.

23.3 FlexGen

23.3.1 Italy – Vado Ligure

On March 11, 2014, the Court of Savona seized and closed down the VL3 and VL4 coal-fired production units at the Vado Ligure thermal power plant belonging to Tirreno Power S.p.A. (TP), a company which is 50%-owned by the ENGIE Group. This decision was taken as part of a criminal investigation against the present and former executive managers of TP into environmental infringements and public health risks. The investigation was closed on July 20, 2016. The case was referred to the Court of Savona to be tried on the merits. The proceedings before the Court of First Instance began on December 11, 2018 and carried on into 2023, seeking the liability of the former members of the Board of Directors and management. Third parties, including the Italian Ministry of the Environment and Ministry of Health, joined the proceedings to claim damages. On October 3, 2023, the Court of Savona acquitted all 26 directors and managers of all charges. The subsidiary Tirreno Power SpA, in which ENGIE has a 50% stake, has also been acquitted. The decision was notified in January 2024. The public prosecutor appealed the decision in February 2024 along with the Ministry of Health, the Ministry of the Environment, and two citizens associations. The date of the first hearing before the Court of Appeal has not yet been set.

23.3.2 Italy – exceptional tax on the energy sector

In December 2022, ENGIE filed an action against the tax authorities to obtain the reimbursement of the tax it had paid in July and November 2022 for a total amount of more than €308 million, pursuant to two legislative decrees (No. 21 and No. 50/2022) that introduced an exceptional solidarity contribution to be paid by operators in the energy sector. ENGIE contests the validity of the basis of the tax in relation to the decree's objective, its compatibility with the Italian Constitution and its compatibility with Italy's European commitments (EU law). The Italian Constitutional Court upheld the tax's conformity with the Constitution and referred the case to the Milan Court of First Instance. ENGIE continues to defend its interests, in particular with regard to the tax's compatibility with European law, and is requesting a referral to the Court of Justice of the European Union (CJEU).

23.3.3 Flémalle - EPC

In November 2021, Electrabel SA entered into an EPC (Engineering, Procurement, Construction) agreement with SEPCO III for the construction of a gas-fired power plant in Flémalle (Belgium), in the context of the CRM (Capacity Remuneration Mechanism).

In August 2022, Electrabel SA terminated the EPC agreement with SEPCO III for non-performance of its contractual obligations and initiated arbitration proceedings in November 2022, to obtain compensation for the damage sustained.

SEPCO III filed a counterclaim against Electrabel seeking damages to cover the alleged loss it had sustained due to the termination of the contract. The proceedings are currently ongoing.

23.3.4 Brazil – Claim against sales tax adjustments

ENGIE Brasil Energia SA was subject to a tax reassessment covering fiscal years 2014, 2015, 2016 and 2018 in respect of federal value-added taxes (PIS and COFINS) for refunds relating to fuel used in the production of energy by thermopower plants. The total amount at stake is 874 million Brazilian real, including a principal amount of 259 million.

The company is contesting these reassessments and has lodged administrative appeals. The administrative appeals for fiscal years 2014, 2015 and 2016 were rejected and the company initiated the discussion at the judicial court. The company is awaiting a decision at appeal level, following an unfavorable decision at first instance. The administrative appeal for 2018 is being examined.

In 2023, Diamante Geraçao de Energia (controlled by ENGIE Brasil Energia SA at the time and owner of the thermopower plants) was also subject to reassessments for the tax treatment of comparable fuel reimbursements. The reassessments

concerned both PIS and COFINS taxes (fiscal years 2019 and 2020) and corporate income tax (fiscal year 2018). The total amount at stake is 604 million Brazilian real, including a principal amount of 261 million. Although ENGIE Brasil Energia SA sold this company in 2021, it remains financially responsible under the vendor's warranty regarding the years prior to the sale. The company is contesting these reassessments and has lodged an administrative appeal, which is currently under review.

If ENGIE Brasil Energia SA and/or Diamante Geraçao de Energian are unsuccessful before the administrative courts, these cases may also be brought before the ordinary courts and tribunals.

23.3.5 Peru – Antamina

In 2012, following a tender for the annual purchase of 170MW for a period extending from 2015 until 2032, ENGIE Energía Perú S.A. entered into a long-term gas purchase agreement with the Peruvian mining company Antamina (the "Agreement").

In 2021, however, Antamina launched another tender for the same annual volume and entered into three purchase agreements with the three new suppliers for a period starting January 2022, until June 2024. This called into question the exclusivity that ENGIE Energía Perú S.A. believed it had been granted until 2032 under the Agreement. Following the signing of these new agreements, Antamina divided its gas procurement between ENGIE and three new suppliers, and refused, as of January 2022, to accept exclusively from ENGIE delivery of the agreed upon quantity of gas under the Agreement and, consequently, to pay the corresponding invoices (approximately 50% of the monthly needs of Antamina).

On April 26, 2022, ENGIE Energía Perú S.A. filed an arbitration procedure against Antamina, seeking recognition of the exclusive nature of the Agreement and Antamina's obligation to only procure gas supplies from ENGIE up to the 170MW gas contracted, from the start date of the Agreement (January 2015) until the end date (December 2032). The procedure also seeks the payment of invoices that have been outstanding since January 2022. The arbitration procedure is governed by the rules of the Arbitration Center of the Lima Chamber of Commerce. On January 4, 2023, ENGIE Energía Perú S.A. filed its statement of claim.

On May 20, 2024, the Arbitration Center issued its decision, which was favorable to ENGIE Energía Perú S.A. The Arbitration Center ruled that ENGIE Energía Perú S.A. was to be the sole supplier of Antamina for up to 170MW per year, and that Antamina had breached the signed Agreement when contracting with third-party suppliers. The Arbitration Center dismissed Antamina's action for annulment, putting an end to the proceedings. Antamina has paid the amount set by the Arbitration Center and the case is now closed.

23.3.6 Chile – TotalEnergies

On January 3, 2023, ENGIE Energía Chile SA initiated international arbitration proceedings against TotalEnergies Gas & Power Limited for breaching its contractual obligations under an LNG supply contract entered into in August 2011. The proceedings are currently ongoing.

23.3.7 Chile – ENGIE Austral

The Chilean tax authorities contest the price at which ENGIE Austral (ENAU) sold its shares in Eolica Monte Redondo (EMR) to ENGIE Energía Chile (EECL) in 2020 alleging that the price at which ENAU sold EMR to EECL was significantly below market price. In June 2024, the authorities ordered ENAU to pay a penalty of USD 62 million, plus interest and fines, representing a total of USD 108 million. Following ENAU's challenge of the adjustment, the Chilean tax authorities reduced the penalty to around USD 52 million (including interest and fines). Now that the administrative phase has been completed, ENAU will challenge the decision before the local courts in the 1st half of 2025.

23.4 Nuclear

23.4.1 Extension of operations at the nuclear power plants 2015-2025

Various associations have brought actions before the Constitutional Court, the *Conseil d'État* and the ordinary courts against the laws and administrative decisions authorizing the extension of operations at the Doel 1 and Doel 2 plants. On June 22, 2017 the Constitutional Court referred the case to the Court of Justice of the European Union (CJEU) for a preliminary ruling. In its judgment of July 29, 2019, the CJEU ruled that the Belgian law extending the operating lives of the Doel 1 and Doel 2 reactors (law extending Doel 1 and Doel 2) was adopted without the required environmental assessments being carried out first, but that the effects of the law on extension could provisionally be maintained where there was a genuine and serious threat of an interruption to the electricity supply, and then only for the length of time strictly necessary to eliminate this threat. In its decision of March 5, 2020, the Constitutional Court overturned the law extending Doel 1 and Doel 2, while maintaining its effects until the legislator adopts a new law after having carried out the required environmental assessment, including a cross-border public consultation process, by December 31, 2022 at the latest.

The environmental assessment and the cross-border public consultation were carried out by the Belgian State in 2021. The draft law incorporating the conclusion of the assessment and the consultation was passed by the Belgian Federal Parliament on October 11, 2022 and the law was published on November 3, 2022.

The appeal before the *Conseil d'État* against the administrative decisions that allowed the extension of operations at the Doel 1 and Doel 2 plants is still pending. The auditor submitted his report on January 21, 2025, concluding that the appeal was inadmissible.

23.4.2 Shutdown of the Doel 3 and Tihange 2 power plants

Various associations have lodged appeals before the Brussels Court of First Instance against Electrabel, the Belgian State, the Nuclear Safety Authority and/or the Elia electricity transmission network to contest the decisions and actions to shut down the Doel 3 (on September 23, 2022) and/or Tihange 2 (on January 31, 2023) power plants. In a first judgment dated November 16, 2022, the Brussels Court of First Instance, ruling in summary proceedings in one of the cases, confirmed the decisions and actions taken in relation to the shutdown. The applicants in this case withdrew their action on the merits. In the second case on the merits, a judgment was handed down on June 30, 2023, rejecting the interim measures requested, including the request to prohibit Electrabel from taking any irreversible action in connection with the shutdown of Doel 3 and Tihange 2. The case is continuing on the merits, with no precise timetable at this stage.

23.4.3 Appeal against the Belgian energy regulator's decision implementing the law of December 16, 2022 introducing a cap on electricity producers' market revenues

Electrabel lodged an appeal with the Belgian Market Court (*Cour des Marchés*) on March 29, 2023 against the decision of the Belgian energy regulator (CREG) to implement the December 16, 2022 law introducing a cap on electricity producers' market revenues for 2022. Electrabel lodged a second action for annulment with the same court against the same regulator's decision for 2023 revenues.

Electrabel contests the validity of this revenue cap, arguing that it is contrary to the European Regulation that introduced it, notably because it falsely determines market revenues using presumptions and not on the basis of revenues actually received, as provided for by the Regulation, and because it is implemented retroactively from August 1, 2022, outside the period covered by the Regulation. The Market Court handed down its ruling in the first case on October 18, 2023, finding that the action was admissible and prima facie founded, and referred three questions to the Court of Justice of the European Union for a preliminary ruling. On January 10, 2025, CREG lodged an appeal against this ruling. The second case was heard on January 10, 2024, and the ruling handed down on January 31 suspends delivery until the Court of Justice of the European Union has ruled on the first case.

An appeal was also lodged with the Constitutional Court in June 2023, and was joined with the actions for annulment lodged by the various parties. The Court handed down its ruling on June 20, 2024, referring 15 questions to the Court of

Justice of the European Union for a preliminary ruling. In addition to the above-mentioned appeals, a claim for restitution of the 2022 tax has been lodged, as well as an appeal to the Court of First Instance for the annulment of the tax.

23.4.4 Arbitration procedure in application of the Tihange 1 and Doel 1 and 2 agreements following the adoption of the law of December 16, 2022 introducing a cap on electricity producers' market revenues

On October 17, 2023, Electrabel initiated arbitration proceedings against the Belgian State for the breach of the agreements signed for the extension of Tihange 1 on March 12, 2014 and the extension of Doel 1 and Doel 2 on November 30, 2015. These agreements excluded, by virtue of the royalties paid, any other charges in favor of the State (with the exception of general application taxes) linked to the ownership or operation of Tihange 1 or Doel 1 and Doel 2, the revenues, production or production capacity of these plants, or their use of nuclear fuel. Under the terms of the agreements, Electrabel is claiming the reimbursement of the tax paid for 2022 and the levy for 2023 on these plants.

23.5 Other

23.5.1 6.6.1 Withholding tax

In their tax deficiency notice dated December 22, 2008, the French tax authorities questioned the treatment as corporate income tax of the non-recourse Dailly sale by SUEZ (now ENGIE) of a disputed withholding tax (*précompte*) receivable in 2005 for an amount of €995 million (receivable relating to the *précompte* paid in respect of the 1999-2003 fiscal years). The Montreuil Administrative Court handed down a judgment in ENGIE's favor in 2019, which led the French tax authorities to appeal the decision before the Versailles Court of Appeal, which overturned the prior Court's decision in 2021. On April 14, 2023, the *Conseil d'État* overturned the Court's ruling on the grounds that the assigned claim should be classified as an advance repayment of non-deductible tax, irrespective of the fact that the State had not authorized its repayment by the bank assigning the claim, and that the repayment was only partial. The *Conseil d'État* referred the case back to the Versailles Administrative Court of Appeal to decide on the basis of a procedure that made the tax treatment of the disputed assignment of receivables in 2005 dependent on the outcome of the *précompte* litigation itself. No decision was handed down in January 2024.

With regard to the withholding tax litigation, all the proceedings to which ENGIE was a party have now terminated, thereby limiting the financial consequences of the aforementioned 2005 Dailly sale.

23.5.2 Poland – Competition procedure

On November 7, 2019, a fine of 172 million Polish zloty (€40 million) was imposed on ENGIE Energy Management Holding Switzerland AG (EEMHS) for failing to respond to a request for disclosure of documents from the Polish Competition Authority (UOKiK) in proceedings initiated by the UOKiK which suspected a potential failure to notify by EEMHS and other financial investors involved in the financing of the Nord Stream 2 pipeline (main proceedings). EEMHS filed an appeal with the Competition Protection Court. On November 7, 2023, the Court reduced the penalty to around €100,000. The UOKiK has appealed this decision to the Warsaw Court of Appeal (2nd instance). The proceedings are pending.

In the context of the main proceedings, on October 6, 2020, the UOKiK ordered EEMHS to pay a fine of 55.5 million Polish zlotys (approximately €12.3 million). The UOKiK also ordered the termination of the financing agreements for the Nord Stream 2 project. On November 5, 2020, EEMHS appealed this decision with the Competition Protection Court (the "Court"). The appeal automatically suspends the execution of all of the penalties ordered by the UOKiK. On November 21, 2022, the Court overturned the UOKiK's decision in its entirety. The UOKiK has appealed this decision. On October 16, 2023, the Warsaw Court of Appeal (2nd instance) upheld the lower court's decisions, which overturned the UOKIK's decision in its entirety. The UOKiK has not lodged an appeal before the court of cassation. The proceedings are now definitively closed.

23.5.3 Claim by the Dutch tax authorities related to interest deductibility

Based on a disputable interpretation of a statutory modification that came into force in 2007, the Dutch tax authorities refused the deductibility of a portion (€1.1 billion) of the interest paid on financing contracted for the acquisition of investments made in the Netherlands since 2000. Following the Dutch tax authorities' rejection of the administrative claim against the 2007 tax assessment, action was brought before the Arnhem Court of First Instance in June 2016. On October 4, 2018, the court ruled in favor of the tax authorities. On October 26, 2020, the ruling was confirmed by the Arnhem Court of Appeal. ENGIE Energie Nederland Holding BV considers that the Court committed errors in law and that its decision was not well-founded, under either Dutch or European law. It has therefore appealed the decision before the Court of Cassation. In July 2022, the Court of Cassation decided to refer questions on the compatibility of the Dutch legislation on interest with three of the European fundamental freedoms to the Court of Justice of the European Union for a preliminary ruling. In October 2024, the Court of Justice of the European Union ruled that Dutch legislation was compatible with the Treaties and European case law. The case has been referred to the Dutch Court of Cassation, which is expected to issue a ruling in 2025.

23.6 GEMS

23.6.1 GPE

At the beginning of the fourth quarter of 2022, ENGIE initiated an arbitration procedure against Gazprom Export LLC seeking, in particular to obtain (i) recognition of Gazprom Export LLC's non-performance of its gas delivery obligations towards ENGIE under long-term gas delivery agreements and (ii) payment of contractual penalties as well as compensation for damage resulting from this non-performance from Gazprom Export LLC.

This arbitration procedure is due to the significant delivery shortages by Gazprom Export LLC to ENGIE as of mid-June 2022, followed by Gazprom Export LLC's unilateral decision at the end of summer 2022 to reduce its deliveries to ENGIE due to a disagreement between the parties on the application of the agreements.

NOTE 24 SUBSEQUENT EVENTS

24.1 Changes in the Group organization starting February 1, 2025

In 2025, the Group has adjusted the scope of its Global Business Units (GBUs) as follows:

- the Renewables & Flex Power GBU combines renewables, power storage facilities (notably batteries) and combined-cycle gas turbines (CCGT);
- the Networks GBU continues to develop power networks and adapt gas infrastructure to green molecules, while promoting their development (biomethane, hydrogen and e-molecules);
- the Energy Solutions GBU, renamed Local Energy Infrastructures GBU, will build on its undisputed European leadership, while increasing selectivity in both business and geography;
- the Supply & Energy Management GBU will bring together energy management previously part of the GEMS operating entity, as well as downstream activities, BtoB and BtoC (Retail).

The Nuclear operating entity continues to focus on the operational management of nuclear production units in Belgium and the drawing rights held in the French power plants.

This change in the Group organization is effective from February 1, 2025. It will affect the identification of the IFRS 8 operating and reportable segments as from the 2025 accounting period, but had no impact on their presentation at December 31, 2024.

24.2 Agreement with the Belgian State on the 10-year extension of two reactors and on the transfer of financial responsibility for nuclear waste management to the Belgian State

On February 21, 2025, the European Commission approved under EU state aid rules the agreement between ENGIE and the Belgian government, announced on December 13, 2023, relating to the extension of the operation of the Tihange 3 and Doel 4 nuclear reactors and the obligations relating to nuclear waste. Pursuant thereto, ENGIE and the Belgian government are now concluding together various procedural steps with a view to closing the transaction on or before March 14, 2025.

24.3 Divestment of power and water desalination assets in Kuwait and Bahrain

On February 18, 2025 ENGIE signed a Sale and Purchase Agreement with ACWA Power for the divestment of its assets in Kuwait and Bahrain for a total amount of 0.7 billion dollars. The scope of the transaction encompasses operating capacities of 4.61GW of gas-fired power generation and 1.11 million cubic meters per day (m3/day) of water desalination facilities, as well as the related operations and maintenance companies in Kuwait and Bahrain. The completion of the transaction remains subject to customary regulatory approvals.

NOTE 25 FEES PAID TO THE STATUTORY AUDITORS AND TO MEMBERS OF THEIR NETWORKS

Pursuant to Article 222-8 of the General Regulations of the French Financial Markets Authority (AMF), the following table presents information on the fees paid by ENGIE SA, its fully consolidated subsidiaries and joint operations to each of the Auditors in charge of auditing the annual and consolidated financial statements of the ENGIE Group.

The Shareholders' Meeting of ENGIE SA of May 14, 2020 decided to renew the terms of office of Deloitte and EY as Statutory Auditors for a six-year period from 2020 to 2025.

	Deloitte			EY			
In millions of euros	**Deloitte & Associés**	**Network**	**Total**	**EY & others**	**Network**	**Total**	**Total**
Statutory audit and review of consolidated and parent company financial statements	**5.6**	**7.8**	**13.4**	**6.7**	**10.8**	**17.6**	**31.0**
ENGIE SA	**2.9**	**-**	**2.9**	**3.8**	**-**	**3.8**	**6.7**
Controlled entities	**2.8**	**7.8**	**10.5**	**2.9**	**10.8**	**13.8**	**24.3**
Certification of sustainability information	**0.5**	**-**	**0.5**	**0.5**	**-**	**0.5**	**1.0**
ENGIE SA	**0.5**	**-**	**0.5**	**0.5**	**-**	**0.5**	**1.0**
Controlled entities	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Missions and services other than certification of financial statements and sustainability information	**0.4**	**0.3**	**0.7**	**1.6**	**3.1**	**4.7**	**5.5**
ENGIE SA	**0.3**	**-**	**0.3**	**1.2**	**-**	**1.2**	**1.5**
Of which services related to legal and regulatory requirements	*-*	*-*	*-*	*0.5*	*-*	*0.5*	*0.5*
Of which other audit services	*0.3*	*-*	*0.3*	*0.7*	*-*	*0.7*	*1.0*
Of which reviews of internal control	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Of which due diligence services	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Of which tax services	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Controlled entities	**0.1**	**0.3**	**0.4**	**0.5**	**3.1**	**3.5**	**4.0**
Of which services related to legal and regulatory requirements	*-*	*0.1*	*0.1*	*0.3*	*0.2*	*0.5*	*0.6*
Of which other audit services	*0.1*	*0.1*	*0.2*	*0.1*	*0.4*	*0.5*	*0.7*
Of which reviews of internal control	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Of which due diligence services	*-*	*-*	*-*	*-*	*2.2*	*2.2*	*2.2*
Of which tax services	*-*	*0.1*	*0.1*	*-*	*0.3*	*0.3*	*0.4*
Total	**6.5**	**8.1**	**14.6**	**8.9**	**13.9**	**22.8**	**37.5**

NOTE 26 INFORMATION REGARDING LUXEMBOURG AND DUTCH COMPANIES EXEMPTED FROM THE REQUIREMENTS TO PUBLISH ANNUAL FINANCIAL STATEMENTS

Some companies do not publish annual financial statements pursuant to domestic provisions under Luxembourg law (Article 70 of the Law of December 19, 2002) and Dutch law (Article 403 of the Civil Code) relating to the exemption from the requirement to publish audited annual financial statements.

The companies exempted are notably: ENGIE Energie Nederland NV, ENGIE Energie Nederland Holding BV, ENGIE Nederland Retail BV, ENGIE United Consumers Energie BV, ENGIE Treasury Management SARL and ENGIE Invest International SA.

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