2021 MANAGEMENT REPORT AND ANNUAL CONSOLIDATED FINANCIAL STATEMENTS

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01 MANAGEMENT REPORT

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1 ENGIE 2021 RESULTS

The previously published financial statements presented hereafter have been restated to take into account the presentation in the financial statements at December 31, 2020 (the income statement, statement of comprehensive income and statement of cash flows) of EQUANS activities held for sale (see Note 5 "Main changes in scope") as discontinued operations insofar as they represent a separate major line of business within the meaning of IFRS 5 - Non-current assets held for sale and discontinued operations. A reconciliation of the reported data with the restated comparative data is presented in Note 2 "Restatement of 2020 comparative data" to the consolidated financial statements.

ENGIE 2021 Financial Results
Strategy put into action
Strong 2021 performance at the top end of expectations
Growth in earnings expected over the medium-term

Business Highlights

- Continued investment in growth, particularly in Renewables with 3 GW commissioned in 2021 taking total installed capacity to over 34 GW
- EQUANS disposal on track with completion expected in H2 2022, as planned
- Major progress on simplification through €9.2 billion of disposals signed or completed
- High availability of Belgian Nuclear at 92%
- Further progress on coal exit with disposal of Jorge Lacerda in Brazil and closure of Tejo in Portugal
- New organisation established: 4 GBUs with P&L accountability driving discipline and consistency

Financial Performance

- 2021 guidance(1) achieved at the top end of the range with "total" NRIgs of €3.2 billion, including EQUANS
- Continuing NRIgs of €2.9bn, significant growth in EBIT, up 42% organically to €6.1 billion, leveraging a favourable price environment and operational performance
- Strong liquidity and balance sheet enabled seamless management of commodity price environment, with impact of margin calls on CFFO
- 2021 proposed dividend of €0.85 per share
- 2022-2024 guidance announced with 2024 NRIgs expected in the range of €3.3-3.5 billion

(1) Main assumptions for the FY 2021 guidance upgraded in November 2021: market commodity prices as of 10/29/2021; average forex rates for FY 2021: €/$: 1.20; €/BRL: 6.28; up to €0.1bn dilution effect at the EBIT level from 2021 disposals; no major deterioration in the pattern of Covid restrictions experienced in 9M 2021, no P&L impact from the French gas regulated tariff freeze, a recurring effective tax rate of 27%, average temperature in France for Q4 2021; no major regulatory or macro-economic changes; no change in Group accounting policies; no 'discontinued operations' accounting.

1.1 Key financial figures at December 31, 2021

In billions of euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported basis)	% change (organic basis)
Revenues	57.9	44.3	+30.6%	+33.1%
EBITDA	10.6	8.9	+18.6%	+21.9%
EBIT	6.1	4.5	+36.8%	+42.2%
Net recurring income of continuing activities, Group share	2.9	1.7	+69.7%	
Net recurring income, Group share	3.2	1.7	+85.4%	
Net income, Group share	3.7	(1.5)	- -	
CAPEX (1)	8.0	7.5	+6,0% 1.0	
Cash Flow From Operations (CFFO) (2)	6.3	6.6	-5,3% 2.0	
Net financial debt (3)	25.3	22.5	2.9 vs Dec. 31, 2020	
Economic net debt	38.3	37.4	0.9 vs Dec. 31, 2020	
Net financial debt	3,6x	4,2x	-0.6x	

(1) Net of DBSO (Develop, Build, Share & Operate) and tax equity proceeds.
(2) Cash Flow From Operations: Free Cash Flow before maintenance Capex and nuclear provisions funding.
(3) Net financial debt is pro forma EQUANS intercompany debt (€0.4 billion).

1.2 2022-2024 outlook and guidance

The forecasts set forth below are based on data, assumptions and estimates considered to be reasonable by the Group at the date of issuance of this document.

These data and assumptions may evolve or be amended due to uncertainties related to the economic, financial, accounting, competitive, regulatory and tax environment or other factors that the Group may not be aware of at the date of registration of the management report. In addition, the fulfilment of forecasts requires the success of the Group's strategy. The Group therefore makes no commitment or warranty regarding the fulfilment of the forecasts set out in this section.

The forecasts presented below and the underlying assumptions, also been prepared in accordance with the provisions of Delegated Regulation (EU) No 2019/980 supplementing Regulation (EU) No 2017/1129 and the ESMA recommendations on forecasts.

The forecast presented below result from the budget and medium-term plan process as described in Note 14 to the consolidated financial statements for the year ended December 31, 2021; they have been prepared on a comparable basis with historical financial information and in accordance with the accounting methods applied to the Group's consolidated financial statements

1.2.1. Assumptions

- strategy: confirmation and deepening of the Group ambition to establish ENGIE as a leading force in the energy and climate transition. The Group will focus on the completion of the ongoing strategic reviews in order to create more value and efficiently allocate its capital for growth, in particular in Renewables, Infrastructure and Asset-based activities in Client Solutions;
- sanitary conditions: no stringent lockdowns due to Covid
- foreign exchange rates: Average forex:
  - €/USD: 1.14 for 2022, 1.16 for 2023 and 1.18 for 2024
  - €/BRL: 6.38 over 2022-24;
- regulated tariffs in France Infrastructures:
  - distribution, transport and storage: tariffs as published by the CRE in January 2020,
  - regasification: tariffs as published by the CRE in January 2021,
- regulated gas and power tariffs in France: Full pass through of supply costs in French BtoC supply tariffs;
- average hydraulic, wind and solar production;

- nuclear:
  - nuclear phase-out starting with Doel 3 in October 2022 and Tihange 2 in February 2023,
  - Belgian nuclear availability: c. 90% in 2022, 88% in 2023 and 95% in 2024 – based on availabilities as published on REMIT as of 01/01/2022, excluding definitive shutdowns (translating into c. 88%/60%/53% assuming a 0% availability for the reactors to v=be definitely shut down as per the Belgian law);
- Hedged volumes and prices for outright power production as of December 31, 2021:
  - 80% at 60€/MWh in 2022
  - 64% at 55€/MWh in 2023
  - 32% at 57€/MWh in 2024
- Market commodity prices: H2 2021 average prices

In €/MWh	**2022**	**2023**	**2024**
Power Base BE	118	79	67
Power Base FR	132	84	71
CSS Peak / Base NL	20 / (1)	10 / (4)	9 / (3)
CSS Peak / Base BE	18 / (4)	12 / (5)	12 / (3)
CSS Peak / Base IT	22 / (10)	15 / 6	15 / 5
CSS Peak / Base FR	50 / 10	24 / (1)	21 / 0
Gas TTF	48	29	22
CO_2	63	64	65

- climate: normalized conditions in France (gas distribution and energy supply + normalized hydro, wind and solar production);
- recurring net financial costs: -€1.4-1.6 million over 2022-24;
- discount rate for post-employment benefit provisions: based on market conditions at December 31, 2021, as described in note 21 to the consolidated financial statements ;
- no significant accounting changes compared to 2021;
- no major regulatory or macro-economic changes compared to 2021.

1.2.2. 2022-2024 Guidance

The progress made last year on the strategic plan to 2023 sets the foundation for ENGIE towards achieving its purpose of carbon neutrality while delivering long-term growth.

In the medium-term to 2024, the Group expects to deliver growth mainly driven by investment in Renewables and higher results from Energy Solutions, alongside a resilient contribution from Networks. Earnings should also benefit from significant performance improvements. Together these drivers are expected to more than offset the reduction from Belgian Nuclear, due to the planned phase-out of capacity by 2025, driving progressive growth in earnings and dividends.

European commodity price assumption in the guidance for residual merchant exposure: In light of the highly volatile European commodity price environment, ENGIE has applied an updated approach to the forward price assumption in the guidance. This price assumption is applicable to unhedged positions and is particularly relevant for Belgian, French Nuclear and French Hydro production. The price assumption used in the guidance for 2022-2024 provided today is based on the average of European forward prices as seen across H2 2021. This is an updated approach compared to the past, where guidance was based on European forward prices at December 31, of the prior year.

Therefore, ENGIE anticipates for 2022 to 2024:

In €billion	**2022 Results**	**2023 Results**	**2024 Results**
EBITDA	10.7 - 11.1	10.9 - 11.3	11.3 - 11.7
EBIT	6.1 - 6.5	6.2 - 6.6	6.4 - 6.8
RNRpg guidance	3.1 - 3.3	3.2 - 3.4	3.3 - 3.5

ENGIE remains committed to a “strong investment grade” rating and continues to target a leverage ratio of below or equal to 4.0x economic net debt to EBITDA.

For reference, applying the previous approach of assuming prices at December 31, 2021 would arithmetically translate to significantly higher NRIgs for the 2022 to 2024 period as follows: by €+0.6 billion for 2022, by €+0.4 billion for 2023 and by €+0.2 billion for 2024.

1.2.3. Overview of key targets

The Group has set up clear objectives for each of its core business.
In Renewables, ENGIE targets to reach 50 GW of capacity installed at 100% by 2025 and 80 GW by 2030. These targets are covered by a growing and realistic pipeline.
In Networks, French Regulated asset base is expected to grow c.1.5% per annum over 2021-2024 and international networks will provide growth.
Energy Solutions benefits from a growing pipeline of € 14 billion.

CAPEX

ENGIE confirms its €15-16 billion growth Capex target over 2021-2023 and expects to invest c.€5 billion mainly in the same key activities in 2024.
Maintenance Capex is expected to be maintained at c. €2.5 billion per annum on average to 2024 and decreasing over time.

Performance

Performance plan of €0.6 billion net EBIT contribution is confirmed for 2021-2023. Improvements are expected to come from operational excellence for c.€0.25 billion, support functions for c. €0.20 billion and loss-making entities for c. €0.15 billion. This performance plan will continue to 2024, with continued improvement expected to contribute to similar magnitude as in 2022-2023.

Disposals

2021-2023 indication has been upgraded to at least €11 billion net financial debt impact from €9-10 billion previously.
ENGIE is well advanced with already c. €9.2 billion of disposals signed or completed. For 2024, disposals are expected to significantly slow down with limited portfolio management.

EBIT evolution

ENGIE expects growth throughout the period, mainly fueled by investments (c. +€1.0 billion) and performance (c. +€0.7 billion), only partly offset by scope (c.€-0.3 billion) and other effects, as volumes, prices or foreign exchange, for an aggregate effect of c.€-0.7 to -1.1 billion.
EBIT CAGR from 2021 to 2024 is expected to reach 5-6% for core business and 1.5-3.5% for the whole ENGIE (including Nuclear).

Main drivers for 2022 EBIT evolution by activity

	Expected drivers
Renewables	Growth driven by newly commissioned capacity, higher prices and reversal of 2021 Texas cold snap, partly offset by no more benefit from GFOM rulings in Brazil
Networks	Reversal of 2021 cold temperatures and lower (smoothed) RAB remuneration in France, partly offset by growth in Latin America
Energy Solutions	Better operational performance, partly offset by reversal of 2021 cold temperatures
Thermal	Normalization of strong 2021 performance in Europe and impact of coal exit offset by higher contribution
Supply	Under pressure due to reversal of 2021 cold temperatures and high commodity price context
Nuclear	Higher achieved prices, offset by lower volumes (first reactor stopped in Belgium in October 2022) and higher Belgian nuclear tax

Main drivers for 2021-2024 EBIT evolution by activity

	Expected drivers	Estimated 2024 EBIT
Renewables	Investments contribution, higher prices, positive one-offs 2021	+ + + +
Networks	Lower RAB remuneration in France, temperature normalization, investments contribution	-
Energy Solutions	Investments contribution, EVBox contribution improvement	+ +
Thermal	Dilution, higher spreads, lower ancillaries and higher fleet availability	-
Supply	Temperature normalization, margin increase, growth in B2C services and power customer portfolio	+
Nuclear	Lower volumes (Belgian phase out), higher prices	- -

Each "+" sign amounts to c. €+200m, each "-" sign amounts to c. €-200m.

1.3 Dividend policy reaffirmed and €0.85 per share proposal for 2021

ENGIE is focused on delivering a progressively growing and sustainable dividend for shareholders.

The Board has reaffirmed the Group's dividend policy with a payout ratio of 65-75% of net recurring income Group share, and a floor of €0.65 per share for the 2021 to 2023 period.

For 2021, the Board has proposed a payout ratio of 66%. This translates to a dividend of €0.85 per share, which will be proposed for shareholder approval at the Annual General Meeting on the April 21, 2022.

1.4 Delivering on the strategic plan, setting the foundation for long-term success

In 2021, ENGIE delivered on commitments in an unprecedented energy environment, benefitting from its integrated business model. This is reflected in high levels of assets availability, opportunities captured from flexible generation, contractual positions actively managed and strong financial liquidity maintained.

Acceleration in Renewables, Energy Solutions, and development of international Networks

ENGIE has continued its growth throughout 2021.
The Group commissioned 9 GW of renewable capacity over the 2019-2021 period despite increasing global supply chain tensions experienced over 2021, leading to over 34 GW total installed capacity. The Group is stepping-up in Renewables growth with 4 GW capacity addition on average per year expected by 2025 to reach 50 GW of total installed renewables capacity at 100%. To support its ambition, ENGIE has a robust pipeline of c. 66 GW of identified projects.
After a period of uncertainty due to the pandemic, commercial development has resumed in Energy Solutions, where the city of Paris has selected ENGIE and its partner RATP Group to manage its cooling network with the renewal of the concession for 20 years in December 2021.
International Networks progressed with the start of commercial operation for Gralha Azul and first energization tests for Novo Estado, the two power transmission lines being built by ENGIE in Brazil.

Progress at pace on disposal plan

In 2021, ENGIE made very strong progress on its refocusing plan, with c. €9.2 billion of disposals signed or completed to date. Given the strong momentum, ENGIE now expects total net financial debt impact of at least €11 billion between 2021 and 2023, compared with the initial €9-10 billion indication.
Simplifying and refocusing

On November 5, 2021, ENGIE entered into exclusive negotiations with Bouygues for the sale of 100% of EQUANS. This is a major step forward in the Group's execution of its strategic plan towards building a simpler ENGIE that is focused on accelerating investment in its core activities. EQUANS is a global multi-technical services leader, which was created on July 1, 2021, as a separate division within ENGIE. Bouygues' firm and binding offer values 100% of EQUANS at €7.1 billion

on an enterprise value basis [1], The proposed transaction is expected to reduce ENGIE's net financial debt by €6.8 billion. This transaction is progressing as planned and still expected to close in H2 2022, subject to regulatory approvals and customary closing conditions.
Also, on August 31, ENGIE received a firm and irrevocable offer from ALTRAD group for ENDEL, a fully-owned subsidiary specialized in industrial maintenance and energy services. This represents another milestone in implementing ENGIE's strategy to simplify its service activities.
In May, ENGIE completed the 10% sale of GTT. With this partial sale, GTT is consolidated under the equity method as from June. Simultaneously to this, ENGIE issued a €290 million zero coupon bonds exchangeable into GTT shares in 2024. In case of full exchange of the bonds, ENGIE would retain a stake of c. 20% down from 40% prior to this transaction.
Lastly, ENGIE completed the sale of ENGIE EPS in July.
On geographic rationalization, the Group has exited or signed agreements to exit 18 countries [2] in 2021. Once closing is completed, the Group will be operating in 35 countries. ENGIE targets to be in less than 30 countries by 2023.

Infrastructures re-balancing

On December 22, 2021, ENGIE, along with its partner SIG, announced the completion of the sale of an 11.5% stake in GRTgaz. This transaction implied a valuation to RAB of 148%, reduced ENGIE's net financial debt by €1.1 billion and demonstrates ENGIE and its partner's shared view on the long-term role of both gas and renewable gases.

Disciplined capital allocation

Total Capex in 2021 amounted to €8.0 billion, with growth Capex at €4.3 billion.
Fully in line with the strategic plan presented in May 2021 towards Net Zero by 2045, growth Capex was allocated to Renewables (44%), Networks (31%) and Energy Solutions (17%) and substantially (over 90%) to organic developments.

Performance plan delivering

The performance plan being implemented delivered its first results, enabling ENGIE to meet its 2021 full year target of €0.1 billion of net EBIT contribution. Operational excellence and support functions optimization contributed to earnings growth.
As a reminder, ENGIE targets a net EBIT contribution of €0.6bn over the period 2021 to 2023**.**

1.5 Update on Belgian nuclear assets

The Belgian government has proposed a new draft law that is expected to be voted in spring 2022. It focuses on the availability of funds against nuclear provisions and proposes a timetable for the funding of dismantling and waste management costs by 2030. If voted through, this would lead to an additional funding for dismantling costs to 2030, representing up to c. €0.7 billion per annum between 2022 and 2024. Electrabel had already accounted for and committed to both, the waste disposal and dismantling costs, and its solid financial position enables the orderly management of these fundings. There is no change to the amount of provisions or the calculation scheme. ENGIE does not expect any change to Net Economic Debt from this draft law under discussion.

The next triennial review of the nuclear provisions towards dismantling costs and waste management will take place in H2 2022. Consistent with the 2019 process, the review will consider any updates required to the nuclear provisions based on discount rates and a review of baseline scenario for cost estimates.

(1) Including IFRS 16 debt.
(2) Including EQUANS' countries.

1.6 Progress on Net Zero ambition and key ESG targets

Progress on coal exit supporting Net Zero ambition

ENGIE is committed to achieving its Net Zero ambition covering all three scopes by 2045 following a "well below 2°C" trajectory with intermediate milestones. [In line with this target, ENGIE has become one of the founding members of the First Movers Coalition, launched at the COP26 in November 2021. By joining the coalition, ENGIE commits to buying low-carbon equipment to help develop decarbonized supply-chains.

ENGIE continues to progress on coal exit with the closing in October of the disposal of Jorge Lacerda in Brazil, which comprises a 0.7 GW coal plant. This transaction contributes towards a gradual transition of the regional economy while reducing potential local socio-economic impacts and demonstrates the importance of a just transition to the Group.
In addition, ENGIE's last coal power plant in Europe located in Portugal stopped operations in November 2021.
ENGIE is committed to exiting all coal assets in Europe by 2025 and globally by 2027, including coal generation for district heating and cooling networks.
At the end of 2021, coal represented 2.9 GW of ENGIE's 100.3 GW centralized power generation portfolio.

Key ESG targets

In 2021, greenhouse gas emissions from energy production were reduced to 67 million tons.
ENGIE also increased the share of renewables in its portfolio to 34% in 2021 from 31% at the end of 2020 with the commissioning of 3 GW of renewables.
On gender diversity, ENGIE had 25% women in management at the end of 2021 and is implementing action plans towards its ambition of reaching gender balance by 2030.

Say on climate resolution

As part of its dialogue with ENGIE's shareholders, the Board of directors has decided to consult them at the next Annual General Meeting on the Group's climate transition strategy.

1.7 Health & Safety

In 2021 the ENGIE Group and its subcontractors experienced severe accidents including 16 fatalities, notably at construction sites. A major company-wide response and comprehensive action plan is being implemented by the ENGIE leadership, to re-assess all safety standards and procedures in every activity and geography to ensure the application of the highest safety standards across the Group and its subcontractors.
The ENGIE Group is strongly committed to playing its role in ensuring every employee, supplier or subcontractor working on an ENGIE site returns home safe, each day.

1.8 Operational and financial review

1.8.4. Revenues

Revenues at €57.9 billion was up 30.6% on a gross basis and 33.1% on an organic basis.

Contributive revenues, after elimination of intercompany transactions

In millions of euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported basis)	% change (organic basis)
Renewables	3,661	2,971	+23.2%	32.9%
Networks	6,700	6,718	-0.3%	+1.8%
Energy Solutions	9,940	8,840	+12.4%	+13.0%
Thermal	4,089	3,281	+24.5%	+29.0%
Supply	13,237	10,792	+22.7%	+22.5%
Nuclear	56	39	+44.3%	+44.3%
Others	20,183	11,664	73.0%	+77.9%
TOTAL	**57,866**	**44,306**	**+30.6%**	**+33.1%**

Revenue for **Renewables** amounted to €3,661 million, up 23.2% on a gross basis and up 32.9% on an organic basis. Gross increase included negative foreign exchange effects mainly in Brazil. On an organic basis, revenue increased mainly in France and Brazil, thanks to better achieved hydro prices. Revenues from assets commissioned in Latin America, the United States and France also contributed to the increase.

Revenue for **Networks** amounted to €6,700 million, down 0.3% on a gross basis and up 1.8% on an organic basis. Gross increase included negative foreign exchange effects mainly in Latin America and Brazil and scope out in Turkey. Organically, French networks revenue increased mainly as a result of higher distributed volumes due to colder temperature compared to 2020. Outside France, revenue increase was driven by Gralha Azul and Novo Estado power transmission lines construction progress in Brazil.

Energy Solutions revenue amounted to €9,940 million, up 12.4% on a gross basis and 13.0% on an organic basis. Gross increase included negative foreign exchange effects notably in the United States. Organically, activity increased significantly in France for both distributed energy infrastructure and energy efficiency services, demonstrating strong Covid recovery. Activities in Italy and in North America also experienced positive organic growth.

Revenue for **Thermal** was up 24.6% on a gross basis and up 29.0% on an organic basis. Gross increase included negative foreign exchange effects mainly in Latin America and negative scope effect with the disposal of Jorge Lacerda in Brazil in October 2021. Organic variance is explained by the strong performance of Thermal activities in Europe thanks to exceptional market conditions allowing to capture higher spreads and increased ancillaries, notably from pumped storage in the UK and Belgium. Thermal activities in the Middle East contributed to the performance with higher dispatch as well as in Latin America with tariff indexation, only partly offset by lower dispatch in Brazil.

Revenue for **Supply** amounted to €13,237 million, up 22.7% on a gross basis and 22.5% on an organic basis. Besides positive foreign exchange effects, increase was mainly driven by higher commodity prices and a positive volume effect on gas due to colder temperature as well as Covid recovery, fostering growth in services.

Nuclear reported almost no external revenue post-elimination of intercompany operations, as its production was sold internally to other ENGIE businesses.

Revenue for the **Others** segment amounted to €20,183 million. The 73.0% reported increase is mainly driven by increase in commodity prices combined with a growth in volumes for Giants and BtoB Supply.

1.8.5. EBITDA

EBITDA at €10.6 billion, was up 18.6% on a gross basis and up 21.9% on an organic basis.

Activity/geography matrix

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2021
Renewables	462	176	1,035	83	11	(67)	**1,700**
Networks	3,520	119	470	-	18	(7)	**4,121**
Energy Solutions	593	207	(3)	71	41	(109)	**799**
Thermal	-	743	424	43	448	(30)	**1,628**
Supply	356	60	-	-	48	(20)	**445**
Nuclear	-	1,413	-	-	-	-	**1,413**
Others	-	-	1	10	(2)	449	**457**
TOTAL EBIT	**4,931**	**2,717**	**1,928**	**208**	**565**	**215**	**10,563**

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2020
Renewables	391	142	924	85	74	(40)	**1,576**
Networks	3,289	108	449	2	6	(6)	**3,848**
Energy Solutions	534	186	4	27	48	(62)	**738**
Thermal	-	607	614	40	472	(25)	**1,708**
Supply	256	200	2	-	25	(48)	**433**
Nuclear	-	415	-	-	-	-	**415**
Others	-	21	(1)	15	(8)	162	**189**
TOTAL EBIT	**4,470**	**1,680**	**1,992**	**168**	**617**	**(19)**	**8,908**

1.8.6. EBIT

EBIT at €6.1 billion was up 36.8% on a gross basis and up 42.2% on an organic basis.

- foreign exchange: a total adverse impact of €94 million mainly driven by the depreciation of the Brazilian real and the US dollar;
- scope: a net negative scope effect of €69 million mainly due to the sale of 10% of GTT's shares that led to a change in consolidation method for the 30% remaining and the partial sale of solar assets in India. These effects were partly offset by the sale of 29.9% of SUEZ which contributed negatively in 2020 and positive contribution from hydro acquisition in Portugal in December 2020;
- French temperature: compared to average, the temperature effect stood at c. €118 million, generating a positive variation of €338 million compared to a warmer than average 2020 across Networks, Supply and Others (1) in France.

(1) First effects in the "Others" activities due to the transfer of Entreprises & Collectivités from "Supply" to "Others"

EBIT contribution by activity

In millions of euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported basis)	% change (organic basis)	o/w temp. effect (France) vs. 2020
Renewables	1,185	1,093	+8.4%	+21.7%	-
Networks	2,314	2,060	+12.3%	+13.1%	210
Energy Solutions	366	305	+19.8%	-0.4%	-
Thermal	1,183	1,259	-6.0%	-3.9%	-
Supply	174	184	-5.5%	-6.4%	101
Nuclear	970	(111)	-	-	-
Others	(46)	(297)	+84.4%	+86.4%	26
TOTAL	**6,145**	**4,493**	**+36.8%**	**+42.2%**	**338**
EQUANS [1]	368	85	-	-	-
EBIT including EQUANS	6,513	4,578	+42.3	+46.8%	338

(1) EQUANS being accounted under IFRS 5 – non-current assets held for sale and discontinued operations.

Activity/geography matrix

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2021
Renewables	273	120	866	(13)	7	(68)	1,185
Networks	1,825	74	403	-	18	(7)	2,314
Energy Solutions	309	124	(5)	63	27	(152)	366
Thermal	-	564	189	41	421	(33)	1,183
Supply	202	(29)	-	-	25	(23)	174
Nuclear	-	970	-	-	-	-	970
Others	-	-	-	(1)	(2)	(43)	(46)
TOTAL EBIT	**2,609**	**1,823**	**1,453**	**91**	**495**	**(325)**	**6,145**

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2020
Renewables	152	89	775	54	62	(40)	1,093
Networks	1,608	66	386	2	4	(6)	2,060
Energy Solutions	256	106	1	17	35	(109)	305
Thermal	-	437	367	37	443	(25)	1,259
Supply	111	118	2	-	6	(52)	184
Nuclear	-	(111)	-	-	-	-	(111)
Others	-	20	(1)	-	(8)	(308)	(297)
TOTAL EBIT	**2,127**	**724**	**1,530**	**110**	**542**	**(540)**	**4,493**

1.8.6.1. Renewables: leveraging price tailwinds and contribution of newly commissioned assets

In millions of euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported basis)	% change (organic basis)
EBIT	1,185	1,093	+8.4%	+21.7%
Total CAPEX	2,007	1,631	+23.0%	-
CNR achieved prices (€/MWh)	56.4	43.9	+28.5%	-
DBSO [1] Margins (EBIT level)	31	98	-68,1%	-
Operational KPIs				
Commissioning (GW at 100%)	3.0	3.0		-
Hydro volumes France (TWh at 100%)	15.1	15.3	-0,5%	-

(1) Develop, Build, Share and Operate.

3 GW of renewable assets were commissioned in 2021 in ENGIE's key geographies, including 1.8 GW of wind assets and 1.1 GW of solar assets, taking total renewable installed capacity at 100% to 34.2 GW at the end of 2021.

In November 2021, ENGIE, alongside with its partner Crédit Agricole Assurances, signed an agreement to acquire Eolia, a leading renewable player in Spain. With 0.9 GW of operating assets and 1.2 GW of renewable projects pipeline, this acquisition will add to ENGIE's scale in the Iberian Peninsula. ENGIE will bring industrial value by leading on delivery of pipeline and providing multiple services, as O&M, Asset management, Energy Management, and development services, to operating assets. Once closed, this transaction will have a €0.4 billion net financial debt impact for ENGIE for a c. €2 billion Enterprise value.
In addition to Eolia, ENGIE further strengthened its pipeline through the acquisition of Assu Sol in Brazil.
More recently, in January 2022, Ocean Winds, ENGIE's joint venture with EDPR dedicated to offshore wind, has been awarded the rights to develop c. 1 GW of new offshore wind capacity in Scotland and the exclusive rights to develop, within a joint venture with Aker Offshore wind (33.3%), 870 MW of floating offshore wind capacity in South Korea. Additional rights for 450 MW are expected to follow.
The Group also supported its customers in their efforts in the energy transition by signing a total amount of 2.1 GW of green corporate Power Purchase Agreements (cPPAs), confirming ENGIE's top position as a green cPPAs supplier in the world.

Renewables reported a 21.7% organic EBIT increase, driven by higher prices (€+335 million) mainly for hydro in France and in Brazil as well as the GFOM hydro compensation (€+87 million versus last year). Capacity commissioned, mainly in the United States and Brazil, also contributed to this increase (€+102 million). This performance was partly offset by the impact of the Texas extreme weather event earlier in 2021 (€-90 million), lower DBSO margins and lower volumes in hydro both in Brazil and France.

1.8.6.2. Networks: colder temperature in Europe and higher international contribution

In millions of euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported basis)	% change (organic basis)
EBITDA	4,121	3,848	+7.1%	+7.6%
EBIT	2,314	2,060	+12.3%	+13.1%
Total CAPEX	2,525	2,591	-2.6%	-
Operational KPIs				
Temperature effect – France (EBIT in €m)	75.0	(135.0)	210	-
Smart meters (m)	9.2	6.9	2.2	-

French gas networks delivered high levels of reliability and solid operational performance on efficiency alongside progressing on the development of renewable gases, which have a growing role to play for the long-term. 2.2 million of smart meters were installed over 2021, almost 9.2 million smart meters have been deployed in total. Moreover, 147 new biomethane production sites have been connected to ENGIE's network leading to a total of 351 sites connected. Altogether these units can contribute to a yearly production of up to 6.1 TWh.

In Brazil, commercial operation started for Gralha Azul, and first energization tests have been carried out on the Novo Estado, the two power transmission lines being built by ENGIE. TAG is also performing very well, achieving results above the acquisition plan.

Networks reported a 13.1% organic EBIT increase.
French infrastructures EBIT was up €216 million driven by colder temperature and recovery from adverse Covid impacts in 2020, partly offset by lower transmission volumes subscribed and lower tariffs revenues reflecting regulatory reviews, as expected. EBIT outside France was also up €51 million with organic growth in Brazil from TAG, in addition to colder temperature in Rest of Europe.

1.8.6.3. Energy Solutions: positive business development and performance improvement offset by higher costs of EVBox

In millions of euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported basis)	% change (organic basis)
Revenues	9,940	8,840	+12.4%	+13.0%
EBIT	*366*	*305*	+19.8%	-0.4%
Total CAPEX	*901*	*767*	+17.5%	
Operational KPIs	-	-	-	-
Distrib. Infra installed cap. (GW)	*23*	*22,6* (1)	*+1.8%*	-
EBIT margin (excluding Evbox)	*5.2%*	*4.1%*	*+110 bps*	-
Backlog - French concessions (bn€)	16.8	13.3	+3.5%	-

(1) Restated data to exclude countries ENGIE exited or stopped developments following geographical rationalization presented in May 2021.

0.4 GW net installed capacity have been added in distributed energy Infrastructures in 2021 (considering 0.8 GW capacity sold in Qatar) and 1.5 GW are already under construction.
On 6 December 2021, ENGIE, alongside with its partner RATP, was selected by the City of Paris to manage its cooling network starting in April 2022. Renewal of this 20-year concession covers the production, storage, transport, and distribution of the city's cooling energy, and will generate a projected revenue of €2.4 billion over the course of the contract. ENGIE will also be responsible for the 158 km network extension by 2042, to serve all the districts in Paris and to open up to new clients such as hospitals, nurseries, schools, and retirement homes.

Energy Solutions reported a negative 0.4% organic EBIT variation. Distributed energy infrastructures activities EBIT increased by €+14 million to reach €385 million, mainly driven by good operating performance notably in North America and France as well as colder temperature for district heating in France. Energy Efficiency services EBIT was up €+74 million to €126 million with progressive Covid recovery allowing to deliver improved operating performance. These positive variances were fully offset by higher costs linked to the development of EVBox (contribution down -€90 million to a negative of €145 million in 2021).

In December 2021, TPG, EV Box and ENGIE mutually decided to terminate the Business Combination Agreement signed in December 2020, as the parties were unable to agree on a new deal ahead of the expiration date of December 31, 2021. This was driven by a number of factors including the severe impacts of the global component shortage crisis on the EVBox business, which impacted sales and margins due to higher costs. ENGIE is implementing actions to limit the impacts of supply shortages and address the underperformance. ENGIE believes the future is very bright for EVBox as a market leading charging solutions provider and remains committed to supporting EVBox in its growth journey.

1.8.6.4. Thermal: headwinds in Chile, higher spreads and ancillaries captured by flexible assets in Europe

In millions of euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported basis)	% change (organic basis)
EBITDA	1,628	1,708	-4.7%	-2.4%
EBIT	1,183	1,259	-6.0%	-3.9%
Operational KPIs				
Average captured CSS Europe (€/MWh)	19.0	12.0	+62.9%	-
Installed capacity (GW at 100%)	59.9	63.6	(3.7)	-

Thermal achieved high level of reliability with internal unplanned unavailability below 5%.
Thermal provides important flexibility in a backdrop of intermittent renewables and is contributing to future security of supply.
On October 31, 2021, ENGIE's two Combined Cycle Gas Turbine (CCGT) projects in Vilvoorde and on the Awirs site, with a capacity of 875 MW each, were selected for a 15-year within the first Belgian Capacity Remuneration Mechanism (CRM) auction. The projects represent an investment of c. €0.5 billion per project. Subject to full completion of the permitting process, the Group will start construction of the Awirs project to target commissioning by November 1, 2025. For the Vilvoorde plant, a new filing for environmental permit has been submitted in January 2022, subsequent to a negative

decision in the Flemish Region in October last year. Both power plants will be compatible with the transition towards carbon-neutral electricity generation in the long run, as they will be equipped to use renewable gases.
Thermal GBU continues to progress on reducing CO_2 emissions. In line with this, ENGIE closed the sale of Jorge Lacerda in Brazil in October 2021 and stopped operations in November of its last coal power station in Europe located in Portugal, reducing coal installed capacity at 100% to less than 3 GW.

Thermal reported a 3.9% organic EBIT decrease. Overall, 2021 was a positive year following a very good 2020.
Contracted EBIT decreased by €-200 million to €656 million mainly driven by the combined impact of higher sourcing spot prices driven by a poor hydrology, lower availability of thermal plants and higher fuel prices in Chile. Merchant EBIT increased €+151 million to €527 million benefitting from higher ancillaries and spreads for flexible European gas plants and pumped storage assets.

1.8.6.5. Supply: lower margins and reversal of 2020 positive one-offs partly offset by higher volumes

In millions of euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported basis)	% change (organic basis)
EBITDA	445	433	+2.6%	+2.0%
EBITDA	174	184	-5.5%	-6.4%
French temperature effect (EBIT in m€)	34	(67)	86	

In France, ENGIE serves 2.6 million BtoC customers with regulated gas tariffs. To support affordability in the current commodity price environment, the French Government decided to implement a tariff freeze for regulated customers from November 1, 2021. In October, the French Government proposed an amendment to the 2022 budget law with a view to compensating ENGIE and other suppliers for loss in revenue due to this measure. This amendment was later voted into law by the Senate and by the National Assembly. This allows ENGIE to book trade receivables and be kept economically neutral.

Supply EBIT was €174 million, down 6.4% on an organic basis.
This EBIT decrease was mainly driven by negative prices effect (-€112 million versus last year), with lower power margins in Belgium and gas margins in Romania, only partly offset by higher margins and better hedging in Australia. Other effects (-€34 million) as reversal of 2020 positive one-offs also weighed on yearly variation.
Volume effects were positive (+€143 million) with colder temperature and Covid recovery.

1.8.6.6. Nuclear: exceptional performance driven by higher prices and better availability

En millions d'+euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported basis)	% change (organic basis)
EBITDA	1,413	415		
EBIT	*970*	*(111)*		
Total Capex	*1,462*	*1,740*	*-16,0%*	
Operational KPIs				
Output (BE + FR, @ share, TWh)	*47.4*	*36.5*	*+10.9 TWh*	-
Availability (Belgium at 100%)	*91,8%*	*62,6%*	*+ 2 920 bps*	-

ENGIE's Nuclear assets in Belgium achieved high level of availability of 92% (63% in 2020), leading to much higher levels of output compared to last year.

EBIT for Nuclear amounted to €970 million for 2021, after 3 consecutive years of negative EBIT, 2020 EBIT having been negative by €111 million. This performance is achieved thanks to a mix of higher achieved prices (+€733 million) and better availability (+€518 million), both on drawing rights in France and units in Belgium. It is partly offset by increasing taxes specific to units in Belgium reaching a total €149 million. Depreciation & amortization was lower following the 2020 impairment.

1.8.6.7. Others: strong commercial and trading performance and lower corporate costs

EBIT amounted to -€46 million, representing a €250 million increase compared to 2020. This increase was mainly driven by GEMS (Global Energy Management & Sales [(1)]) strong commercial and trading performance especially in H2 2021 in the context of high volatility, Covid recovery, and colder temperature. Overall, GEMS was up €318 million to €564 million. Other activities were also lowered by the normalization of GTT's contribution (down -€34 million to €70 million) after a very strong 2020.
Lastly, Corporate costs were lower year-on-year.

1.8.6.8. EQUANS, discontinued operations

Following the entry into exclusive negotiations with Bouygues on 5 November 2021, EQUANS has been accounted for as "held for sale and discontinued operations" under the IFRS 5 accounting standard, therefore presented in FY 2021 results as "Discontinued operations"
Total earnings, including EQUANS for comparability with guidance were as follows:

In € billion	Reported / Continuing operations	Dicountinued operations	Total	Guidance
EBITDA	10.6	0.6	11.2	10.8-11.2
EBIT	6.1	0.4	6.5	6.1-6.5
NRIgs	2.9	0.2	3.2	3.0-3.2
Economic net debt / EBITDA	3.6x	-	3.5x	≤ 4.0x

"Total" column numbers are the basis for the comparison with the FY 2021 guidance that was last updated on November 10, 2021.

1.8.7. Comparable basis organic growth analysis

In millions of euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported/organic basis)
Revenues	**57,866**	**44,306**	**+30.6%**
Scope effect	(49)	(509)	-
Exchange rate effect	-	(342)	-
Comparable data	**57,817**	**43,455**	**+33.1%**

In millions of euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported/organic basis)
EBITDA	**10,563**	**8,908**	**+18.6%**
Scope effect	(34)	(156)	-
Exchange rate effect	-	(116)	-
Comparable data	**10,529**	**8,637**	**+21.9%**

In millions of euros	Dec. 31, 2021	Dec. 31, 2020	% change (reported/organic basis)
EBIT	**6,145**	**4,493**	**+36.8%**
Scope effect	(32)	(101)	-
Exchange rate effect	-	(94)	-
Comparable data	**6,113**	**4,298**	**+42.2%**

(1) BtoB Supply activities transferred from Supply to GEM in "Other" activities during 2021.

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

2 OTHER INCOME STATEMENT ITEMS

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

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)	% change (reported basis)
EBIT	**6,145**	**4,493**	**+36.8%**
(+) Mark-to-Market on commodity contracts other than trading instruments	721	198	
(+) Non-recurring share in net income of equity method entities	50	(137)	
Current operating income including operating MtM and share in net income of equity method entities	**6,916**	**4,554**	**+51.9%**
Impairment losses	(1,028)	(3,502)	
Restructuring costs	(204)	(257)	
Changes in scope of consolidation	1,107	1,641	
Other non-recurring items	(69)	(879)	
Result from operating activities	**6,722**	**1,558**	**+331.6%**
Net financial income/(loss)	(1,350)	(1,634)	
Income tax benefit/(expense)	(1,695)	(666)	
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**80**	**(151)**	
NET INCOME/(LOSS)	3,758	(893)	+521.0%
Net recurring income/(loss) Group share	**3,158**	**1,703**	
Net recurring income/(loss) Group per share	**1.26**	**0.63**	
Net income/(loss) Group share	**3,661**	**(1,536)**	
Non-controlling interests	**97**	**644**	

(1) *Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as discontinued operations in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").*

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

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
Net recurring income/(loss) Group share	**3,158**	**1,703**
Impairment & Others	(1,122)	(4,822)
Restructuring costs	(204)	(257)
Changes in scope of consolidation	1,107	1,641
Mark-to-Market on commodity contracts other than trading instruments	721	198
Net income/(loss) Group share	**3,661**	**(1,536)**

(1) *Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as discontinued operations in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").*

Result from operating activities amounted to €6,722 million, representing an increase compared with 2020, mainly due to EBIT growth, lower impairment losses, and lower other non-recurring items, partially offset by lower gains on asset disposals.

Result from operating activities was also affected by:

- net impairment losses of €1,028 million (compared with €3,502 million in 2020) mainly relating to assets concerned by the exit from coal fired power generation announced by the Group in 2021 (€228 million), assets concerned by the strategic review of Client Solutions announced by the Group in 2020, in France, Africa and Asia (€196 million), and assets whose medium and long-term outlook has been revised or that have encountered operational difficulties, in particular renewable production assets in Latin America and thermal power generation assets in Asia (€311 million) *(see Note 10.1)*;
- restructuring costs of €204 million (compared with €257 million in 2020) (*see Note 10.2*);

- positive scope effects of €1,108 million, mainly relating to the disposal of 10% of GTT's share capital and the remeasurement of the remaining 30% (€628 million), and the earn-out related to the sale of 29.9% of ENGIE's stake in SUEZ (€347 million) *(see Note 10.3)*;

- other non-recurring items for a negative €69 million (versus a negative €879 million in 2020). In 2020, this amount included in particular the initial accounting impact of extending the trading management method launched by the GEM BU in 2017 to the rest of the Group's gas positions in Europe for a negative €726 million, as well as the impacts of the adjustment to provisions for the dismantling and rehabilitation of industrial sites (*see Note 10.4*).

The **net financial loss** amounted to €1,350 million in 2021, compared with €1,634 million in 2020 (*see Note 12*) despite an increase in the average cost of gross debt. This improvement is mainly due to the positive impact of changes in the fair value of money market funds held by Synatom. Adjusted for non-recurring items, the net financial loss was €1,494 million in 2021, compared with €1,377 million in 2020. This deterioration is notably due to the increase in the cost of debt in Brazil, of around 12% compared with 7% in 2020, driven by inflation. Debt in Brazil - 80% of which is at a variable rate in line with the inflation indexation of the underlying operating revenues - represents around 10% of consolidated debt.

The **income tax expense** for 2021 amounted to €1,695 million (versus €666 million in 2020). Adjusted for these non-recurring items, the recurring effective tax rate was 29.3% in 2021 compared with 30.5% in 2020, mainly due to:

- the decrease in the 2021 statutory income tax rate in France (28.40% versus 32.02% in 2020), and the change in the interest rate mix in the various countries – *around -2.1 points*;
- the favorable change in untaxed losses, particularly in Belgium, the USA, Italy and Germany – *around -7 points*;

These items were partially offset by:

- decreases in deferred tax assets in certain countries (Australia, Luxembourg, the Netherlands), and the increase in provisions for uncertain tax positions in others – *around +7 points*;
- the effect on deferred tax positions of the increase in the future income tax rate voted in the United Kingdom – *around +1 point*.

The total effective tax rate rose sharply (36.9% compared with a negative 169.9% in 2020), mainly due to the non-taxation of losses on non-recurring items (notably on certain derivatives) in Belgium, Australia and the United states, and by changes in provisions for tax contingencies. The effective tax rate in 2020 appeared low due to a very low earnings.

Net recurring income, Group share relating to continuing operations amounted to €2.9 billion compared to €1.7 million at December 31, 2020. The increase was mainly driven by the strong increase in EBIT and recurring effective tax rate decrease from 30.5% to 29.3%.

Net recurring income Group share including EQUANS contribution amounted to €3.2 billion compared to €1.7 billion at December 31, 2020.

Net income Group share including EQUANS amounted to €3.7 billion. The € 5.2 billion increase compared to 2020 was mainly linked to the higher net recurring income Group share and lower impairment loses.
2021 impairment of €1.0 billion was mainly related to coal assets in Brazil and Renewables in Mexico.
2021 capital gains of €1.1 billion were mainly related to the sale of 10% shareholding in GTT (incl. the revaluation of the 30% retained) and the earn-out on the 29.9% shareholding in SUEZ sold in 2020.

Net income attributable to non-controlling interests amounted to €97 million, compared with €644 million in 2020. This decrease was primarily the result of renewable generation partnerships in the United States, that recorded unrealized losses on economic commodity hedges on short net positions in an environment of sharply increasing commodity prices.

Return on capital employed (ROCE) improved over the year from c. 5.7% in 2020 to c. 9.1% in 2021, mainly thanks to EBIT improvement and tax rate variation.

3 CHANGES IN NET FINANCIAL DEBT

Net financial debt stood at €25.4 billion up €2.9 billion compared to December 31, 2020.
The increase was mainly attributable to:

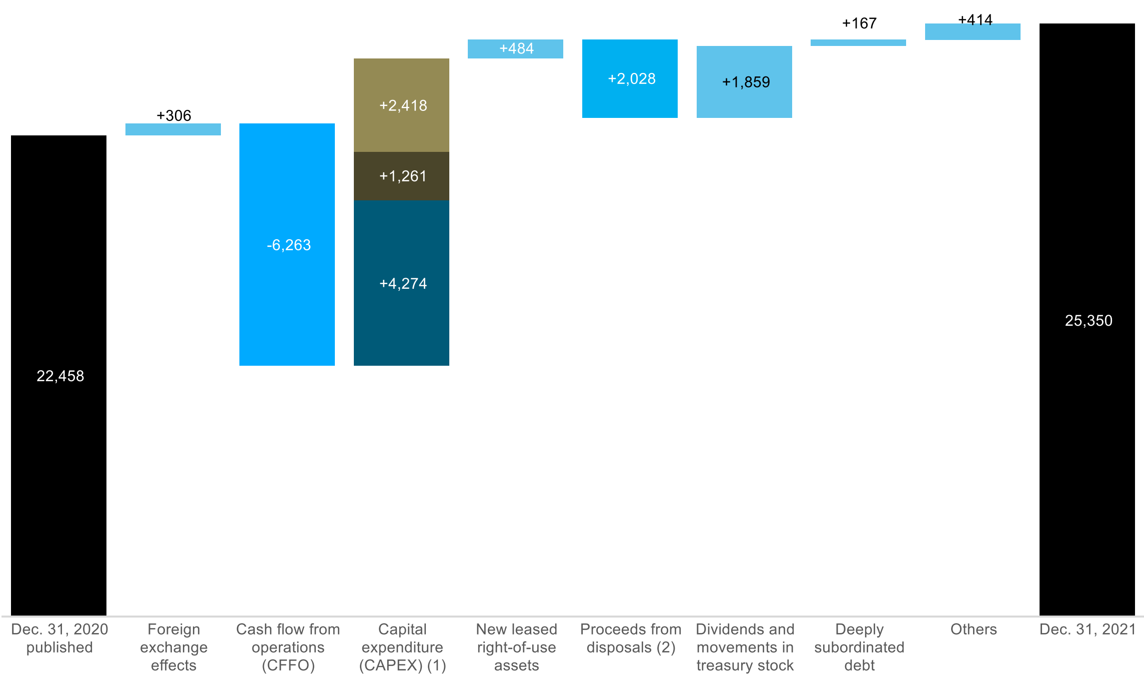
(i) total capital expenditure over the period of €8.0 billion, of which Belgian nuclear provisions funding of €1.3 billion;
(ii) dividends paid to ENGIE SA shareholders (€1.4 billion) and to non-controlling interests (€0.4 billion mainly in Latin America and to GRTgaz);
(iii) other items included, €1.5 billion, mainly related to new leased right of use assets, hybrid repayments and foreign exchange rates effects;

only partly offset by:

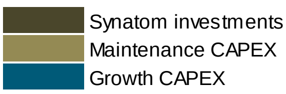
(i) cash Flow From Operations of €6.3 billion (€8.5 billion excluding margin calls); and
(ii) disposals of €2.0 billion, mainly GRTgaz.

Changes in net financial debt break down as follows:

In millions of euros



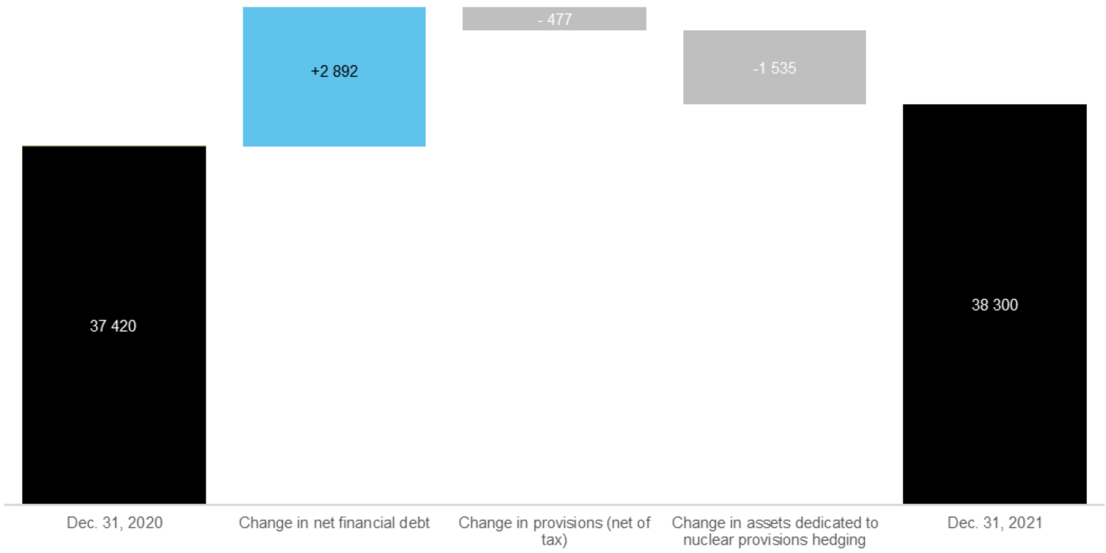
(1) *Capital expenditure net of DBSO proceeds.*
(2) *Excluding DBSO proceeds.*



Economic net debt stood at €38.3 billion, up €0.9 billion compared to 31 December 2020. Increase of net financial debt was partly offset by nuclear provision funding (-€1.3 billion) and actuarial gains on employee benefits provisions (-€0.8 billion).

Changes in economic net debt break down as follows:

In millions of euros



The **net financial debt to EBITDA ratio** stood at 2.4x, down 0.1x compared to December 31, 2020. The average cost of gross debt was 2.63%, up 25bps compared with December 31, 2020

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Net financial debt	25,350	22,458
EBITDA	10,563	8,908
NET DEBT/EBITDA RATIO	**2.40**	**2.52**

The **economic net debt** to EBITDA stood at 3.6x, down 0.4x compared to December31, 2020, and in line with target ratio of less than or equal to 4.0x.

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Economic net debt	38,300	37,420
EBITDA	10,563	8,908
ECONOMIC NET DEBT/EBITDA RATIO	**3.62**	**4.20**

3.1 Cash flow from operations (CFFO)

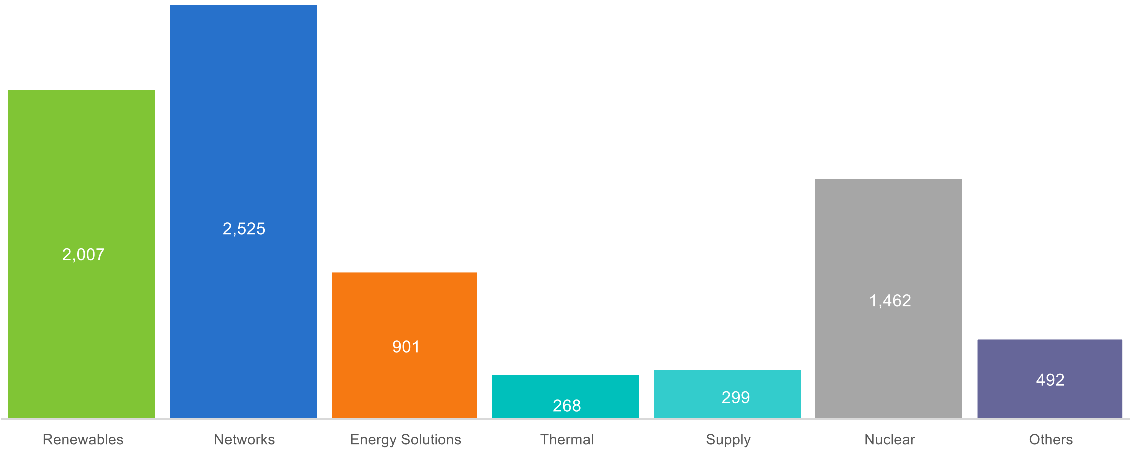
Cash flow from operations amounted to €6.3 billion, down €0.4 billion compared to 2020. This decrease is mainly due to negative changes in Working Capital Requirements (-€1.4 billion), primarily driven by margin calls (-€2.2 billion) more than offsetting higher operating cash-flows (+€1.3 billion). Tax and interest paid were also slightly higher.

3.2 Net investments

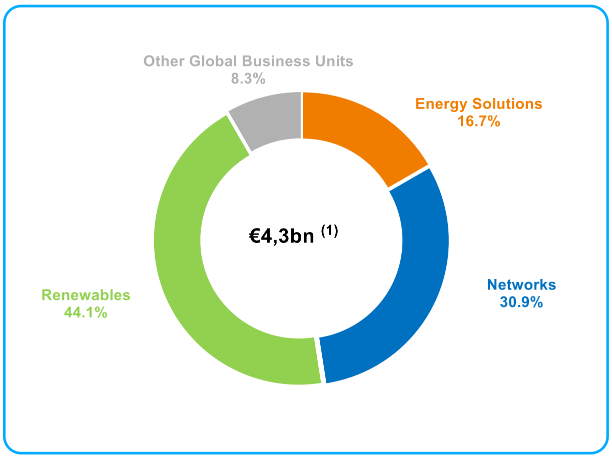
Total Capex amounted to €6.1 billion, including growth CAPEX of €4.3 billion.

Capital expenditure (CAPEX) by business

In millions of euros



Growth capital expenditure amounted to €4,3 billion, breaking down as follows by business:



Main projects (€bn)		
Renewables	~	**1.9**
USA - Wind & Solar	~	0.8
France renewables	~	0.3
Latin America - Wind & Solar	~	0.3
Networks	~	**1.3**
GRDF - Smart meters + network development	~	0.6
Brazil - Power transmission lines	~	0.4
Client Solutions	~	**0.7**
US Georgetown University	~	0.2
ENGIE solutions - various projects	~	0.2

(1) *Net of disposals under DBSO operations, excluding Corporate, and Synatom reallocated to maintenance expenditure.*

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

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2021
Renewables	244	122	462	773	183	104	**1,887**
Networks	812	68	440	-	-	-	**1,320**
Energy Solutions	209	122	15	298	24	45	**712**
Thermal	-	8	26	-	(57)	7	**(17)**
Supply	74	46	-	-	11	24	**155**
Nuclear	-	-	-	-	-	-	**-**
Others	-	-	1	-	1	217	**218**
TOTAL GROWTH CAPEX	**1,338**	**366**	**943**	**1,071**	**161**	**396**	**4,274**

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2020 (1)
Renewables	152	63	635	122	(453)	1,010	**1,529**
Networks	822	40	659	-	1	57	**1,579**
Energy Solutions	208	38	4	247	22	72	**591**
Thermal	-	13	122	-	(111)	3	**28**
Supply	60	49	-	-	8	27	**144**
Nuclear	-	-	-	-	-	-	**-**
Others	-	-	3	9	1	(10)	**2**
TOTAL GROWTH CAPEX	**1,241**	**204**	**1,423**	**378**	**(532)**	**1,159**	**3,873**

(2) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as discontinued operations in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

Net investments for the period amounted to €6.1 billion and include:

- growth capital expenditure for €4.3 billion (see above);
- gross maintenance capital expenditure amounting to €2.4 billion;
- the €1.3 billion net increase in Synatom investments;
- new right-of-use assets recognized over the period (€0.4 billion);
- changes in the scope of consolidation for the period relating to acquisitions and disposals of subsidiaries for €0.3 billion; and
- proceeds from disposals representing an inflow of €2.0 billion.

3.3 Dividends and movements in equity

Dividends and movements in treasury stock during the period amounted to €1.9 billion and include ENGIE's dividend payment in May for the 2020 fiscal year for €1.4 billion, dividends paid by various subsidiaries to their non-controlling interests in an amount of €0.4 billion, and the payment of interest on hybrid debt for €0.1 billion.

3.4 Net financial debt at December 31, 2021

Excluding amortized cost but including the impact of foreign currency derivatives, at December 31, 2021 a total of 83% of net financial debt was denominated in euros, 11% in US dollars and 10% in Brazilian real.

Including the impact of financial instruments, 91% of net debt was at fixed rates.

The average maturity of the Group's net financial debt is 11.8 years.

At December 31, 2021, the Group had total undrawn confirmed credit lines of €12.0 billion.

3.5 Rating

On January 17, 2022, Moody's reaffirmed its Baa1/P-2 senior unsecured rating, with a stable outlook.

On October 15, 2021, Fitch affirmed its long-term issuer rating to A-, which was downgraded on March 24, 2021, and its short-term rating of F1, with a stable outlook.

On June 7, 2021, S&P affirmed its BBB+ long-term issuer rating and short-term issuer rating at A-2, with a stable outlook.

4 OTHER ITEMS IN THE STATEMENT OF FINANCIAL POSITION

In millions of euros	Dec. 31, 2021	Dec. 31, 2020	Net change
Non-current assets	**117,418**	**93,095**	**24,323**
Of which goodwill	*12,799*	*15,943*	*(3,144)*
Of which property, plant and equipment and intangible assets, net	*57,863*	*57,085*	*778*
Of which financial instruments derivatives	*25,616*	*2,996*	*22,620*
Of which investments in equity method entities	*8,498*	*6,760*	*1,738*
Current assets	**107,915**	**60,087**	**47,828**
Of which trade and other payables	*32,556*	*14,295*	*18,260*
Of which financial instruments derivatives	19,373	8,069	11,304
Of which assets classified as held for sale	*11,881*	*1,292*	*10,589*
Total equity	**41,980**	**33,856**	**8,124**
Provisions	25,459	27,073	(1,613)
Borrowings	41,048	37,939	3,109
Financial instruments derivatives	46,931	13,125	33,806
Other liabilities	69,916	41,191	28,725
Of which liabilities directly associated with assets classified as held for sale	*7,415*	*488*	*6,927*

The carrying amount of **property, plant and equipment and intangible assets** was €57.9 billion, up €0.8 billion compared with December 31, 2020. This increase was primarily the result of acquisitions and development capital expenditure during the period (€7.2 billion positive impact) and foreign exchange effects (€1 billion positive impact mostly relating to the appreciation of the US dollar and the pound sterling), and was partially offset by depreciation and amortization charges (€4.6 billion negative impact), the classification of the EQUANS activities under "Discontinued operations" (€1.5 billion negative impact) and impairment losses (€1.0 billion negative impact).

Goodwill decreased by €3.1 billion to €12.8 billion, mainly due to EQUANS activities being classified under "Assets classified as held for sale".

Investments in equity method entities increased by €1.7 billion, primarily due to the disposal of a 10% stake in GTT which is now accounted for using the equity method.

Total equity amounted to €42 billion, up €8.1 billion on December 31, 2020. The increase stemmed mainly from other comprehensive income (€5.7 billion positive impact, including a positive €4 billion of cash flow hedges on commodities, a positive €1.7 billion of actuarial gains and losses, and a positive €0.9 billion of translation adjustments) and from net income for the period (€3.8 billion positive impact), partially offset by dividends paid (€1.7 billion negative impact).

Provisions amounted to €25.5 billion, a decrease of €1.6 billion compared with December 31, 2020. This decrease stemmed mainly from actuarial gains on provisions for post-employment benefits and other long-term benefits (which deducted €2.0 billion from the provision amount) owing to the sharp rise in discount rates over the period (*see Note 20*).

The increase in **derivative financial instruments** and **trade and other receivables** compared to December 31, 2020 is mainly due to the change in commodity prices over the period.

At December 31, 2021, assets and liabilities classified under **"Assets classified as held for sale"** and **"Liabilities directly associated with assets classified as held for sale"** mainly comprised EQUANS activities.

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 2021 totaled €36,224 million, an increase compared to 2020 (€19,272 million), both on the gas and electricity markets.

The net operating loss amounted to €846 million loss in 2021, an improvement of €794 million compared with a loss of €1,640 million in 2020. The energy margin decreased by €1,009 million.

Net financial income amounted to €381 million, a decrease of €1,058 million compared to 2020 due to lower dividends received.

Non-recurring items represented an income of €1,771 million, mainly comprising changes in the value of equity interests (including Electrabel) and capital gains on the disposal of shares (including GRTgaz).

The income tax benefit amounted to €474 million, versus an income tax benefit of €532 million in 2020, including a tax consolidation benefit of €408 million.

The net income for the year came out at €1,780 million.

Shareholders' equity amounted to €31,211 million at end-2021 compared with €30,702 million at end-2020. The €509 million increase was mainly due to the 2021 net income of €1,780 million, and to the 2020 dividend payment for an amount of €-1,305 million.

At December 31, 2021, borrowings and debt stood at €39,361 million, and cash and cash equivalents totaled €11,232 million (of which €7,533 million relating to subsidiaries' current accounts).

Information relating to payment terms

Pursuant to Article D.441-4 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 Article D.441-4 of the French Commercial Code

	Article D. 441 I.- 1°: Invoices received, unpaid and overdue at the reporting date						Article D. 441 I.- 2°: Invoices issued, unpaid and overdue at the reporting date					
In millions of euros	**0 days (indicative)**	**1 to 30 days**	**31 to 60 days**	**61 to 90 days**	**91 days or more**	**Total (1 day or more)**	**0 days (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	-					40,767	-					5,928,591
Aggregate invoice amount (incl. VAT)	-	12.9	369.6	1.1	141.4	524.9	-	1,921.5	50.9	34.1	5,587.3	2,593.8
Percentage of total amount of purchases (incl. VAT) for the period	-	0.03%	0.83%	0.00%	0.32%	1.19%						
Percentage of total revenues (incl. VAT) for the period							-	4.50%	0.12%	0.08%	1.37%	6.07%
(B) Invoices excluded from (A) relating to disputed or unrecognized receivables and payables												
Number of excluded invoices	177						503					
Aggregate amount of excluded invoices	(2.8)						0.9					
(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, 2021	Dec. 31, 2020 [1]
REVENUES	**7.2 & 8**	**57,866**	**44,306**
Purchases and operating derivatives	9.1	(38,861)	(28,088)
Personnel costs	9.2	(7,692)	(7,503)
Depreciation, amortization and provisions	9.3	(4,840)	(4,477)
Taxes		(1,479)	(1,207)
Other operating income		1,122	971
Current operating income including operating MtM		**6,116**	**4,001**
Share in net income of equity method entities	7.2	800	553
Current operating income including operating MtM and share in net income of equity method entities	**0**	**6,916**	**4,554**
Impairment losses	10.1	(1,028)	(3,502)
Restructuring costs	10.2	(204)	(257)
Changes in scope of consolidation	10.3	1,107	1,641
Other non-recurring items	10.4	(69)	(879)
RESULT FROM OPERATING ACTIVITIES	**10**	**6,722**	**1,558**
Financial expenses		(2,061)	(2,168)
Financial income		711	533
NET FINANCIAL INCOME/(LOSS)	**11**	**(1,350)**	**(1,634)**
Income tax benefit/(expense)	12	(1,695)	(666)
NET INCOME/(LOSS) RELATING TO CONTINUING OPERATIONS		**3,678**	**(742)**
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS		**80**	**(151)**
NET INCOME/(LOSS)		**3,758**	**(893)**
Net income/(loss) Group share		**3,661**	**(1,536)**
Of which Net income/(loss) relating to continuing operations, Group share		*3,582*	*(1,384)*
Of which Net income/(loss) relating to discontinued operations, Group share		*79*	*(153)*
Non-controlling interests		**97**	**644**
Of which Non-controlling interests relating to continuing operations		*96*	*642*
Of which Non-controlling interests relating to discontinued operations		*1*	*2*
BASIC EARNINGS/(LOSS) PER SHARE (EUROS)	**13**	**1.46**	**(0.71)**
Of which Basic earnings/(loss) relating to continuing operations per share		*1.43*	*(0.65)*
Of which Basic earnings/(loss) relating to discontinued operations per share		*0.03*	*(0.06)*
DILUTED EARNINGS/(LOSS) PER SHARE (EUROS)	**13**	**1.46**	**(0.71)**
Of which Diluted earnings/(loss) relating to continuing operations per share		*1.42*	*(0.65)*
Of which Diluted earnings/(loss) relating to discontinued operations per share		*0.03*	*(0.07)*

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as “Discontinued operations” in application of IFRS 5 (see Note 2 “Restatement of 2020 comparative data”).

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, 2021	Dec. 31, 2020 (1)
NET INCOME/(LOSS)		**3,758**	**(893)**
Debt instruments	17.1	(21)	(46)
Net investment hedges	18	(215)	128
Cash flow hedges (excl. commodity instruments)	18	511	(250)
Commodity cash flow hedges	18	3,980	872
Deferred tax on items above		(1,333)	(136)
Share of equity method entities in recyclable items, net of tax		270	(387)
Translation adjustments		909	(1,938)
Recyclable items relating to discontinued operations, net of tax		114	(159)
TOTAL RECYCLABLE ITEMS		**4,215**	**(1,916)**
Equity instruments	17.1	159	45
Actuarial gains and losses		1,742	(1,587)
Deferred tax on items above		(451)	378
Share of equity method entities in actuarial gains and losses, net of tax		-	75
Non-recyclable items relating to discontinued operations, net of tax		48	16
TOTAL NON-RECYCLABLE ITEMS		**1,499**	**(1,073)**
TOTAL RECYCLABLE ITEMS AND NON-RECYCLABLE ITEMS		**5,712**	**(2,990)**
TOTAL COMPREHENSIVE INCOME/(LOSS)		**9,471**	**(3,882)**
Of which owners of the parent		*9,415*	*(4,046)*
Of which non-controlling interests		*56*	*163*

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

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, 2021	Dec. 31, 2020
Non-current assets			
Goodwill	14	12,799	15,943
Intangible assets, net	15	6,784	7,196
Property, plant and equipment, net	16	51,079	49,889
Other financial assets	17	10,949	9,009
Derivative instruments	17	25,616	2,996
Assets from contracts with customers	8	34	26
Investments in equity method entities	4	8,498	6,760
Other non-current assets	25	478	396
Deferred tax assets	12	1,181	880
TOTAL NON-CURRENT ASSETS		**117,418**	**93,095**
Current assets			
Other financial assets	17	2,495	2,583
Derivative instruments	17	19,373	8,069
Trade and other receivables, net	8	32,555	14,295
Assets from contracts with customers	8	8,344	7,738
Inventories	25	6,175	4,140
Other current assets	25	13,202	8,990
Cash and cash equivalents	17	13,890	12,980
Assets classified as held for sale	5.2	11,881	1,292
TOTAL CURRENT ASSETS		**107,915**	**60,087**
TOTAL ASSETS		**225,333**	**153,182**

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.

LIABILITIES

In millions of euros	Notes	Dec. 31, 2021	Dec. 31, 2020
Shareholders' equity		36,994	28,945
Non-controlling interests	3	4,986	4,911
TOTAL EQUITY	**19**	**41,980**	**33,856**
Non-current liabilities			
Provisions	20	23,394	24,876
Long-term borrowings	17	30,458	30,092
Derivative instruments	17	24,228	3,789
Other financial liabilities	17	108	77
Liabilities from contracts with customers	8	68	39
Other non-current liabilities	25	2,341	2,004
Deferred tax liabilities	12	7,738	4,416
TOTAL NON-CURRENT LIABILITIES		**88,335**	**65,293**
Current liabilities			
Provisions	20	2,066	2,197
Short-term borrowings	17	10,590	7,846
Derivative instruments	17	22,702	9,336
Trade and other payables	17	32,822	17,307
Liabilities from contracts with customers	8	2,671	4,315
Other current liabilities	25	16,752	12,545
Liabilities directly associated with assets classified as held for sale	5.2	7,415	488
TOTAL CURRENT LIABILITIES		**95,019**	**54,034**
TOTAL EQUITY AND LIABILITIES		**225,333**	**153,182**

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, 2019	**2,435**	**31,470**	**(1,369)**	**3,913**	**(1,961)**	**(1,098)**	**(303)**	**33,087**	**4,950**	**38,037**
Net income/(loss)			(1,536)					(1,536)	644	(893)
Other comprehensive income/(loss)			(999)		242	(1,752)		(2,509)	(480)	(2,990)
TOTAL COMPREHENSIVE INCOME/(LOSS)			**(2,535)**		**242**	**(1,752)**		**(4,046)**	**163**	**(3,882)**
Share-based payment	-	-	52					52	2	54
Dividends paid in cash (1)		-	-					-	(425)	(425)
Purchase/disposal of treasury stock			(52)				52	-	-	-
Operations on deeply-subordinated perpetual notes (2)			(193)					(193)		(193)
Transactions between owners			25					25	35	59
Transactions with impact on non-controlling interests			-					-	7	7
Share capital increases and decreases								-	178	178
Other changes		(178)	199		-			21	1	21
EQUITY AT DECEMBER 31, 2020	**2,435**	**31,291**	**(3,874)**	**3,913**	**(1,719)**	**(2,850)**	**(251)**	**28,945**	**4,911**	**33,856**

(1) The Shareholders' Meeting of May 14, 2020 approved the resolution relating to the cancellation of the dividend payment in respect of 2019 proposed by the Group in the context of the COVID-19 crisis (see Note 17.3 "Liquidity risk" to the consolidated financial statements for the year ended December 31, 2020).

(2) Transactions of the period are listed in Note 18 "Equity" to the consolidated financial statements for the year ended December 31, 2020.

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, 2020	**2,435**	**31,291**	**(3,874)**	**3,913**	**(1,719)**	**(2,850)**	**(251)**	**28,945**	**4,910**	**33,856**
Net income/(loss)			3,661					3,661	97	3,758
Other comprehensive income/(loss)			1,490		3,431	833		5,753	(40)	5,713
TOTAL COMPREHENSIVE INCOME/(LOSS)			**5,151**	**-**	**3,431**	**833**	**-**	**9,415**	**56**	**9,471**
Share-based payment	-	-	48					48	1	49
Dividends paid in cash [(1)]		(1,296)	-					(1,296)	(410)	(1,706)
Purchase/disposal of treasury stock			(52)				52	-	-	-
Operations on deeply-subordinated perpetual notes [(1)]			(129)	(146)				(275)	-	(275)
Transactions between owners [(1)] [(2)]			324					324	740	1,064
Transactions with impact on non-controlling interests [(1)] [(3)]			-					-	(312)	(312)
Share capital increases and decreases								-	(1)	(1)
Normative change			43					43	1	44
Other changes [(1)] (4)		(3,937)	3,726	-	-			(211)	1	(209)
EQUITY AT DECEMBER 31, 2021	**2,435**	**26,058**	**5,238**	**3,767**	**1,711**	**(2,017)**	**(199)**	**36,994**	**4,986**	**41,979**

(1) Transactions of the period are listed in Note 19 “Equity”.

(2) Mainly relates to the disposal of 11.5% of GRTgaz.

(3) Mainly relates to the partial disposal of Gaztransport & Technigaz SA (GTT).

(4) Mainly concerns the dispute with the French tax authorities on the assignment without recourse of the withholding tax claim made in 2005 by SUEZ. This dispute is presented in Note 26.7.1 "Legal and anti-trust proceedings".

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, 2021	Dec. 31, 2020 [1]
NET INCOME/(LOSS)		**3,758**	**(893)**
- Net income/(loss) relating to discontinued operations		80	(151)
NET INCOME/(LOSS) RELATING TO CONTINUING OPERATIONS		**3,678**	**(742)**
- Share in net income of equity method entities		(800)	(553)
+ Dividends received from equity method entities		662	739
- Net depreciation, amortization, impairment and provisions		5,484	8,432
- Impact of changes in scope of consolidation and other non-recurring items		(1,039)	(1,580)
- Mark-to-market on commodity contracts other than trading instruments		(721)	(198)
- Other items with no cash impact		(501)	109
- Income tax expense	12	1,695	666
- Net financial income/(loss)	11	1,350	1,634
Cash generated from operations before income tax and working capital requirements		**9,806**	**8,506**
+ Tax paid		(603)	(494)
Change in working capital requirements	**25.1**	**(2,377)**	**(902)**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO CONTINUING OPERATIONS		**6,826**	**7,110**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		**486**	**479**
CASH FLOW FROM OPERATING ACTIVITIES		**7,312**	**7,589**
Acquisitions of property, plant and equipment and intangible assets	15 & 16	(5,990)	(4,964)
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	5 & 17	(392)	(405)
Acquisitions of investments in equity method entities and joint operations	5 & 17	(369)	(1,067)
Acquisitions of equity and debt instruments	17	(1,548)	(1,618)
Disposals of property, plant and equipment, and intangible assets	15 & 16	88	131
Loss of controlling interests in entities, net of cash and cash equivalents sold	5 & 17	(173)	462
Disposals of investments in equity method entities and joint operations	5 & 17	62	3,841
Disposals of equity and debt instruments	17	73	18
Interest received on financial assets		32	33
Dividends received on equity instruments		57	56
Change in loans and receivables originated by the Group and other	6.6	121	(359)
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO CONTINUING OPERATIONS		**(8,039)**	**(3,872)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		**(3,003)**	**(175)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES		**(11,042)**	**(4,046)**
Dividends paid [2]		(1,859)	(621)
Recovery from the French State of the 3% tax on dividends		-	-
Repayment of borrowings and debt		(5,054)	(6,031)
Change in financial assets held for investment and financing purposes		464	(608)
Interest paid		(719)	(648)
Interest received on cash and cash equivalents		52	52
Cash flow on derivatives qualifying as net investment hedges and compensation payments on derivatives and on early buyback of borrowings		(219)	25
Increase in borrowings		8,352	7,337
Increase/decrease in capital		226	181
Changes in ownership interests in controlled entities	6.6	1,085	23
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO CONTINUING OPERATIONS		**2,328**	**(290)**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		**2,519**	**(272)**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES		**4,848**	**(561)**
Effects of changes in exchange rates and other relating to continuing operations [2]		223	(518)
Effects of changes in exchange rates and other relating to discontinued operations		10	(11)
Effects of changes in exchange rates and other		233	(528)
TOTAL CASH FLOW FOR THE PERIOD		**1,350**	**2,453**
Reclassification of cash and cash equivalents relating to discontinued operations		(440)	9
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD		**12,980**	**10,519**
CASH AND CASH EQUIVALENTS AT END OF PERIOD		**13,890**	**12,980**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

(2) The line "Dividends paid" includes the coupons paid to owners of deeply-subordinated perpetual notes (see Note 19 "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.

03 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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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 de 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 14, 2022, the Group's Board of Directors approved and authorized for issue the consolidated financial statements of the Group for the year ended December 31, 2021.

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, and profit and loss of ENGIE has been provided for the last two reporting periods (ended December 31, 2020 and 2021). 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, 2021 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, 2021 are consistent with the policies used to prepare the consolidated financial statements for the year ended December 31, 2020, except for those described below.

1.1.1 IFRS Standards, amendments or IFRIC Interpretations applicable in 2021

- Amendments to IFRS 9 – *Financial Instruments*; IAS 39 – *Financial Instruments: Recognition and Measurement*; IFRS 7 – *Financial Instruments: Disclosures*; IFRS 4 – *Insurance Contracts* and IFRS 16 – *Leases*: Interest Rate Benchmark Reform (phase 2).

The Group elected to early adopt these amendments, as indicated in Note 17.1.5.2 to the consolidated financial statements for the year ended December 31, 2020.

- Amendments to IFRS 16 – *Leases*: Covid-19-related rent concessions beyond June 30, 2021.

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

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

1.1.2 Other texts

- In its April 2021 agenda decision, the IFRS Interpretations Committee (IFRIC) clarified to which service period an entity should attribute certain employee benefits under defined benefit plans (IAS 19 – *Employee Benefits*). The impact of this decision for the Group is not significant and was recognized in equity at January 1, 2021.
- In its March 2021 agenda decision, the IFRS Interpretations Committee (IFRIC) clarified the accounting treatment of configuration and customization costs for software in a SaaS (Software as a Service) arrangement. According to the IFRIC, some of these costs should be recognized as an expense (and not as an intangible asset). The Group has identified the main projects related to the implementation of software in an SaaS arrangement for which costs have been recognized as intangible assets. Given the practical difficulty of identifying the configuration and customization costs included in the amounts recognized as intangible assets for these projects, this decision has not been applied in the consolidated financial statements for the year ended December 31, 2021. At this stage of the analysis, this decision is not considered to have a significant impact on the Group's consolidated financial statements.

1.1.3 IFRS Standards, amendments or IFRIC Interpretations effective in 2022 and that the Group has elected to early adopt

- Amendments to IAS 16 – *Property, Plant and Equipment*: Proceeds before Intended Use.

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

1.1.4 IFRS Standards, amendments or IFRIC Interpretations effective in 2022 and that the Group has elected not to early adopt

- Amendments to IAS 1 – *Presentation of Financial Statements*: Classification of Liabilities as Current or Non-Current (1).
- Amendments to IAS 37 – *Provisions, Contingent Liabilities and Contingent Assets*: Onerous Contracts - Cost of Fulfilling a Contract.
- Annual improvements to IFRSs – 2018-2020 cycle.
- IFRS 17 – *Insurance Contracts* (including amendments).
- Amendments to IAS 1 – *Presentation of Financial Statements* and the Materiality Practice Statement: Disclosure of Accounting Policies (1).
- Amendments to IAS 8 – *Accounting Policies, Changes in Accounting Estimates and Errors*: Definition of Accounting Estimates (1).
- Amendments to IAS 12 – *Income taxes*: Deferred Tax related to Assets and Liabilities arising from a Single Transaction (1).

The impact of these standards, amendments and improvements, is currently being assessed.

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

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 that 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 revision. 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.

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 non-current 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 judgments

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 highly volatile commodities markets, 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 sharp 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 changes in gas and electricity prices, which increased significantly in the second half of 2021.

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 14*), other intangible assets (*see Note 15*) and property, plant and equipment (*see Note 16*);
- fair value measurement of financial assets and liabilities (*see Notes 17 and 18*);
- assessment of expected credit losses, mainly in order to update probabilities of default and other inputs in an uncertain context (*see Note 18*);
- measurement of provisions, particularly for the back-end of the nuclear fuel cycle, dismantling obligations, disputes, and pensions and other employee benefits (*see Notes 20 and 21*);
- measurement of the fair value of assets acquired and liabilities assumed in a business combination (*see Note 5*);
- 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 sharp fluctuations in commodity prices (*see Note 8*);
- measurement of recognized tax loss carry-forwards, taking into account, where applicable, taxable income revisions and projections (*see Note 12*).

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 type of control (*see Notes 3 and 4*);
- identifying the performance obligations of sales contracts (*see Note 8*);
- determining how revenues are recognized for distribution or transmission services invoiced to customers (*see Note 8*);
- recognizing support measures granted by certain governments, notably the tariff shield in France aimed at protecting both consumers and suppliers of gas and electricity against sharp fluctuations in commodity prices (*see Note 8*);
- identifying "own use contracts" as defined by IFRS 9 within non-financial purchase and sale contracts (electricity, gas, etc.) (*see Note 17*);
- identifying offsetting arrangements that meet the criteria set out in IAS 32 *Financial Instruments: Presentation* (*see Note 17*);
- determining whether arrangements are or contain a lease (*see Note 16*);
- determining operating and reportable segments following the Group's reorganization (*see Note 7*).

Entities for which judgment on the type of control has been exercised are listed in Note 3 "Main subsidiaries at December 31, 2021" and Note 4 "Investments in equity method entities".

1.3.3 Consideration of climate issues in the preparation of the Group's financial statements

The Group has also exercised its judgment in assessing climate risks and challenges and their impact on the consolidated financial statements. As a reminder, the management of climate and environmental risks and their challenges for the Group are presented in Chapter 2 "Risk Factors" and Chapter 3 "Non-financial Performance Statement and CSR Information" of the Universal Registration Document.

- The commitments made by France, Europe and various countries at international level, in particular with regard to 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 14*), and (ii) in assessing dismantling provisions, in particular by assessing the useful life of the gas infrastructures in France based on the expected change in the energy mix (*see Note 20*).
- The commitments specifically made by ENGIE are reflected in the assessment of the value of the Group's assets (*see Note 14*), in particular (i) the complete withdrawal from coal by 2027, which primarily concerns South America, depending on each asset's specific prospects (closure, conversion or disposal), 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, and developing its offering of low-carbon services.

NOTE 2 RESTATEMENT OF 2020 COMPARATIVE DATA

The previously published financial statements presented hereafter have been restated to take into account the presentation in the financial statements at December 31, 2020 (the income statement, statement of comprehensive income and statement of cash flows) of EQUANS activities held for sale (*see Note 5 "Main changes in Group structure"*) as discontinued operations insofar as they represent a separate major line of business within the meaning of IFRS 5 - *Non-current assets held for sale and discontinued operations*.

2.1 Statement of financial income at December 31, 2020

In millions of euros	Dec. 31, 2020 published	IFRS 5	Dec. 31, 2020 restated
REVENUES	**55,751**	**(11,445)**	**44,306**
Purchases and operating derivatives	(34,967)	6,879	(28,088)
Personnel costs	(11,759)	4,256	(7,503)
Depreciation, amortization and provisions	(4,778)	301	(4,477)
Taxes	(1,265)	58	(1,207)
Other operating income	1,105	(134)	971
Current operating income including operating MtM	**4,087**	**(86)**	**4,001**
Share in net income of equity method entities	552	-	553
Current operating income including operating MtM and share in net income of equity method entities	**4,640**	**(86)**	**4,554**
Impairment losses	(3,551)	49	(3,502)
Restructuring costs	(343)	86	(257)
Changes in scope of consolidation	1,640	1	1,641
Other non-recurring items	(886)	7	(879)
RESULT FROM OPERATING ACTIVITIES	**1,501**	**56**	**1,558**
Financial expenses	(2,232)	64	(2,168)
Financial income	553	(20)	533
NET FINANCIAL INCOME/(LOSS)	**(1,678)**	**45**	**(1,634)**
Income tax benefit/(expense)	(715)	50	(666)
NET INCOME/(LOSS) RELATING TO CONTINUING OPERATIONS	**(893)**	**151**	**(742)**
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**-**	**(151)**	**(151)**
NET INCOME/(LOSS)	**(893)**	**-**	**(893)**
Net income/(loss) Group share	**(1,536)**	**-**	**(1,536)**
Of which Net income/(loss) relating to continuing operations, Group share	*(1,536)*	*153*	*(1,384)*
Of which Net income/(loss) relating to discontinued operations, Group share	*-*	*(153)*	*(153)*
Non-controlling interests	**644**	**-**	**644**
Of which Non-controlling interests relating to continuing operations	*644*	*(2)*	*642*
Of which Non-controlling interests relating to discontinued operations	*-*	*2*	*2*
BASIC EARNINGS/(LOSS) PER SHARE (EUROS)	**(0.71)**	**-**	**(0.71)**
Of which Basic earnings/(loss) relating to continuing operations per share	*(0.71)*	*0.06*	*(0.65)*
Of which Basic earnings/(loss) relating to discontinued operations per share	*0.00*	*(0.06)*	*(0.06)*
DILUTED EARNINGS/(LOSS) PER SHARE (EUROS)	**(0.71)**	**-**	**(0.71)**
Of which Diluted earnings/(loss) relating to continuing operations per share	*(0.71)*	*0.06*	*(0.65)*
Of which Diluted earnings/(loss) relating to discontinued operations per share	*0.00*	*(0.07)*	*(0.07)*

2.2 Statement of comprehensive income at December 31, 2020

In millions of euros	Dec. 31, 2020 published	IFRS 5	Dec. 31, 2020 restated
NET INCOME/(LOSS)	(893)	-	(893)
Debt instruments	(46)	-	(46)
Net investment hedges	128	-	128
Cash flow hedges (excl. commodity instruments)	(249)	(1)	(250)
Commodity cash flow hedges	872	-	872
Deferred tax on items above	(137)	-	(136)
Share of equity method entities in recyclable items, net of tax	(387)	-	(387)
Translation adjustments	(2,098)	160	(1,938)
Recyclable items relating to discontinued operations, net of tax	-	(159)	(159)
TOTAL RECYCLABLE ITEMS	**(1,916)**	**-**	**(1,916)**
Equity instruments	43	2	45
Actuarial gains and losses	(1,569)	(18)	(1,587)
Deferred tax on items above	377	-	378
Share of equity method entities in actuarial gains and losses, net of tax	75	-	75
Non-recyclable items relating to discontinued operations, net of tax	-	16	16
TOTAL NON-RECYCLABLE ITEMS	**(1,073)**	**-**	**(1,073)**
TOTAL RECYCLABLE ITEMS AND NON-RECYCLABLE ITEMS	**(2,990)**	**-**	**(2,990)**
TOTAL COMPREHENSIVE INCOME/(LOSS)	(3,882)	-	(3,882)
Of which owners of the parent	*(4,046)*	-	*(4,046)*
Of which non-controlling interests	*163*	-	*163*

2.3 Statement of cash flows at December 31, 2020

In millions of euros	Dec. 31, 2020 published	IFRS 5	Dec. 31, 2020 restated
NET INCOME/(LOSS)	**(893)**	**-**	**(893)**
- Net income/(loss) relating to discontinued operations	-	(151)	(151)
NET INCOME/(LOSS) RELATING TO CONTINUING OPERATIONS	**(893)**	**151**	**(742)**
- Share in net income of equity method entities	(552)	-	(553)
+ Dividends received from equity method entities	740	(1)	739
- Net depreciation, amortization, impairment and provisions	8,760	(329)	8,432
- Impact of changes in scope of consolidation and other non-recurring items	(1,573)	(7)	(1,580)
- Mark-to-market on commodity contracts other than trading instruments	(199)	1	(198)
- Other items with no cash impact	111	(2)	109
- Income tax expense	715	(50)	666
- Net financial income/(loss)	1,678	(45)	1,634
Cash generated from operations before income tax and working capital requirements	**8,788**	**(282)**	**8,506**
+ Tax paid	(599)	104	(494)
Change in working capital requirements	**(600)**	**(302)**	**(902)**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO CONTINUING OPERATIONS	**7,589**	**(479)**	**7,110**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS	**-**	**479**	**479**
CASH FLOW FROM OPERATING ACTIVITIES	**7,589**	**-**	**7,589**
Acquisitions of property, plant and equipment and intangible assets	(5,115)	151	(4,964)
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	(417)	12	(405)
Acquisitions of investments in equity method entities and joint operations	(1,067)	-	(1,067)
Acquisitions of equity and debt instruments	(1,622)	4	(1,618)
Disposals of property, plant and equipment, and intangible assets	154	(22)	131
Loss of controlling interests in entities, net of cash and cash equivalents sold	456	5	462
Disposals of investments in equity method entities and joint operations	3,841	-	3,841
Disposals of equity and debt instruments	21	(2)	18
Interest received on financial assets	21	12	33
Dividends received on equity instruments	57	(1)	56
Change in loans and receivables originated by the Group and other	(374)	15	(359)
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO CONTINUING OPERATIONS	**(4,046)**	**175**	**(3,872)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO DISCONTINUED	**-**	**(175)**	**(175)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES	**(4,046)**	**-**	**(4,046)**
Dividends paid [(1) (2)]	(622)	1	(621)
Recovery from the French State of the 3% tax on dividends	-	-	-
Repayment of borrowings and debt	(6,179)	148	(6,031)
Change in financial assets held for investment and financing purposes	(608)	-	(608)
Interest paid	(665)	18	(648)
Interest received on cash and cash equivalents	53	-	52
Cash flow on derivatives qualifying as net investment hedges and compensation payments on derivatives and on early buyback of borrowings	25	-	25
Increase in borrowings	7,231	106	7,337
Increase/decrease in capital	181	-	181
Changes in ownership interests in controlled entities	23	-	23
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO CONTINUING OPERATIONS	**(561)**	**272**	**(290)**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO DISCONTINUED	**-**	**(272)**	**(272)**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES	**(561)**	**-**	**(561)**
Effects of changes in exchange rates and other relating to continuing operations	(520)	2	(518)
Effects of changes in exchange rates and other relating to discontinued operations	-	(11)	(11)
Effects of changes in exchange rates and other	(520)	(9)	(528)
TOTAL CASH FLOW FOR THE PERIOD	**2,461**	**(9)**	**2,453**
Reclassification of cash and cash equivalents relating to discontinued operations	-	9	9
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	**10,519**	**-**	**10,519**
CASH AND CASH EQUIVALENTS AT END OF PERIOD	**12,980**	**-**	**12,980**

2.4 Impacts on key indicators

In millions of euros	Dec. 31, 2020 published	IFRS 5	Dec. 31, 2020 restated
EBITDA	**9,276**	**(368)**	**8,908**
EBIT	**4,578**	**(85)**	**4,493**
NET RECURRING INCOME/(LOSS)	**2,355**	**-**	**2,355**
Net recurring income/(loss) relating to continuing operations	2,355	20	2,375
Net recurring income/(loss) relating to discontinued operations	-	(20)	(20)
NET RECURRING INCOME/(LOSS), GROUP SHARE	**1,703**	**-**	**1,703**
Net recurring income/(loss) relating to continuing operations, Group share	1,703	22	1,725
Net recurring income/(loss) relating to discontinued operations, Group share	-	(22)	(22)
NET RECURRING INCOME/(LOSS) ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	**652**	**-**	**652**
Net recurring income/(loss) relating to continuing operations attributable to non-controlling interests	652	(2)	650
Net recurring income/(loss) relating to discontinued operations attributable to non-	-	2	2
CASH FLOW FROM OPERATIONS (CFFO)	**7,054**	**(439)**	**6,616**

NOTE 3 MAIN SUBSIDIARIES AT DECEMBER 31, 2021

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.

3.1 List of main subsidiaries at December 31, 2021

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), shell companies 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 under non-current financial assets (*see Note 17.1.1.1)* 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 debt. The main equity-accounted investments (associates and joint ventures) are presented in Note 4 "Investments in equity method entities".

Some entities such as ENGIE SA, ENGIE Energie 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, 2021	Dec. 31, 2020
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 Infinity Renewables	Electricity distribution and generation	United States	100.0	100.0
ENGIE Resources Inc.	Energy sales	United States	100.0	100.0
ENGIE Romania	Natural gas distribution, Energy sales	Romania	51.0	51.0
ENGIE Solar	Solar EPC	France	100.0	100.0
ENGIE Brazil Energia Group	Electricity distribution and generation	Brazil	68.7	68.7
ENGIE Energía Chile Group	Electricity distribution and generation	Chile	60.0	60.0
Jupiter Projects	Electricity distribution and generation	United States	51.0	51.0

Networks

Company name	Activity	Country	% interest Dec. 31, 2021	Dec. 31, 2020
Elengy	Natural gas, LNG	France	60.9	61.3
ENGIE Romania	Natural gas distribution, Energy sales	Romania	51.0	51.0
Fosmax LNG	Natural gas, LNG	France	60.9	61.3
GRDF	Natural gas distribution	France	100.0	100.0
ENGIE Brazil Energia Group	Electricity distribution and generation	Brazil	68.7	68.7
ENGIE Energía Chile Group	Electricity distribution and generation	Chile	60.0	60.0
GRTgaz Group (excluding Elengy)	Natural gas transportation	France, Germany	60.9	74.6
Storengy Deutschland GmbH	Underground natural gas storage	Germany	100.0	100.0
Storengy France	Underground natural gas storage	France	100.0	100.0

Energy Solutions

Company name	Activity	Country	% interest Dec. 31, 2021	Dec. 31, 2020
Cofely Besix	Systems, facilities and maintenance services	UAE	100.0	100.0
CPCU	Urban heating networks	France	66.5	66.5
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
Endel Group	Systems, facilities and maintenance services	France	100.0	100.0
Tractebel Engineering	Engineering	Belgium	100.0	100.0

Thermal

Company name	Activity	Country	% interest Dec. 31, 2021	Dec. 31, 2020
Electrabel SA *	Electricity generation, Energy sales	Belgium	100.0	100.0
ENGIE Cartagena	Electricity generation	Spain	100.0	100.0
ENGIE Deutschland AG *	Electricity generation	Germany	100.0	100.0
ENGIE Energía Perú	Electricity distribution and generation	Peru	61.8	61.8
ENGIE Energie Nederland N.V.	Electricity generation, Energy sales	Netherlands	100.0	100.0
ENGIE Italia S.p.A *	Energy sales	Italy	100.0	100.0
ENGIE SA *	Energy sales	France	100.0	100.0
ENGIE Thermique France	Electricity generation	France	100.0	100.0
First Hydro Holdings Company	Electricity generation	United Kingdom	75.0	75.0
ENGIE Brazil Energia Group	Electricity distribution and generation	Brazil	68.7	68.7
ENGIE Energía Chile Group	Electricity distribution and generation	Chile	60.0	60.0
Pelican Point Power Limited	Electricity generation	Australia	72.0	72.0
UCH Power Limited	Electricity generation	Pakistan	100.0	100.0

Supply

Company name	Activity	Country	% interest Dec. 31, 2021	Dec. 31, 2020
Electrabel SA *	Electricity generation, Energy sales	Belgium	100.0	100.0
ENGIE Italia S.p.A *	Energy sales	Italy	100.0	100.0
ENGIE Romania	Natural gas distribution, Energy sales	Romania	51.0	51.0
ENGIE SA *	Energy sales	France	100.0	100.0
ENGIE Supply Holding UK Limited	Energy sales	United Kingdom	100.0	100.0
Simply Energy	Energy sales	Australia	72.0	72.0

Nuclear

Company name	Activity	Country	% interest Dec. 31, 2021	Dec. 31, 2020
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, 2021	% interest Dec. 31, 2020
Electrabel SA *	Electricity generation, Energy sales	Belgium	100.0	100.0
ENGIE CC	Financial subsidiaries, Central functions	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, Italy, United Kingdom	100.0	100.0
ENGIE Energy Management Holding Switzerland AG	Holding	Switzerland	100.0	100.0
ENGIE FINANCE SA	Financial subsidiaries	France	100.0	100.0
ENGIE Global Markets	Energy management trading	France, Belgium, Singapore	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, Gaz naturel, GNL, Energy services	United States	100.0	100.0
ENGIE Romania	Natural gas distribution, Energy sales	Romania	51.0	51.0
ENGIE Energía Chile Group	Electricity distribution and generation	Chile	60.0	60.0
ENGIE SA *	Holding - parent company, Energy management trading, energy sales	France	100.0	100.0
Gaztransport & Technigaz (GTT) (1)	Engineering	France	-	40.4
International Power Limited	Holding	United Kingdom	100.0	100.0

(1) Gaztransport & Technigaz is consolidated under the equity method at December 31, 2021 (see Note 5 "Main changes in Group structure").

EQUANS (1)

Company name	Activity	Country	% interest Dec. 31, 2021	% interest Dec. 31, 2020
Axima Concept	Systems, facilities and maintenance services	France	100.0	100.0
Cofely Fabricom SA	Systems, facilities and maintenance services	Belgium	100.0	100.0
Conti Service LLC	Energy services	United States	100.0	100.0
ENGIE Regeneration	Energy services	United Kingdom	100.0	100.0
ENGIE Services Nederland N.V.	Energy services	Netherlands	100.0	100.0
ENGIE Services Holding UK Ltd	Energy services	United Kingdom	100.0	100.0
ENGIE Services Limited	Energy services	United Kingdom	100.0	100.0
INEO Group	Systems, facilities and maintenance services	France	100.0	100.0

(1) Activities held for sale and classified as "Discontinued operations" at December 31, 2021 (see Note 5 "Main changes in Group structure").

3.2 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 entities and sub-groups described below.

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

GRTgaz (France Infrastructures): 60.9%

The analysis of the shareholders' agreement concluded with Société d'Infrastructures Gazières, a subsidiary of *Caisse des Dépôts et Consignations* (CDC), which now 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 concerns 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 will continue to exercise control over GRTgaz and its subsidiaries (including Elengy) following the additional disposal by ENGIE, on December 22, 2021, of 11.50% of GRTgaz to Société d'Infrastructures Gazières. This analysis is based on the Group's current 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

In the entities in which the Group does not have a 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 vote holders 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 entities in which the Group does not have the majority of the voting rights at December 31, 2021 are Compagnie Nationale du Rhône (49.98%).

Compagnie Nationale du Rhône ("CNR" – France excluding Infrastructures): 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 shareholders' meetings due to the widely dispersed shareholding structure and the absence of evidence of the minority shareholders acting in concert.

3.3 Main subsidiaries with non-controlling interests

The following table shows the non-controlling interests in Group entities that are deemed to be material, the respective contributions to equity and to net income at December 31, 2021 and December 31, 2020, as well as the dividends paid to non-controlling interests:

Corporate 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, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020
GRTgaz Group (France Infrastructures, France)	Regulated gas transportation activities and management of LNG terminals	39.1	25.4	106	95	1,554	1,029	105	80
ENGIE Energía Chile Group (Latin America, Chile) (1)	Electricity distribution and generation - thermal power plants	40.0	40.0	17	67	781	716	31	24
ENGIE Romania Group (Rest of Europe, Romania)	Distribution of natural gas, Energy sales	49.0	49.0	34	49	592	563	15	10
ENGIE Brasil Energia Group (Latin America, Brazil) (1)	Electricity distribution and generation	31.3	31.3	45	144	294	411	38	87
ENGIE Energía Perú (Latin America, Peru) (1)	Electricity distribution and generation - thermal and hydroelectric power plants	38.2	38.2	22	29	393	368	20	20
ENGIE Jupiter Group (North America, United States)	Electricity distribution and generation	49.0	49.0	(323)	51	345	394	-	-
Gaztransport & Technigaz (Other, France) (1) (2)	Naval engineering, cryogenic membrane containment systems for LNG transportation	-	59.6	-	93	-	343	-	94
Other subsidiaries with non-controlling interests				195	115	1,027	1,087	201	109
TOTAL				**97**	**644**	**4,986**	**4,911**	**410**	**425**

(1) ENGIE Energia Chile, ENGIE Brasil Energia, Gaztransport & Technigaz and ENGIE Energia Perú are listed in their respective countries.

(2) Gaztransport & Technigaz is consolidated using the equity method at December 31, 2021 (see Note 5 "Main changes in Group structure").

3.3.1 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.

	GRTgaz Group		ENGIE Energía Chile Group		ENGIE Romania Group	
In millions of euros	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020
Income statement						
Revenues	2,209	2,275	1,187	1,107	1,473	1,545
Net income/(loss)	388	343	42	142	69	100
Net income/(loss) Group share	282	247	25	75	35	51
Other comprehensive income/(loss) – Owners of the parent	130	(91)	107	(88)	9	(10)
TOTAL COMPREHENSIVE INCOME/(LOSS) – OWNERS OF THE PARENT	**412**	**157**	**132**	**(14)**	**45**	**41**
Statement of financial position						
Current assets	1,089	826	635	498	729	520
Non-current assets	10,098	10,167	3,150	2,677	903	843
Current liabilities	(1,272)	(1,044)	(345)	(252)	(357)	(156)
Non-current liabilities	(5,946)	(6,113)	(1,498)	(1,146)	(79)	(67)
TOTAL EQUITY	**3,969**	**3,836**	**1,941**	**1,776**	**1,196**	**1,140**
TOTAL NON-CONTROLLING INTERESTS	**1,554**	**1,029**	**781**	**716**	**592**	**563**
Statement of cash flows						
Cash flow from operating activities	1,149	1,082	186	308	102	181
Cash flow from (used in) investing activities	(464)	(410)	(234)	(230)	(131)	(88)
Cash flow from (used in) financing activities	(650)	(673)	29	(81)	39	(59)
TOTAL CASH FLOW FOR THE PERIOD (1)	**35**	**(1)**	**(19)**	**(2)**	**9**	**34**

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

	ENGIE Brasil Energia Group		ENGIE Energía Perú		Gaztransport & Technigaz (1)		ENGIE Jupiter Group (North America, United States)	
In millions of euros	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020
Income statement								
Revenues	2,118	2,065	445	424	-	395	213	20
Net income/(loss)	144	550	57	76	-	156	(661)	(51)
Net income/(loss) Group share	99	405	35	47	-	63	(338)	(101)
Other comprehensive income/(loss) – Owners of the parent	10	(687)	37	(53)	-	-	21	(74)
TOTAL COMPREHENSIVE INCOME/(LOSS) – OWNERS OF THE PARENT	**109**	**(282)**	**72**	**(6)**	**-**	**63**	**(317)**	**(175)**
Statement of financial position								
Current assets	1,390	1,262	360	267	-	326	302	314
Non-current assets	4,236	4,627	1,687	1,550	-	428	2,843	2,663
Current liabilities	(900)	(859)	(302)	(149)	-	(140)	(531)	(287)
Non-current liabilities	(3,912)	(3,434)	(716)	(703)	-	(39)	(1,912)	(1,358)
TOTAL EQUITY	**813**	**1,596**	**1,029**	**965**	**-**	**575**	**703**	**1,332**
TOTAL NON-CONTROLLING INTERESTS	**294**	**411**	**393**	**368**	**-**	**343**	**345**	**394**
Statement of cash flows								
Cash flow from operating activities	941	869	185	197	-	152	(20)	186
Cash flow from (used in) investing activities	(629)	(758)	(92)	(17)	-	(21)	(13)	(151)
Cash flow from (used in) financing activities	(126)	2	(14)	(171)	-	(158)	(3)	49
TOTAL CASH FLOW FOR THE PERIOD (2)	**185**	**113**	**80**	**9**	**-**	**(27)**	**(36)**	**83**

(1) *Gaztransport & Technigaz is consolidated under the equity method at December 31, 2021 (see Note 5 "Main changes in Group structure").*

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

NOTE 4 INVESTMENTS IN EQUITY METHOD ENTITIES

Accounting standards

The Group accounts for its investments in associates (entities over which the Group has significant influence) 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.

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, 2021 and December 31, 2020 are as follows:

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
Statement of financial position		
Investments in associates	4,007	3,017
Investments in joint ventures	4,492	3,743
INVESTMENTS IN EQUITY METHOD ENTITIES	**8,498**	**6,760**
Income statement		
Share in net income/(loss) of associates	306	184
Share in net income/(loss) of joint ventures	495	369
SHARE IN NET INCOME/(LOSS) OF EQUITY METHOD ENTITIES	**800**	**553**
Statement of comprehensive income		
Share of associates in "Other comprehensive income/(loss)"	208	(28)
Share of joint ventures in "Other comprehensive income/(loss)"	62	(284)
SHARE OF EQUITY METHOD ENTITIES IN "OTHER COMPREHENSIVE INCOME/(LOSS)"	**270**	**(312)**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

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: 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. 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

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 ventures in which the Group holds an interest of more than 50%

Tihama (60%)

ENGIE holds a 60% stake in the Tihama cogeneration plant in Saudi Arabia and its partner Saudi Oger holds 40%. The Group considers that it has joint control over Tihama since the decisions about its relevant activities, including for example the preparation of the budget and amendments to major contracts, etc., require the unanimous consent of the parties sharing control.

Transportadora Associada de Gás S.A. ("TAG" - Latin America): 65.0% holding interest (directly and indirectly) representing a net interest in TAG of 54.8%

The Group exercises joint control over TAG since the decisions about its relevant activities, including, for example, the preparation of the budget and medium-term plan, investments, operations and maintenance, etc., are taken according to a majority vote requiring the agreement of ENGIE and *Caisse de dépôt et de placement du Québec* (CDPQ). The Group holds potential voting rights but they are not yet exercisable. Consequently, this investment is accounted for using the equity method.

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, 2021.

4.1 Investments in associates

4.1.1 Contribution of material associates and of associates that do not have material impact on the Group's financial statements taken individually

The table hereafter 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.

Corporate 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, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020
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		-		940	803	139	184	102	(60)	107	107
Gaztransport & Technigaz (GTT)	Engineering company in containment systems for transport and storage of LNG		30.43	-	757	-	1	-	-	-	35	-
Hydroelectric portfolio in Portugal	Hydro power plant	1,688 MW	40.00	40.00	493	516	1	(6)	(23)	(11)	-	-
Energia Sustentável do Brasil (Brazil)	Hydro power plant	3,750 MW	40.00	40.00	501	475	21	(17)	-	-	-	-
GASAG (Germany)	Gas and heat networks		31.57	31.57	333	239	29	12	75	15	11	16
Other investments in associates that are not material taken individually					982	984	114	9	54	27	81	145
INVESTMENTS IN ASSOCIATES					**4,007**	**3,017**	**306**	**184**	**208**	**(28)**	**234**	**268**

(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 includes around 40 associates operating thermal power plants with a total installed capacity of 26,977 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 as property, plant and equipment or as financial receivables whenever substantially all of the risks and rewards associated with the assets are transferred to the buyer of the output. This treatment complies with IFRS 16. 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 net non-recurring income for a total amount of €6 million in 2021 (compared to a net non-recurring loss of €131 million in 2020), mainly including changes in the fair value of derivative instruments and disposal gains and losses, net of tax *(see Note 6.3 "Net recurring income Group share (NriGs)")*.

4.1.2 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 items 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, 2021											
Project management entities in the Middle East	4,442	576	425	1,001	3,067	19,513	4,310	14,693	3,578	-	940
Gaztransport & Technigaz (GTT)	169	3	-	2	330	2,299	144	(2)	2,488	30.43	757
Energia Sustentável do Brasil	496	54	-	54	110	2,941	1,800	(3)	1,253	40.00	501
Hydroelectric portfolio in Portugal	276	2	(58)	(57)	198	2,189	226	929	1,232	40.00	493
GASAG	1,368	93	237	331	1,199	2,078	1,927	297	1,054	31.57	333
AT DECEMBER 31, 2020											
Project management entities in the Middle East	4,082	769	(255)	514	2,885	18,321	3,925	14,338	2,944	-	803
Energia Sustentável do Brasil	454	(41)	-	(41)	153	2,897	1,863	(2)	1,189	40.00	475
Hydroelectric portfolio in Portugal	-	(14)	(26)	(41)	37	2,202	16	934	1,289	40.00	516
GASAG	1,205	40	47	87	921	1,944	1,872	234	758	31.57	239

4.1.3 Transactions between the Group and its associates

The data below set out the impact of transactions with associates on the Group's 2021 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	-	190	-	52	190	-	-
Contassur [(1)]	-	-	-	228	2	-	-
Energia Sustentável do Brasil	95	-	-	-	-	-	-
Hydroelectric portfolio in Portugal	-	22	7	51	120	-	-
Other	69	31	13	32	177	13	28
AT DECEMBER 31, 2021	**164**	**243**	**20**	**363**	**490**	**13**	**28**

(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 totaled €228 million at December 31, 2021 (€187 million at December 31, 2020).

4.2 Investments in joint ventures

4.2.1 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.

Corporate 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 joint ventures		Dividends received from joint ventures	
In millions of euros			Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020
Transportadora Associada de Gás S.A. (TAG) (Brazil) (1)	Gas transmission network		65.00	65.00	792	803	189	177	7	(233)	222	231
National Central Cooling Company "Tabreed" (Middle-East, Asia & Africa, Abu Dhabi)	District cooling networks		40.00	40.00	787	702	45	52	-	-	14	27
EcoÉlectrica (Puerto Rico)	Combined-cycle gas-fired power plant and LNG terminal	530 MW	50.00	50.00	310	329	46	35	-	-	63	70
Portfolio of power generation assets in Portugal	Electricity generation	2,342 MW	50.00	50.00	253	278	3	34	8	-	35	69
WSW Energie und Wasser AG (Germany)	Electricity distribution and generation		33.10	33.10	240	206	41	6	-	-	7	7
Iowa University partnership (Canada)	Services		33.10	33.10	208	190	3	2	1	(1)	2	-
Georgetown University partnership (United States)	Services		50.00	-	184	-	2	-	-	-	-	-
Tihama Power Generation Co (Saudi Arabia)	Electricity generation	1,546 MW	60.00	60.00	91	93	13	19	4	(4)	27	21
Ohio State Energy Partners (USA)	Services		50.00	50.00	78	76	3	6	6	(24)	9	12
Megal GmbH (Germany)	Gas transmission network		49.00	49.00	67	71	5	2	-	-	9	10
Transmisora Eléctrica del Norte (Chile) (2)	Electricity transmission line		50.00	50.00	96	67	(1)	5	25	(13)	-	-
Other investments in joint ventures that are not material taken individually					1,385	929	145	32	12	(9)	40	15
INVESTMENTS IN JOINT VENTURES					**4,492**	**3,743**	**495**	**369**	**62**	**(284)**	**428**	**461**

(1) The Group's interest in Transportadora Associada de Gás S.A. (TAG) is 54,83%.
(2) The Group's interest inTransmisora Eléctrica del Norte is 30%.

The share in net income/(loss) of joint ventures includes non-recurring gain of €44 million in 2021 (non-recurring loss of €6 million in 2020), resulting chiefly from changes in the fair value of derivatives, impairment losses and disposal gains and losses, net of tax *(see Note 6.3 "Net recurring income Group share (NriGs)")*.

4.2.2 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.

4.2.2.1 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 expense	Net income/(loss)	Other comprehensive income/(loss)	Total comprehensive income/(loss)
AT DECEMBER 31, 2021							
Transportadora Associada de Gás S.A.	1,109	(248)	(254)	(150)	290	11	301
National Central Cooling Company "Tabreed"	170	(40)	(35)	-	113	-	113
EcoÉlectrica	174	(38)	-	(5)	104	-	104
Portfolio of power generation assets in Portugal	369	(54)	(27)	(19)	3	26	29
WSW Energie und Wasser AG	781	(14)	(1)	(62)	126	-	126
Iowa University partnership	65	-	(19)	-	9	3	12
Georgetown University partnership	19	-	(9)	-	5	-	5
Tihama Power Generation Co	107	(5)	(11)	(6)	22	6	28
Ohio State Energy Partners	193	(1)	(48)	-	6	12	18
Megal GmbH	122	(64)	(3)	1	10	-	10
Transmisora Eléctrica del Norte	41	-	(22)	-	(1)	49	48
AT DECEMBER 31, 2020							
Transportadora Associada de Gás S.A.	1,018	(260)	(245)	(99)	272	(346)	(74)
National Central Cooling Company "Tabreed"	417	(46)	(38)	-	130	-	130
EcoÉlectrica	274	(42)	-	(2)	70	-	70
Portfolio of power generation assets in Portugal	307	(65)	(25)	(30)	79	(1)	78
WSW Energie und Wasser AG	703	(13)	(2)	(14)	18	1	19
Iowa University partnership	24	-	(17)	-	5	(3)	3
Tihama Power Generation Co	113	(5)	(16)	(6)	31	(6)	25
Ohio State Energy Partners	165	-	(43)	-	12	(49)	(37)
Megal GmbH	123	(69)	(4)	2	3	-	3
Transmisora Eléctrica del Norte	65	-	(26)	(4)	10	(27)	(18)

4.2.2.2 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, 2021										
Transportadora Associada de Gás S.A.	70	251	5,721	540	75	3,174	1,036	1,218	65.00	792
National Central Cooling Company "Tabreed"	294	141	2,469	-	182	755	-	1,967	40.00	787
EcoÉlectrica	14	77	572	3	22	-	18	620	50.00	310
Portfolio of power generation assets in Portugal	294	495	793	159	208	558	72	583	50.00	253
WSW Energie und Wasser AG	17	268	852	156	36	93	142	711	33.10	240
Iowa University partnership	-	7	1,070	9	4	527	3	534	39.10	209
Georgetown University partnership	9	-	868	-	-	509	1	367	50.00	184
Tihama Power Generation Co	53	135	286	73	49	191	10	151	60.00	91
Ohio State Energy Partners	31	70	1,274	-	63	1,126	30	156	50.00	78
Megal GmbH	9	13	729	-	50	511	52	138	49.00	67
Transmisora Eléctrica del Norte	45	9	730	30	3	559	-	193	50.00	96
AT DECEMBER 31, 2020										
Transportadora Associada de Gás S.A.	69	277	5,737	514	88	3,524	720	1,235	65.00	803
National Central Cooling Company "Tabreed"	87	131	2,408	-	169	702	-	1,754	40.00	702
EcoÉlectrica	26	60	598	(6)	17	-	16	657	50.00	329
Portfolio of power generation assets in Portugal	203	601	891	174	160	635	76	650	50.00	278
WSW Energie und Wasser AG	14	51	812	40	55	87	90	606	33.10	206
Iowa University partnership	5	7	960	1	4	492	3	473	39.10	185
Tihama Power Generation Co	61	129	333	67	45	246	10	155	60.00	93
Ohio State Energy Partners	8	56	1,074	341	20	575	49	153	50.00	76
Megal GmbH	1	5	730	230	43	262	56	145	49.00	71
Transmisora Eléctrica del Norte	42	28	698	28	4	602	-	133	50.00	67

4.2.3 Transactions between the Group and its joint ventures

The data below set out the impact of transactions with joint ventures on the Group's 2021 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	-	-	-	-	-	-	52
WSW Energie und Wasser AG	1	22	-	4	-	1	-
Megal GmbH	65	-	-	-	-	6	-
Futures Energies Investissements Holding	10	22	4	6	181	2	-
Ocean Winds	-	-	6	1	180	-	-
Other	41	59	12	43	233	3	(7)
AT DECEMBER 31, 2021	**114**	**104**	**23**	**55**	**594**	**13**	**45**

4.3 Other information on investments accounted for using the equity method

4.3.1 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 €49 million in 2021 (€114 million in 2020).

These unrecognized losses correspond to the negative fair value of derivative instruments designated as interest rate and commodity hedges ("Other comprehensive income/(loss)") contracted by associates in the Middle-East, Africa and Asia reportable segment in connection with the financing of construction projects for power generation plants.

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

At December 31, 2021, 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 4,114 million (€651 million).
  At December 31, 2021, the amount of loans granted by Banco Nacional de Desenvolvimento Econômico e Social, the Brazilian Development Bank, to Energia Sustentável do Brasil amounted to BRL 10,285 million (€1,627 million). Each partner stands as guarantor for this debt to the extent of its ownership interest in the consortium;

- TAG for bank guarantees for an amount of €254 million;

- The project management entities in the Middle East and Africa, for an aggregate amount of €667 million.

  Commitments and guarantees given by the Group in respect of these project management entities chiefly correspond to:
  - letters of credit to guarantee debt service reserve accounts for an aggregate amount of €131 million. The project financing set up in certain entities can 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 management entities, for an aggregate amount of €264 million,
  - performance bonds and other guarantees for an amount of €272 million.

NOTE 5 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.

Furthermore, assets or group 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.

5.1 Disposals carried out in 2021

5.1.1 Impact of the main disposals and sale agreements during the period

As part of the presentation of its new strategy, on May 18, 2021, the Group confirmed a significant increase to its asset portfolio rotation program which, in the medium term, could represent a budget of around €9 billion to €10 billion.

The table below shows the impact of the main disposals and sale agreements of 2021 on the Group's net debt, excluding partial disposals with respect to DBSO [1] activities:

In millions of euros	**Disposal price**	**Reduction in net debt**
Disposal of a share of ENGIE's interest in GRTgaz - France	1,121	1,121
Disposal of a share of ENGIE's interest in GTT - France	247	52
Disposal of a share of ENGIE's interest in Georgetown Energy Partners Holding - United States	170	170
Disposal of ENGIE's interest in ENGIE EPS - France	127	150
Other disposals that are not material taken individually	364	352
Effects of classification as "assets held for sale"	-	475
TOTAL	**2,029**	**2,320**

Disposals in the process of completion at December 31, 2021 are described in Note 5.2 "Assets held for sale".

5.1.2 Disposal of a portion of ENGIE's interest in French company GRTgaz

ENGIE and Société d'Infrastructures Gazières (SIG), an investment vehicle owned by CNP Assurances and Caisse des Dépôts, have finalized the acquisition by SIG of an 11.5% stake in GRTgaz from ENGIE for €1.1 billion.

At the end of this transaction, SIG, shareholder of GRTgaz since 2011 with a 24.8% stake, now owns 38.6% of the company, with ENGIE retaining 60.9%. For SIG, this transaction includes the sale of 17.8% of Elengy's share capital in exchange for new GRTgaz shares. This has simplified GRTgaz's shareholding structure, as it holds 100% of Elengy following the transaction.

(1) Develop, Build, Share and Operate, a model used in renewable energies based on continuous rotation of capital employed.

5.1.3 Disposal of a portion of ENGIE's interest in French company Gaztransport & Technigaz SA (“GTT”)

On November 13, 2020, ENGIE announced that it was beginning a strategic review of its interest in GTT, in which the Group held a 40.4% interest and which was fully consolidated.

On May 26, 2021, the Group announced that it had completed the sale of a portion of its interest in GTT representing 10% of GTT’s share capital at a price of €67 per share and the simultaneous issuance of a €290 million zero coupon bond exchangeable for GTT shares with a maturity of three years and an exchange price of €78.25, representing a 20% premium above the placing price of the concurrent sale of GTT shares.

Prior to this disposal of a portion of its interest, the Group exercised de facto control over GTT since it held the majority of seats on the Board of Directors and owing to the widely dispersed shareholding structure and the absence of evidence of shareholders acting in concert. As a result, it held the relative majority of the voting rights exercised at shareholders’ meetings (*see Note 3.2 “Significant judgments exercised when assessing control” to the consolidated financial statements for the year ended December 31, 2020*).

The transaction, which was accompanied by the immediate resignation of two directors whose appointment had been proposed by ENGIE, has resulted in the loss of ENGIE’s majority of seats on the Board of Directors and a dilution in the percentage of the voting rights of the Group, which no longer exercises de facto control. Consequently, following the disposal, ENGIE considers that it now exercises only significant influence and therefore accounts for its residual 30.4% interest in GTT using the equity method.

The effects of the transaction have reduced the Group’s net financial debt by €52 million (after deduction of the net cash held by GTT). The disposal gain before tax, including the revaluation gain on the remaining interest, amounted to €628 million in 2021.

5.1.4 Disposal of a portion of ENGIE’s interest in American company Georgetown Energy Partners Holding, LLC

On March 31, 2021, ENGIE North America entered into a 50-year concession agreement with Georgetown University (Washington D.C., USA) to manage its entire energy and water treatment infrastructure.

On July 1, 2021, the Group sold 50% of its interest in Georgetown Energy Partners Holding, LLC to Axium Hoya. The Group has retained joint control over the project company which is accounted for using the equity method. The effects of the transaction have reduced the Group’s net financial debt by €170 million. The disposal gain before tax amounted to €44 million in 2021.

5.1.5 Disposal of ENGIE’s stake in French company ENGIE EPS SA

On July 20, 2021, the Group finalized the sale of its stake in ENGIE EPS SA to Taiwan Cement Corporation.

The effects of the transaction have reduced the Group’s net financial debt by €150 million. The disposal gain before tax amounted to €83 million in 2021.

5.1.6 Earn-out from the disposal of a portion of ENGIE’s interest in French company SUEZ SA

On October 6, 2020, the Group sold 29.9% of its stake in SUEZ SA to the VEOLIA Group. This sale was subject to an earn-out mechanism if the VEOLIA Group carried out other capital transactions on SUEZ at a price higher than that of the 29.9% block sold by ENGIE.

In 2021, the VEOLIA Group launched a takeover bid for SUEZ at a price of €20.50 per share (cum dividend) which closed successfully on January 7, 2022. At the end of 2021, the ENGIE Group considered that all the conditions had been met to recognize the €347 million in income related to the earn-out mechanism negotiated with the VEOLIA Group.

ENGIE cashed in this earn-out on January 19, 2022, once the takeover bid had been closed

5.2 Assets held for sale

Total "Assets classified as held for sale" and total "Liabilities directly associated with assets classified as held for sale" amounted to €11,881 million and €7,415 million, respectively, at December 31, 2021.

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Property, plant and equipment, net and intangible assets	4,235	992
Other assets	7,645	299
TOTAL ASSETS CLASSIFIED AS HELD FOR SALE	**11,881**	**1,292**
of which Assets relating to discontinued operations	*11,186*	*-*
Borrowings and debt	368	297
Other liabilities	7,047	190
TOTAL LIABILITIES DIRECTLY ASSOCIATED WITH ASSETS CLASSIFIED AS HELD FOR SALE	**7,415**	**488**
of which Liabilities directly associated with assets relating to discontinued operations	*6,952*	*-*

The assets related to renewable energy in India recorded as "Assets classified as held for sale" at December 31, 2020 were sold in 2021. However, the Group's stake in EV Charged BV (EV Box), for which the planned disposal of the majority of the shares was announced in December 2020, is no longer classified under IFRS 5 following the parties' decision to put to an end the planned transaction.

"Assets held for sale" at December 31, 2021 corresponds to the EQUANS entities, Endel and its main subsidiaries, and certain renewable energy assets in Mexico (the sale of which is highly probable but remains subject to various approvals being obtained). These transactions are expected to be completed in 2022.

The activities of the EQUANS entities held for sale have been classified in the Group's consolidated financial statements as discontinued operations since Asset-Light Client Solutions represent a separate major line of business pursuant to IFRS 5 – *Non-current Assets Held for Sale and Discontinued Operations*. Consequently, the net income or loss generated by these activities is presented on a separate line after income from continuing operations. The comparative income statement data for the previous period have been restated on the same basis.

5.2.1 Planned sale of the EQUANS operations

On November 5, 2021, the Group entered into exclusive negotiations with Bouygues for the sale of 100% of EQUANS, based on a unilateral firm and binding offer.

EQUANS encompasses the Group's multi-technical services for companies worldwide, mainly in France and Europe: design, engineering, works, operation, installation, maintenance, facility management, etc. The scope of these activities constituted a reportable segment (*see Note 4 "Segment information" to the condensed consolidated interim financial statements at June 30, 2021*).

EQUANS was classified under "Assets held for sale" and "Discontinued operations" on November 5, 2021. This assumption was based on the firm and binding sale option signed on November 5, 2021, and on the nature of the conditions precedent to be met at the date of receipt of the offer. The impact of this classification on the Group's consolidated financial statements was as follows:

- assets held for sale and the associated liabilities are identified separately from other assets and liabilities in the statement of financial position at December 31, 2021, but the statement of financial position at December 31, 2020 has not been restated;
- from the date of classification as "Assets held for sale", these assets are no longer depreciated;

- net income generated in 2021 is presented on a single line of the income statement entitled “Net income/(loss) from discontinued operations”. The comparative income statement data for 2020 has been restated in accordance with IFRS 5 (*see Note 2 “Restatement of comparative data”*);
- recyclable and non-recyclable items relating to discontinued operations are presented separately in the statement of comprehensive income for 2021. The comparative comprehensive income data for 2020 have also been restated in accordance with IFRS 5 (*see Note 2 “Restatement of comparative data”*);
- net cash flows from operating, investing and financial activities attributable to discontinued operations are presented on separate lines of the Group's statement of cash flows for 2021. The comparative cash flow data for 2020 have been restated in accordance with IFRS 5 (*see Note 2 ”Restatement of comparative data”*).

Given the expected capital gain from the disposal, no value adjustment has been recorded.

The transaction is expected to close in the second half of 2022 and should reduce the Group's net financial debt by around €6.8 billion.

5.2.2 Financial information on discontinued operations

Net income/(loss) from discontinued operations

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
REVENUES	**12,860**	**11,445**
Purchases and operating derivatives	(7,942)	(6,879)
Personnel costs	(4,420)	(4,256)
Depreciation, amortization and provisions	(239)	(301)
Taxes	(59)	(58)
Other operating income	166	134
Current operating income including operating MtM	**366**	**86**
Share in net income of equity method entities	-	-
Current operating income including operating MtM and share in net income of equity method entities	**367**	**86**
Impairment losses	2	(49)
Restructuring costs	(100)	(86)
Changes in scope of consolidation	(53)	(1)
Other non-recurring items	(30)	(7)
RESULT FROM OPERATING ACTIVITIES	**185**	**(56)**
Financial expenses	(74)	(65)
Financial income	25	20
NET FINANCIAL INCOME/(LOSS)	**(49)**	**(45)**
Income tax benefit/(expense)	(55)	(50)
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**80**	**(151)**
Of which Net income/(loss) relating to discontinued operations, Group share	**79**	**(153)**
Of which Non-controlling interests relating to discontinued operations	**1**	**2**
FINANCIAL INDICATORS USED IN FINANCIAL COMMUNICATION		
EBITDA	622	368
EBIT (1)	368	85
Net recurring income/(loss) Group Share (1)	231	(22)

(1) Includes the effect of the cessation of depreciation, on the date of classification as Assets held for sale, for a positive amount of €51 million for EBIT and for positive amount of €37 million for Net recurring income/(loss) Group Share, as of December 31, 2021.

Statement of financial position of discontinued operations

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Non-current assets		
Goodwill	3,056	2,934
Intangible assets, net	409	403
Property, plant and equipment, net	1,150	1,031
Other financial assets	124	113
Assets from contracts with customers	7	7
Investments in equity method entities	3	5
Other non-current assets	165	19
Deferred tax assets	267	205
TOTAL NON-CURRENT ASSETS	**5,181**	**4,718**
Current assets		
Other financial assets	21	31
Trade and other receivables, net	2,246	2,258
Assets from contracts with customers	2,302	2,308
Inventories	190	179
Other current assets	817	825
Cash and cash equivalents	429	428
TOTAL CURRENT ASSETS	**6,004**	**6,028**
TOTAL ASSETS RELATING TO DISCONTINUED OPERATIONS	**11,185**	**10,747**

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Non-current liabilities		
Provisions	355	281
Long-term borrowings	390	364
Derivative instruments	1	2
Other financial liabilities	1	1
Liabilities from contracts with customers	12	13
Other non-current liabilities	3	1
Deferred tax liabilities	218	114
TOTAL NON-CURRENT LIABILITIES	**979**	**775**
Current liabilities		
Provisions	311	338
Short-term borrowings	198	206
Derivative instruments	-	1
Trade and other payables	1,977	1,857
Liabilities from contracts with customers	1,910	1,972
Other current liabilities	1,577	1,599
TOTAL CURRENT LIABILITIES	**5,973**	**5,972**
TOTAL LIABILITIES DIRECTLY ASSOCIATED WITH DISCONTINUED OPERATIONS	**6,952**	**6,748**

Cash flows from discontinued operations

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
NET INCOME/(LOSS)	80	(151)
Cash generated from operations before income tax and working capital requirements	**462**	**282**
+ Tax paid	(71)	(104)
Change in working capital requirements	**96**	**302**
CASH FLOW FROM OPERATING ACTIVITIES	**486**	**479**
Acquisitions of property, plant and equipment and intangible assets	(208)	(151)
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	(14)	(12)
Loss of controlling interests in entities, net of cash and cash equivalent sold	6	22
Interest received on financial assets	(12)	(12)
Change in loans and receivables originated by the Group and other (1)	(2,782)	(15)
Other	7	(6)
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES	**(3,003)**	**(175)**
Dividends paid	-	(1)
Repayment of borrowings and debt	(155)	(148)
Interest paid	(33)	(18)
Interest received on cash and cash equivalents	(1)	-
Increase in borrowings	7	25
Cash flow from (used in) financing activities excluding intercompany transactions	**(181)**	**(141)**
Intercompany transactions with ENGIE (2)	2,700	(131)
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES	**2,518**	**(272)**
Effects of changes in exchange rates and other	(11)	(27)
TOTAL CASH FLOW FOR THE PERIOD	(9)	5
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	428	422
CASH AND CASH EQUIVALENTS AT END OF PERIOD	429	428

(1) The line "Change in loans and receivables originated by the Group and other" includes acquisitions, by EQUANS, of shares of "Asset-Light Client Solutions Activities", held by ENGIE for a negative amount of €3,343 million and disposals, by EQUANS, of shares not constituting of "Asset-Light Client Solutions Activities", to ENGIE for an amount of €519 million.

(2) The line "Intercompany transactions with ENGIE" includes capital increases of EQUANS, for an amount of €3,615 million, subscribed by ENGIE to finance the above acquisitions.

5.3 Acquisitions carried out in 2021

In total, acquisitions carried out in 2021 had an impact of €1 billion on net financial debt. These acquisitions relate mainly to concession contracts in Brazil for €0.4 billion and a 50-year concession agreement with the US company Georgetown Energy Partners Holding, LLC for €0.2 billion.

5.4 Other transactions

On November 11, 2021, ENGIE and Crédit Agricole Assurances announced that they had reached an agreement to acquire 97.33% of Eolia Renovables, one of Spain's largest renewable energy producers, from Canadian institutional investment manager Alberta Investment Management Corporation. The transaction covers the ownership and operation of 899 MW of operating assets (821 MW of onshore wind and 78 MW photovoltaic) and a 1.2 GW pipeline of renewable projects.

The operating assets will be 40% owned by ENGIE and 60% by Crédit Agricole Assurances while ENGIE will develop and build the pipeline of projects. ENGIE will provide a complete range of services (O&M, Asset Management, Energy Management and Development services) for the full asset scope.

The acquired assets benefit from a regulated scheme ensuring predictability of returns for the next ten years. The deal will have a €0.4 billion net financial debt impact for ENGIE. The interest in the company holding the operating assets will be accounted for using the equity method. The company responsible for developing and building the pipeline of projects will be fully consolidated by ENGIE.

Completion of the transaction is expected by Q1 2022, subject to the fulfillment of certain conditions including merger control clearance from the relevant competition authorities.

NOTE 6 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.

6.1 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, 2021	Dec. 31, 2020 (1)
Current operating income including operating MtM and share in net income of equity method entities	**6,916**	**4,554**
Mark-to-market on commodity contracts other than trading instruments	(721)	(198)
Net depreciation and amortization/Other	4,370	4,368
Share-based payments (IFRS 2)	48	47
Non-recurring share in net income of equity method entities	(50)	137
EBITDA	**10,563**	**8,908**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

6.2 EBIT

The Group's main performance indicator, formerly "Current operating income (COI)", has been renamed "EBIT" to bring it in line with market practice. There is no change in its definition or calculation.

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, 2021	Dec. 31, 2020 (1)
Current operating income including operating MtM and share in net income of equity method entities	**6,916**	**4,554**
Mark-to-market on commodity contracts other than trading instruments	(721)	(198)
Non-recurring share in net income of equity method entities	(50)	137
EBIT	**6,145**	**4,493**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

6.3 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 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, 2021	Dec. 31, 2020 (1)
NET INCOME/(LOSS) GROUP SHARE		**3,661**	**(1,536)**
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS, GROUP SHARE		**79**	**(153)**
NET INCOME/(LOSS) RELATING TO CONTINUING OPERATIONS, GROUP SHARE		**3,582**	**(1,384)**
Net income attributable to non-controlling interests relating to discontinued operation		96	642
NET INCOME/(LOSS) RELATING TO CONTINUING OPERATIONS		**3,678**	**(742)**
Reconciliation items between "Current operating income including operating MtM and share in net income of equity method entities" and RESULT FROM OPERATING ACTIVITIES		**194**	**2,996**
Impairment losses	*10.1*	*1,028*	*3,502*
Restructuring costs	*10.2*	*204*	*257*
Changes in scope of consolidation	*10.3*	*(1,107)*	*(1,641)*
Other non-recurring items	*10.4*	*69*	*879*
Other adjusted items		**(363)**	**121**
Mark-to-market on commodity contracts other than trading instruments	*9.1*	*(721)*	*(198)*
Ineffective portion of derivatives qualified as fair value hedges	*11*	*2*	*-*
Gains/(losses) on debt restructuring and early unwinding of derivative financial instruments	*11*	*-*	*29*
Change in fair value of derivatives not qualified as hedges and ineffective portion of derivatives qualified as cash flow hedges	*11*	*153*	*158*
Non-recurring income/(loss) from debt instruments and equity instruments	*11*	*(298)*	*69*
Other adjusted tax impacts		*552*	*(75)*
Non-recurring income/(loss) included in share in net income of equity method entities		*(50)*	*137*
NET RECURRING INCOME RELATING TO CONTINUING OPERATIONS		**3,509**	**2,375**
Net recurring income attributable to non-controlling interests		581	650
NET RECURRING INCOME RELATING TO CONTINUING OPERATIONS, GROUP SHARE		**2,927**	**1,725**
Net recurring income/(loss) relating to discontinued operations, Group share		231	(22)
NET RECURRING INCOME GROUP SHARE		**3,158**	**1,703**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

6.4 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, 2021	Dec. 31, 2020 (1)
(+)	Property, plant and equipment and intangible assets, net	57,863	57,085
(+)	Goodwill	12,799	15,943
(-)	*Goodwill Gaz de France - SUEZ and International Power (1)*	*(7,213)*	*(7,472)*
(+)	IFRIC 4, IFRS 16 and IFRIC 12 receivables	2,456	1,827
(+)	Investments in equity method entities	8,498	6,760
(-)	*Goodwill arising on the International Power combination (1)*	*(38)*	*(141)*
(+)	Trade and other receivables, net	32,555	14,295
(-)	*Margin calls (1) (2)*	*(13,856)*	*(1,585)*
(+)	Inventories	6,175	4,140
(+)	Assets from contracts with customers	8,377	7,764
(+)	Other current and non-current assets	13,681	9,386
(+)	Deferred tax	(6,557)	(3,536)
(+)	*Cancellation of deferred tax on other recyclable items (1) (2)*	*841*	*(543)*
(-)	Provisions	(25,459)	(27,073)
(+)	*Actuarial gains and losses in shareholders' equity (net of deferred tax) (1)*	*3,162*	*4,553*
(-)	Trade and other payables	(32,822)	(17,307)
(+)	*Margin calls (1) (2)*	*7,835*	*982*
(-)	Liabilities from contracts with customers	(2,739)	(4,354)
(-)	Other current and non-current liabilities	(19,175)	(14,579)
INDUSTRIAL CAPITAL EMPLOYED		**46,382**	**46,146**

(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.

6.5 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, 2021	Dec. 31, 2020 (1)
Cash generated from operations before income tax and working capital requirements	9,806	8,506
Tax paid	(603)	(494)
Change in working capital requirements	(2,377)	(902)
Interest received on financial assets	32	33
Dividends received on equity investments	57	56
Interest paid	(719)	(648)
Interest received on cash and cash equivalents	52	52
Change in financial assets at fair value through income	464	(608)
(+) Change in financial assets at fair value through income recorded in the statement of financial position	*(448)*	*621*
CASH FLOW FROM OPERATIONS (CFFO)	**6,263**	**6,616**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as “Discontinued operations” in application of IFRS 5 (see Note 2 “Restatement of 2020 comparative data”).

6.6 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, 2021	Dec. 31, 2020 (1)
Acquisitions of property, plant and equipment and intangible assets	5,990	4,960
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	392	405
(+) Cash and cash equivalents acquired	*6*	*50*
Acquisitions of investments in equity method entities and joint operations	369	1,067
Acquisitions of equity and debt instruments	1,548	1,618
Change in loans and receivables originated by the Group and other	(121)	359
(+) Other	*3*	*2*
Change in ownership interests in controlled entities	35	312
(-) Disposal impacts relating to DBSO (2) activities	(270)	(1,276)
TOTAL CAPITAL EXPENDITURE (CAPEX)	**7,954**	**7,497**
(-) Maintenance CAPEX	(2,418)	(2,284)
(-) Synatom investments	(1,261)	(1,339)
TOTAL GROWTH CAPEX	**4,274**	**3,873**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

(2) Develop, Build, Share & Operate; including Tax equity financing received (see Note 25 "Working capital requirements, inventories, other assets and other liabilities").

6.7 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, 2021	Dec. 31, 2020
(+) Long-term borrowings	17.2 & 17.3	30,458	30,092
(+) Short-term borrowings	17.2 & 17.3	10,590	7,846
(+) Derivative instruments - carried in liabilities	17.4	46,931	13,115
(-) Derivative instruments hedging commodities and other items		*(46,617)*	*(12,762)*
(-) Other financial assets	17.1	(13,444)	(11,599)
(+) Loans and receivables at amortized cost not included in net financial debt		*5,143*	*4,710*
(+) Equity instruments at fair value		*2,827*	*1,668*
(+) Debt instruments at fair value not included in net financial debt		*3,853*	*3,134*
(-) Cash and cash equivalents	17.1	(13,890)	(12,980)
(-) Derivative instruments - carried in assets	17.4	(44,989)	(11,065)
(+) Derivative instruments hedging commodities and other items		*44,489*	*10,299*
NET FINANCIAL DEBT		**25,350**	**22,458**

6.8 Economic net debt

Economic net debt is as follows:

In millions of euros	Notes	Dec. 31, 2021	Dec. 31, 2020
NET FINANCIAL DEBT	17	**25,350**	**22,458**
Provisions for back-end of the nuclear fuel cycle	20	8,030	7,948
Provisions for dismantling of plant and equipment	20	8,015	7,604
Provisions for site rehabilitation	20	246	238
Post-employment benefit - Pension	20	1,779	3,174
(-) Infrastructures regulated companies		*(16)*	*(351)*
Post-employment benefit - Reimbursement rights	20	(228)	(187)
Post-employment benefit - Other benefits	20	5,149	5,732
(-) Infrastructures regulated companies		*(3,289)*	*(3,602)*
Deferred tax assets for pension and related obligations	12	(1,501)	(2,061)
(-) Infrastructures regulated companies		*780*	*947*
Plan assets relating to nuclear provisions, inventories of uranium, related derivative financial instruments and a receivable of Electrabel towards EDF Belgium	20 & 25	(6,014)	(4,479)
ECONOMIC NET DEBT		**38,300**	**37,420**

NOTE 7 SEGMENT INFORMATION

7.1 Reorganization of ENGIE and modification of segment information

A new Executive Committee was appointed on February 1, 2021, whose responsibilities are aligned with the strategic priorities presented by the Group in July 2020 and reflect ENGIE's decision to organize the Group around its four strategic activities: Renewables, Networks, Thermal & Supply and Energy Solutions. Following discussions with the employee representative bodies in the first half of the year, the operational implementation of a reorganization into Global Business Units (GBUs) in line with these activities began. Within Energy Solutions operations, asset-light activities, which are intended to become independent of ENGIE in the long term, are grouped together under the "EQUANS" sub-group (*see Note 5.2.1 "Planned sale of the EQUANS operations"*), while the other retained activities make up the "Energy Solutions" GBU.

Since taking office, the Group Executive Committee, which is the chief operating decision maker within the meaning of IFRS 8 – *Operating Segment*, has steered operational and financial performance and allocated resources within the Group by activity underlying the GBUs. As a result, these activities now correspond to "operating segments" and "reportable segments" within the meaning of IFRS 8.

This change has led to a shift in the Group's segment reporting towards the activities' key focuses. However, as 2021 is considered to be a transitional year, the former operational organization by geographical Business Units will remain in place for the time being and will constitute a secondary focus of the Group's segment reporting.

The relationship between the old and new segments is as follows (after the reclassification of EQUANS activities as discontinued operations):

	New organization						
	GBU and Segment	*GBU and Segment*	*GBU and Segment*	*GBU* *Segment*	*Segment*	*Segment*	*Segment*
Former organization	**Renewables**	**Networks**	**Energy Solutions**	**Thermal**	**Supply**	**Nuclear**	**Others**
France excluding Infrastructures	X		X		X		
France Infrastructures		X					
Rest of Europe	X	X	X	X	X	X	
Latin America	X	X		X	X		
USA & Canada	X		X	X	X		
Middle East, Asia & Africa	X		X	X	X		
Others			X				X

7.2 Information by reportable segment

7.2.1 Definition of reportable segments

The reportable segments are identical to the operating segments, and correspond to the activities underlying the organization into 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, biomass, offshore wind, and geothermal. 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) natural gas underground 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 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 low-carbon 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).
- **Thermal**: encompasses all the Group's centralized power generation activities using thermal assets, whether contracted or not. It includes the operation of power plants fueled mainly by gas or coal, as well as pump-operated storage plants. 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. It also includes the financing, construction and operation of desalination plants, whether or not connected to power plants as well as the development of hydrogen production capacities.
- **Supply**: 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 power generation activities, with seven reactors in Belgium (four in Doel and three in Tihange) and drawing rights in France.

Others encompasses energy management and optimization activities, the B2B supply activities in France, GTT, corporate and holding activities.

7.2.2 Key indicators by reportable segment

The data by activity according to the new segmentation correspond to the data by Business Line under the previous secondary segmentation. Some minor reallocations were made during the reorganization, marginally impacting 2020 data compared to previous publications.

REVENUES

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
Renewables	3,661	2,971
Networks	6,700	6,718
Energy Solutions	*9,940*	*8,840*
Thermal	4,089	3,281
Supply	13,237	10,792
Nuclear (2)	56	39
Others (3)	20,183	11,664
TOTAL REVENUES	**57,866**	**44,306**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

(2) Revenues after elimination of intra-group transactions of €1,705 million at December 31, 2021 compared to €1,129 million at December, 31 2020.

(3) Of which €10 billion of price effect compared to 2020.

EBITDA

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
Renewables	1,700	1,576
Networks	4,121	3,848
Energy Solutions	*799*	*738*
Thermal	1,628	1,708
Supply	445	433
Nuclear	1,413	415
Others	457	189
TOTAL EBITDA	**10,563**	**8,908**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

EBIT

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
Renewables	1,185	1,093
Networks	2,314	2,060
Energy Solutions	*366*	*305*
Thermal	1,183	1,259
Supply	174	184
Nuclear	970	(111)
Others	(46)	(297)
TOTAL EBIT	**6,145**	**4,493**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

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

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
Renewables	95	39
Networks	233	193
Energy Solutions	153	(62)
Thermal	301	389
Supply	-	-
Nuclear	-	-
Others	18	(7)
TOTAL SHARE IN NET INCOME/(LOSS) OF EQUITY METHOD ENTITIES	**800**	**553**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

Associates and joint ventures accounted for €306 million and €494 million respectively of share in net income of equity method entities at December 31, 2021, compared to €183 million and €370 million at December 31, 2020.

INDUSTRIAL CAPITAL EMPLOYED

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Renewables	12,535	10,281
Networks	24,166	23,324
Clients Solutions	6,634	10,083
Energy Solutions	6,634	6,280
EQUANS	-	3,804
Thermal	7,852	8,210
Supply	1,362	1,234
Nuclear (1)	(12,728)	(11,826)
Others	6,561	4,839
TOTAL INDUSTRIAL CAPITAL EMPLOYED	**46,382**	**46,146**

(1) Including €15,119 million of nuclear provisions. Capital employed does not include assets dedicated to covering provisions for €5,501 million.

CAPITAL EXPENDITURE

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
Renewables	2,007	1,631
Networks	2,525	2,591
Energy Solutions	*901*	*767*
Thermal	268	189
Supply	299	278
Nuclear	1,462	1,740
Others	492	301
TOTAL CAPITAL EXPENDITURE (CAPEX)	**7,954**	**7,497**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

GROWTH CAPEX

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
Renewables	1,887	1,529
Networks	1,320	1,579
Energy Solutions	*712*	*591*
Thermal	(17)	28
Supply	155	144
Nuclear	-	-
Others	218	2
TOTAL GROWTH CAPEX	**4,274**	**3,873**

(1) *Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").*

7.3 Key indicators by geographical segment

The geographic areas below come from the combination of the Group's Business Units, as described in Note 6 "Segment information" to the consolidated financial statements for the year ended December 31, 2020.

REVENUES

	Dec. 31, 2021			Dec. 31, 2020 (1)		
In millions of euros	External revenues	Intra-Group Revenues	Total	External revenues	Intra-Group Revenues	Total
France excluding Infrastructures	13,038	299	13,337	10,386	296	10,682
France Infrastructures	5,629	878	6,506	5,439	920	6,359
Total France	*18,667*	*1,176*	*19,844*	*15,825*	*1,216*	*17,041*
Rest of Europe	11,088	3,364	14,452	9,047	1,915	10,961
Latin America	4,306	37	4,343	4,287	32	4,319
USA & Canada	661	3	664	476	3	479
Middle East, Asia & Africa	2,038	31	2,069	2,045	45	2,090
Others	21,107	16,063	37,169	12,626	4,802	17,428
Elimination of internal transactions	-	(20,674)	(20,674)	-	(8,013)	(8,013)
TOTAL REVENUES	**57,866**	**-**	**57,866**	**44,306**	**-**	**44,306**

(1) *Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").*

EBITDA

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
France excluding Infrastructures	1,410	1,180
France Infrastructures	3,521	3,290
Total France	4,931	4,470
Rest of Europe	2,717	1,680
Latin America	1,928	1,992
USA & Canada	208	168
Middle East, Asia & Africa	565	617
Others	215	(19)
TOTAL EBITDA	**10,563**	**8,908**

(1) *Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").*

DEPRECIATION AND AMORTIZATION

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
France excluding Infrastructures	(625)	(660)
France Infrastructures	(1,694)	(1,681)
Total France	(2,319)	(2,341)
Rest of Europe	(891)	(951)
Latin America	(474)	(461)
USA & Canada	(117)	(58)
Middle East, Asia & Africa	(69)	(75)
Others	(500)	(482)
TOTAL DEPRECIATION AND AMORTIZATION	**(4,370)**	**(4,368)**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

EBIT

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
France excluding Infrastructures	782	518
France Infrastructures	1,827	1,609
Total France	2,609	2,127
Rest of Europe	1,823	724
Latin America	1,453	1,530
USA & Canada	91	110
Middle East, Asia & Africa	495	542
Others	(325)	(540)
TOTAL EBIT	**6,145**	**4,493**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

INDUSTRIAL CAPITAL EMPLOYED

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
France excluding Infrastructures	6,545	7,326
France Infrastructures	19,972	19,891
Total France	26,518	27,218
Rest of Europe	(4,934)	(1,596)
Latin America	10,409	9,476
USA & Canada	3,945	3,168
Middle East, Asia & Africa	2,916	2,663
Others	7,528	5,218
TOTAL INDUSTRIAL CAPITAL EMPLOYED	**46,382**	**46,146**

CAPITAL EXPENDITURE (CAPEX)

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
France excluding Infrastructures	828	666
France Infrastructures	1,922	1,763
Total France	2,750	2,429
Rest of Europe	2,171	2,201
Latin America	1,076	1,506
USA & Canada	1,081	395
Middle East, Asia & Africa	188	(499)
Others	687	1,465
TOTAL CAPITAL EXPENDITURE (CAPEX)	**7,954**	**7,497**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

7.4 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.

In millions of euros	Revenues		Industrial capital employed	
	Dec. 31, 2021	Dec. 31, 2020 (1)	Dec. 31, 2021	Dec. 31, 2020 (1)
France	24,341	18,666	30,241	30,560
Belgium	4,372	3,756	(10,775)	(9,833)
Other EU countries	12,501	7,999	6,938	6,234
Other European countries	3,110	1,830	1,447	2,704
North America	4,752	4,264	5,342	4,460
Asia, Middle East & Oceania	4,441	3,458	2,709	2,495
South America	4,053	4,030	9,521	8,721
Africa	297	304	960	805
TOTAL	**57,866**	**44,306**	**46,382**	**46,146**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

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

NOTE 8 REVENUES

8.1 Revenues

Accounting standards

Revenues from contracts with customers concern revenues from contracts that fall within the scope of IFRS 15. 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), facility management (FM) and other services**
  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.
  FM generally involves managing and integrating a large number of different services, outsourced by customers. The consideration due to FM suppliers can either be fixed or variable depending on the number of hours or based on another indicator, irrespective of the nature of the services provided. Hence, the related revenues are recognized according to the percentage of completion on the basis of the costs incurred or of the number of hours performed.

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 lease or concession income, as well as any financial component of operating services.

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, O&M, FM and other services	Others	Dec. 31, 2021
Renewables	-	3,335	85	149	91	**3,661**
Networks	205	1	5,715	606	173	**6,700**
Energy Solutions	157	3,368	102	6,262	51	***9,939***
Thermal	66	3,165	345	451	62	**4,089**
Supply	6,384	5,518	77	992	265	**13,238**
Nuclear	-	4	11	22	19	**56**
Others	9,166	9,470	228	323	994	**20,183**
TOTAL REVENUES	**15,978**	**24,861**	**6,565**	**8,806**	**1,656**	**57,866**

The significant change in natural gas prices has led the French government to temporarily freeze regulated natural gas sales tariffs from November 1, 2021. The 2022 Finance Act for (No. 2021-1900 of December 30, 2021) introduced the “tariff shield” mechanism aimed at capping, until June 30, 2022, the regulated gas sales tariffs at the level of October 1, 2021. The loss of revenue borne by ENGIE as of November 1, 2021 constitutes expenses attributable to public service obligations and is subject to guaranteed compensation by the State. This mechanism will be followed by a catch-up on tariffs starting in July 2022. The subsidy receivable for the compensation of public service charges amounts to about €248 million at December 31, 2021 and is recorded under “Supply” in the "Others" column (“non-IFRS 15 Revenues”).

In millions of euros	Sales of gas	Sales of electricity and other energies	Sales of services linked to infrastructures	Constructions, installations, O&M, FM and other services	Others	Dec. 31, 2020 (1)
Renewables	-	2,686	39	190	56	**2,971**
Networks	441	65	5,501	622	89	**6,718**
Energy Solutions	142	2,689	104	5,851	55	**8,840**
Thermal	15	2,526	251	385	105	**3,281**
Supply	5,888	3,926	140	804	34	**10,792**
Nuclear	-	5	15	19	-	**39**
Others	2,683	7,884	58	441	598	**11,664**
TOTAL REVENUES	**9,168**	**19,782**	**6,108**	**8,311**	**936**	**44,306**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as “Discontinued operations” in application of IFRS 5 (see Note 2 “Restatement of 2020 comparative data”).

8.2 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 approach for trade receivables and assets from contracts with customers, for which the change in credit risk is monitored on a portfolio basis. An individual approach is used for large customers and other large counterparties, for which the change in credit risk is monitored on an individual basis.

See Note 18 "Risks arising from financial instruments" for the Group's assessment of counterparty risk.

8.2.1 Trade and other receivables and assets from contracts with customers

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Trade and other receivables, net [(1)]	32,555	14,295
Of which IFRS 15	*6,453*	*6,897*
Of which non-IFRS15	*26,103*	*7,398*
Assets from contracts with customers	8,377	7,764
Accrued income and unbilled revenues	*6,817*	*6,754*
Energy in the meter [(2)]	*1,560*	*1,010*

(1) The increase in trade and other receivables is mainly due to changes in commodities prices over the period.
(2) Net of advance payments.

In 2021, the most significant assets from contracts mainly concerned Others (mainly Energy Management and BtoB Supply (€3,102 million), Energy Solutions (€2,220 million) and BtoC Supply (€1,950 million).

	Dec. 31, 2021			Dec. 31, 2020		
In millions of euros	Gross	Allowances and expected credit losses	Net	Gross	Allowances and expected credit losses	Net
Trade and other receivables, net	33,920	(1,365)	32,555	15,568	(1,273)	14,295
Assets from contracts with customers	8,393	(16)	8,377	7,784	(20)	7,764
TOTAL	**42,314**	**(1,381)**	**40,932**	**23,351**	**(1,292)**	**22,059**

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 allocations 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 immaterial.

In France and Belgium, un-metered revenues (“gas in the meter”) are calculated using a direct method taking into account customers’ estimated consumption based on 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. The average price is used to measure “gas in the meter” and takes account of 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 €4,638 million at December 31, 2021 (€3,079 million at December 31, 2020).

8.2.2 Liabilities from contracts with customers

	Dec. 31, 2021			Dec. 31, 2020		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Liabilities from contracts with customers	68	2,671	2,739	39	4,315	4,354
Advances and downpayments received	*-*	*1,955*	*1,955*	*15*	*2,123*	*2,138*
Deferred revenues	*68*	*716*	*784*	*25*	*2,192*	*2,217*

In 2021, the Global Business Units reporting the greatest amounts of revenues recognized over time due to the time lag between the payments and the performance of the services, are Energy Solutions (€1,330 million), BtoC Energy Supply (€713 million) and Others (mainly energy management and BtoB supply activities (€458 million)).

8.3 Revenues relating to performance obligations not yet satisfied

Revenues relating to performance obligations only partially satisfied at December 31, 2021 amounted to €2,846 million. They mainly concern Energy Solutions (€2,017 million) and Supply (€731 million) which handle a large number of construction, installation, maintenance and facility management contracts under which revenues are recognized over time.

NOTE 9 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 or leases with a low underlying asset value), concession expenses, etc.;
- personnel costs;
- depreciation, amortization, and provisions; and
- taxes.

9.1 Purchases and operating derivatives

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
Purchases and other income and expenses on operating derivatives other than trading (2)	(32,135)	(21,404)
Service and other purchases (3)	(6,726)	(6,684)
PURCHASES AND OPERATING DERIVATIVES	**(38,861)**	**(28,088)**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

(2) Of which net income of €721 million in 2021 relating to MtM on commodities other than trading (compared to a net income of €198 million in 2020), notably on certain residual economic gas hedging positions not documented as cash flow hedges (with electricity and other underlying exposures offsetting each other overall).

(3) Of which €51 million in lease expenses, relating to short-term lease contracts and leases with a low underlying asset value in 2021 (compared to €36 million in lease expenses in 2020).

The increase in purchases and operating derivatives is mainly due to changes in commodity prices over the period.

9.2 Personnel costs

In millions of euros	Notes	Dec. 31, 2021	Dec. 31, 2020 (1)
Short-term benefits		(7,018)	(6,858)
Share-based payments	22	(48)	(47)
Costs related to defined benefit plans	21.3.3	(479)	(350)
Costs related to defined contribution plans	21.4	(147)	(248)
PERSONNEL COSTS		**(7,692)**	**(7,503)**

(1) Comparative data at December 31,2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations", in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

9.3 Depreciation, amortization and provisions

In millions of euros	Notes	Dec. 31, 2021	Dec. 31, 2020 (1)
Depreciation and amortization	15 & 16	(4,370)	(4,368)
Net change in write-downs of inventories, trade receivables and other assets		(310)	(217)
Net change in provisions	20	(159)	108
DEPRECIATION, AMORTIZATION AND PROVISIONS		**(4,840)**	**(4,477)**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

At December 31, 2021, depreciation and amortization mainly break down as €1,004 million for intangible assets and €3,366 million for property, plant and equipment.

NOTE 10 OTHER ITEMS OF RESULT FROM OPERATING ACTIVITIES

Accounting standards

Other items of Result from operating activities include:

- “Impairment losses”: this line include impairment losses on goodwill, other intangible assets, property, plant and equipment and investments in entities consolidated using the equity method of accounting;
- “Restructuring costs”: this line concern 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 the 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. These transactions on renewable activities are recognized in current operating income as they are part of the recurring rotation of the Group’s capital employed;
- “Other non-recurring items”: this line includes other elements of an inhabited, abnormal or infrequent nature..

10.1 Impairment losses

In millions of euros	Notes	Dec. 31, 2021	Dec. 31, 2020 (1)
Impairment losses:			
Goodwill	14.1	(107)	(2,145)
Property, plant and equipment and other intangible assets	15 & 16	(969)	(1,203)
Investments in equity method entities and related provisions		(17)	(237)
TOTAL IMPAIRMENT LOSSES		**(1,093)**	**(3,585)**
Reversal of impairment losses:			
Property, plant and equipment and other intangible assets		64	84
Investments in equity method entities and related provisions		-	-
TOTAL REVERSALS OF IMPAIRMENT LOSSES		**64**	**84**
TOTAL		**(1,028)**	**(3,502)**

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as “Discontinued operations” in application of IFRS 5 (see Note 2 “Restatement of 2020 comparative data”).

Net impairment losses amounted to €1,028 million in 2021, relating mainly to property, plant and equipment, intangible assets and goodwill. After taking into account the deferred tax effects and the share of impairment losses attributable to non-controlling interests, the impact of these impairment losses on net income Group share for 2021 amounted to €773 million.

Impairment tests are performed in accordance with the conditions described in Note 14.4.

10.1.1 Impairment losses recognized in 2021

Net impairment losses recognized as of December 31, 2021 amounted to € 1,028 million and relate mainly to:

- assets affected by the Group's announced exit from coal, in 2021, for thermal power generation assets in Brazil (€228 million);
- assets affected by the strategic review of Client Solutions, announced by the Group in 2020, in France (€90 million), Africa (€73 million) and Asia (€33 million);
- assets that have been subject to revisions to their medium- and long-term prospects, or that have encountered operational difficulties, in particular renewable energy production assets in Latin America (€221 million) and thermal power generation assets in Asia (€90 million);
- other production or support assets for less significant amounts taken individually.

10.1.2 Impairment losses recognized in 2020

Net impairment losses amounted to €3,502 million in 2020 and mainly concerned:

- **Goodwill for the Nuclear CGU** (€2,145 million) and **Belgian nuclear reactors** (€715 million)

  Following the announcements made by the Belgian government in Autumn 2020 and the talks held since then, the Group considered that it could no longer justify the assumption that the operating life of half of its second-generation reactors could be extended for 20 years beyond 2025.

  The impairment losses over the year take into consideration this major assumption change, the level of forward prices observed in the second half of 2020 and the update of the Group's long-term pricing scenario in light of the latest forecasts for demand, the price of CO2 and the change in the energy mix.

- **Other impairment losses**

  Other impairment losses recognized by the Group mainly concerned:

  - an investment in a gas production asset in Algeria (€123 million);
  - thermal power generation assets in the Middle East (€115 million);
  - other thermal and renewable power generation assets in Mexico (€70 million), North America (€69 million) and Brazil (€64 million).

10.2 Restructuring costs

In 2021, restructuring costs totaled €204 million (versus €257 million in 2020). Restructuring costs in both years mainly included costs related to staff reduction plans and measures to adapt to economic situations in 2021 and 2020, as well as the shutdown or sale of operations, the closure or restructuring of certain facilities and other miscellaneous restructuring costs.

10.3 Changes in scope of consolidation

At December 31, 2021, the impact of changes in the scope of consolidation was a positive €1,107 million and mainly comprised:

- a positive impact of €628 million related to the disposal of 10% of the shares held in GTT for €151 million and the revaluation of the remaining 30% for €478 million,
- the positive impact of the earn-out to be received on the disposal of 29.9% stake in SUEZ for €347 million,
- a positive €113 million change in the fair value of the earn-out from the disposal of LNG activities to TOTAL in 2018,

- a positive impact €56 million relating to various disposals including EPS for € 83 million, the Group's interests in Georgetown ENA in the United States for €44 million, and in a thermal power generation asset in Greece for a negative €28 million, and
- a negative €48 million impact related to the change in the fair value of the embedded derivative of the GTT shares exchangeable bond.

At December 31, 2020, the impact of changes in the scope of consolidation was a positive €1,641 million and mainly comprised:

- the positive impact of the disposal of the majority of ENGIE's interest in SUEZ for €1,735 million,
- the positive impact of the disposal of the Group's interests in Astoria 1 and 2 in the United States for €95 million, partially offset by
- a negative impact of €62 million relating to the disposal of MultiTech in Canada and
- a negative €51 million change in the fair value of the earn-out from the disposal of LNG activities to TOTAL in 2018.

10.4 Other non-recurring items

Other non-recurring items at December 31, 2021 totaled a negative €69 million and mainly included asset scrapping, and disposals of property, plant and equipment.

At December 31, 2020, other non-recurring items totaled a negative €879 million and mainly included, in addition to the impacts of the adjustment to provisions for the dismantling and rehabilitation of industrial sites, the effects of extending the trading management method launched by the GEM BU in 2017 to the rest of the Group's gas positions in Europe for a negative amount of €726 million.

NOTE 11 NET FINANCIAL INCOME/(LOSS)

In millions of euros	Expense	Income	Dec. 31, 2021	Expense	Income	Dec. 31, 2020 (1)
Interest expense on gross debt and hedges	*(943)*	-	*(943)*	*(876)*	-	*(876)*
Cost of lease liabilities	*(35)*	-	*(35)*	*(40)*	-	*(40)*
Foreign exchange gains/losses on borrowings and hedges	*(6)*	-	*(6)*	*(21)*	-	*(21)*
Ineffective portion of derivatives qualified as fair value hedges	*(2)*	-	*(2)*	-	-	-
Gains and losses on cash and cash equivalents and liquid debt instruments held for cash investment purposes	-	*63*	*63*	-	*46*	*46*
Capitalized borrowing costs	*70*	-	*70*	*103*	-	*103*
Cost of net debt	**(916)**	**63**	**(852)**	**(834)**	**46**	**(788)**
Cash payments made on the unwinding of swaps	*(73)*	-	*(73)*	*(44)*	-	*(44)*
Reversal of the negative fair value of these early unwound derivative financial instruments	-	*73*	*73*	-	*31*	*31*
Gains/(losses) on debt restructuring transactions	-	-	-	*(16)*	-	*(16)*
Gains/(losses) on debt restructuring and early unwinding of derivative financial instruments	**(73)**	**73**	**-**	**(60)**	**31**	**(29)**
Net interest expense on post-employment benefits and other long-term benefits	*(63)*	-	*(63)*	*(87)*	-	*(87)*
Unwinding of discounting adjustments to other long-term provisions	*(630)*	-	*(630)*	*(614)*	-	*(614)*
Change in fair value of derivatives not qualified as hedges and ineffective portion of derivatives qualified as cash flow hedges	*(152)*	-	*(152)*	*(158)*	-	*(158)*
Income/(loss) from debt instruments and equity instruments	*(16)*	*329*	*313*	*(96)*	*70*	*(26)*
Interest income on loans and receivables at amortized cost	-	*125*	*125*	-	*176*	*176*
Other	*(213)*	*121*	*(92)*	*(318)*	*209*	*(108)*
Other financial income and expenses	**(1,073)**	**575**	**(498)**	**(1,273)**	**456**	**(818)**
NET FINANCIAL INCOME/(LOSS)	**(2,061)**	**711**	**(1,350)**	**(2,168)**	**533**	**(1,634)**

(1) Comparative data at December 31,2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

The cost of net debt is higher compared to December 31, 2020 mainly due to the increase in interest rates in Brazil.

Gains from debt and equity instruments amounted to €313 million. This amount includes the positive change in fair value of money market funds held by Synatom for €291 million *(see Note 20.2.4 "Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material")* and the change in fair value of the residual interest in SUEZ for €42 million (*see Note 17.1.1.1 "Equity instruments at fair value").*

At December 31, 2021, the average cost of debt after hedging came out at 2.63% compared with 2.38% at December 31, 2020.

NOTE 12 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.

12.1 Actual income tax expense recognized in the income statement

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

The tax expense recognized in the income statement for 2021 amounted to €1,695 million (€666 million income tax expense in 2020). It breaks down as follows:

In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
Current income taxes	(740)	(765)
Deferred taxes	(955)	99
TOTAL INCOME TAX BENEFIT/(EXPENSE) RECOGNIZED IN INCOME	**(1,695)**	**(666)**

(1) Comparative data at December 31,2020 have been restated due to the classification of EQUANS activities held for sale as “Discontinued operations” in application of IFRS 5 (see Note 2 “Restatement of 2020 comparative data”).

12.1.2 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, 2021	Dec. 31, 2020 (1)
Net income/(loss)	**3,758**	**(893)**
Share in net income of equity method entities	784	316
Net income/(loss) from discontinued operations	80	(151)
Income tax expense	(1,695)	(666)
Income/(loss) before income tax of consolidated companies (A)	**4,588**	**(392)**
Of which French companies	*5,604*	*1,538*
Of which companies outside France	*(1,016)*	*(1,930)*
Statutory income tax rate of the parent company (B)	28.4%	32.0%
THEORETICAL INCOME TAX EXPENSE (C) = (A) X (B)	**(1,303)**	**125**
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	38	(124)
Permanent differences (2)	(30)	(580)
Income taxed at a reduced rate or tax-exempt (3)	300	573
Additional tax expense (4)	(230)	(388)
Effect of unrecognized deferred tax assets on tax loss carry-forwards and other tax-deductible temporary differences (5)	(958)	(596)
Recognition or utilization of tax income on previously unrecognized tax loss carry-forwards and other tax-deductible temporary differences (6)	510	263
Impact of changes in tax rates (7)	(17)	(103)
Tax credits and other tax reductions (8)	185	108
Other (9)	(189)	56
INCOME TAX BENEFIT/(EXPENSE) RECOGNIZED IN INCOME	**(1,695)**	**(666)**

(1) *Comparative data at December 31,2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").*

(2) *Mainly includes disallowable impairment losses on goodwill, disallowable operating expenses and the deduction of interest expenses arising from hybrid debt.*

(3) *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.*

(4) *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.*

(5) *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.*

(6) *Includes the impact of the recognition of net deferred tax asset positions for some tax entities.*

(7) *Mainly includes the impact of tax rate changes on deferred tax balances in the United Kingdom, in France and in Argentina for 2021 and in France and the United Kingdom for 2020.*

(8) *Mainly includes reversals of provisions for tax litigation, tax credits in France and other tax reductions.*

(9) *Mainly includes the correction of previous tax charges.*

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

	Impact in the income statement	
In millions of euros	Dec. 31, 2021	Dec. 31, 2020 (1)
Deferred tax assets:		
Tax loss carry-forwards and tax credits	(178)	(203)
Pension and related obligations	(218)	(78)
Non-deductible provisions	(56)	222
Difference between the carrying amount of PP&E and intangible assets and their tax bases	174	276
Measurement of financial instruments at fair value (IAS 32/IFRS 9)	6,542	488
Other	222	(40)
TOTAL	**6,485**	**666**
Deferred tax liabilities:		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(498)	2
Measurement of assets and liabilities at fair value (IAS 32/IFRS 9)	(7,148)	(437)
Other	183	(146)
TOTAL	**(7,463)**	**(581)**
DEFERRED TAX INCOME/(EXPENSE)	**(977)**	**85**
Of which continuing activities	*(955)*	*99*

(1) Comparative data at December 31,2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations", in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

12.2 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, 2021	Dec. 31, 2020 (1)
Equity and debt instruments	1	(10)
Actuarial gains and losses	(447)	400
Net investment hedges	55	(27)
Cash flow hedges on other items	(1,370)	(127)
Cash flow hedges on net debt	(19)	17
TOTAL EXCLUDING SHARE OF EQUITY METHOD ENTITIES	**(1,779)**	**254**
Share of equity method entities	(50)	116
Discontinued operations	(13)	(1)
TOTAL	**(1,843)**	**369**

(1) Comparative data at December 31,2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations", in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

12.3 Deferred taxes presented in the statement of financial position

12.3.1 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, 2020	**880**	**(4,416)**	**(3,536)**
Impact on net income for the year	6,484	(7,463)	(979)
Impact on other comprehensive income items	(286)	(1,511)	(1,797)
Impact of changes in scope of consolidation	(8)	42	34
Impact of translation adjustments	59	(125)	(66)
Transfers to assets and liabilities classified as held for sale	(250)	219	(30)
Other	309	(491)	(183)
Impact of netting by tax entity	(6,007)	6,007	-
AT DECEMBER 31, 2021	**1,181**	**(7,738)**	**(6,557)**

12.3.2 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 validated 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, 2021	Dec. 31, 2020
Deferred tax assets:		
Tax loss carry-forwards and tax credits	1,299	1,769
Pension obligations	1,501	2,061
Non-deductible provisions	388	435
Difference between the carrying amount of PP&E and intangible assets and their tax bases	1,440	955
Measurement of financial instruments at fair value (IAS 32/IFRS 9)	8,968	2,148
Other	523	442
TOTAL	**14,119**	**7,810**
Deferred tax liabilities:		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(9,345)	(8,528)
Measurement of financial instruments at fair value (IAS 32/IFRS 9)	(10,643)	(2,067)
Other	(687)	(752)
TOTAL	**(20,675)**	**(11,346)**
NET DEFERRED TAX ASSETS/(LIABILITIES)	**(6,557)**	**(3,536)**

12.4 Unrecognized deferred taxes

At December 31, 2021, the tax effect of tax losses and tax credits eligible for carry-forward but not utilized and not recognized in the statement of financial position amounted to €4,642 million (€4,061 million at December 31, 2020). Most of these unrecognized tax losses relate to companies based in countries which allow losses to be carried forward indefinitely (mainly Belgium, Luxembourg and the Netherlands). These tax loss carry-forwards did not give fully or partially rise to the recognition of deferred tax 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 €1,097 million at end-December 2021 versus €823 million at end-December 2020.

NOTE 13 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 19.2.1 "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, 2021	Dec. 31, 2020 (1)
Numerator (in millions of euros)		
Net income/(loss) Group share	**3,661**	**(1,536)**
Of which Net income/(loss) relating to continuing operations, Group share	*3,582*	*(1,384)*
Interest from deeply-subordinated perpetual notes	(121)	(187)
Net income/(loss)used to calculate earnings per share	**3,540**	**(1,723)**
Of which Net income/(loss) relating to continuing operations, Group share, used to calculate earnings per	*3,461*	*(1,571)*
Impact of dilutive instruments	-	-
Diluted net income/(loss) Group share	**3,540**	**(1,723)**
Net recurring income/(loss) Group share	**3,158**	**1,703**
Of which Net recurring income/(loss) relating to continuing operations, Group share	*2,927*	*1,725*
Interest from deeply-subordinated perpetual notes	(121)	(187)
Net recurring income/(loss)used to calculate earnings per share	**3,037**	**1,516**
Of which Net recurring income/(loss) relating to continuing operations, Group share, used to calculate	*2,806*	*1,538*
Impact of dilutive instruments	-	-
Diluted net recurring income/(loss) Group share	**3,037**	**1,516**
Denominator (in millions of shares)		
Average number of outstanding shares	**2,419**	**2,416**
Impact of dilutive instruments:		
Bonus share plans reserved for employees	12	11
Diluted average number of outstanding shares	**2,431**	**2,427**
Earnings per share (in euros)		
Basic earnings/(loss) per share	**1.46**	**(0.71)**
Of which Basic earnings/(loss) Group share relating to continuing operations per share	*1.43*	*(0.65)*
Diluted earnings/(loss) per share	**1.46**	**(0.71)**
Of which Diluted earnings/(loss) Group share relating to continuing operations per share	*1.42*	*(0.65)*
Basic recurring earnings/(loss) per share	**1.26**	**0.63**
Of which Basic recurring earnings/(loss) Group share relating to continuing operations per share	*1.16*	*0.64*
Diluted recurring earnings/(loss) per share	**1.25**	**0.62**
Of which Diluted recurring earnings/(loss) Group share relating to continuing operations per share	*1.15*	*0.63*

(1) Comparative data at December 31,2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations", in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").

NOTE 14 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 recorded under "Investments in equity method entities".

Risk of impairment

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. 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. The methods used to carry out these impairment tests are described in Note 14.4.

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

Indicators of goodwill 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.

14.1 Changes in organizational structure

As of February 1, 2021, the Group is structured around four major strategic activities, or Global Business Units (GBUs): Renewables, Networks, Thermal & Supply and Energy Solutions *(see Note 7.1 "Reorganization of ENGIE and modification of segment information").*

As part of this reorganization, the Group has modified its segment information within the meaning of IFRS 8 – *Operating segments* and consequently reallocated the goodwill from the previous geographical Business Units (BUs) to the new operating segments in accordance with IAS 36 – *Impairment of Assets*.

Of the 25 BUs that made up the operating segments under the previous organization:

- 13 BUs had a single activity: their goodwill, which totaled €9.2 billion at January 1, 2021 (approximately 60% of the Group's goodwill), was allocated directly to the new segments corresponding to the businesses in question;
- 12 BUs had multiple activities: their goodwill, representing €6.7 billion, was reallocated to the relevant segments.

The reallocation of goodwill at segment level as of January 1, 2021 was as follows:

In billions of euros	Renewables	Networks	Clients Solutions		Thermal	Supply	Nuclear	Other	Goodwill January 1, 2021
			Energy Solutions	*EQUANS*					
France excluding Networks									
France Renewables									**1.2**
ENGIE Solutions France									**1.5**
France BtoC									**1.0**
Networks France									
GRDF									**4.0**
GRTgaz									**0.6**
Other									**0.4**
Rest of Europe									
Benelux									**1.3**
Generation Europe									**0.5**
Nuclear									**0.8**
United Kingdom									**1.0**
North/South/East Europe									**0.9**
Latin America									**0.7**
United States & Canada									**0.7**
Middle East, Asia & Africa									**0.7**
Other									**0.7**
Of which GTT									*0.2*
Goodwill January 1. 2021	**2.1**	**5.3**	**1.4**	**2.9**	**1.1**	**1.8**	**0.8**	**0.5**	**15.9**

Total single business	**9.2**
Total multi business	**6.7**

Given the existing value headroom, this reallocation of goodwill did not entail any day-one impairment.

14.2 Movements in the carrying amount of goodwill

In millions of euros	Net amount
AT DECEMBER 31, 2020	**15,943**
Impairment losses	(107)
Changes in scope of consolidation and Other	(3,249)
Translation adjustments	214
AT DECEMBER 31, 2021	**12,799**

Changes during the period mainly result from the classification under “Assets held for sale” of the activities of the EQUANS entities, Endel and its main subsidiaries, and the impairment losses recognized on non-strategic geographies or activities in South America and Africa, offset by various acquisitions during the year*(see Note 5 “Main changes in Group structure”*).

14.3 Breakdown of goodwill

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

The table below shows goodwill at December 31, 2021:

In millions of euros	Dec. 31, 2021
Networks	5,288
Renewables	2,132
Supply	1,818
Energy Solutions	1,302
Thermal	1,139
Nuclear	797
Other	324
TOTAL	**12,799**

14.4 Impairment testing of goodwill

All goodwill is tested for impairment based on data as of end-June, plus a review of events arisen in the second half of the year. In most cases, the recoverable amount of goodwill is determined by reference to a value in use that is calculated using cash flow projections drawn up on the basis of the 2022 budget and the 2023-2024 medium-term business plan, as approved by the Executive Committee and the Board of Directors, and of extrapolated cash flows beyond that time frame.

Cash flow projections 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 2025-2040 as approved by the Executive Committee in November 2021. 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 against a backdrop of highly volatile 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 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. 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.

14.4.1 Renewables

The goodwill allocated to the Renewables segment amounted to €2,132 million at December 31, 2021. 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, biomass, offshore wind, and geothermal. 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.

For the hydraulics business, the terminal value was determined to calculate the value in use by extrapolating the cash flows beyond the medium-term business plan based on the reference scenario adopted by the Group.

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

Value in use of the Compagnie Nationale du Rhône and SHEM was calculated based on assumptions including the extension or renewal of a tender process for the concession agreements, as well as on the conditions of a potential extension.

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 2021, the discount rates applied to these activities ranged between 4.5% and 10%.

Results of the impairment test

At December 31, 2021, the recoverable amount was higher than the carrying amount.

Sensitivity analyses

A decrease of €10/MWh in electricity prices for hydropower generation would have a negative €0.5 billion impact on the recoverable amount. However, the recoverable amount would remain above the carrying amount. Conversely, an increase of €10/MWh in electricity prices would have a positive €0.5 billion impact on the recoverable amount.

An increase of 50 basis points in the discount rates used for hydropower generation in France would have a negative €0.2 billion impact on the recoverable amount. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive €0.2 billion impact on the recoverable amount.

14.4.2 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) natural gas underground 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.).

The goodwill allocated to the Networks segment amounted to €5,288 million at December 31, 2021.

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. It is the sum of the future pre-tax cash flows, discounted at the pre-tax rate of return guaranteed by the regulator.

In respect of the valuation of activities in France, the energy mix scenario for 2050, adopted by the Group and detailed in Note 20.3.1 "Dismantling obligations arising on non-nuclear plant and equipment", will not lead to any significant change in RAB. Given the vital role of gas, a reliable energy source able to supplement renewable energy sources that are intermittent by nature, non-controllable and difficult to store, the Group is planning to maintain or convert its gas network infrastructures to allow for the transport of green gases (biomethane, hydrogen, etc.).

The Group plans to do this by maintaining the current level of investment and including hydrogen in its regulated activities, a scenario supported by the various measures presented by the European Commission.

In 2021, the discount rates applied to all these activities ranged between 4.5% and 8.5%.

Results of the impairment test

At December 31, 2021, the recoverable amount was higher than the carrying amount.

Sensitivity analyses

Given the regulated nature of the Networks business in France, a reasonable change in any of the valuation inputs would not result in impairment losses.

14.4.3 Energy Solutions

The goodwill allocated to the Energy Solutions segment amounted to €1,302 million at December 31, 2021. Energy Solutions encompasses the construction and management of decentralized energy networks to produce low-carbon 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 2021, the discount rates applied to these activities ranged between 4.5% and 8.6%.

Results of the impairment test

At December 31, 2021, the recoverable amount was higher than the carrying amount.

Sensitivity analyses

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

14.4.4 Thermal

The goodwill allocated to the Thermal segment amounted to €1,139 million at December 31, 2021. Thermal encompasses all the Group's centralized power generation activities using thermal assets, whether contracted or not. It includes the operation of power plants fueled mainly by gas or coal, as well as pump-operated storage plants. 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. It also includes the financing, construction and operation of desalination plants, whether or not connected to power plants.

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2022 budget and the 2023-2024 medium-term business plan. Beyond this three-year period, cash flows were projected over the useful lives of the assets based on the reference scenario adopted by the Group.

The main assumptions and key estimates relate primarily to discount rates, estimated demand for electricity and changes in the price of CO_2, fuel and electricity beyond the liquidity period.

In 2021, the discount rates applied to these activities ranged between 6% and 10%.

Results of the impairment test

At December 31, 2021, the recoverable amount was higher than the carrying amount.

Sensitivity analyses

An increase of 50 basis points in the discount rates used would have a negative 8% impact on the excess of the recoverable amount of thermal power plants in France, Belgium, the Netherlands and Spain over their carrying amount. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 8% 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 29% on the excess of the recoverable amount over the carrying amount. An increase of 10% in the margin captured would have a positive 29% impact on this calculation.

14.4.5 Supply

The goodwill allocated to the Supply segment amounted to €1,818 million at December 31, 2021. Supply 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 between 1.8% and 1.9% per year.

In 2021, the discount rates applied to these activities ranged between 7% and 9%.

Results of the impairment test

At December 31, 2021, the recoverable amount was higher than the carrying amount.

Sensitivity analyses

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

14.4.6 Nuclear

Nuclear encompasses the power generation activities from the Group's nuclear power plants in Belgium and drawing rights on the Chooz B and Tricastin power plants in France.

The goodwill allocated to the Nuclear segment amounted to €797 million at December 31, 2021.

Key assumptions used for the impairment test

The cash flow projections for these activities are based on a large number of key assumptions, such as prices of fuel and CO_2, expected trends in electricity demand and prices, availability of power plants, the market outlook, and changes in the regulatory environment (especially concerning nuclear capacities in Belgium and 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% for 2021, unchanged from 2020.

Cash flow projections for the period beyond the medium-term business plan were determined as described below:

Activities	Assumptions applied beyond the term of the business plan
Nuclear power generation in Belgium	For Doel 1, Doel 2 and Tihange 1, cash flow projection over the residual useful life of 50 years. For the second generation reactors Doel 3, Doel 4, Tihange 2 and Tihange 3, cash flow projection over the residual useful life of 40 years without any assumption of an extension.
Drawing rights on Chooz B and Tricastin power plants	Cash flow projection over the remaining term of existing contract plus the assumption that drawing rights will be extended for a further 10 years.

As regards second-generation reactors, the principle of a gradual phase-out of nuclear power and the schedule for this phase-out, with the shutdown of Doel 3 in 2022, Tihange 2 in 2023 and Tihange 3 and Doel 4 in 2025, after 40 years of operation, were first set out in the law of January 31, 2003 on the gradual phase-out of nuclear power for industrial electrical generation, and were reaffirmed in the French government's general policy memorandum of November 4, 2020. However, this principle remains subject to analysis mechanisms enabling this decision to be reassessed based on its impacts on the security of supply, the climate, energy prices and the security of power plants subject to a monitoring process. If this monitoring process reveals a potential supply security problem, the 2020 governmental agreement provides for the option of adjusting the phase-out schedule for capacity of up to 2 GW.

Since the end of 2020, the Group has considered that, in particular, the operating conditions for carrying out pre-extension work are no longer met and therefore no longer justify the assumption that the life of certain second generator reactors may be extended beyond 2025. There were still no conclusions drawn in 2021 as a result of the above monitoring, and the assumption of a gradual phase-out of all units by 2025 has not changed for the purposes of the impairment test.

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 900 MW reactors to continue operating beyond 40 years. Confirmation of a 10-year extension of the operating life of the 900 MW series reactors is therefore expected to be formalized in the next few years, once the conditions for continued operation have been determined by the Nuclear Safety Authority and a public inquiry has been held. The Group therefore included an assumption that the operating lives of the Tricastin and Chooz B nuclear plants, which expire(d) in 2021 and 2039, respectively, would be extended for 10 years after their fourth 10-yearly inspection, as would the Group’s drawing rights. The assumption of an extension was already taken into account in previous years.

Results of the impairment test

Given the information provided above, the forward prices observed in 2021 and the Group’s long-term pricing scenario updated based on the latest forecasts for demand, CO_2 prices and developments in the energy mix, the Group did not recognize an impairment loss for the year.

Sensitivity analyses

A decrease of €10/MWh in electricity prices for nuclear power generation beyond the forward period would lead to an impairment loss of around €0.2 billion.

An increase of 50 basis points in the discount rates used would not lead to an impairment loss.

A 5% decrease in availability of all Belgian nuclear power plants would lead to an impairment loss of around €0.1 billion.

14.5 Other

The goodwill allocated to the Other segment amounted to €324 million at December 31, 2021. Other encompasses energy management and optimization activities, the BtoB supply activities in France of Entreprises & Collectivités (E&C), and the corporate and holding activities.

In the Other segment, there is a considerable difference between the recoverable amount and the carrying amount at December 31, 2021 for operating activities to which goodwill is allocated.

NOTE 15 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 assets with an indefinite useful life are not amortized but are tested for impairment annually.

Risk of impairment

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.

Impairment indicators

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.

The main impairment indicators used by the Group are described in Note 14 “Goodwill”.

Impairment

Items of property, plant and equipment and intangible assets are tested for impairment at the level of the individual asset or 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.

Measurement of recoverable amount

In order to review the recoverable amount of property, plant and equipment and intangible assets, the assets are grouped, where appropriate, into CGUs and the carrying amount of each CGU is compared with its 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.

In the event of a decline in value, the impairment loss is recorded in the consolidated income statement under "Impairment losses".

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.

15.1 Movements in intangible assets

In millions of euros	Intangible rights arising on concession contracts	Capacity entitlements	Others	Total
GROSS AMOUNT				
AT DECEMBER 31, 2020	**3,907**	**2,908**	**12,886**	**19,701**
Acquisitions (1)	197	-	1,032	1,228
Disposals	(3)	(125)	(115)	(242)
Translation adjustments	(7)	-	127	120
Changes in scope of consolidation	(38)	-	(631)	(669)
Transfer to "Assets classified as held for sale and discontinued operations"	(195)	-	(578)	(773)
Other	57	61	214	331
AT DECEMBER 31, 2021	**3,917**	**2,845**	**12,936**	**19,697**
ACCUMULATED AMORTIZATION AND IMPAIRMENT				
AT DECEMBER 31, 2020	**(1,781)**	**(2,193)**	**(8,532)**	**(12,505)**
Amortization (2)	(129)	(65)	(860)	(1,053)
Impairment	(20)	-	(100)	(120)
Disposals	2	125	101	228
Translation adjustments	1	-	(69)	(67)
Changes in scope of consolidation	7	-	257	264
Transfer to "Assets classified as held for sale and discontinued operations"	24	-	379	403
Other	(26)	-	(35)	(62)
AT DECEMBER 31, 2021	**(1,921)**	**(2,133)**	**(8,860)**	**(12,913)**
CARRYING AMOUNT				
AT DECEMBER 31, 2020	**2,126**	**716**	**4,354**	**7,196**
AT DECEMBER 31, 2021	**1,996**	**712**	**4,076**	**6,784**

(1) Including €49 million related to intangible assets of EQUANS classified as in "Discontinued operations" (see Note 5 "Main changes in Group structure").

(2) Including €49 million in amortization charges recognized in "Net income/(loss) from discontinued operations" in the income statement in respect of EQUANS on December 31, 2021.

In 2021, the net decrease in "Intangible assets" was mainly attributable to:

- amortizations (negative €1,053 million);
- the transfer to the financial investment account "Assets classified as held for sale" (a negative €369 million) with primarily the classification of EQUANS activities as discontinued operations in application of IFRS 5;
- changes in scope of consolidation (negative €406 million) relating mainly to the partial disposal of 10% and consequent loss of control in the GTT "Groupe de Gaztransport & Technigaz" (a negative €357 million), which operates in the sector of liquified gas transportation and storage in France;
- impairment losses (negative €120 million);

partially offset by :

- the investments during the period (positive €1,228 million) relating mainly to intangible assets in progress in the business of Networks business in France;
- a positive foreign exchange impact of €53 million primarily due to the appreciation of the US dollar (positive €47 million).

15.1.1 Impairment

At December 31, 2021, the impairment losses of €120 million were recognized mainly on software of ENGIE SA and intangible assets of affiliates of Energy Solutions and Renewables businesses.

15.1.2 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 assets. These rights are amortized over the useful life of the underlying assets, not exceeding 50 years. The Group currently holds entitlements in the Chooz B and Tricastin power plants in France and in the virtual power plant (VPP) in Italy.

15.1.3 Other

At December 31, 2021, this caption mainly relates to software and licenses for €1,470 million, as well as intangible assets in progress €628 million and intangible assets (client portfolio) acquired as a result of business combinations and capitalized acquisition costs for customer contracts for €1,721 million.

15.2 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 costs, excluding technical assistance costs, totaled €159 million in 2021, of which €25 million in expenses related to in-house projects in the development phase that meet the criteria for recognition as an intangible asset as defined in IAS 38.

NOTE 16 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 and loss. The lease contracts in the Group mainly concern real estate, vehicles 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 injected into 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 25.2 "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
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. In accordance with the law of January 31, 2003 adopted by the Belgian Chamber of Representatives with respect to the gradual phase-out of nuclear energy for the industrial production of electricity, the useful lives of nuclear power stations were reviewed and adjusted prospectively to 40 years as from 2003, except for Tihange 1, Doel 1 and Doel 2 for which the operating lives have been extended by 10 years.

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.

Risk of impairment

See Note 15 “Intangible assets”.

Impairment indicators

See Note 14 “Goodwill”.

16.1 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, 2020	**633**	**5,447**	**81,958**	**488**	**3,593**	**4,616**	**4,151**	**1,442**	**102,327**
Acquisitions/Increases [1]	6	408	(6)	49	-	4,816	666	64	6,003
Disposals	(16)	(89)	(885)	(33)	(5)	(29)	(163)	(65)	(1,284)
Translation adjustments	8	70	866	3	18	178	133	38	1,313
Changes in scope of consolidation	70	1,102	1,258	(1)	3	(53)	(12)	(14)	2,353
Transfer to "Assets classified as held for sale and discontinued operations"	(41)	(433)	(925)	(207)	(26)	100	(768)	(190)	(2,489)
Other	(10)	(3,192)	8,265	4	86	(4,914)	(140)	33	133
AT DECEMBER 31, 2021	**650**	**3,312**	**90,530**	**304**	**3,669**	**4,715**	**3,867**	**1,308**	**108,355**
ACCUMULATED DEPRECIATION AND IMPAIRMENT									
AT DECEMBER 31, 2020	**(99)**	**(3,090)**	**(43,444)**	**(341)**	**(2,973)**	**(309)**	**(1,256)**	**(928)**	**(52,439)**
Depreciation [2]	(5)	(152)	(2,621)	(51)	(106)	-	(523)	(111)	(3,569)
Impairment	-	(14)	(537)	-	(37)	(205)	(57)	(6)	(857)
Disposals	12	82	853	30	5	24	160	58	1,223
Translation adjustments	-	(16)	(307)	(2)	(9)	(9)	(30)	(15)	(388)
Changes in scope of consolidation	(74)	(1,111)	(1,411)	-	(3)	7	4	10	(2,577)
Transfer to "Assets classified as held for sale and discontinued operations"	5	302	603	140	25	(3)	337	154	1,562
Other	16	2,150	(2,560)	4	(16)	107	80	(12)	(232)
AT DECEMBER 31, 2021	**(146)**	**(1,849)**	**(49,426)**	**(219)**	**(3,115)**	**(387)**	**(1,284)**	**(850)**	**(57,277)**
CARRYING AMOUNT									
AT DECEMBER 31, 2020	**535**	**2,356**	**38,514**	**147**	**619**	**4,308**	**2,895**	**514**	**49,889**
AT DECEMBER 31, 2021	**503**	**1,463**	**41,105**	**85**	**554**	**4,328**	**2,583**	**458**	**51,079**

(1) Including €342 million related to property, plant and equipment of EQUANS activities recognized in “Discontinued operations” (see Note 5 “Main changes in Group structure”).

(2) Including €203 million in amortization recognized in “Net income/(loss) from discontinued operations” in the income statement in respect of EQUANS.

In 2021, the net increase in “Property, plant and equipment” essentially takes into account :

- maintenance and development investments for a total amount of €5,337 million mainly related to the construction and the development of wind and solar farms (€2,260 million) primarily in France, the United States, Latin America and India, as well as to the extension of the transportation and distribution networks in the France Infrastructure segment (€1,747 million);
- and positive foreign exchange effects of €925 million, mainly resulting from the appreciation of the US dollar (positive impact of €720 million) and fluctuations in the pound sterling (positive impact of €118 million);

largly offset by :

- depreciation for a total amount of €3,569 million;
- the classification under “Assets held for sale” for a negative €927 million, relating mainly to EQUANS activities;
- impairment losses on property, plant and equipment amounting to €857 million mainly relating to:
  - solar and wind farms in Latin America, in China and in France (a negative €267 million),
  - thermal power plants in Brazil (a negative €235 million),
  - thermal assets in Australia, in France, in the United States and in Oman (a negative €234 million),
  - assets of Cofely Endel affiliates, operating in the industrial maintenance and energy services in France (€38 million)
- changes in the scope of consolidation amounting to a negative €224 million, primarily relating to disposals in the renewable energies sector in France, the United States, India and the Netherlands for a negative amount of €114 million, the disposal of a thermal power plant in Brazil for a negative €35 million, the partial disposal of GTT for a negative €30 million and to the disposal of a thermal power plant in Turkey for a negative €12 million.

Reclassifications were made between Buildings and Plant and equipment to better align the assets' classification with their underlying nature.

16.2 Pledged and mortgaged assets

Items of property, plant and equipment pledged by the Group to guarantee borrowings and debt amounted to €1,373 million at December 31, 2021 compared to €1,749 million at December 31, 2020.

The net decrease mainly relates to the entity FHH (Guernsey) Ltd. in the United Kingdom for a negative €593 million due to the redemption of Guaranteed Secured Bonds on their maturity date for which all of First Hydro's assets were pledged.

16.3 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, property, 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.

Investment commitments made by the Group to purchase property, plant and equipment totaled €2,360 million at December 31, 2021 compared to €2,212 million at December 31, 2020.

The net increase primarily relates to the construction of renewable assets in Brazil for €438 million, partially offset by the decrease in contractual commitments related to the construction of solar farms in India for a negative €310 million.

16.4 Other information

Borrowing costs for 2021 included in the cost of property, plant and equipment amounted to €70 million at December 31, 2021 compared to €103 million at December 31, 2020.

NOTE 17 FINANCIAL INSTRUMENTS

17.1 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, financial assets measured using the amortized cost method or at fair value through other comprehensive income (with a recycling mechanism) are subject to an impairment test 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, 2021			Dec. 31, 2020		
In millions of euros	Notes	Non-current	Current	Total	Non-current	Current	Total
Other financial assets	17.1	10,949	2,495	13,444	9,009	2,583	11,592
Equity instruments at fair value through other comprehensive income		*2,344*	*-*	*2,344*	*1,197*	*-*	*1,197*
Equity instruments at fair value through income		*483*	*-*	*483*	*471*	*-*	*471*
Debt instruments at fair value through other comprehensive income		*2,157*	*104*	*2,261*	*1,795*	*111*	*1,906*
Debt instruments at fair value through income		*1,794*	*395*	*2,189*	*1,404*	*432*	*1,836*
Loans and receivables at amortized cost		*4,171*	*1,996*	*6,167*	*4,141*	*2,041*	*6,182*
Trade and other receivables	8.2	-	32,556	32,556	-	14,295	14,295
Assets from contracts with customers	8.2	34	8,344	8,377	26	7,738	7,764
Cash and cash equivalents		-	13,890	13,890	-	12,980	12,980
Derivative instruments	17.4	25,616	19,373	44,989	2,996	8,069	11,065
TOTAL		**36,599**	**76,657**	**113,256**	**12,031**	**45,665**	**57,696**

17.1.1 Other financial assets

17.1.1.1 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 income	Total
AT DECEMBER 31, 2020	**1,197**	**471**	**1,668**
Increase	1,261	88	1,348
Decrease	(264)	(32)	(296)
Changes in fair value	140	(19)	121
Changes in scope of consolidation, translation adjustments and other	11	(26)	(15)
AT DECEMBER 31, 2021	**2,344**	**483**	**2,827**
Dividends	34	14	**49**

Equity instruments break down as €1,750 million of listed equity instruments and €1,077 million of unlisted equity instruments. This amount mainly includes shares held by the Group as a minority interest in Nord Stream AG for an amount of €564 million, as well as the Group's residual interest in SUEZ for €227 million, and shares tendered to the public takeover bid in January 2022 (*see Note 27 "Subsequent events"*).

17.1.1.2 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:

- interest income using the effective interest method;
- 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 income	Liquid debt instruments held for cash investment purposes at fair value through income	Total
AT DECEMBER 31, 2020	**1,895**	**11**	**1,238**	**598**	**3,742**
Increase	1,260	(10)	2,559	55	3,864
Decrease	(909)	6	(2,450)	(60)	(3,413)
Changes in fair value	14	-	243	3	260
Changes in scope of consolidation, translation adjustments and other	-	(7)	3	-	(4)
AT DECEMBER 31, 2021	**2,260**	**1**	**1,593**	**595**	**4,449**

Debt instruments at fair value at December 31, 2021 primarily include bonds and money market funds held by Synatom for €3,806 million (*see Note 20.2.4 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 €596 million (respectively €3,086 million and €608 million at December 31, 2020).

17.1.1.3 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 enters 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.

Please refer to Note 18 “Risks arising from financial instruments” regarding the assessment of counterparty risk.

	Dec. 31, 2021			Dec. 31, 2020		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Loans granted to affiliated companies	2,267	195	2,462	2,527	148	2,675
Other receivables at amortized cost	240	1,537	1,777	205	1,740	1,944
Amounts receivable under concession contracts	1,200	123	1,324	853	51	904
Amounts receivable under finance leases	463	141	604	557	101	658
TOTAL	**4,171**	**1,996**	**6,167**	**4,141**	**2,041**	**6,182**

Loans and receivables at amortized cost include the loan relating to the financing of the Nord Stream 2 pipeline project for a total amount of €987 million, including capitalized interest.

Amounts receivable under concession contracts amounted to €1,324 million at December 31, 2021. They are related to the Novo Estado and Gralha Azul electric power transmission networks in Brazil, which are currently under construction.

Impairment and expected credit losses against loans and receivables at amortized cost stood at €228 million at December 31, 2021 (versus €204 million at December 31, 2020).

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

		Post-acquisition measurement	
In millions of euros	Interest income	Foreign currency translation	Expected credit loss
At December 31, 2021	223	(15)	(7)
At December 31, 2020 (1)	283	(48)	1

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as discontinued operations in application of IFRS 5 (see Note 2 “Restatement of 2020 comparative data”).

No material expected credit losses were recognized against loans and receivables at amortized cost at December 31, 2021 and December 31, 2020.

Amounts receivable under finance leases

These contracts refer to lease contracts in which ENGIE acts as lessor, classified as finance leases in accordance with IFRS 16. They concern (i) energy purchase and sale contracts where the contract conveys an exclusive right to use a production asset; and (ii) certain contracts with industrial customers relating to assets held by the Group.

The Group has recognized finance lease receivables, notably for cogeneration plants for Wapda and NTDC (Uch - Pakistan).

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Undiscounted future minimum lease payments	713	760
Unguaranteed residual value accruing to the lessor	11	11
TOTAL GROSS INVESTMENT IN THE LEASE	**724**	**771**
Unearned financial income	**56**	**62**
NET INVESTMENT IN THE LEASE (STATEMENT OF FINANCIAL POSITION)	**668**	**709**
Of which present value of future minimum lease payments	*660*	*700*
Of which present value of unguaranteed residual value	*9*	*9*

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

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Year 1	122	130
Years 2 to 5 inclusive	351	379
Beyond year 5	240	251
TOTAL	**713**	**760**

17.1.2 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 8.2."Trade and other receivables, assets and liabilities from contracts with customers".

17.1.3 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".

Cash and cash equivalent items are subject to impairment tests in accordance with the expected credit losses model of IFRS 9.

"Cash and cash equivalents" totaled €13,890 million at December 31, 2021 (€12,980 million at December 31, 2020). This item comprises standard money market funds with daily liquidity (45%), term deposits with a maturity of less than one month (37%), and deposits with a maturity of less than three months and other products (18%).

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

At December 31, 2021, this amount also included €172 million in cash and cash equivalents subject to restrictions (€68 million at December 31, 2020), including €62 million of cash equivalents set aside to cover the repayment of borrowings and debt as part of project financing arrangements in certain subsidiaries.

Gains recognized in respect of "Cash and cash equivalents" amounted to €54 million at December 31, 2021 compared to €44 million at December 31, 2020.

17.1.4 Transfer of financial assets

At December 31, 2021, the outstanding amount of transferred financial assets (as well as the risks to which the Group remains exposed following the transfer of those financial assets) as part of transactions leading to either (i) all or part of those assets being retained in the statement of financial position, or (ii) their full deconsolidation while retaining a continuing involvement in these financial assets, was not material in terms of the Group's indicators.

The Group carried out disposals without recourse to financial assets as part of transactions leading to full derecognition, for an outstanding amount of €2,204 million at December 31, 2021.

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

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Financial assets and equity instruments pledged as collateral	3,915	3,716

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

17.2 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 payables and other creditors, 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, 2021, broken down into current and non-current items:

		Dec. 31, 2021			Dec. 31, 2020		
In millions of euros	Notes	Non-current	Current	Total	Non-current	Current	Total
Borrowings and debt	17.3	30,458	10,590	41,048	30,092	7,846	37,939
Trade and other payables	17.2	-	32,822	32,822	-	17,307	17,307
Liabilities from contracts with customers	8.2	68	2,671	2,739	39	4,315	4,354
Derivative instruments	17.4	24,228	22,702	46,931	3,789	9,336	13,125
Other financial liabilities		108	-	108	77	-	77
TOTAL		**54,863**	**68,785**	**123,648**	**33,997**	**38,805**	**72,802**

17.2.1 Trade and other payables

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Trade payables	32,197	16,890
Payable on fixed assets	625	417
TOTAL	**32,822**	**17,307**

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

The increase in trade payables is mainly due to the rise in commodity prices.

17.2.2 Liabilities from contracts with customers

Information on liabilities from contracts with customers are provided in Note 8.2. "Trade and other receivables, assets and liabilities from contracts with customers".

17.3 Net financial debt

17.3.1 Net financial debt by type

		Dec. 31, 2021			Dec. 31, 2020		
In millions of euros		Non-current	Current	Total	Non-current	Current	Total
Borrowings and debt	Bond issues	24,035	2,205	26,240	24,724	1,446	26,170
	Bank borrowings	3,829	1,977	5,806	3,136	986	4,123
	Negotiable commercial paper	-	4,962	4,962	-	4,024	4,024
	Lease liabilities	1,709	334	2,043	1,892	494	2,386
	Other borrowings (1)	885	613	1,498	340	594	935
	Bank overdrafts and current account	-	499	499	-	301	301
	BORROWINGS AND DEBT	**30,458**	**10,590**	**41,048**	**30,092**	**7,846**	**37,939**
Other financial assets	Other financial assets deducted from net financial debt (2)	**(251)**	**(1,369)**	**(1,621)**	**(210)**	**(1,878)**	**(2,088)**
Cash and cash equivalents	Cash and cash equivalents	**-**	**(13,890)**	**(13,890)**	**-**	**(12,980)**	**(12,980)**
Derivative instruments	Derivatives hedging borrowings (3)	**(147)**	**(41)**	**(187)**	**(306)**	**(107)**	**(413)**
NET FINANCIAL DEBT		**30,060**	**(4,710)**	**25,350**	**29,577**	**(7,119)**	**22,458**

(1) This item corresponds to the revaluation of the interest rate component of debt in a qualified fair value hedging relationship for €227 million, margin calls on debt hedging derivatives carried in liabilities for €269 million and the impact of amortized cost for €99 million (compared to, respectively, €396 million, €262 million and €117 million at December 31, 2020).

(2) This item notably corresponds to assets related to financing for €47 million, liquid debt instruments held for cash investment purposes for €596 million and margin calls on derivatives hedging borrowings carried in assets for €977 million (compared to, respectively, €55 million, €609 million and €1,424 million at December 31, 2020).

(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 €41,131 million at December 31, 2021, compared with a carrying amount of €39,000 million.

Financial income and expenses related to borrowings and debt are presented in Note 11 "Net financial income/(loss)".

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

In millions of euros		Dec. 31, 2020	Cash flow from financing activities	Cash flow from operating and investing activities and change in cash and cash equivalents	Change in fair value	Translation adjustments	Change in scope of consolidation and others	Dec. 31, 2021
Borrowings and debt	Bond issues	26,170	(679)	-	-	284	465	26,240
	Bank borrowings	4,123	1,558	-	-	128	(3)	5,806
	Negotiable commercial paper	4,024	852	-	-	87	-	4,962
	Lease liabilities[(1)]	2,386	(560)	-	-	25	191	2,043
	Other borrowings	935	834	-	8	(2)	(277)	1,498
	Bank overdrafts and current account	301	289	-	-	(3)	(88)	499
	BORROWINGS AND DEBT	**37,939**	**2,293**	**-**	**8**	**520**	**288**	**41,048**
Other financial assets	Other financial assets deducted from net financial debt	**(2,088)**	**464**	**-**	**3**	**-**	**-**	**(1,621)**
Cash and cash	Cash and cash equivalents	**(12,980)**	**-**	**(1,304)**	**-**	**(217)**	**610**	**(13,890)**
Derivative	Derivatives hedging borrowings	**(413)**	**(75)**	**-**	**279**	**21**	**1**	**(187)**
NET FINANCIAL		**22,458**	**2,683**	**(1,304)**	**289**	**324**	**899**	**25,350**

(1) Lease liabilities: the negative amount of €560 million included in the "Cash flow from financing activities" column corresponds to lease payments, excluding interest (total cash outflow for leases amounted to €594 million, of which €34 million relating to interest).

17.3.3 Main events of the period

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

In 2021, changes in exchange rates resulted in a €324 million increase in net financial debt, including a €292 million increase in relation to the US dollar.

Changes in the scope of consolidation (including the cash impact of acquisitions and disposals) led to a €1,320 million decrease in net financial debt, reflecting:

- disposals of assets over the period, which reduced net financial debt by €1,845 million, including notably the disposal of a 10% interest in GTT, the disposal of part of the Group's interest in Georgetown energy Partners Holding LLC in the United States, the disposal of part of the Group's interest in GRTgaz, as well as the disposal of the Group's interest in ENGIE EPS SA (*see Note 5.1 "Disposals carried out in 2021"*);
- the classification of the entities in the EQUANS reportable segment and of Endel and its main affiliates under "Assets held for sale", which reduced net financial debt by €475 million (*see Note 5.2 "Assets held for sale"*);
- acquisitions carried out in 2021 which increased net financial debt by nearly €1 billion (*see Note 5.3 "Acquisitions carried out in 2021"*).

17.3.3.2 Financing and refinancing transactions

The Group carried out the following main transactions in 2021:

ENGIE SA

- on January 18, 2021 ENGIE SA redeemed at maturity €900 million worth of bonds with a 6.38% coupon;

- on February 11, 2021 ENGIE SA redeemed at maturity GBP 226 million (€252 million) worth of bonds with a 6.13% coupon;
- on June 2, 2021 ENGIE SA issued a €290 million zero coupon bond redeemable for GTT shares, maturing on June 2, 2024;
- on June 10, 2021, ENGIE SA notified the exercise of the annual redemption option and recognized as financial debt the €363 million tranche of deeply-subordinated perpetual notes (i.e. a total amount of €379 million including accrued interest), previously recorded in equity, with a coupon of 4.75%. The debt was redeemed on July 10, 2021 (*see Note 19.2.1 "Issuance of deeply-subordinated perpetual notes"*);
- on September 1, 2021, ENGIE SA redeemed at maturity a €400 million bank loan with a floating EURIBOR 12M coupon and a 0.47% mark up;
- on October 26, 2021 ENGIE SA issued €1.5 billion worth of green bonds:
  - a €750 million tranche, maturing in October 2029, with a 0.375% coupon,
  - a €750 million tranche, maturing in October 2036, with a 1% coupon;
- on November 23, 2021, ENGIE SA redeemed at maturity a €100 million bank loan with a floating EURIBOR 6M coupon plus a 0.61% mark up;
- on December 13, 2021 ENGIE SA redeemed in advance a €750 million worth of bonds with a 0.5% coupon;
- on December 23, 2021 ENGIE SA drew down a €253 million bank loan maturing in December 2031, with a 0.42% coupon;

Other entities of the Group

- in 2021 ENGIE Brasil Energia drew down several bank loans for a total amount of BRL 1,007 million (€153 million) maturing in March 2044;
- in 2021 ENGIE Brasil Energia drew down several bank loans for a total amount of BRL 1,770 million (€293 million) maturing in May 2044;
- on June 1, 2021, ENGIE Energia Perù SA took out three bank loans for a total amount of USD 150 million (€127 million) maturing in June 2022;
- on October 5, 2021 Compagnie Nationale du Rhône took out a €50 million bank loan, maturing in April 2024;
- on October 5, 2021 Compagnie Nationale du Rhône took out a €300 million bank loan, maturing in October 2022;
- on December 22, 2021, Compagnie Nationale du Rhône took out a €300 million bank loan, maturing in June 2022;
- on December 6, 10, 15 and 17, 2021 Compagnie Nationale du Rhône drew down four bank loans for a total amount of €625 million, and maturing in January 2022.

17.4 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 18 – 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.

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.

Embedded derivatives

The main Group contracts that may contain embedded derivatives are contracts with clauses or options potentially affecting the contract price, volume or maturity. This is the case primarily with contracts for the purchase or sale of non-financial assets, whose price is revised based on an index, the exchange rate of a foreign currency or the price of an asset other than the contract’s underlying.

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative.

If a hybrid contract contains a host that is an asset within the scope of IFRS 9, the Group applies the presentation and measurements requirements described in Note 18.1 to the entire hybrid contract.

Conversely, when a hybrid contract contains a host that is not an asset within the scope of IFRS 9, an embedded derivative shall be separated from the host and accounted for as a derivative if, and only if:

- the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host;
- a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and
- the hybrid contract is not measured at fair value with changes in fair value recognized in profit or loss (i.e., a derivative that is embedded in a financial liability at fair value through profit or loss is not separated).

Where an embedded derivative is separate from the host contract, it is measured at fair value and fair value changes are recognized in profit or loss (except if the embedded derivative is documented in a hedge relationship).

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 income. 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 income 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 income. 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 income.

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 income. 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 income 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 broken down as follows:

	Dec. 31, 2021						Dec. 31, 2020					
	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	370	130	501	224	89	313	619	147	766	313	39	353
Derivatives hedging commodities	24,474	19,190	43,664	22,335	22,507	44,842	1,163	7,879	9,042	945	9,252	10,197
Derivatives hedging other items (1)	772	52	824	1,670	106	1,775	1,214	43	1,257	2,530	45	2,575
TOTAL	**25,616**	**19,373**	**44,989**	**24,228**	**22,702**	**46,931**	**2,996**	**8,069**	**11,065**	**3,789**	**9,336**	**13,125**

(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.

At December 31, 2021, derivatives hedging other items carried in liabilities include the fair value of the option embedded in the bond redeemable for GTT shares for €55 million.

The increase in the balance of derivatives hedging commodities is due to the extreme volatility of commodity prices in 2021. Most of these derivatives mature in 2022 and 2023.

17.4.1 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, 2021				Dec. 31, 2020			
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	75,043	**43,664**	(9,282)	**34,383**	9,466	**9,042**	(5,198)	**3,844**
	Derivatives hedging borrowings and other items	1,325	**1,325**	(269)	**1,056**	2,023	**2,023**	(200)	**1,822**
Liabilities	Derivatives hedging commodities	(76,220)	**(44,842)**	4,987	**(39,855)**	(10,621)	**(10,197)**	6,307	**(3,890)**
	Derivatives hedging borrowings and other items	(2,089)	**(2,089)**	977	**(1,111)**	(2,928)	**(2,928)**	1,362	**(1,566)**

(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. Due to the extreme volatility of commodity prices, this offsetting had a significant impact on the statement of financial position at December 31, 2021 and mainly concerns 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).

(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.

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

17.5.1 Financial assets

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

	Dec. 31, 2021				Dec. 31, 2020			
In millions of euros	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**	**Level 1**	**Level 2**	**Level 3**
Other financial assets (excluding loans and receivables at	7,276	5,556	-	1,720	5,410	3,693	-	1,718
Equity instruments at fair value through other comprehensive income	*2,344*	*1,524*	*-*	*820*	*1,197*	*421*	*-*	*775*
Equity instruments at fair value through income	*483*	*227*	*-*	*256*	*471*	*185*	*-*	*286*
Debt instruments at fair value through other comprehensive income	*2,261*	*2,254*	*-*	*7*	*1,906*	*1,895*	*-*	*11*
Debt instruments at fair value through income	*2,189*	*1,552*	*-*	*637*	*1,836*	*1,191*	*-*	*645*
Derivative instruments	44,989	177	41,606	3,206	11,065	4	10,216	844
Derivatives hedging borrowings	*501*	*-*	*501*	*-*	*766*	*-*	*766*	*-*
Derivatives hedging commodities - relating to portfolio management activities (1)	*35,381*	*-*	*35,306*	*75*	*1,967*	*-*	*1,717*	*250*
Derivatives hedging commodities - relating to trading activities (1)	*8,284*	*177*	*4,975*	*3,131*	*7,075*	*4*	*6,477*	*594*
Derivatives hedging other items	*824*	*-*	*824*	*-*	*1,257*	*-*	*1,257*	*-*
TOTAL	**52,266**	**5,734**	**41,606**	**4,926**	**16,475**	**3,697**	**10,216**	**2,562**

(1) Derivative financial instruments relating to commodities classified in level 3 mainly include long-term gas supply contracts and a power contract that are measured at fair value and relate to trading activities.

A definition of these three levels is presented in Note 17.4 “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 comprehensi	Equity instruments at fair value through income	Debt instruments at fair value through income	Other financial assets (excluding loans and receivables
AT DECEMBER 31, 2020	**775**	**11**	**286**	**645**	**1,718**
Acquisitions	44	(4)	88	60	189
Disposals	(26)	6	(32)	(76)	(127)
Changes in fair value	15	-	(60)	5	(40)
Changes in scope of consolidation, foreign currency translation and other changes	12	(7)	(26)	3	(18)
AT DECEMBER 31, 2021	**821**	**7**	**256**	**637**	**1,721**
Gains/(losses) recorded in income relating to instruments held at the end of the period					17

Derivative instruments

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

In millions of euros	Net Asset/(Liability)
AT DECEMBER 31, 2020	**(836)**
Changes in fair value recorded in income	534
Settlements	(85)
Transfer from level 3 to levels 1 and 2	141
Net fair value recorded in income	**(247)**
Deferred Day-One gains/(losses)	37
AT DECEMBER 31, 2021	**(210)**

17.5.2 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, 2021				Dec. 31, 2020			
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	4,255	-	4,255	-	4,812	-	4,812	-
Borrowings not used in designated fair value hedges	36,875	24,262	12,613	-	34,223	25,039	9,184	-
Derivative instruments	46,931	-	43,515	3,415	13,125	89	11,355	1,681
Derivatives hedging borrowings	*313*	-	*313*	-	*353*	-	*353*	-
Derivatives hedging commodities - relating to portfolio management activities (1)	*35,458*	-	*34,374*	*1,084*	*1,694*	*4*	*1,428*	*261*
Derivatives hedging commodities - relating to trading activities (1)	*9,384*	-	*7,053*	*2,331*	*8,503*	*85*	*6,999*	*1,419*
Derivatives hedging other items	*1,775*	-	*1,775*	-	*2,575*	-	*2,575*	-
TOTAL	**88,061**	**24,262**	**60,383**	**3,415**	**52,160**	**25,128**	**25,352**	**1,681**

(1) Derivative financial instruments relating to commodities classified in level 3 mainly include long-term gas supply contracts and a power contract that are measured at fair value and relate to trading activities.

A definition of these three levels is presented in Note 17.4 “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 18 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.

18.1 Market risks

18.1.1 Commodity risk

Commodity risk arises primarily from the following activities:

- portfolio management; and
- trading.

The Group has identified primarily 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 on natural gas, electricity, coal, oil and oil products, other fuels, CO_2 and other "green" products. The Group is active on these energy markets either for supply purposes, or to optimize and secure its energy production chain and its energy sales. The Group also uses derivatives to offer hedging instruments to its clients and to hedge its own positions.

18.1.1.1 Portfolio management activities

Portfolio management seeks to optimize the market value of assets (power plants, gas and coal supply contracts, energy sales and gas storage 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 as at December 31, 2021 are detailed in the table below. They 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.

Sensitivity analysis (1)

		Dec. 31, 2021		Dec. 31, 2020	
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	19	159	119	266
Natural gas	+€3/MWh	298	624	379	537
Electricity	+€5/MWh	(110)	(49)	(90)	(39)
Coal	+USD 10/ton	-	-	-	1
Greenhouse gas emission rights	+€2/ton	(134)	-	(116)	1
EUR/USD	+10%	16	83	37	-
EUR/GBP	+10%	(49)	(6)	(6)	7

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

18.1.1.2 Trading activities

The Group's trading activities are primarily conducted within:

- ENGIE Global Markets and ENGIE Energy Management. The purpose of these wholly-owned companies is to (i) assist Group entities in optimizing their asset portfolios; and (ii) create and implement energy price risk management solutions for internal and external customers;
- ENGIE SA for the optimization of part of its long-term gas supply contracts, of a power exchange contract and of part of its gas sales contracts with retail entities in France and Benelux and with power generation facilities in France and Belgium.

Revenues from trading activities totaled €1,011 million at December 31, 2021 (€629 million at December 31, 2020).

The use of Value at Risk (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 trading entities.

Value at Risk

In millions of euros	Dec. 31, 2021	2021 average(1)	2021 maximum(2)	2021 minimum(2)	2020 average(1)
Trading activities	22	10	46	4	10

(1) Average daily VaR.
(2) Maximum and minimum daily VaR observed in 2021.

18.1.2 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 indices between the derivative instruments and the associated underlying exposures.

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

	Dec. 31, 2021				Dec. 31, 2020			
	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	24,474	10,906	(22,335)	(13,123)	1,163	804	(945)	(749)
Cash flow hedges	*2,643*	*5,141*	*(1,533)*	*(3,796)*	*225*	*291*	*(250)*	*(205)*
Other derivative instruments	*21,831*	*5,765*	*(20,802)*	*(9,327)*	*938*	*514*	*(695)*	*(544)*
Derivative instruments relating to trading activities	-	8,284	-	(9,384)	-	7,075	-	(8,503)
TOTAL	**24,474**	**19,190**	**(22,335)**	**(22,507)**	**1,163**	**7,879**	**(945)**	**(9,252)**

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 expected future cash flows insofar as positions (i) are sensitive to changes in prices; (ii) can be modified by subsequent transactions; and (iii) can be offset by future cash flows arising on the underlying transactions.

18.1.2.1 Cash flow hedges

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

	Dec. 31, 2021				Dec. 31, 2020			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Natural gas	2,194	4,792	(1,044)	(2,971)	168	236	(178)	(159)
Electricity	195	171	(215)	(439)	1	3	(3)	(5)
Coal	-	-	-	-	-	-	-	-
Oil	246	176	(274)	(386)	54	50	(68)	(41)
Other (1)	9	2	-	-	2	2	(1)	-
TOTAL	**2,643**	**5,141**	**(1,533)**	**(3,796)**	**225**	**291**	**(250)**	**(205)**

(1) Mainly includes foreign currency hedges on commodities.

Notional amounts (net) (1)

Notional amounts and maturities of cash flow hedges are as follows:

	Unit	2022	2023	2024	2025	2026	Beyond 5 years	Total at Dec. 31, 2021
Natural gas	*GWh*	166,636	65,864	10,944	(9,930)	(10,369)	-	223,145
Electricity	*GWh*	(3,986)	(4,501)	(1,230)	(35)	(15)	(62)	(9,829)
Coal	*Thousands of tons*	23	-	-	-	-	-	23
Oil-based products	*Thousands of barrels*	(11,767)	(11,548)	(11,511)	-	-	-	(34,826)
Forex	*Millions of euros*	14	-	-	-	-	-	15
Greenhouse gas emission rights	*Thousands of tons*	117	83	28	31	-	-	259

(1) Long/(short) position.

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

	Dec. 31, 2021				Dec. 31, 2020	
	Fair Value			Nominal	Fair value	Nominal
In millions of euros	Assets	Liabilities	Total	Total	Total	Total
Cash flow hedges	7,784	(5,329)	2,455	15,590	61	126,189
TOTAL	**7,784**	**(5,329)**	**2,455**	**15,590**	**61**	**126,189**

The fair values represented 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 effectiveness	Change in the value of the hedging instrument recognized in equity (1)	Ineffective portion recognized in profit or loss (1)	Amount reclassified from the hedge reserve to profit or loss (1)	Line item of profit or loss
Cash flow hedges	Hedging instruments	15,590	2,455		4,049	26	(42)	Current operating income
	Hedged items			4,070				

(1) Gains/(losses).

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 hedge. The fair value of the hedging instruments at December 31, 2021 reflects the cumulative change in the fair value of the hedging instruments since inception of the hedges.

Maturity of commodity derivatives designated as cash flow hedges

In millions of euros	2022	2023	2024	2025	2026	Beyond 5 years	Dec. 31, 2021	Dec. 31, 2020
Fair Value of derivatives by maturity	1,355	858	179	54	10	-	2,455	154

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 hedge
In millions of euros	**Derivatives hedging commodities**
At December 31, 2020	**54**
Effective portion recognized in equity	4,133
Amount reclassified from hedge reserve to profit or loss	(93)
Translation differences	-
Changes in scope of consolidation and other	-
At December 31, 2021	**4,094**

18.1.2.2 Other commodity derivatives

Other commodity derivatives include:

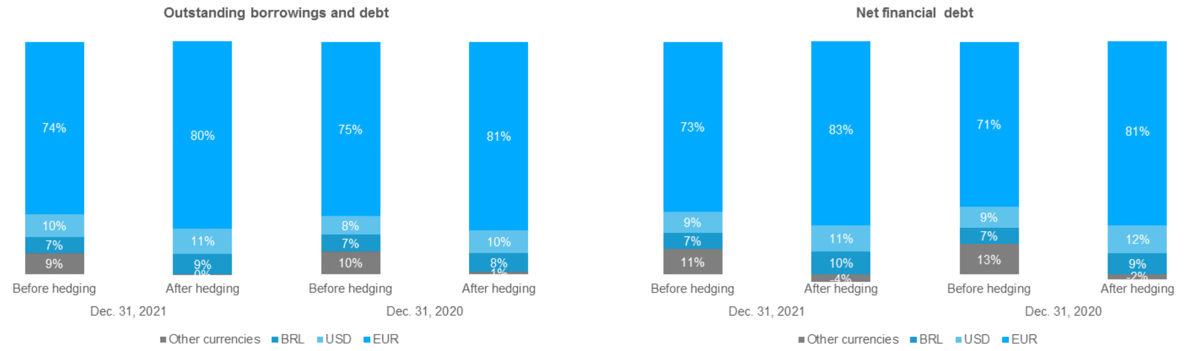
- commodity purchase and sale contracts that were not entered into or are no longer held for the purpose of the receipt or delivery of commodities in accordance with the Group's expected purchase, sale or usage requirements;
- embedded derivatives; and
- derivative financial instruments that are not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

18.1.3 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, in order, to assets in US dollars, Brazilian real and pounds sterling.

18.1.3.1 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:



18.1.3.2 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, 2021			
	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)	38	(38)	NA	NA
Financial instruments (debt and derivatives) qualified as net investment hedges(3)	NA	NA	254	(254)

(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 countered by the offsetting change in the net investment hedged.

18.1.4 Interest rate risk

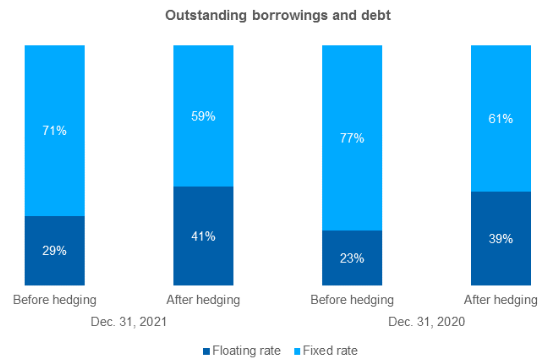
The Group seeks to manage its borrowing costs by limiting the impact of interest rate fluctuations on its income statement. The Group's policy is therefore to arbitrate between fixed rates, floating rates and capped floating rates for its net debt. The interest rate mix may shift within a range defined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

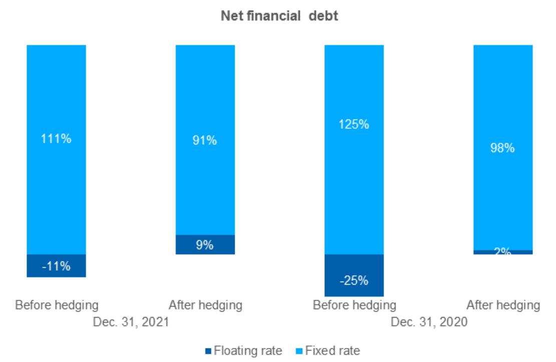
In order to manage the interest rate structure for its net debt, the Group uses hedging instruments, particularly interest rate swaps and options.

The Group has a portfolio of 2023, 2024, 2025, 2027 and 2028 forward interest rate pre-hedges with 10-to-20-year maturities on each of the volumes initiated in 2021 to protect the refinancing interest rate on a portion of its debt.

18.1.4.1 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:





18.1.4.2 Interest rate risk sensitivity analysis

Sensitivity was analyzed based on the Group's net 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, 2021			
	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	(19)	19	NA	NA
Change in fair value of derivatives not qualifying as hedges	60	(95)	NA	NA
Change in fair value of derivatives qualifying as cash flow hedges	NA	NA	503	(649)

18.1.5 Currency and interest rate hedges

18.1.5.1 Currency risk management

Foreign currency exchange risk (or "FX" risk) is reported and managed based on a Group-wide approach, reflected in a dedicated Group policy that is approved by Group Management. The policy distinguishes between the three following main sources of currency risk:

- **Regular transaction risk**

  Regular transaction risk corresponds to the potential negative financial impact of currency fluctuations on business and financial operations denominated in a currency other than the functional currency.

  The management of regular transaction risk is fully delegated to the subsidiaries for their scope of activities, while the risks related to central activities are managed at corporate level.

  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. Exposures are monitored and managed based on the sum of nominal cash flows in FX, including highly probable amounts and related hedges.

For FX risks related to financial activities, all significant exposures related to cash, financial debt, etc. are systematically hedged. Exposures are monitored based on the net sum of balance sheet items in FX.

- **Project transaction risk**

  Specific project transaction risk corresponds to the potential negative financial impact of FX fluctuations on specific major operations such as investment projects, acquisitions, disposals and restructuring projects, involving multiple currencies.

  The management of these FX risks includes the definition and implementation of hedging transactions, taking into account the likelihood of the risk (including probability of project completion) and its evolution, the availability of hedging instruments and their associated cost. Management's aim is to ensure the viability and the profitability of the transactions.

- **Translation risk**

  Translation risk corresponds to the potential negative financial impact of FX fluctuations concerning consolidated entities with a functional currency other than the euro. It relates to the translation of their income and expenses and their net assets.

  Translation risk is managed centrally, with a focus on securing the net asset value.

  The pertinence of hedging this translation risk is assessed regularly for each currency (as a minimum) or 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 risk management levers for mitigating currency risk:

- 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.

18.1.5.2 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, LIBOR, etc., that do not include the borrower's credit spread.

Reform of interbank benchmark rates

As part of the interest rate benchmark reform, the Group has defined since 2020 an organization dedicated to managing the transition by setting up an ad hoc working group bringing together the finance department, the legal department and the information systems administration team. This working group has mapped and prioritized the impacts of the reform on financial documentation, operational management and management systems. In particular, it has prepared a schedule for the implementation of the necessary changes.

The main rates used by the Group and affected by the reform are Eonia, USD Libor, GBP Libor and Euribor.

In 2021, the Group has modified the CSA (Credit Support Annex) remuneration terms on collateralized derivative instruments carried by central vehicles. The Eonia benchmark rate has been replaced by the €STR rate, which has modified the reference curves used for the valuation of the related derivative instruments. These changes have resulted in a financial compensation payment in the second half of 2021 of €8.5 million, recorded against a value adjustment of derivative financial instruments.

As part of the IBOR transition, the Group has chosen to replace the IBOR benchmark rates with a capitalized overnight risk-free rate. The Group has replaced the GBP Libor with Sonia for all financial instruments, requiring the renegotiation of financing contracts and fallback clauses as well as an adaptation of information systems. There is no impact on the change of the benchmark rate on the transition date. The Group also plans to replace the USD Libor with the SOFR before the end of its publication on June 30, 2023.

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

- **Interest rate risk relating to Group net debt**

  Interest rate risk relating to Group net debt designates the financial impact of base rate movements on the debt and cash portfolio from recurring financing activities. This risk is mainly managed centrally.

  Risk management objectives are, by order of importance:

  - to protect the long term viability of assets;
  - to optimize financing costs and ensure competitiveness; and
  - to minimize uncertainty on the cost of debt.

  Interest rate risk is managed actively by monitoring changes in market rates and their impact on the Group's gross and net debt.

- **Project interest rate risk**

  Specific project interest rate risk corresponds to the potential negative financial impact of base rate movements on specific major operations such as investment projects, acquisitions, disposals and restructuring projects. Interest rate risk after the closing of an operation is considered as regular (see "Interest rate risk" above).

  Interest rate risk is managed for specific project transactions in order to protect the economic viability of projects, acquisitions, disposals and restructuring initiatives against adverse changes in interest rates. It may include the implementation of hedging transactions, depending on 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 risk management levers for mitigating interest rate risk:

- 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, and
  - 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.

18.1.5.3 Currency and interest rate hedges

The Group has elected to apply hedge accounting whenever possible and suitable for currency risk and interest rate risk management purposes and also manages a portfolio of undesignated derivative instruments, corresponding to economic hedges relating to net debt and foreign currency exposures.

The Group uses the three hedge accounting methods: cash flow hedging, fair value hedging and net investment hedging.

In general, the Group does not frequently reset hedging relationships, designate specific risk components as a hedged item or designate credit exposures as measured at fair value through income.

The Group qualifies interest rate or cross currency swaps transforming fixed-rate debt into floating-rate debt as fair value hedges.

Cash flow hedges are mainly used to hedge future cash flows in foreign currency, floating-rate debt as well as future refinancing requirements.

Net investment hedging instruments are mainly FX swaps and forwards.

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

	Dec. 31, 2021				Dec. 31, 2020			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Derivatives hedging borrowings	370	130	(224)	(89)	619	147	(313)	(39)
Fair value hedges	*261*	*97*	*(24)*	*(35)*	*526*	*14*	*(48)*	*(3)*
Cash flow hedges	*36*	*1*	*(121)*	*(4)*	*8*	*7*	*(220)*	*(8)*
Derivative instruments not qualifying for hedge accounting	*73*	*33*	*(79)*	*(51)*	*85*	*126*	*(46)*	*(28)*
Derivatives hedging other items	772	52	(1,670)	(50)	1,214	43	(2,530)	(45)
Cash flow hedges	*110*	*9*	*(264)*	*-*	*30*	*3*	*(768)*	*(11)*
Net investment hedges	*6*	*-*	*(20)*	*-*	*55*	*-*	*(4)*	*-*
Derivative instruments not qualifying for hedge accounting	*656*	*44*	*(1,385)*	*(51)*	*1,130*	*40*	*(1,758)*	*(33)*
TOTAL	**1,142**	**183**	**(1,894)**	**(140)**	**1,833**	**189**	**(2,844)**	**(84)**

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 expected future cash flows 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) can be offset by future cash flows arising on the underlying transactions.

Amount, timing and uncertainty of future cash flows

The following tables provide a profile of the timing at December 31, 2021 of the nominal amount of hedging instruments:

In millions of euros

Buy/Sell	Interest rate type	Derivative instrument type	Currency	Total	2022	2023	2024	2025	2026	Beyond 5 years
Buy	Fixed	CCS	EUR	**(32)**	(1)	(2)	(2)	(3)	(4)	(19)
			USD	**(1,079)**	(662)	(88)	(110)	(83)	(90)	(44)
			GBP	**(1,904)**	-	-	-	-	-	(1,904)
			HKD	**(260)**	-	-	-	-	-	(260)
			JPY	**(345)**	(77)	(115)	(153)	-	-	-
			PEN	**(215)**	-	(36)	(17)	-	(55)	(106)
			Other	**(348)**	-	-	(219)	(74)	-	(54)
Sell	Fixed	CCS	EUR	**2,568**	-	-	216	75	-	2,277
			USD	**263**	-	44	21	-	67	130
			Other	**35**	1	2	3	3	4	22
	Floating	CCS	EUR	**953**	680	129	144	-	-	-
		CCS	BRL	**345**	-	82	100	79	84	-

In millions of euros

Buy/Sell	Interest rate type	Derivative instrument type	Currency	Total	2022	2023	2024	2025	2026	Beyond 5 years
Buy	Fixed	CAP	EUR	**4**	1	1	1	-	-	-
		IRS	EUR	**9,055**	974	(839)	(440)	383	1,342	7,634
			USD	**1,516**	(1)	960	3	506	3	44
			Other	**72**	1	3	3	3	4	58
	Floating	IRS	EUR	**16,652**	5,574	1,600	500	515	2,050	6,413
			BRL	**293**	169	124	-	-	-	-

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 18.1.3.2 "Currency risk sensitivity analysis" and the average cost of debt is 2.63% as presented in Note 11 "Net financial income/(loss)".

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

Currency derivatives

	Dec. 31, 2021				Dec. 31, 2020	
	Fair value			Nominal amount	Fair value	Nominal amount
In millions of euros	Assets	Liabilities	Total	Total	Total	Total
Cash flow hedges	53	(306)	(253)	3,201	(628)	3,779
Net investment hedges	6	(20)	(14)	2,794	50	1,999
Derivative instruments not qualifying for hedge accounting	37	(77)	(39)	10,166	73	6,907
TOTAL	**96**	**(402)**	**(306)**	**16,161**	**(504)**	**12,686**

Interest rate derivatives

	Dec. 31, 2021				Dec. 31, 2020	
	Fair value			Nominal amount	Fair value	Nominal amount
In millions of euros	Assets	Liabilities	Total	Total	Total	Total
Fair value hedges	358	(59)	299	4,203	495	4,622
Cash flow hedges	102	(84)	17	2,110	(331)	2,497
Derivative instruments not qualifying for hedge accounting	763	(1,473)	(710)	18,933	(569)	17,910
TOTAL	**1,222**	**(1,616)**	**(394)**	**25,246**	**(405)**	**25,029**

The fair values presented in the above table are positive for an assets and negative for a liabilities.

In millions of euros		Nominal and outstanding amount	Fair value (1)	Change in fair value used for calculating hedge ineffectiveness	Change in the value of the hedging instrument recognized in equity (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	4,203	299	299	NA	(2)	NA	Cost of net debt
	Hedged items (3) (4)	3,967	227	(557)	NA		NA	
Cash flow hedges	Hedging instruments	5,310	(235)	(168)	(605)	(30)	64	Other financial income and expenses/ Current operating income including operating MtM
	Hedged items			158				
Net investment hedges	Hedging instruments	2,794	(14)	(11)	217	NA	(2)	Other financial income and expenses/ Current operating income including operating MtM
	Hedged items			11				

(1) *The adjustment of the fair value of hedged items is presented as long term and short-term borrowings and debt for an amount of €227 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 €74 million relating to hedging items that are no longer adjusted as a result of disqualification as a fair value hedge.*

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 hedge. The fair value of the hedging instruments at December 31, 2021 reflects the cumulative change in the fair value of the hedging instruments since inception of the hedges. For fair value hedges, the same principle applies to the hedged items.

No significant impact in terms of ineffectiveness or disqualification of certain hedges was recognized at December 31,2021.

Foreign currency and interest rate derivatives designated as cash flow hedges can be analyzed as follows by maturity

In millions of euros	2022	2023	2024	2025	2026	Beyond 5 years	Total at Dec. 31, 2021	Total at Dec. 31, 2020
Fair value of derivatives by maturity	(13)	(10)	(9)	(2)	(7)	(194)	(235)	**(958)**

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 hedge			Net investment hedge
In millions of euros	Derivatives hedging borrowings - currency risk hedging (1) (3)	Derivatives hedging other items - interest rate risk hedging (1) (3)	Derivatives hedging other items - currency risk hedging (2) (3)	Derivatives hedging other items - currency risk hedging (2) (4)
AT DECEMBER 31, 2020	**46**	**(1,203)**	**12**	**(156)**
Effective portion recognized in equity		588	17	(217)
Amount reclassified from the hedge reserve to profit or loss		(64)	-	2
Translation differences	-	-	-	-
Changes in scope of consolidation and other	(1)	(71)	(2)	-
AT DECEMBER 31, 2021	**45**	**(751)**	**27**	**(371)**

(1) Cash flow hedges for given periods.
(2) Cash flow hedges for given transactions.
(3) Of which a negative €586 million of cash flow hedge reserves for which hedge accounting is no longer applied.
(4) All of the reserves relate to continuing hedging relationships.

18.2 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, goods delivery and/or asset performance.

The principles of counterparty risk management are set out in the Group counterparty risk policy, which:

- assigns roles and responsibilities for managing and controlling counterparty risk at different levels (Corporate, BU or entity), and ensures operational procedures are in place and consistent across the Group;
- characterizes counterparty risk and the mechanisms by which it impacts the economic performance and financial statements of the Group;
- defines indicators, reporting and control mechanisms to ensure visibility and to provide tools for financial performance management; and
- provides guidelines on the use of mitigating mechanisms such as collateral and guarantees, which are widely used by some businesses.

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 the new standard IFRS 9, the Group has defined and applied a Group-wide methodology including the 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), taking into account different aspects:
    - public or private counterparties,
    - residential or BtoB counterparties,
    - geography,
    - type of activity,
    - size of the counterparty, and
    - any other aspects the Group may consider relevant,
  - 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 covers financial assets that have not deteriorated significantly since initial recognition. The ECL for stage 1 is calculated on a 12-month basis,
  - stage 2 covers financial assets for which the credit risk has significantly increased. The ECL for stage 2 is calculated on a lifetime basis. The decision to move an asset from stage 1 to stage 2 is based on certain criteria such as:
    - a significant downgrade in the creditworthiness of a counterparty and/or its parent company and/or its guarantor (if any),
    - significant adverse change in the regulatory environment,
    - changes in political or country-related risk, and
    - any other aspect the Group may consider relevant.

  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 supportable 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 covers assets for which default has already been observed, such as:
    - when there is evidence of significant and ongoing financial difficulty of the counterparty,
    - when there is evidence of failure in credit support from a parent company to its subsidiary (in this case the subsidiary is the Group's counterparty at risk),
    - when a Group entity has initiated legal proceedings against the counterparty for non-payment.

  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, and 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 is the likelihood of default over a particular time horizon (in stage 1, this time horizon is 12 months after the reporting period; in stage 2 this time horizon is the entire lifetime of the financial asset). This information is based on external data from a well-known 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: should not be written off as long as the procedure is ongoing; and

- assets for which no legal recovery procedure is pending: should be written off once the trade receivable is 3 years overdue (5 years overdue for public counterparties).

The Group has maintained its monitoring of cash inflows and default risks in BtoB, BtoC and Energy Management activities. Furthermore, the provisioning rate of these entities were adjusted on December 31, 2021 in order to take into account the uncertainty created by the significant increase in commodity prices.

18.2.1 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.

Under the Group's policy, each business unit is responsible for managing counterparty risk, although the Group continues to manage the biggest counterparty exposures centrally.

The credit rating of large- and mid-sized counterparties with which the Group has exposures above a certain threshold is measured based on a specific rating process, while a simplified credit scoring process is used for commercial customers with which the Group has fairly low exposures. These processes are based on formally documented, consistent methods across the Group. Consolidated exposures are monitored by counterparty and by segment (credit rating, sector, etc.) using standard indicators (payment risk, mark-to-market exposure).

The Group's Energy Market Risk Committee (CRME) consolidates and monitors the Group's exposure to its main energy counterparties on a quarterly basis and ensures that the exposure limits set for these counterparties are respected.

18.2.1.1 Trade and other receivables, assets from contracts with customers

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 €14,438 million at December 31, 2021 (compared to €2,431 million at December 31, 2020).

Individual approach

		Dec. 31, 2021							
In millions of euros		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	**15,997**	15,023	830	144	**15,997**	14,063	1,933	**15,997**
	Expected credit losses	**(377)**	(237)	(23)	(116)	**(377)**	(174)	(203)	**(377)**
TOTAL		**15,620**	**14,786**	**806**	**28**	**15,620**	**13,890**	**1,730**	**15,620**
Assets from contracts with customers	Gross	**3,366**	3,327	37	3	**3,366**	2,434	933	**3,366**
	Expected credit losses	**(12)**	(10)	-	(2)	**(12)**	(8)	(4)	**(12)**
TOTAL		**3,354**	**3,316**	**37**	**1**	**3,354**	**2,425**	**929**	**3,354**

		Dec. 31, 2020							
In millions of euros		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	**9,530**	8,329	893	308	**9,530**	7,854	1,676	**9,530**
	Expected credit losses	**(391)**	(103)	(46)	(242)	**(391)**	(188)	(203)	**(391)**
TOTAL		**9,139**	**8,226**	**846**	**66**	**9,139**	**7,666**	**1,473**	**9,139**
Assets from contracts with customers	Gross	**3,039**	2,714	318	8	**3,039**	2,076	963	**3,039**
	Expected credit losses	**(19)**	(18)	-	-	**(19)**	(14)	(5)	**(19)**
TOTAL		**3,021**	**2,696**	**318**	**7**	**3,021**	**2,062**	**959**	**3,021**

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's.

Collective approach

In millions of euros		Dec. 31, 2021 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	3,529	544	152	267	964
	Expected credit losses	(971)	(21)	(21)	(221)	(263)
TOTAL		**2,558**	**523**	**132**	**46**	**701**
Assets from contracts with customers	Gross	5,042	584	5	16	604
	Expected credit losses	(4)	-	-	(1)	(1)
TOTAL		**5,038**	**584**	**5**	**15**	**603**

In millions of euros		Dec. 31, 2020 Collective approach	0 to 6 months	6 to 12 months	Beyond	Total past due assets at Dec. 31, 2020
Trade and other receivables, net	Gross	3,625	593	235	300	1,128
	Expected credit losses	(865)	(20)	(22)	(211)	(253)
TOTAL		**2,761**	**574**	**213**	**88**	**875**
Assets from contracts with customers	Gross	4,748	487	1	3	491
	Expected credit losses	(1)	-	-	-	-
TOTAL		**4,747**	**487**	**1**	**3**	**491**

18.2.1.2 Commodity derivatives

In the case of commodity derivatives, counterparty risk arises from positive fair value. Counterparty risk is taken into account when calculating the fair value of these derivative instruments.

In millions of euros	Dec. 31, 2021 Investment Grade(1)	Dec. 31, 2021 Total	Dec. 31, 2020 Investment Grade(1)	Dec. 31, 2020 Total
Gross exposure (2)	35,386	43,660	6,633	9,031
Net exposure (3)	15,796	19,089	2,817	3,750
% of credit exposure to "Investment Grade" counterparties	82.7%		75.1%	

(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.

18.2.2 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).

The oversight procedure for managing counterparty risk arising from financing activities is managed by a Middle Office that operates independently of the Group's Treasury department and reports to the Finance division.

18.2.2.1 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 €977 million at December 31, 2021 (compared to €1,424 million at December 31, 2020).

	Dec. 31, 2021						
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	4,643	302	26	**4,971**	1,906	3,065	**4,971**
Expected credit losses	(76)	(36)	(113)	**(226)**	(147)	(79)	**(226)**
TOTAL	**4,567**	**265**	**(87)**	**4,745**	**1,759**	**2,986**	**4,745**

	Dec. 31, 2020						
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	4,144	415	67	**4,626**	2,582	2,045	**4,626**
Expected credit losses	(57)	(34)	(110)	**(201)**	(127)	(74)	**(201)**
TOTAL	**4,087**	**381**	**(43)**	**4,425**	**2,455**	**1,970**	**4,425**

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's.

18.2.2.2 Counterparty risk arising from investing activities and the use of derivative financial instruments

The Group is exposed to counterparty risk arising from 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.

	Dec. 31, 2021				Dec. 31, 2020			
In millions of euros	**Total**	**Investment Grade (1)**	**Unrated (2)**	**Non Investment Grade (2)**	**Total**	**Investment Grade (1)**	**Unrated (2)**	**Non-Investment Grade (2)**
Exposure	14,194	85.9%	8.2%	5.9%	13,174	84.4%	8.7%	6.9%

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's or Baa3 by Moody's.

(2) Most 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, 2021, Crédit Agricole Corporate and Investment Bank (CACIB) is the main Group counterparty and represents 25% of cash surpluses. This relates mainly to a depositary risk.

18.3 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.

The Group has set up a weekly committee tasked with managing and monitoring liquidity risk throughout the Group, by maintaining a broad range of investments and sources of financing, 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. Stress tests are also performed on the margin calls put in place when commodity, interest rate and currency derivatives are negotiated to assess the Group's resilience in terms of liquidity.

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 succession of financial crises since 2008 and the ensuing rise in counterparty risk prompted the Group to tighten its investment policy with the aim of keeping an extremely high level of liquidity and protecting invested capital and a daily monitoring of performance and counterparty, allowing the Group to take immediate action where required in response to market developments. Consequently, 72% of the cash pooled at December 31, 2021 was invested in overnight bank deposits and standard money market funds with daily liquidity.

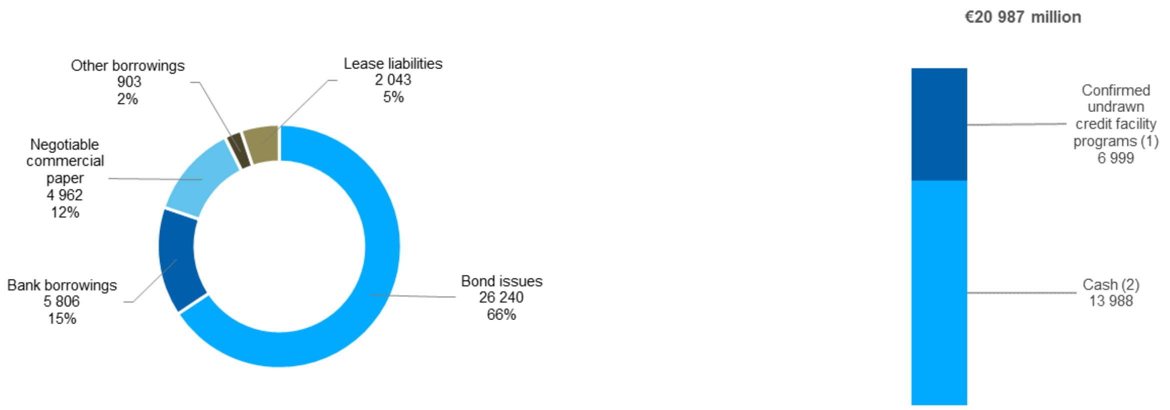
The Group's financing policy is based on:

- 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 (U.S. Commercial Paper) as well as the issuance of 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 fashion 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.

The various actions carried out by the Group ensure a high and reinforced level of liquidity.

Diversifying sources of financing and liquidity [3]
In millions of euros



(1) *Net amount of negotiable commercial paper.*
(2) *Cash corresponds to cash and cash equivalents, other financial assets deducted from net financial debt, net of bank overdrafts and current accounts, of which 73% was invested in the Eurozone.*
(3) *These sources of financing and liquidity do not include the deeply-subordinated perpetual notes recognized in equity (see Note 19.2.1 "Issuance of deeply-subordinated perpetual notes").*

At December 31, 2021, all the entities of the Group 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. None of the available centralized credit lines contain a default clause linked to financial ratios or rating level.

18.3.1 Undiscounted contractual payments relating to financial activities

Undiscounted contractual payments on outstanding borrowings and debt by maturity

In millions of euros	2022	2023	2024	2025	2026	Beyond 5 years	Total at Dec. 31, 2021	Total at Dec. 31, 2020
Bond issues	2,205	2,510	1,147	2,032	2,317	16,029	**26,240**	26,170
Bank borrowings	1,977	365	316	402	204	2,543	**5,806**	4,123
Negotiable commercial paper	4,962	-	-	-	-	-	**4,962**	4,024
Lease liabilities	367	348	263	233	193	995	**2,043**	2,386
Other borrowings	91	647	19	20	16	110	**903**	150
Bank overdrafts and current accounts	499	-	-	-	-	-	**499**	301

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	2022	2023	2024	2025	2026	Beyond 5 years	Total at Dec. 31, 2021	Total at Dec. 31, 2020
Undiscounted contractual interest flows on outstanding borrowings and debt	801	770	671	642	592	7,200	**10,676**	9,853

Undiscounted contractual payments on outstanding derivatives (excluding commodity instruments) by maturity

In millions of euros	2022	2023	2024	2025	2026	Beyond 5 years	Total at Dec. 31, 2021	Total at Dec. 31, 2020
Derivatives (excluding commodity instruments)	(108)	21	(5)	26	52	141	**126**	317

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, 2021, the Group, as lessee, is potentially exposed to future cash outflows not reflected in the measurement of lease liabilities for €1,825 million (of which approximately 86% relate to potential cash outflows beyond 2026). These potential future cash outflows mainly relate to leases that are not yet effective and mainly concern lease liabilities relating to the possible extension of a hydropower concession agreement, and to leases relating to real estate and LNG vessels.

Undrawn credit facility programs

In millions of euros	2022	2023	2024	2025	2026	Beyond 5 years	Total at Dec. 31, 2021	Total at Dec. 31, 2020
Confirmed undrawn credit facility programs	990	812	685	4,989	3,985	499	**11,961**	13,695

Of these undrawn programs, an amount of €4,962 million is allocated to covering commercial paper issues.

At December 31, 2021, no single counterparty represented more than 5% of the Group's confirmed undrawn credit lines.

18.3.2 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 statement of financial position 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	2022	2023	2024	2025	2026	Beyond 5 years	Total at Dec. 31, 2021	Total at Dec. 31, 2020
Derivative instruments carried in liabilities								
relating to portfolio management activities	*(13,392)*	*(16,779)*	*(3,343)*	*(1,077)*	*(319)*	*(632)*	*(35,541)*	*(1,699)*
relating to trading activities	*(9,365)*	-	-	-	-	-	*(9,365)*	*(8,483)*
Derivative instruments carried in assets								
relating to portfolio management activities	*10,835*	*14,655*	*6,642*	*2,569*	*543*	*124*	*35,368*	*1,975*
relating to trading activities	*8,304*	-	-	-	-	-	*8,304*	*7,059*
TOTAL	**(3,618)**	**(2,123)**	**3,299**	**1,492**	**225**	**(508)**	**(1,234)**	**(1,149)**

18.3.3 Commitments relating to commodity purchase and sale contracts entered into within 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 GEM (expressed in TWh).

In TWh	2022	2023-2026	Beyond 5 years	Total at Dec. 31, 2021	Total at Dec. 31, 2020
Firm purchases	(385)	(771)	(766)	(1,922)	(1,829)
Firm sales	587	513	321	1,421	1,571

NOTE 19 EQUITY

19.1 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, 2020	**2,435,285,011**	**(18,464,634)**	**2,416,820,377**	**2,435**	**31,291**	**(251)**
Dividend paid in cash	-	-	-	-	(1,296)	-
Dividend on treasury stock					(8)	
Allocation of prior-year income	-	-	-	-	(3,928)	-
Purchase/disposal of treasury stock	-	-	-	-	-	-
Delivery of treasury stock (bonus)	-	3,381,485	3,381,485	-	-	52
Revaluation	-	-	-	-	-	-
AT DECEMBER 31, 2021	**2,435,285,011**	**(15,083,149)**	**2,420,201,862**	**2,435**	**26,058**	**(199)**

Changes in the number of outstanding shares in 2021 result exclusively from the disposal of 3.4 million treasury shares, as part of bonus share plans.

19.1.1 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 22 "Share-based payments" are covered by existing ENGIE SA shares.

19.1.2 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 May 20, 2021. 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, 2021, the Group held 15.1 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 €50 million.

19.2 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 €35,064 million at December 31, 2021, including €26,058 million in additional paid-in capital. Additional paid-in capital includes the allocation of the net loss of ENGIE SA for 2020 in an amount of €3,928 million, the payment of the cash dividend for 2020 in an amount of €1,296 million as well as the reclassification to consolidated reserves of the dividend not paid on treasury shares in an amount of €8 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.

19.2.1 Issuance of deeply subordinated perpetual notes

In July 2021, ENGIE SA carried out an early refinancing of deeply subordinated perpetual notes resulting in:

- an issue of green deeply subordinated perpetual notes in the amount of €750 million bearing a coupon of 1.875% with a redemption option as of July 2031, recorded in equity for a net amount of €742.5 million.
- the redemption at the first option date of the remaining €363.4 million of hybrid debt (4.750% coupon).
- the partial early redemption of two tranches of deeply subordinated perpetual notes for a total amount of €532.6 million:
  - the redemption of €149.1 million (3.875% coupon) out of a residual nominal amount of €542 million. The first redemption option for this deeply subordinated perpetual debt was scheduled for June 2024.
  - the redemption of €383.5 million (1.375% coupon) on a residual nominal amount of €657.7 million. The first redemption option for this deeply subordinated perpetual debt is schedule was for January 2023.

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, 2021, the outstanding nominal value of deeply-subordinated perpetual notes amounted to €3,767 million.

In 2021, the Group paid €126.6 million to the holders of these notes, including €102.4 million in coupons and €24.2 million in compensation for early redemption. 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.

19.2.2 Distributable capacity of ENGIE SA

ENGIE SA's distributable capacity totaled €27,758 million at December 31, 2021 (compared with €27,363 million at December 31, 2020), including €26,058 million of additional paid-in capital.

19.2.3 Dividends

It was proposed, at the Shareholders' Meeting convened to approve the ENGIE Group financial statements for the year ended December 31, 2020, to pay a dividend of €0.53 per share, representing a total payout of €1,283 million based on the number of shares outstanding at December 31, 2020. It was increased by 10% for all shares held for at least two years on December 31, 2020 and up to the 2020 dividend payment date. Based on the number of outstanding shares on December 31, 2020, this increase is valued at €13 million.

Proposed dividend in respect of 2021

At the Shareholders' Meeting convened to approve the ENGIE Group financial statements for the year ended December 31, 2021, the shareholders will be asked to approve a dividend of €0.85 per share, representing a total payout of €2,057 million based on the number of shares outstanding at December 31, 2021. It will be increased by 10% for all shares held for at least two years at December 31, 2021 and up to the 2021 dividend payment date. Based on the number of outstanding shares at December 31, 2021, this increase is valued at €23 million.

Subject to approval by the Shareholders' Meeting of April 21, 2022, this dividend will be detached on Monday April 25, 2022 and paid on Wednesday April 27, 2022. It is not recognized as a liability in the financial statements at December 31, 2021, since the financial statements at the end of 2021 were presented before the appropriation of earnings.

19.2.4 Other transactions

On December 22, 2021, ENGIE sold 11.5% of its stake in GRTgaz to SIG (Société d'Infrastructures Gazières), bringing its ownership to 60.81% (38.60% SIG, 0.51% Altos employee funds, 0.08% treasury shares). For the purposes of the transaction, the GRTgaz group's equity was valued at €9.75 billion for an enterprise value of €14.6 billion. The transaction had a €477million impact on the Group's share of equity (gain on the sale) and a €1,025 million impact on consolidated equity (sale price net of corporate tax on the capital gain, success fees and registration fees).

On May 26, 2021, the Group completed the partial sale of 10% of its stake in GTT, reducing its stake from 40.4% and full consolidation to 30.4% and accounted for using the equity method. The change in consolidation method resulted in the removal of equity of non-controlling interests in the amount of €321 million.

As a reminder, on July 2, 2020, the Group signed an agreement to sell a 49% stake in a 2.3 GW renewable energy portfolio (in service or under construction) in the United States to the American group Hannon Armstrong, a leader in investing in environmentally friendly solutions. ENGIE continues to fully to consolidate, operate and manage these assets. Under this agreement, the Group has received an amount of €64 million as of December 31, 2021.

19.3 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, 2021 and December 31, 2020, which are recyclable to income in subsequent periods.

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Debt instruments	9	30
Net investment hedges (1)	(371)	(156)
Cash flow hedges (excl. commodity instruments) (1)	(699)	(1,212)
Commodity cash flow hedges (1)	4,383	76
Deferred taxes on the items above	(1,064)	357
Share of equity method entities accounted in recyclable items, net of tax (2)	(546)	(813)
Recyclable items relating to discontinued operations, net of tax	118	(1)
TOTAL RECYCLABLE ITEMS BEFORE TRANSLATION ADJUSTMENTS	**1,831**	**(1,719)**
Translation adjustments	(2,136)	(2,856)
Translation adjustments relating to discontinued operations	-	6
TOTAL RECYCLABLE ITEMS	**(306)**	**(4,570)**

(1) See Note 18 "Risks arising from financial instruments".
(2) See Note 4 "Investments in equity method entities".

19.4 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 19.1.2 “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 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 20 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 reflect 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 (notably the retained scenario for managing radioactive nuclear fuel consumed) (*see Note 20.2*);
- the timing of expenditure (notably, for nuclear power generation activities, the timetable for reprocessing radioactive nuclear fuel consumed and for dismantling facilities as well as the timetable for the end of gas operations regarding the main gas infrastructure businesses in France) (*see Notes 20.2 and 20.3*); 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, 2020	**8,941**	**14,677**	**1,112**	**2,342**	**27,073**
Additions (1)	378	223	30	726	1,357
Utilizations (1)	(329)	(202)	(90)	(587)	(1,208)
Reversals (1)	(1)	-	-	(12)	(13)
Changes in scope of consolidation	(6)	-	-	(11)	(18)
Impact of unwinding discount adjustments	64	421	26	16	528
Translation adjustments	2	-	22	5	29
Other (2)	(2,050)	-	71	(310)	(2,289)
AT DECEMBER 31, 2021	**7,000**	**15,119**	**1,172**	**2,169**	**25,459**
Non-current	6,919	14,909	1,172	394	**23,394**
Current	81	210	-	1,775	**2,066**

(1) Net additions to provisions relating to EQUANS' activities are recognized in "Net income/(loss) relating to discontinued operations" in the income statement for €23 million at December 31, 2021.

(2) Including €666 million in provisions for EQUANS activities, which are classified under "Discontinued operations" (see Note 5 "Main changes in Group structure").

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 2021, which are recorded in "Other comprehensive income" as well as provisions recorded against a dismantling or site rehabilitation asset.

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, 2021
Income/(loss) from operating activities	(159)
Other financial income and expenses	(526)
TOTAL	**(686)**

The different types of provisions and the calculation principles applied are described below.

20.1 Post-employment benefits and other long-term benefits

See Note 21 "Post-employment benefits and other long-term benefits".

20.2 Obligations relating to nuclear power generation activities

In the context of its nuclear power generation activities, the Group assumes obligations related to the management of the back-end of the nuclear fuel cycle and the dismantling of nuclear facilities.

20.2.1 Legal framework

The Belgian law of April 11, 2003 granted Group subsidiary Synatom responsibility for managing provisions set aside to cover the costs of dismantling nuclear power plants and managing spent nuclear fuel in those plants. The tasks of the Commission for Nuclear Provisions (CNP) set up pursuant to the above-mentioned law is to oversee the process of computing and managing these provisions.

To enable the CNP to carry out its work in accordance with the above-mentioned law, Synatom is required to submit a report every three years describing the core inputs used to measure these provisions. If any changes are observed from one triennial report to another that could materially impact the financial inputs used, i.e., the industrial scenario, estimated costs and timing, the CNP may revise its opinion, and the Group makes the necessary adjustments, if any, in the income statement.

Synatom submitted its triennial report to the CNP on September 12, 2019 and the CNP issued its opinion on December 12, 2019, which was taken into account in preparing the financial statements for the year ended December 31, 2019. The provisions recognized by the Group were determined taking into account the prevailing contractual and legal framework, which sets the operating life of the Tihange 1 reactor and the Doel 1 and 2 reactors at 50 years, and the other reactors at 40 years. These provisions have not changed significantly since that date, besides the impact of recurring factors such as the passage of time (unwinding) and utilizations of and additions to provisions for fuel spent during the year. They will be reviewed again at the end of 2022, in accordance with the applicable regulations.

The provisions include in their assumptions all existing or planned environmental regulatory requirements on a European, national and regional level. If new legislation were to be introduced in the future, the cost estimates used as a basis for the calculations could vary.

The estimated provision amounts include margins for contingencies and other risks that may arise in connection with dismantling and radioactive spent fuel management procedures. Contingency margins relating to the disposal of waste are determined by ONDRAF and built into its fees. The Group also estimates appropriate margins for each cost category.

The Group believes that the latest assumptions reviewed and approved by the CNP are the most appropriate for establishing these provisions. However, in its opinion issued on December 12, 2019, the CNP pointed out uncertainty over some costs, which in principle are covered by the contingency margins, but for which it set up a further work and analysis program as of 2020, and which may be covered by the review in 2022. The provisions may be subsequently adjusted in line with changes in the inputs set out below.

The breakdown of dismantling provisions between Synatom and Electrabel is shown below:

In millions of euros	Current	Non-current	Dec. 31, 2021
Provisions for dismantling nuclear facilities - Synatom	75	6,270	**6,345**
Provisions for the back-end of the nuclear fuel cycle - Synatom	134	7,895	**8,030**
Provisions for dismantling nuclear facilities - Electrabel	-	744	**744**
TOTAL	**210**	**14,909**	**15,119**

20.2.2 Provisions for the back-end of the nuclear fuel cycle

Accounting standards

Allocations to provisions for the back-end of the nuclear fuel cycle are computed based on the average unit cost of the quantities expected to be used up to the end of the operating life of the plants, applied to quantities used at the closing date. An annual allocation is also recognized with respect to unwinding the discount on the provisions.

When spent nuclear fuel is removed from a reactor and temporarily stored on-site, it requires conditioning, potentially after reprocessing [(1)], before being consigned to long-term storage.

ONDRAF proposed on February 9, 2018 that geological storage be adopted as the national policy for managing high-level and/or long-lived radioactive waste. The proposal is subject to the approval of the Belgian government after obtaining the opinion of the Federal Agency for Nuclear Control (Agence Fédérale de Contrôle Nucléaire – AFCN).

In addition, ENGIE considers that the “mixed” scenario adopted by the CNP, whereby a portion of the fuel is reprocessed, and the rest is disposed of directly without reprocessing, continues to apply.

(1) Operation that separates uranium, plutonium and fission products.

The provisions booked by the Group for nuclear fuel processing and storage cover all of the costs linked to the “mixed” scenario, including on-site storage, transportation, reprocessing, conditioning, off-site storage and geological disposal. They 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;
- part of the radioactive spent fuel is transferred for reprocessing. . The reprocessed plutonium and uranium will be sold to a third party for a cost that must be reviewed on a regular basis;
- 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. ONDRAF's recommendations as regards the cost of these facilities have been fully taken into account;
- the reprocessing residues and conditioned spent fuel are transferred to ONDRAF;
- the cost of burying fuel in deep geological repositories is estimated using the royalty rate established by ONDRAF based on a total disposal facility cost of €10.7 billion$_{2017}$. The estimated cost of implementing the preliminary recommendation of the AFCN concerning an additional well has also been added, based on ONDRAF's recommendations. Other adjustments to the operational safety of the evacuation site are being discussed with ONDRAF and may give rise to a revision of the costs if they exceed the amounts covered by the contingency margins already included in ONDRAF's assessment;
- the long-term obligation is calculated using estimated internal costs and external costs assessed based on offers received from third parties;
- the baseline scenario includes ONDRAF’s latest scenario, with geological storage starting in around 2070 and ending in around 2135;
- the discount rate used is 3.25%. It takes into account (i) an analysis of trends in long-term benchmark rates and their historical and forecast averages, as well as (ii) the long life of the liabilities given the conditioning and evacuation of spent fuel, which has been delayed until 2070.

The costs effectively incurred in the future may differ from the estimates in terms of their nature and timing of payment. Belgium's current legal framework does not permit reprocessing and has not yet confirmed the adoption of geological storage as the policy for managing medium- and high-level nuclear waste.

As regards the partial reprocessing scenario, following a resolution adopted by the House of Representatives in 1993, reprocessing contracts that had not already begun were suspended and then terminated in 1998. The scenario adopted is based on the assumption that the Belgian government will allow Synatom to reprocess spent fuel and that an agreement will be reached between Belgium and France designating Orano (formerly Areva) as responsible for these reprocessing operations. A scenario assuming the direct disposal of waste without reprocessing would lead to a decrease in the provision compared to the provision resulting from the "mixed" scenario currently used and approved by the CNP.

The Belgian government has not yet taken a decision as to whether the waste should be buried in a deep geological repository or stored over the long term. On November 27, 2019, the European Commission sent a reasoned opinion to Belgium under the breach procedure provided for in Article 258 of the Treaty on the Functioning of the European Union, on the grounds that Belgium had not adopted a national program for managing radioactive waste in compliance with various requirements set out in the directive on spent fuel and radioactive waste (Council Directive 2011/70/Euratom). Therefore, at this stage, there is only one national program for the safe storage of spent fuel pending reprocessing or long-term storage. The scenario adopted by the CNP is based on the assumption that the waste will be buried in a deep geological repository at a site yet to be identified and classified in Belgium.

Sensitivity

Provisions for the back-end of the nuclear fuel cycle remain sensitive to assumptions regarding costs, the timing of operations and expenditure, as well as to discount rates:

- a 10% increase in ONDRAF’s fees above the royalty rate for the removal of high-level and/or long-lived waste would lead to an increase in provisions of approximately €175 million based on unchanged contingency margins;
- a five-year advance in ONDRAF’s expenditure on temporary storage, conditioning and long-term storage for high level and/or long-lived radioactive waste would lead to an increase in provisions of approximately €170 million. A

five-year delay in the payment schedule for these various expenses would lead to a decrease of less than that amount;
- a change of 10 basis points in the discount rate used could lead to an adjustment of approximately €260 million in provisions for the back-end of the nuclear fuel cycle. A fall in discount rates would lead to an increase in outstanding provisions, while a rise in discount rates would reduce the provision amount.

These sensitivities are calculated on a purely financial basis and should therefore be interpreted with appropriate caution in view of the variety of other inputs – some of which may be interdependent – included in the evaluation.

20.2.3 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 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.

Nuclear power plants have to be dismantled at the end of their operating life. Provisions are set aside in the Group's financial statements to cover all costs relating to (i) the shutdown phase, which involves removing radioactive spent fuel from the site and (ii) the dismantling phase, which consists of decommissioning and cleaning up the site.

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 site-by-site basis, and (iii) completely, the land being subsequently returned to greenfield status.

Provisions for dismantling nuclear facilities are calculated based on the following principles and inputs:

- the operating life is 50 years for Tihange 1 and Doel 1 and 2, and 40 years for the other facilities;
- the start of the technical shutdown procedures depends on the facility concerned and on the timing of operations for the nuclear reactor as a whole. The shutdown procedures are immediately followed by dismantling operations;
- the scenario adopted is based on a dismantling program and on timetables that have to be approved by the nuclear safety authorities. A dialogue on the safety conditions for the decommissioning and dismantling phases of the power plants has been initiated with the AFCN. 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;
- fees for handling Class A – low or medium activity and short-lived – and B – low or medium activity and long-lived dismantling waste are determined using the royalty rate established by ONDRAF and include the margins recommended by ONDRAF for waste reclassification risk given the uncertainty over the definition of the criteria for classification in those classes; the difficulty in obtaining operating permits for class A waste storage has led ONDRAF to redefine a technical solution for storage and set a new assessment for 2022;

- for the different phases, the inclusion of normal contingency margins, reviewed by ONDRAF and the CNP, is taken into account; another study of the uncertainties and contingencies to be covered by these margins is set to be carried out during the next revision;
- an inflation rate of 2.0% is applied until the dismantling obligations expire in order to determine the value of the future obligation;
- a discount rate of 2.5% (including inflation of 2.0%) is applied to determine the present value (NPV) of the obligation. It takes into account (i) an analysis of trends in consistent benchmark rates and their historical and forecast averages, as well as (ii) the duration of the dismantling program scheduled to end by 2040.

Sensitivity

Based on currently applied inputs for estimating costs and the timing of payments, a change of 10 basis points in the discount rate used could lead to an adjustment of approximately €62 million in dismantling provisions. A fall in discount rates would lead to an increase in outstanding provisions.

A 10% increase in decommissioning and dismantling costs could lead to a change in the balance of the dismantling provisions of around €635 million.

This sensitivity is calculated on a purely financial basis and should therefore be interpreted with appropriate caution in view of the variety of other inputs – some of which may be interdependent – included in the evaluation.

20.2.4 Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material

20.2.4.1 Principles, objectives and governance

As indicated above, the Belgian 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 radioactive fissile material. Pursuant to the law, Synatom may lend up to 75% of these funds to nuclear power plant operators provided that certain credit quality criteria are met. 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.

Since October 2019, Electrabel has not taken out any further loans in respect of provisions for the back-end of the nuclear fuel cycle and has undertaken to repay all of the loans taken out for that purpose by 2025. In 2021, Synatom therefore invested nearly €1.3 billion in external financial assets to cover the future costs of managing radioactive fissile material.

Synatom's objective in terms of investment in these assets is to offer, in the long term and for an acceptable level of risk, a sufficient return, in order to cover dismantling costs and the management of radioactive fissile material, under the constraints of diversification, risk minimization and availability as defined by the law of April 11, 2003.

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 April 11, 2003. Based on a rigorous risk control policy, the Investment Committee oversees investment decisions, which are managed by a team headed by an investment director.

20.2.4.2 Strategic allocation and composition of financial assets

The strategic allocation of financial assets is determined on the basis of a periodic asset-liability analysis, which consists of determining the asset categories and their respective weighting in order to meet the return objective while respecting the risk framework identified for each type of liability.

This allocation varies according to the type of liability and the different investment horizons and discount rates. Separate risk profiles are considered for:

- Assets in relation to provisions for dismantling of nuclear power plants,

- Assets in relation to provisions for managing radioactive fissile material.

The target allocation of plan assets based on the two aforementioned risk profiles is as follows:

In %	Management of radioactive fissile material	Dismantling
Shares	40%	30%
Bonds	40%	70%
Unlisted assets	20%	0%
TOTAL	**100%**	**100%**

Listed equities consist of international securities. Listed bonds consist of international sovereign bonds and international corporate bonds. Unlisted assets consist of securities representing funds or real estate, private equity, infrastructure or private debt investment vehicles. Investments are managed by specialized asset management companies.

Synatom believes that the inclusion of Environmental, Social and Governance (ESG) principles in investment decisions allows for better management of non-financial risks in order to generate long-term sustainable returns. The integration of ESG principles implies a broader consideration of the risks and opportunities that can influence financial performance. The selection process for external managers also incorporates ESG principles.

To implement this investment policy, Synatom has a money market fund (*SICAV*) under Luxembourg law, a Nuclear Investment Fund, and a newly created money market fund under Belgian law, the Belgian Nuclear Liabilities Fund (“BNLF”).

20.2.4.3 Changes in financial assets in 2021

The value of financial assets dedicated to covering nuclear provisions amounted to €5,501 million at December 31, 2021, and their return was 7.63% for the year. The main drivers of performance were equities, with global stock markets benefiting from a strong economic outlook and better-than-expected corporate earnings. Bonds performed sluggishly, however, amid rising returns at the long-term end of the yield curve

20.2.4.4 Valuation of financial assets in 2021

Loans to entities outside the Group and other cash investments are shown in the table below:

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Loans to third parties	**8**	**11**
Loan to Sibelga	8	11
Other loans and receivables at amortized cost	**167**	**332**
Debt instruments - restricted cash	167	332
Total loans and receivables at amortized cost	**174**	**343**
Equity and debt instruments at fair value	1,509	406
Equity instruments at fair value through other comprehensive income	11	-
Equity instruments at fair value through income	**1,520**	**406**
Debt instruments at fair value through other comprehensive income	2,254	1,895
Debt instruments at fair value through income	1,552	1,191
Debt instruments at fair value	**3,806**	**3,086**
Total equity and debt instruments at fair value	**5,326**	**3,492**
Derivative instruments	**4**	**20**
TOTAL (1)	**5,505**	**3,855**

(1) Not including €414 millions in uranium inventories at December 31,2021 (€540 million at December 31, 2020).

Loans to legal entities outside the Group and the cash held by money market funds (OPCVM) are presented in the statement of financial position under “Loans and receivables at amortized cost”. Money market bonds and associated hedging instruments held by Synatom are presented under equity or debt instruments (*see Note 17.1 “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, 2021	Dec. 31, 2020
Equity instruments at fair value through other comprehensive income	116	17
Equity instruments at fair value through income	-	-
Debt instruments at fair value through other comprehensive income	51	32
Debt instruments at fair value through income	154	45
TOTAL	**321**	**95**

Net income for the period generated by these assets amounted to €228 million in 2021 (negative €31 million in 2020).

	Effects on the result of the return on dedicated financial assets	
In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Disposal proceeds	50	21
Dividends received	45	34
Interest received	7	6
Change in fair value of derivatives not designated as hedges	(115)	(6)
Change in fair value of dedicated assets through income	241	(87)
TOTAL	**228**	**(31)**

20.3 Dismantling of non-nuclear plant and equipment and site rehabilitation

20.3.1 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 issue 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 or the "Energy Futures" study by the electricity transmission system operator, RTE, all lead to a significant decrease in the quantities of gas consumed. The Group is closely analyzing this prospect, particularly for the purpose of defining its strategy and assessing the useful life of gas infrastructures and evaluating provisions for their dismantling.

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 ambitious development of a diversified range of green gases (biomethane, synthesized e-CH4, natural gas with the Carbon-Capture and Storage process, and pure hydrogen). Due to the importance of these 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 means that they can be used in the very distant future, which means that the present value of provisions for their dismantling is almost zero, except in the specific cases of LNG terminals and non-regulated storage sites. Provisions for dismantling LNG terminals and storage sites totaled €402 million at December 31, 2021, compared to €367 million at December 31, 2020.

Given its time horizon and the many underlying inputs (in particular, better knowledge of the compatibility of gas infrastructures with hydrogen, and changes in 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.

20.3.2 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 1,600 MW power station and adjoining coal mine, which has been consolidated as a joint operation.

At December 31, 2021, the Group’s share (72%) of the provision covering the obligation to dismantle and rehabilitate the mine amounted to €251 million.

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.

Several policies and laws that have a direct or indirect impact on mine rehabilitation and on the agencies that administer them have recently been reformed. Consequently, the ultimate regulatory obligations are likely to be revised during the life of the project and could therefore have an impact on provisions.

The average discount rate used to determine the amount of the provisions is 2.04%.

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.

20.4 Other contingencies

This caption essentially includes provisions for commercial litigation, tax claims and disputes (except income tax, pursuant to IFRIC 23) as well as provisions for onerous contracts relating to storage and transport capacity reservation contracts.

NOTE 21 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 income.

Net interest on the net defined benefit liability (asset) is presented in net financial income/(loss).

21.1 Description of the main pension plans

21.1.1 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 special EGI pension plan is a legal pension plan available to new entrants.

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 represents a defined benefit plan, the Group has set aside a pension provision in respect of specific benefits payable to employees of unregulated activities and specific benefits vested by employees of regulated activities 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.

Pension benefit obligations and other "mutualized" obligations are assessed by the CNIEG.

At December 31, 2021, the projected benefit obligation in respect of the special pension plan for EGI sector companies amounted to €3.9 billion.

The duration of the pension benefit obligation of the EGI pension plan is 23 years.

21.1.2 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 projected benefit obligation relating to these plans represented around 20% of total pension obligations and related liabilities at December 31, 2021. The average duration is 11 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 2021, the minimum rate of return stood at 1.75%.

An expense of €38 million was recognized in 2021 in respect of these defined contribution plans (€37 million in 2020).

21.1.3 Multi-employer plans

Employees of some Group companies are affiliated to multi-employer pension plans.

Under multi-employer plans, risks are pooled to the extent that the plan is funded by a single contribution rate determined for all affiliated companies and applicable to all employees.

Multi-employer plans are particularly common in the Netherlands, where employees are normally required to participate in a compulsory industry-wide plan. These plans cover a significant number of employers, thereby limiting the impact of potential default by an affiliated company. In the event of default, the vested rights are maintained in a special compartment and are not transferred to the other members. Refinancing plans may be set up to ensure the funds are balanced.

The ENGIE Group accounts for multi-employer plans as defined contribution plans.

The expense recognized in 2021 in respect of multi-employer pension plans was stable as compared to 2020 at €74 million.

21.1.4 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, Belgium and the Netherlands concern:

- the United Kingdom: the large majority of defined benefit pension plans is 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.

21.2 Description of other post-employment benefit obligations and other long-term benefits

21.2.1 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.

21.2.1.1 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 is measured as the difference between the energy sale price and the preferential rate granted.

The provision set aside in respect of reduced energy prices stood at €3.8 billion at December 31, 2021. The duration of the obligation is 24 years.

21.2.1.2 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.

21.2.1.3 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 suffered 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.

21.2.2 Other benefits granted to employees of the gas and electricity sector in Belgium

Electricity and gas sector companies also grant other 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.

21.2.3 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.

21.3 Defined benefit plans

21.3.1 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, 2020	**(8,941)**	**36**	**188**
Exchange rate differences	(34)	2	(1)
Changes in scope of consolidation and other	372	(63)	37
Actuarial gains and losses	1,719	84	-
Periodic pension cost	(541)	(5)	1
Asset ceiling	-	-	-
Contributions/benefits paid	426	19	3
AT December 31, 2021	**(6,999)**	**72**	**229**

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 €547 million in 2021 (€441 million in 2020). The components of this defined benefit cost in the period are set out in Note 21.3.3 “Components of the net periodic pension cost”.

The Eurozone represented 98% of the Group’s net obligation at December 31, 2021, (98% at December 31, 2020).

Cumulative actuarial gains and losses recognized in equity amounted to €4,232 million at December 31, 2021, compared to €6,037 million at December 31, 2020.

Net actuarial differences arising in the period and presented on a separate line in the statement of comprehensive income represented a net actuarial gain of €1,803 million in 2021 and a loss of €1,519 million in 2020.

Changes in the scope of consolidation mainly relate to the classification of Equans' activities within "Assets classified as held for sale".

21.3.2 Change in benefit obligations and plan assets

The table below shows the amount of the 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:

In millions of euros		Dec. 31, 2021				Dec. 31, 2020			
		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		**(9,186)**	**(5,167)**	**(565)**	**(14,919)**	**(8,570)**	**(4,470)**	**(531)**	**(13,572)**
Service cost		(353)	(88)	(80)	(521)	(303)	(79)	(50)	(432)
Interest expense		(85)	(39)	(3)	(126)	(115)	(57)	(5)	(177)
Contributions paid		(13)	-	-	(13)	(16)	-	-	(16)
Amendments		(2)	-	-	(2)	(19)	4	(1)	(16)
Changes in scope of consolidation		1,108	4	58	1,170	-	-	-	-
Curtailments/settlements		13	1	-	13	125	1	1	127
Non-recurring items		-	-	-	-	-	-	-	-
Financial actuarial gains and losses		869	533	32	1,434	(789)	(678)	(31)	(1,498)
Demographic actuarial gains and losses		(230)	2	11	(217)	(56)	8	(6)	(55)
Benefits paid		389	107	47	543	405	104	57	566
Other (of which translation adjustments)		(78)	-	(1)	(78)	152	-	2	154
Projected benefit obligation at December 31	**A**	**(7,566)**	**(4,649)**	**(499)**	**(12,715)**	**(9,186)**	**(5,167)**	**(565)**	**(14,919)**
B - CHANGE IN FAIR VALUE OF PLAN ASSETS									
Fair value of plan assets at January 1		**6,034**	**-**	**-**	**6,034**	**6,169**	**-**	**-**	**6,169**
Interest income on plan assets		58	-	-	58	86	-	-	86
Financial actuarial gains and losses		629	-	-	629	(4)	-	-	(4)
Contributions received		198	-	-	198	206	-	-	206
Changes in scope of consolidation		(862)	-	-	(862)	-	-	-	-
Settlements		(11)	-	-	(11)	9	-	-	9
Benefits paid		(283)	-	-	(283)	(308)	-	-	(308)
Other (of which translation adjustments)		81	-	-	81	(124)	-	-	(124)
Fair value of plan assets at December 31	**B**	**5,843**	**-**	**-**	**5,843**	**6,034**	**-**	**-**	**6,034**
C - FUNDED STATUS	**A+B**	**(1,723)**	**(4,649)**	**(499)**	**(6,872)**	**(3,153)**	**(5,167)**	**(565)**	**(8,885)**
Asset ceiling		(55)	-	-	(55)	(21)	-	-	(21)
NET BENEFIT OBLIGATION		(1,779)	(4,649)	(499)	(6,927)	**(3,174)**	**(5,167)**	**(565)**	**(8,906)**
ACCRUED BENEFIT LIABILITY		**(1,850)**	**(4,649)**	**(499)**	**(6,999)**	**(3,210)**	**(5,137)**	**(595)**	**(8,941)**
PREPAID BENEFIT		**72**	**-**	**-**	**72**	**36**	**-**	**-**	**36**

(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.

21.3.3 Components of the net periodic pension cost

The net periodic cost recognized in respect of defined benefit obligations for the years ended December 31, 2021 and 2020 breaks down as follows:

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Current service cost	521	432
Actuarial gains and losses (1)	(43)	37
Plan amendments	-	-
Gains or losses on pension plan curtailments, terminations and settlements	-	(120)
Non-recurring items	-	-
Total accounted for under current operating income including operating MtM and share in net income of equity method entities	**479**	**350**
Net interest expense	68	91
Total accounted for under net financial income/(loss)	**68**	**91**
TOTAL	**547**	**441**

(1) On the long-term benefit obligation.

21.3.4 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 are twofold: 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	(5,891)	4,671	(50)	(1,271)
Overfunded plans	(1,116)	1,172	(5)	51
Unfunded plans	(5,708)	-	-	(5,708)
AT DECEMBER 31, 2021	**(12,715)**	**5,843**	**(55)**	**(6,927)**
Underfunded plans	(7,671)	5,192	(21)	(2,500)
Overfunded plans	(606)	842	-	236
Unfunded plans	(6,641)	-	-	(6,641)
AT DECEMBER 31, 2020	**(14,918)**	**6,034**	**(21)**	**(8,905)**

The allocation of plan assets by principal asset category can be analyzed as follows:

In %	Dec. 31, 2021	Dec. 31, 2020
Equity investments	29	26
Sovereign bond investments	21	23
Corporate bond investments	27	29
Money market securities	3	3
Real estate	2	2
Other assets	18	16
TOTAL	**100**	**100**

All plan assets were quoted on an active market at December 31, 2021.

The actual return on assets of EGI sector companies stood at a positive 13.4% in 2021.

In 2021, the actual return on plan assets of Belgian entities amounted to approximately 10.4% 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	55	29	3	8	4	100
Sovereign bond investments	76	1	17	2	4	100
Corporate bond investments	70	19	2	4	4	100
Money market securities	89	-	3	9	-	100
Real estate	94	1	4	1	-	100
Other assets	68	7	3	22	-	100

21.3.5 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	
		2021	2020	2021	2020	2021	2020	2021	2020
Discount rate	Eurozone	1.2%	0.6%	1.2%	0.6%	1.2%	0.6%	1.2%	0.6%
	UK Zone	1.6%	1.6%	-	-	-	-	-	-
Inflation rate	Eurozone	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
	UK Zone	3.6%	3.2%	-	-	-	-	-	-

21.3.5.1 Discount and inflation rate

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 or decrease in the discount rate would result in a change of approximately 27% in the projected benefit obligation.

The inflation rates were determined for each monetary area. A 100-basis-point increase or decrease in the inflation rate (with an unchanged discount rate) would result in a change of approximately 18% in the projected benefit obligation.

21.3.5.2 Other assumptions

The increase in the rate of medical costs (including inflation) was estimated at 1%.

A 100-basis-point change in the assumed increase in medical costs would have the following impacts:

In millions of euros	**100 basis point increase**	**100 basis point decrease**
Impact on expenses	-	-
Impact on pension obligations	1	(1)

21.3.6 Estimated employer contributions payable in 2022 under defined benefit plans

The Group expects to pay around €199 million in contributions into its defined benefit plans in 2022, including €121 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.

21.4 Defined contribution plans

In 2021, the Group recorded a €122 million expense in respect of amounts paid into Group defined contribution plans (€248 million in 2020). These contributions are recorded under “Personnel costs” in the consolidated income statement.

NOTE 22 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 fair value measurement also takes into account the non-transferability period associated with these instruments. 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, 2021	Dec. 31, 2020 (1)
Employee share issues (2)	(1)	(1)
Bonus/performance share plans (3) (4)	(47)	(41)
Other Group companies' plans	-	(4)
TOTAL	(48)	(47)

(1) Comparative data at December 31, 2020 have been restated due to the classification of EQUANS activities held for sale as “Discontinued operations” in application of IFRS 5 (see Note 2 “Restatement of 2020 comparative data”).

(2) Including Share Appreciation Rights set up within the scope of employee share issues in certain countries.

(3) Of which a reversal of €0.3 million in 2021 for failure to meet the performance conditions (€6 million in 2020).

(4) Of which a reversal of €4 million in 2021 for failure to meet the condition of continuing employment within the Group (€5 million in 2020).

22.1 Performance shares

22.1.1 New awards in 2021

ENGIE Performance Share plan of December 16, 2021

On December 16, 2021, the Board of Directors approved the award of 5 million performance shares to members of the Group's executive and senior management, breaking down into three tranches:

- performance shares vesting on March 14, 2025, subject to a one-year lock-up period;
- performance shares vesting on March 14, 2025, without a lock-up period; and
- performance shares vesting on March 14, 2026, without a lock-up period.

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 four different conditions, excluding the first 150 performance shares granted to beneficiaries (excluding top management), which are exempt from performance conditions. The performance conditions are as follows:

- a market performance condition relating to ENGIE’s Total Shareholder Return compared to that of a reference panel of six companies, as assessed between December 2021 and February 2025, which accounts for 25% of the total award;

- an internal performance condition relating to net recurring income Group share compared to that of a reference panel of six companies, as assessed between the second half of 2021 and the first half of 2024, which accounts for 25% of the total award;
- an internal performance condition relating to Return On Capital Emplyed (ROCE) in 2024 which accounts for 30% of the total award;
- an internal performance condition relating to non-financial criterias in terms of targets for greenhouse gas emissions from energy productions, increasing the share of renewable capacities and increasing the percentage of women in management, as assessed between December 2021 and December 2024, which accounts for 20% of the total award.

Under this plan, performance shares without conditions were also awarded to the winners of the Innovation and Incubation programs (15,450 shares awarded).

22.1.2 Fair value of bonus share plans with or without performance conditions

The following assumptions were used to calculate the fair value of the new plans awarded by ENGIE in 2021:

Award date	Vesting date	End of the lock-up period	Price at the award date	Expected dividend	Financing cost for the employee	Non-transferability cost	Market-related performance condition	Fair value per unit
December 16, 2021	March 14, 2025	March 14, 2026	13.0	0.83	3.7%	0.22	yes	8.79
December 16, 2021	March 14, 2025	March 14, 2025	13.0	0.83	3.7%	0.22	yes	9.15
December 16, 2021	March 14, 2025	March 14, 2025	13.0	0.83	3.7%	0.41	no	10.36
December 16, 2021	March 14, 2026	March 14, 2026	13.0	0.83	3.7%	0.22	yes	8.31
Weighted average fair value of the December 16, 2021 plan								9.28

22.1.3 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.

In 2020, the Group decided to adjust in favor of the employees the effect of the COVID-19 crisis on the achievement of the internal performance conditions for the performance share plans awarded in December 2017 and December 2018 including 2020 as the year of reference. After applying the adjusted achievement rates, the Group recognized income of €6 million.

NOTE 23 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 24 “Executive compensation”.

Transactions with joint ventures and associates are described in Note 4 “Investments in equity method entities”.

Only material transactions are described below.

23.1 Relations with the French State and with entities owned or partly owned by the French State

23.1.1 Relations with the French State

The French State’s interest in the Group at December 31, 2021 was unchanged from the previous year at 23.64%. This entitles it to three seats 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 33.20% of the theoretical voting rights (33.36% of exercisable voting rights) compared with 33.19% at end-2020.

On May 22, 2019, the PACTE Act (“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 will put an end to regulated gas tariffs and will restrict regulated electricity tariffs for consumers and small businesses. The final date for the discontinuation of regulated gas tariffs is July 1, 2023.

23.1.2 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 January 1, 2008, respectively, and act in accordance with the agreement previously signed by the two incumbent operators.

23.2 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 21 "Post-employment benefits and other long-term benefits".

NOTE 24 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 11 members at December 31, 2021 (10 members at December 31, 2020).

Their compensation breaks down as follows:

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Short-term benefits	22	29
Post-employment benefits	1	-
Share-based payments	3	2
Termination benefits	7	7
TOTAL	**33**	**38**

Pursuant to the European Directive of April 16, 2014, French ordinance no. 2019-697 relating to supplementary pensions, published on July 4, 2019, terminated the existing L137-11 pension plan (referred to as “Article 39”) and prohibited the accrual of further rights and the entry of any new members as of that date.

Following the closure of the plan and the freezing of the random rights in 2019, in 2020 the Group transformed the random rights of beneficiaries, including the members of the Group’s Executive Committee, under a defined contribution plan referred to as “Article 82”.

NOTE 25 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 withdrawn 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 16 "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.

25.1 Composition of change in working capital requirements

In millions of euros	Change in working capital requirements at Dec. 31, 2021	Change in working capital requirements at Dec. 31, 2020 (1)
Inventories	(2,349)	(476)
Trade and other receivables, net	(11,043)	(55)
Trade and other payables, net	10,676	(545)
Tax and employee-related receivables/payables	364	(58)
Margin calls and derivative instruments hedging commodities relating to trading activities	(706)	(109)
Other	680	340
TOTAL	**(2,377)**	**(902)**

(1) *Comparative data at December 31,2020 have been restated due to the classification of EQUANS activities held for sale as "Discontinued operations" in application of IFRS 5 (see Note 2 "Restatement of 2020 comparative data").*

25.2 Inventories

In millions of euros	Dec. 31, 2021	Dec. 31, 2020
Inventories of natural gas, net	3,079	1,146
Inventories of uranium (1)	408	530
CO_2 emissions allowances, green certificates and energy saving certificates, net	1,526	1,070
Inventories of commodities other than gas and other inventories, net	1,161	1,395
TOTAL	**6,175**	**4,140**

(1) *Financial hedging instruments are backed by these uranium inventories and represented a negative amount of €9 million at December 31, 2021*

25.3 Other assets and other liabilities

	Dec. 31, 2021				Dec. 31, 2020			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Other assets and liabilities	478	13,202	(2,341)	(16,752)	396	8,990	(2,004)	(12,545)
Tax receivables/payables	*-*	*10,628*	*-*	*(11,316)*	*-*	*6,274*	*-*	*(6,960)*
Employee receivables/payables	*300*	*18*	*(2)*	*(2,033)*	*222*	*51*	*(6)*	*(2,667)*
Dividend receivables/payables	*-*	*15*	*-*	*(9)*	*-*	*17*	*-*	*(76)*
Other	*178*	*2,541*	*(2,339)*	*(3,395)*	*174*	*2,649*	*(1,998)*	*(2,841)*

At December 31, 2021, other non-current assets also included a receivable towards EDF Belgium in respect of nuclear provisions amounting to €96 million (€94 million at December 31, 2020).

Other liabilities include €1,229 million in investments made by tax partners as part of the financing of renewable projects in the United States by tax equity (€1,123 million at December 31, 2020).

NOTE 26 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 normal 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.

26.1 Renewables

26.1.1 Mexico – Renewable energy

In the past few months, the Mexican government and public authorities have taken positions and legislative and regulatory measures that directly affect private players in the energy sector (in particular renewable energy producers) and go against the letter and spirit of the latest energy sector reforms introduced in 2013 and 2014. The constitutionality and legality of some of these measures have been contested in legal proceedings launched by non-government bodies and private investors, in particular by ENGIE subsidiaries that develop or implement renewable energy projects in the country. These proceedings are currently ongoing. The Mexican President has also submitted a draft revision of the Constitution that would substantially change the regulatory framework applicable to the electricity sector. This will be discussed by parliament in the coming weeks.

26.2 Networks

26.2.1 Investigation into the regulation mechanism for natural gas storage in France

On February 29, 2020, the European Commission announced that it had launched an in-depth investigation into the regulation mechanism for the storage of natural gas introduced on January 1, 2018 to secure France’s natural gas supply. Storengy and Géométhane provided the Commission with all the necessary information to substantiate their analyses. The European Commission closed its investigation and published a press release on June 28, 2021 announcing that it had concluded that the regulation mechanism for the storage of natural gas complies with EU rules on State aid. This decision will be published at a later date.

26.3 Energy Solutions

26.3.1 Spain - Púnica

In the Púnica case (investigation into 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 has been closed since July 19, 2021; the investigating judge requested that Cofely España and eight (former) employees be tried in court. Cofely España has appealed this decision.

26.3.2 Italy - Competition procedure

On May 9, 2019, a fine of €38 million was jointly and severally imposed on ENGIE Servizi SpA and ENGIE Energy Services International S.A. by the Italian Competition Authority (the Authority) for certain alleged anti-competitive practices relating to the award of the Consip FM4 2014 contract. An appeal was lodged with the Lazio Regional Administrative Court (Lazio

RAC). On July 18, 2019, the Lazio RAC suspended the payment of the fine, and on July 27, 2020, it overturned the Authority's decision as regards both ENGIE Servizi SpA and ENGIE Energy Services International SA. On November 17, 2020, the Authority appealed the Lazio RAC's decision before Italy's highest administrative court. Proceedings before the Italy's highest administrative court are still underway.

26.3.3 Concessions in Buenos Aires and Santa Fe

In 2003, ENGIE and its joint shareholders, water distribution concession operators in Buenos Aires and Santa Fe, initiated two arbitration proceedings against the Argentinean State before the International Center for Settlement of Investment Disputes (ICSID). The purpose of these proceedings was to obtain compensation for the loss in value of investments made since the start of the concession, in accordance with bilateral investment protection treaties.

As a reminder, prior to the stock market listing of SUEZ Environnement Company, ENGIE and SUEZ (formerly SUEZ Environnement) entered into an agreement providing for the economic transfer to SUEZ of the rights and obligations relating to the ownership interests held by ENGIE in Aguas Argentinas and Aguas Provinciales de Santa Fe, including the rights and obligations resulting from the arbitration proceedings.

On April 9, 2015, the ICSID ordered the Argentinean State to pay USD 405 million in respect of the termination of the Buenos Aires water distribution and treatment concession contracts (including USD 367 million to ENGIE and its subsidiaries), and on December 4, 2015, to pay USD 225 million in respect of the termination of the Santa Fe concession contracts. The Argentinean State sought the annulment of these awards. By decision dated May 5, 2017, the claim for the annulment of the Buenos Aires award was rejected. The claim to annul the award in the Santa Fe case was rejected by a decision dated December 14, 2018. Consequently, the two ICSID awards, which are a step in the settlement of the dispute, are now final.

The Argentinean government and the various shareholders of Aguas Argentinas entered into and implemented a settlement agreement in accordance with the arbitral award of April 9, 2015, handed down in respect of the water distribution and treatment concession contracts in Buenos Aires. In accordance with the above-mentioned agreement concerning the economic transfer to SUEZ of ENGIE's rights and obligations, SUEZ and its subsidiaries received €224.1 million in cash. Furthermore, the December 14, 2018 ruling pertaining to the water distribution and wastewater treatment concessions granted to Aguas Provinciales de Santa Fe has yet to be applied.

The settlement for the Aguas Provinciales de Santa Fe concession will no longer have any financial impact on ENGIE given the sale of its shares in SUEZ.

26.4 Energy supply

26.4.1 Canvassing

EDF brought an action against ENGIE before the Nanterre Commercial Court on July 20, 2017, seeking €13.5 million in damages for alleged losses due to unfair competitive practices pursued by ENGIE mainly in its door-to-door canvassing campaigns. In its judgment of December 14, 2017, the court ordered ENGIE to pay EDF the sum of €150,000, concluding that ENGIE was guilty of unfair competition but acknowledging that there had been no disparagement of EDF and that ENGIE had set up training and control arrangements for its partners.

ENGIE appealed the judgment and EDF brought a cross-appeal seeking €94.7 million in damages for its alleged loss. The Versailles Court of Appeal delivered its judgment on March 12, 2019, ordering ENGIE to pay EDF €1 million. It also ordered ENGIE to cease and desist from all parasitic business practices and disparagement to the detriment of EDF, subject to a penalty of €10,000 per infringement for a period of one year.

On July 6, 2020, EDF asked the enforcement judge at the Nanterre Court to assess the penalty ordered by the Versailles Court of Appeal, seeking payment from ENGIE of the sum of €106.89 million and a final penalty of €50,000 per infringement for a period of one year. On December 11, 2020, the enforcement judge ordered ENGIE to pay EDF the sum of

€230,000and ordered a new provisional penalty of €15,000 per new infringement for a period of one year as of notification of the judgment by EDF.

On December 22, 2020, EDF appealed the enforcement judge's decision before the Versailles Court of Appeal. The Versailles Court of Appeal handed down its decision on July 1, 2021. It reduced ENGIE's fine to €190,000 and, considering that ENGIE had demonstrably implemented measures that were likely to be efficient and that the difficulties encountered stemmed for the most part from the behavior of service providers/partners and door-to-door salespeople, annulled the new provisional penalty and rejected EDF's request to impose a definitive penalty. EDF appealed this decision before the French Court of Cassation on July 29, 2021.

26.4.2 Commissioning

Regarding the customer management services carried out on behalf of the grid manager in the electricity sector (in this case ERDF, now ENEDIS), following proceedings brought by ENGIE, in a decision of July 13, 2016, the Conseil d'État ruled that the principle whereby the grid manager pays compensation to the supplier should apply. In the same decision, the Conseil d'État denied the CRE the right to set a customer threshold beyond which the compensation would not be payable, which hitherto prevented ENGIE from receiving any compensation. In light of this decision, ENGIE brought an action against ENEDIS with the purpose of obtaining payment for these customer management services. The legislature has adopted a decision that retroactively validates the agreements entered into with ENEDIS and precludes any request for compensation for unpaid customer management services. In a decision handed down on April 19, 2019, the Constitutional Court ruled that this provision was constitutional. The proceedings against ENEDIS are still underway.

26.5 Thermal

26.5.1 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 Savone Court to be tried on the merits. The proceedings before the Court of First Instance began on December 11, 2018 and will continue through 2022.

26.5.2 Claim against sales tax adjustments in Brazil

On December 14, 2018, the Brazilian tax authorities sent ENGIE Brasil Energia S.A. tax deficiency notices for the 2014, 2015 and 2016 fiscal years considering that the company was liable for the PIS and COFINS taxes (federal value added taxes) on the reimbursement of certain fuels used in the production of energy by thermoelectric plants. The adjustments amounted to a total of 528 million Brazilian real, including 229 million Brazilian real in taxes plus fines and interest.

ENGIE Brasil Energia disputes these tax deficiency notices and introduced tax claims in 2019, which the tax authorities have rejected, however. A final claim at administrative level (prior to possible appeals before tax courts at judicial level) was filed by ENGIE Brasil Energia in January 2020.

26.5.3 Claim by the Dutch tax authorities related to power plant impairment losses

The Dutch tax authorities have disallowed the tax deduction of asset impairment losses reported by ENGIE Energie Nederland NV on its 2010-2013 tax returns. The authorities challenged both the period of coverage of the impairment losses and the amount. Accordingly, they added back the full amount of the accumulated asset impairment losses over the abovementioned period, i.e., an amount of €1.9 billion. ENGIE has contested the tax authorities' position as regards both the period and the amount and filed an administrative appeal in November 2018, which was rejected in February 2019. In the second half of 2021, ENGIE and the tax authorities agreed on a sum of €44 million to end this dispute.

26.6 Nuclear

26.6.1 Resumption and extension of operations at the nuclear power plants

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 2 and Tihange 1 reactors. The Brussels Court of Appeal dismissed Greenpeace's claims in a decision dated June 12, 2018. Greenpeace appealed this decision before the Court of Cassation. This appeal was rejected by a ruling of the Court of Cassation dated January 9, 2020, such that the decision by the Brussels Court of Appeal dated June 12, 2018 is now final. As for the action brought before the Constitutional Court, on June 22, 2017 the 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 may provisionally be maintained where there is a genuine and serious threat of an interruption to electricity supply, and then only for the length of time that is 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 assessments, including a cross-border public consultation process, by December 31, 2022 at the latest. The appeal before the Conseil d'État is still ongoing.

In addition, some local authorities and various organizations have challenged the authorization to restart operations at the Tihange 2 reactor. On November 9, 2018, the Conseil d'État rejected the action brought by some local German authorities seeking the annulment of this decision. Civil proceedings were also ongoing before the Brussels Court of First Instance. On September 3, 2020, the Court ruled that the case was admissible, but unfounded.

26.7 Other

26.7.1 Withholding tax

In their tax deficiency notice dated December 22, 2008, the French tax authorities questioned the tax treatment of the non recourse sale by SUEZ (now ENGIE) of a 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 April 2019, which led to the French tax authorities to appeal the decision before the Versailles Court of Appeal, which overturned the prior Court's decision on December 22, 2021. While recognizing the fiscal nature of the receivable sold, the Court did not validate the exemption of the sale price because there was no text or principle to that effect, and because the sale was not authorized by the State.

Regarding the dispute over the précompte itself, on February 1, 2016, the Conseil d'État dismissed the appeal before the Court of Cassation seeking the repayment of the précompte in respect of the 1999, 2000 and 2001 fiscal years. On June 23, 2020, the Versailles Administrative Court of Appeal found in favor of ENGIE as regards the cases seeking repayment of the précompte in respect of the 2002 and 2003 fiscal years but rejected the case in respect of the 2004 fiscal year. As the précompte receivables for 2002/2003 have been assigned, the relevant amounts will be repaid to the assignee banks. The case has been referred to the Conseil d'État by the two parties. Pursuant to an application for a priority preliminary ruling on the issue of constitutionality, on October 23, 2020, the Conseil d'État decided to seek a preliminary ruling from the Court of Justice of the European Union to ascertain whether Directive 90/435/EC of 1990 precludes the withholding of the précompte upon the redistribution by a parent company of dividends received from subsidiaries established in the European Union.

Furthermore, after ENGIE and several French groups lodged a complaint, on April 28, 2016, the European Commission issued a reasoned opinion to the French State as part of infringement proceedings, setting out its view that the Conseil d'État did not comply with European Union law when handing down decisions in disputes regarding the précompte, such as those involving ENGIE. On July 10, 2017, the European Commission referred the matter to the Court of Justice of the European Union (CJEU) on the grounds of France's failure to comply. On October 4, 2018, the Court of Justice of the

European Union ruled partially in favor of the European Commission. Following this decision, France must revisit its methodology in order to determine the précompte repayment amounts in closed and pending court cases.

26.7.2 Luxembourg – State aid investigation

On September 19, 2016, the European Commission announced its decision to open an investigation into whether or not two private rulings granted by the Luxembourg State in 2008 and 2010 covering two similar transactions between several of the Group's Luxembourg subsidiaries constituted State aid. On June 20, 2018, the European Commission adopted a final, unfavorable decision deeming that Luxembourg had provided ENGIE with State aid. On September 4, 2018, ENGIE requested the annulment of the decision before the European Courts, thereby challenging the existence of a selective advantage. As these proceedings do not have a suspensive effect, ENGIE paid a sum of €123 million into an escrow account on October 22, 2018 in respect of one of the two transactions in question, since no aid was actually received for the other. Following the proceedings before the European Courts, this sum will be returned to ENGIE or paid to the Luxembourg State depending on whether or not the Commission's decision is annulled. On May 12, 2021, the Court rejected the appeals of the Luxembourg State and of ENGIE, thereby confirming the European Commission's position on the existence of State aid granted to the Group's Luxembourg subsidiaries. On July 22, 2021, ENGIE referred the matter to the Court of Justice of the European Union seeking the annulment of the Court's decision. The proceedings are currently ongoing.

26.7.3 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 proceeding). EEMHS filed an appeal with the Competition Protection Court. The appeal 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 appeal automatically suspends the execution of all of the penalties ordered by the UOKiK. The appeal proceedings are pending.

26.7.4 Sale of 29.9% of the capital of SUEZ to Veolia

In the context of the sale by ENGIE of 29.9% of the capital of SUEZ to Veolia on October 6, 2020, ENGIE was summonsed to various proceedings, both in summary hearings or hearings on the merits, and both in labor law and commercial law matters. The main proceedings involved Veolia and SUEZ and were initiated by SUEZ, acting alone or jointly with its staff representation bodies. All these proceedings were closed following the agreement between Veolia and SUEZ on May 14, 2021. ENGIE has acted within its rights in all circumstances, has not violated any of its obligations and there is no irregularity in the form or substance of the sale to Veolia, which is now final, that is likely to affect the validity thereof.

26.7.5 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 refuse 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, either under Dutch or European law. It has therefore appealed the decision before the Court of Cassation. The hearing took place in June 2021 and a decision is expected in the first half of 2022.

26.7.6 Transfer price of gas

The Belgian tax authorities' Special Tax Inspectorate has issued two tax deficiency notices in respect of taxable income for fiscal years 2012 and 2013 for an aggregate amount of €706 million, considering that the price applied for the supply of gas by ENGIE (then GDF SUEZ) to Electrabel S.A. was excessive. ENGIE and Electrabel S.A. are challenging this adjustment and have submitted a request for conciliation proceedings, which was accepted by France and Belgium in May 2018. The proceedings are ongoing between the two States, with no major progress made in 2021.

26.7.7 Italy - Tax dispute relating to excise duties and ENGIE Italia VAT (formerly GDF SUEZ Energie)

In 2017, the Italian tax authorities challenged the excise duty waiver for gas transfers carried out by ENGIE Italia SpA (ENGIE Italia) for industrial customers in Italy on the grounds that it did not have a certificate for these customers. The authorities plan to issue a tax reassessment for a total amount of €126 million (excise duties, VAT, late payment penalties and interest). ENGIE Italia has challenged the legality of this procedure both in light of Italian and European law and in any event deems the sanction to be disproportionate compared to a formal requirement.

In 2018, ENGIE Italia launched an appeal with the Perugia Court of First Instance requesting the cancellation of the tax reassessment notice.

In October 2018, the Court of First Instance dismissed the cancellation request, simply applying an outdated ministerial decree and ignoring ENGIE Italia's legal arguments.

ENGIE Italia appealed the ruling in November 2018 and the Court of Appeal ruled in its favor in November 2019 on the grounds that the documents requested by the Italian tax authorities were not legal and that the authorities needed to take into account the factual situation of the taxpayer to determine its requirement to pay excise duties. In 2020, the tax authorities referred the case to the Court of Cassation. In August 2021, an agreement with the Italian tax authorities was formalized leading to the payment of an amount of €3.2 million relating to excise duties. Discussions are still ongoing to finalize the issues of VAT and local tax on the excise duties.

NOTE 27 SUBSEQUENT EVENTS

Disposal of ENGIE's remaining stake in SUEZ

On January 18, 2022, the Group contributed its remaining 1.8% stake in SUEZ as part of the public offer initiated by the VEOLIA Group. This transaction will have no impact on the Group's 2022 results, as the interest was measured at fair value at December 31, 2021. It will reduce the Group's net debt by €227 million in 2022.

NOTE 28 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	**6.8**	**8.5**	**15.4**	**6.7**	**11.7**	**18.4**	**33.8**
ENGIE SA	2.8	-	2.8	3.5	-	3.5	6.3
Controlled entities	4.1	8.5	12.6	3.2	11.7	14.9	27.5
Non-audit services	**0.6**	**8.2**	**8.7**	**1.0**	**0.7**	**1.7**	**10.4**
ENGIE SA	**0.5**	**7.5**	**8.0**	**0.8**	**0.0**	**0.8**	**8.8**
Of which services related to legal and regulatory requirements	*0.3*	*-*	*0.3*	*0.3*	*-*	*0.3*	*0.6*
Of which other audit services	*0.2*	*-*	*0.2*	*0.4*	*-*	*0.4*	*0.6*
Of which reviews of internal control	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Of which due diligence services	*-*	*7.5*	*7.5*	*0.1*	*-*	*0.1*	*7.6*
Of which tax services	*-*	*-*	*-*	*-*	*0.0*	0.0	0.0
Controlled entities	**0.1**	**0.7**	**0.7**	**0.2**	**0.7**	**0.8**	**1.6**
Of which services related to legal and regulatory requirements	*-*	*0.3*	*0.3*	*0.1*	*0.2*	*0.3*	*0.6*
Of which other audit services	*0.1*	*0.1*	*0.1*	*0.0*	*0.3*	*0.3*	*0.4*
Of which reviews of internal control	*-*	*0.1*	*0.1*	*-*	*-*	*-*	*0.1*
Of which due diligence services	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Of which tax services	*-*	*0.3*	*0.3*	*-*	*0.2*	*0.2*	*0.5*
Total	**7.4**	**16.7**	**24.1**	**7.7**	**12.4**	**20.1**	**44.2**

NOTE 29 INFORMATION REGARDING LUXEMBOURG AND DUTCH COMPANIES EXEMPTED FROM THE REQUIREMENTS TO PUBLISH ANNUAL FINANCIAL STATEMENTS

Some companies in the Rest of Europe and Others reportable segments 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, Electrabel Invest Luxembourg, ENGIE Treasury Management SARL and ENGIE Invest International SA.

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