



Fortum Financial Statements Bulletin

JANUARY-DECEMBER 2021

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Figures in brackets refer to the comparison period, i.e. the same period last year, unless otherwise stated.

Outstanding performance under extraordinary and volatile market conditions

October–December 2021

- Comparable EBITDA was EUR 1,416 (1,247) million
- Comparable operating profit was EUR 1,070 (928) million
- Operating profit was EUR 2,012 (458) million, mainly impacted by changes in fair values of non-hedge-accounted derivatives
- Comparable share of profits of associates and joint ventures was EUR 27 (63) million
- Comparable earnings per share were EUR 0.78 (0.69)
- Earnings per share were EUR 0.95 (0.43)
- Cash flow from operating activities totalled EUR 1,576 (763) million
- Due to very volatile commodity markets with unprecedentedly high prices, Fortum and its subsidiary Uniper took precautionary measures to secure additional liquidity and financial flexibility

January–December 2021

- Comparable EBITDA was EUR 3,817 (2,434) million
- Comparable operating profit was EUR 2,536 (1,344) million
- Operating profit was EUR -588 (1,599) million, mainly impacted by changes in fair values of non-hedge-accounted derivatives partly offset by capital gains from divestments
- Comparable share of profits of associates and joint ventures was EUR 154 (656) million. The comparison period includes Uniper for the fourth quarter of 2019 and first quarter of 2020
- Comparable earnings per share were EUR 2.00 (1.67)
- Earnings per share were EUR 0.83 (2.05)
- Cash flow from operating activities totalled EUR 4,970 (2,555) million
- Financial net debt-to-comparable EBITDA ratio for 2021 at 0.2 times, clearly below the target level of <2 times
- On 2 July, Fortum concluded the sale of its district heating business in the Baltics for a total consideration of approximately EUR 710 million
- On 20 September, Fortum concluded the sale of its 50% ownership in Stockholm Exergi Holding AB for a total consideration of EUR 2.9 billion
- S&P and Fitch upgraded rating outlook to “stable”, BBB rating reaffirmed
- Fortum's Board of Directors proposes a dividend of EUR 1.14 (1.12) per share

Summary of outlook

- The Generation segment's Nordic generation hedges: approximately 75% at EUR 34 per MWh for 2022, and approximately 50% at EUR 31 per MWh for 2023
- The Uniper segment's Nordic generation hedges: approximately 80% at EUR 18 per MWh for 2022, approximately 60% at EUR 18 per MWh for 2023 and approximately 20% at EUR 30 per MWh for 2024
- Capital expenditure, including maintenance but excluding acquisitions, is expected to be approximately EUR 1,500 million in 2022

Key figures*

EUR million	IV/2021	IV/2020	2021	2020
Reported				
Sales	50,079	21,279	112,400	49,015
Operating profit	2,012	458	-588	1,599
Share of profit/loss of associates and joint ventures	40	113	192	656
Net profit	1,003	411	-114	1,855
Net profit (after non-controlling interests)	842	379	739	1,823
Earnings per share, EUR	0.95	0.43	0.83	2.05
Net cash from operating activities	1,576	763	4,970	2,555

EUR million	IV/2021	IV/2020	2021	2020
Comparable				
EBITDA	1,416	1,247	3,817	2,434
Operating profit	1,070	928	2,536	1,344
Share of profit/loss of associates and joint ventures	27	63	154	656
Net profit (after non-controlling interests)	693	610	1,778	1,483
Earnings per share, EUR	0.78	0.69	2.00	1.67

EUR million	31 Dec 2021	31 Dec 2020
Financial net debt (at period-end)	789	7,023
Adjusted net debt (at period-end)	3,227	9,784
Financial net debt/comparable EBITDA	0.2	2.9

* Uniper has been consolidated as a subsidiary from 31 March 2020. Previously, Uniper's contribution to the income statement was recognised in the Share of profit/loss of associates and joint ventures.

Fortum's President and CEO Markus Rauramo:

Fortum has published a statement by its President and CEO Markus Rauramo's on the Group's Russian businesses following Russia's invasion on Ukraine. Please see the separate Investor News published this morning on 3 March 2022.

"2021 was in many ways an extraordinary year in the energy business. We have experienced a rare combination of circumstances leading to unprecedented developments in the commodity market. During these turbulent times Fortum Group held course. We successfully continued the implementation of our strategy with active portfolio rotation and accelerated decarbonisation, and produced another great set of operative results.

After the drop in 2020, energy consumption in our market areas increased as economies recovered and societies learned to cope with the Covid-19 pandemic. Market conditions were characterised by colder weather during the first half of the year, below-normal European wind and Nordic hydro conditions, as well as increasing EU emission allowance prices. It was gas that was in the driver's seat for the energy commodities. Lower-than-average gas storage levels coupled with tight LNG and pipeline supplies caused unprecedented volatility and a price rally in the second half of the year in Europe.

The higher power and gas prices have clearly impacted both our business and results in many ways. Both our Uniper and Generation segments significantly contributed to the Group's comparable operating profit, which increased by 89%. Uniper's gas business benefitted from the extraordinary market developments with volatile and rising prices despite additional liquidity requirements while the Generation segment significantly gained from the higher power prices supported by successful physical and financial optimisation. In the fourth quarter, the segment's achieved power price reached its highest quarterly level since 2009. Record-high nuclear and higher hydro volumes also contributed to the upsurge. The results of our Russia segment were supported by sales gains and higher power

prices. Our City Solutions segment also produced a sound result improvement especially in power and heat sales year-on-year. Whilst large parts of the business benefitted from these developments, Consumer Solutions suffered from high electricity purchase costs due to the very high power prices in the fourth quarter and the intensifying competition in the Nordic market.

The extremely volatile commodity markets with record-high gas prices in December also caused a sharp increase in the margining requirements of Uniper's trading business. At the beginning of 2022, Uniper took precautionary financing measures including credit arrangements from Fortum and the German state-owned KfW Bank to ensure liquidity and financial flexibility, and to manage any further market volatility. These efforts were positively noted as S&P Global Ratings rating agency in January 2022 affirmed Fortum's and Uniper's long-term ratings of BBB with a stable outlook.

In this turbulent operating environment, we have kept our strategic priorities clear. Our goals for 2021 were to strengthen the balance sheet, to further decarbonise our portfolio, and to drive profitable growth while balancing it with our dividend and financial position.

Actions taken during the year included the divestments of mainly district heating assets, such as Stockholm Exergi (50%) and the Baltic district heating business as well as the 500 megawatts of solar power capacity in India. The total consideration recorded for divested assets amounted to more than EUR 4 billion in 2021, securing a strong balance sheet and bringing our financial net debt-to-comparable EBITDA to 0.2 times, significantly below our set target level of <2 times.

We also continued working towards our climate targets to be carbon neutral in our European generation at the latest by 2035 and in all operations by 2050. Within less than one year, we have been able to announce accelerated coal phase-out of six of our coal-fired power plants in Germany and the UK compared to the original timetable. In Russia, our Chelyabinsk CHP-2 plant is transitioning from the use of coal to gas, ending the use of coal in the Fortum Russia segment by the end of 2022. Towards the end of the year, we also set a reduction target for the Group's indirect emissions, i.e. Scope 3, which is -35% by 2035.

At the same time, we strengthened our position in CO₂-free power generation. Over the year, we commissioned a total of almost 600 MW of new wind and solar capacity in Russia and announced our first joint wind power project of 380 MW in Finland together with Uniper. In addition, we have won the right to build a total of 2 GW of wind and solar power capacity in the coming years in national auctions.

2021 was also the year in which Fortum and Uniper grew closer together. We announced new cooperation in the three strategic areas of Nordic hydro and physical trading optimisation, wind and solar development, as well as hydrogen; the ambition is to create value for both companies, and, in particular, for our customers. We made management changes and announced more diverse leadership teams at both Fortum and Uniper.

As a group, our strategy execution will continue with the same determination and focus this year. We will continue to drive profitable growth and to further deepen the cooperation between Fortum and Uniper. Today we have also announced the decision to submit an application for a new operating licence for our nuclear power plant in Loviisa in Finland. In addition to financial, political and societal aspects, the EU taxonomy was a key factor that we took into account when preparing the decision – it is central in guiding investments towards sustainable and clean activities.

Based on the solid results of 2021 and the outlook for future years, Fortum's Board of Directors is proposing to the Annual General Meeting a dividend of EUR 1.14 per share for the financial year 2021. The proposal is in line with Fortum's dividend policy to pay a stable, sustainable, and over time increasing dividend.

I would like to thank our customers for their continued trust and cooperation, and all the employees of the Fortum Group for their unwavering commitment towards our shared purpose of driving the change for a cleaner world. This year has been challenging in many ways, and I am proud of what we have achieved as a Group. Together, we are securing a fast and reliable transition to a carbon-neutral economy."

Changes in reporting

As of the first quarter of 2021, Fortum discloses two new Alternative Performance Measures (APM) to provide additional financial performance indicators that better reflect the underlying profitability:

- Comparable net profit
- Comparable earnings per share

Comparable net profit is shown after non-controlling interest and adjusted for items affecting comparability, as well as adjustments to share of profit of associates and joint ventures, net finance costs, income tax expenses, and non-controlling interest. Comparable earnings per share is calculated from comparable net profit. See Note 4.2 and Note 23.

Financial results

Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter of 2020, consolidated Uniper's results into its income statement. In the first quarter of 2020, Uniper was consolidated as an associated company into Fortum's income statement. The main reason for the change in cumulative figures and in the comparison to the year 2020 is thus the consolidation of Uniper.

Sales by segment

EUR million	IV/2021	IV/2020	2021	2020
Generation	965	541	2,899	2,006
Russia	267	238	906	929
City Solutions	427	337	1,302	1,075
Consumer Solutions	1,052	370	2,622	1,267
Uniper	47,918	19,990	105,992	44,514
Other Operations	35	38	138	140
Netting of Nord Pool transactions	-540	-105	-1,128	-317
<i>Eliminations</i>	-45	-130	-331	-598
Total	50,079	21,279	112,400	49,015

Comparable EBITDA by segment

EUR million	IV/2021	IV/2020	2021	2020
Generation	450	220	1,299	886
Russia	118	108	404	394
City Solutions	119	90	317	239
Consumer Solutions	3	38	123	153
Uniper	763	819	1,789	856
Other Operations	-36	-28	-114	-94
Total	1,416	1,247	3,817	2,434

Comparable operating profit by segment

EUR million	IV/2021	IV/2020	2021	2020
Generation	401	177	1,110	722
Russia	80	76	261	251
City Solutions	73	41	135	47
Consumer Solutions	-17	21	52	90
Uniper	578	649	1,120	363
Other Operations	-44	-36	-142	-129
Total	1,070	928	2,536	1,344

Operating profit by segment

EUR million	IV/2021	IV/2020	2021	2020
Generation	370	160	1,054	711
Russia	75	76	227	252
City Solutions	14	44	2,671	775
Consumer Solutions	113	49	495	129
Uniper	1,492	166	-4,901	29
Other Operations	-51	-36	-134	-298
Total	2,012	458	-588	1,599

Comparable share of profit/loss of associates and joint ventures by segment

EUR million	IV/2021	IV/2020	2021	2020
Generation	8	5	11	13
Russia	5	15	62	47
City Solutions	4	19	42	57
Consumer Solutions	-	-	-	-
Uniper	10	25	39	38
Other Operations*	0	-1	0	502
Total	27	63	154	656

* The first-quarter 2020 share of profits of associates and joint ventures of Other Operations includes Fortum's share of Uniper's fourth-quarter 2019 and first-quarter 2020 profits.

Share of profit/loss of associates and joint ventures by segment

EUR million	IV/2021	IV/2020	2021	2020
Generation	17	46	36	29
Russia	5	15	62	47
City Solutions	4	19	42	57
Consumer Solutions	-	-	-	-
Uniper	14	35	51	54
Other Operations*	0	-1	0	470
Total	40	113	192	656

* The first-quarter 2020 share of profits of associates and joint ventures of Other Operations includes Fortum's share of Uniper's fourth-quarter 2019 and first-quarter 2020 profits.

October–December 2021

Sales were EUR 50,079 (21,279) million.

Comparable operating profit was EUR 1,070 (928) million. The increase was driven by the Generation segment benefitting from higher nuclear volumes and an achieved power price that was at the highest quarterly level since 2009. This positive effect, however, was somewhat offset by a lower result in the Uniper segment.

Operating profit for the period was impacted by EUR 942 (-470) million of items affecting comparability, the majority of which were changes in fair values of non-hedge-accounted derivatives of EUR 1,134 (-605) million mainly in the Uniper segment (Note 4).

Comparable share of profits of associates and joint ventures was EUR 27 (63) million (Note 12).

January–December 2021

Sales were EUR 112,400 (49,015) million due to record high commodity prices.

Comparable operating profit was EUR 2,536 (1,344) million. A strong performance in an exceptional commodity market enabled the highest comparable operating profit in Fortum's history following volatile commodity prices and the

consolidation of Uniper as a subsidiary. Additionally, the Uniper segment's gas business could take profit from extraordinarily volatile market fundamentals. Earnings increased in the Generation segment due to the higher achieved power price and higher nuclear and hydro volumes. In the first quarter of 2020, Uniper was consolidated as an associated company.

Operating profit for the period was impacted by EUR -3,124 (255) million of items affecting comparability, mainly due to changes in fair values of non-hedge-accounted derivatives of EUR -5,424 (-675) million almost entirely related to the Uniper segment. Items affecting comparability also includes the tax-exempt capital gains of EUR 2,681 million, the main part of which is related to the divestment of the 50% ownership in Stockholm Exergi Holding AB and the divestment of the Baltic district heating operations (Note 4).

Comparable share of profits of associates and joint ventures was EUR 154 (656) million (Note 12). The comparison period includes the comparable share of profit from Uniper of EUR 502 million based on Uniper's fourth-quarter 2019 and first-quarter 2020 results.

Finance costs – net, i.e. net finance income, amounted to EUR 107 (-56) million. Comparable finance costs - net amounted to EUR -38 (-103) million. The change mainly relates to the positive effect of changes in discount rates on Other provisions in the Uniper segment.

Profit before income taxes was EUR -289 (2,199) million. Comparable profit before income taxes was EUR 2,651 (1,897) million.

Income taxes for the period totalled EUR 175 (tax income) (-344) million. Comparable income tax expenses were EUR -605 (-299) million (Note 8).

Net profit was EUR -114 (1,855) million. Comparable net profit was EUR 1,778 (1,483) million after the deduction of adjusted non-controlling interest. Comparable net profit is adjusted for items affecting comparability, adjustments to share of profit of associates and joint ventures, net finance costs, and income tax expenses. The alternative performance measure (APM) 'comparable net profit' was introduced in the first quarter of 2021 to better reflect the underlying profitability (Notes 4.2 and 23).

Earnings per share were EUR 0.83 (2.05) and comparable earnings per share were EUR 2.00 (1.67).

For further details, see Segment reviews.

Financial position and cash flow

Cash flow

In 2021, net cash from operating activities increased by EUR 2,415 million to EUR 4,970 (2,555) million. The change in working capital was impacted by operational liquidity measures in the Uniper segment, which are done to manage the increased margin receivables in investing activities.

Net cash used in investing activities was EUR 5,727 (2,140) million. Capital expenditure increased by EUR 77 million to EUR 1,178 (1,101) million. Acquisition of shares, net of liquid funds, was EUR 294 (1,801) million. Acquisition of shares mainly relates to the acquisition of Uniper shares. Divestment of shares and capital returns of EUR 3,863 (1,244) million mainly include the divestments of the 50% ownership in Stockholm Exergi Holding AB and the district heating business in the Baltics. In 2020, divestment of shares mainly includes the divestment of the Joensuu and Järvenpää district heating operations. The change in margin receivables was EUR -7,964 (-552) million as a result of the higher commodity prices.

The negative change of EUR 7,964 (552) million in margin receivables in net cash used in investing activities was partly offset by the positive change of EUR 649 (-623) million in margin liabilities in the cash flow from financing activities.

Cash flow before financing activities was EUR -756 (415) million.

Net cash from financing activities was EUR 6,013 (505) million. The net increase in long-term liabilities was EUR 1,124 (2,062) million while the increase in short-term liabilities was EUR 5,364 (207) million. The increase in short-

term liabilities is mainly related to the use of commercial paper programmes and revolving credit facilities, which are used to manage the increased margin receivables. In 2020, Fortum drew a term loan of EUR 2,000 million and a bridge loan of EUR 300 million to finance the acquisition of shares in Uniper. (For additional information, see the Financing section.) The dividend, EUR 995 million, was paid on 7 May 2021. The change in margin liabilities was EUR 649 (-623) million, mainly due to higher commodity prices. The net increase in liquid funds was EUR 5,256 (920) million (Note 14).

Assets

At the end of 2021, total assets amounted to EUR 149,661 (57,810) million. The increase from December 2020 mainly relates to derivative financial instruments in the Uniper segment as a result of the higher commodity prices. Liquid funds at the end of 2021 were EUR 7,592 (2,308) million.

Equity

Total equity amounted to EUR 13,665 (15,577) million. Equity attributable to owners of the parent company totalled EUR 12,131 (12,953) million. The change from December 2020 was mainly related to the net profit for the period of EUR 739 million, offset by the EUR -980 million impact from fair valuation of cash flow hedges and the dividend payment of EUR 995 million.

Financing

Fortum has determinedly executed its strategy and taken measures, mainly divestments of non-core assets and businesses during the past years, to strengthen its balance sheet and secure its rating. With these actions, the Group has successfully lowered its financial net debt-to-comparable EBITDA ratio to a level clearly below the target level of <2 times. At the end of 2021, the ratio was 0.2 times (2.9).

During the second half of the year, the very volatile commodity markets with unprecedentedly high prices resulted in significantly higher margining requirements for European energy market participants. To manage this volatility and the high price levels, in late 2021 the Group took precautionary financing measures to secure its liquidity position and financial flexibility.

By the end of 2021, financial net debt decreased by EUR 6,234 million to EUR 789 (7,023) million. Adjusted net debt was EUR 3,227 (9,784) million.

At the end of 2021, the Group's liquid funds totalled EUR 7,592 (2,308) million. Liquid funds include EUR 2,966 (289) million related to the Uniper segment.

At the end of 2021, Fortum had undrawn committed credit facilities of EUR 400 million.

In May, Fortum repaid a maturing bond of EUR 500 million and in December 2021 Fortum prepaid EUR 1,550 million of a EUR 2,000 million bridge loan maturing in October 2022. Additionally, in October 2021, Fortum cancelled the remaining revolving credit facility that was part of the facility for the purchase of Uniper shares and liquidity purposes, EUR 1,350 million, with the original maturity date in November 2021.

In December, following the surge in commodity prices Fortum extended the credit facility agreement with Uniper, originally signed in September, to EUR 8,000 million comprising tranches for both a shareholder loan and a parent company guarantee. Both Fortum (EUR 1,750 million) and Uniper (EUR 1,800 million) withdrew their core revolving credit facilities as precautionary measures to secure sufficient liquidity for possible further increases and volatility in commodity prices and a consequent additional requirement of collateral payments. In addition, Fortum signed new bilateral financing agreements to further strengthen the liquidity position. These agreements consisted of a EUR 400 million bank loan (maturing in September 2024), a EUR 500 million bank loan (maturing in June 2023 with an extension option of eight months) and a revolving credit facility of EUR 800 million (maturing in December 2022 with an extension option of one year), of which EUR 500 million was drawn as of 31 December 2021. Also in December, Uniper extended the existing EUR 400 million bank loan, maturing in September 2022, to mature in March 2023 and signed a new EUR 150 million bank loan with maturity in January 2024.

After year-end 2021, in January 2022, Uniper signed a EUR 2,000 million short-term revolving credit facility with the German state-owned KfW-Bank (maturing in April 2022). Fortum signed a EUR 3,000 million revolving credit facility (maturing in April 2022 with an extension option of three months). These facilities have not been used.

In the fourth quarter of 2021, Fortum's total interest-bearing loans increased by EUR 4,486 million to EUR 16,144 million. Current loans, including the EUR 1,731 million current portion of long-term loans, amounted to EUR 8,389 million. In order to manage the higher margin requirements, short-term loans increased by EUR 2,847 million from EUR 3,811 million at the end of September to EUR 6,658 million at the end of the year. These short-term liquidity needs were mainly covered by commercial paper programmes and the use of the revolving credit facilities. The use of commercial papers increased by EUR 895 million from EUR 2,234 million at the end of September to EUR 3,129 million (Note 14).

In June 2021, Fitch revised its long-term rating for Fortum to BBB, with a stable outlook (previously BBB with a negative outlook). The short-term rating is at the level F2. In July 2021, S&P Global Ratings revised its long-term rating for Fortum to BBB, with a stable outlook (previously BBB with a negative outlook). The short-term rating is at the level A-2.

In September 2021, S&P Global Ratings reaffirmed Uniper's BBB rating and stable outlook. In July 2021, S&P Global Ratings also revised its long-term rating for Uniper to BBB, with a stable outlook (previously BBB, with a negative outlook).

In January 2022, S&P Global Ratings affirmed both Fortum's and Uniper's rating of BBB with a stable outlook.

Segment reviews

Generation

Generation is responsible for Nordic power generation. The segment comprises CO₂-free nuclear, hydro, and wind power generation, as well as power portfolio optimisation, trading, market intelligence, thermal power for the capacity reserve, and global nuclear services. The segment does not include the Nordic hydro and nuclear power generation or the trading activities of Uniper. As of 31 March 2020, the segment includes Generation's proportionate share of OKG (Note 3).

EUR million	IV/2021	IV/2020	2021	2020
Reported				
Sales	965	541	2,899	2,006
- power sales	878	506	2,690	1,878
of which Nordic outright power sales*	625	387	1,937	1,478
- other sales	87	36	209	128
Operating profit	370	160	1,054	711
Share of profit/loss of associates and joint ventures**	17	46	36	29
Capital expenditure and gross investments in shares	76	115	175	228
Number of employees			1,116	1,143

EUR million	IV/2021	IV/2020	2021	2020
Comparable				
EBITDA	450	220	1,299	886
Operating profit	401	177	1,110	722
Share of profit/loss of associates and joint ventures**	8	5	11	13
Return on net assets, %			18.0	12.2
Net assets (at period-end)			6,336	6,234

* The Nordic outright power sales includes hydro and nuclear generation. It does not include thermal generation, minorities, customer business, or other purchases.

** Power plants are often built jointly with other power producers, and owners purchase power at cost. The share of profit/loss is mainly IFRS adjustments (e.g. accounting for nuclear-related assets and liabilities) and depreciations on fair value adjustments from historical acquisitions (Note 18 in the Consolidated Financial Statements 2020).

Power generation by source

TWh	IV/2021	IV/2020	2021	2020
Hydropower, Nordic	6.1	6.4	23.3	22.4
Nuclear power, Nordic	6.3	4.8	23.5	21.0
Wind power, Nordic	-	0.1	-	0.4
Thermal power, Nordic	0.0	0.0	0.0	0.1
Total	12.4	11.3	46.8	43.9

Nordic sales volumes

TWh	IV/2021	IV/2020	2021	2020
Nordic sales volume	14.2	13.4	54.1	51.4
of which Nordic outright power sales volume*	12.0	11.0	45.3	42.5

* The Nordic outright power sales volume includes hydro and nuclear generation. It does not include thermal generation, minorities, customer business, or other purchases.

Achieved power price

EUR/MWh	IV/2021	IV/2020	2021	2020
Generation's Nordic achieved power price*	51.9	35.2	42.8	34.8

* Generation's Nordic achieved power price includes hydro and nuclear generation. It does not include thermal generation, minorities, customer business, or other purchases.

October–December 2021

The Generation segment's total power generation in the Nordic countries increased due to higher nuclear volumes. The nuclear volumes were at a very good level and the increase was mainly due to shorter planned outages and partly due to better availability of the plants.

The achieved power price in the Generation segment reached its highest quarterly level since 2009. It increased by EUR 16.7 per MWh, up by 47%. The achieved power price increased due to the very successful physical optimisation, financial optimisation, and higher spot prices. While the spot power price increased by 273% in Generation segment's power generation areas, the positive result effect of the higher achieved power price was dampened by the fairly high hedge levels and a hedge price clearly below the level of the spot price in the fourth quarter as well as the achieved power price being well above the spot price in the comparison period.

Comparable operating profit increased significantly and was up by 127%. The increase was mainly related to the higher achieved power price. Also higher nuclear volumes and a slightly lower cost level contributed to the result improvement. Comparable operating profit included EUR -27 (-8) million from the consolidation of the Generation segment's proportionate share of OKG (Note 3).

Operating profit was affected by EUR -31 (-17) million of items affecting comparability, mainly related to the fair value change of non-hedge-accounted derivatives (Note 3).

Comparable share of profits of associates and joint ventures totalled EUR 8 (5) million (Notes 3 and 12).

January–December 2021

The Generation segment's total power generation in the Nordic countries increased, driven especially by higher nuclear volumes but also by higher hydro volumes, the effect of which was partly offset by the sale of a majority share of Fortum's Nordic wind assets. The availability for nuclear generation was at a good level throughout the year with annual production records in the Loviisa (Finland), Oskarshamn 3, and Forsmark (Sweden) nuclear power plants. The CO₂-free generation accounted for 100% of the total power generation.

The achieved power price in the Generation segment increased by EUR 8 per MWh, up 23%. The achieved power price increased due to the very successful physical optimisation, financial optimisation, and higher spot prices. While the spot power price increased by 183% in Generation segment's power generation areas, the positive result effect of the higher achieved power price was dampened by the fairly high hedge levels and a hedge price below the level of the spot price as well as the achieved power price being well above the spot price in comparison period.

Comparable operating profit increased by 54%. The increase was mainly related to the higher achieved power price. Also higher nuclear and hydro volumes contributed to the increase. Comparable operating profit included EUR -13 (15) million from the consolidation of the Generation segment's proportionate share of OKG (Note 3).

Operating profit was affected by EUR -56 (-11) million of items affecting comparability, mainly related to the fair value change of non-hedge-accounted derivatives. It also included the tax-exempt capital gain of EUR 50 million from the divestment of eight small hydropower plants in Sweden (Note 3).

Comparable share of profits of associates and joint ventures totalled EUR 11 (13) million (Notes 3 and 12).

In January 2021, Fortum announced that it had finished the construction of two new wind parks in the Nordics: Kalax in Finland and Sørfjord in Norway which subsequently started generating CO₂-free energy for the Nordic market. The wind parks are part of the transaction concluded in 2020 with Energy Infrastructure Partners AG (EIP), and Fortum's ownership is 20%.

In March 2021, Fortum announced a substantial investment in dam safety in Sweden for an extensive rebuild of the over 100-year-old Forshuvud hydropower plant. Fortum is investing more than SEK 450 million (approximately EUR 44 million) during 2021–2025. This investment guarantees an extended lifetime for the power plant as a supplier of renewable electricity and balancing power for more weather-dependent types of power.

In April 2021, Fortum announced its second pilot project for the use of batteries as energy storage at hydropower plants in Landaforsen, Sweden. Out-of-service batteries from plug-in hybrid cars and other batteries, a total of 48 batteries with a combined storage capacity of 1 MW and 250 kWh, are installed, extending the lifetime of the hydropower turbines and the batteries.

In September 2021, Fortum and Uniper agreed on long-term external and internal collaboration in nuclear decommissioning services. The objective for the complementary capabilities is to develop a wider customer offering, reach a stronger market position, and ensure excellent performance in the Oskarshamn and Barsebäck decommissioning projects in Sweden.

In September 2021, Fortum submitted its Environmental Impact Assessment (EIA) Report of the Loviisa nuclear power plant in Finland to the Ministry of Economic Affairs and Employment (MEAE). The report contains an assessment of the environmental impacts of the potential lifetime extension of the nuclear power plant or, alternatively, the decommissioning of it, as well as the environmental impacts of Posiva Oy's final disposal facility ONKALO® for low- and intermediate-level waste. In January 2022, MEAE gave its informed conclusion on the Loviisa nuclear power plant's Environmental Impact Assessment report and stated that it meets the requirements of the EIA legislation. The alternatives examined were not found to have such significant adverse environmental impacts that could not be accepted, prevented or mitigated to an acceptable level.

On 16 December 2021, the Radiation and Nuclear Safety Authority in Finland (STUK) granted Teollisuuden Voima Oyj (TVO) permission to make the Olkiluoto 3 (OL3) reactor critical and to conduct low power tests. Consequently, Finland's fifth nuclear reactor was started and it reached first criticality on 21 December 2021. Electricity generation starts in March 2022, and regular electricity generation is expected to start in July 2022 (Note 15).

On 22 December 2021, Fortum announced the first investment by the joint team of Fortum and Uniper for wind and solar businesses in Europe. Fortum decided to construct the 380-MW Pjälax-Böle and Kristinestad Norr wind parks in Närpes and in Kristinestad in Finland in partnership with the Finnish energy company Helen Ltd. Construction started in January 2022 and the wind parks are expected to be fully operational at the latest in the second quarter of 2024. Fortum has a 60% majority and Helen holds a 40% minority ownership in the project. The total capital expenditure of the projects is approximately EUR 360 million, of which Fortum's share is EUR 216 million.

Russia

The Russia segment comprises power and heat generation and sales in Russia. The segment includes Fortum's fully owned power plants and its joint ventures for building and operating approximately 3.4 GW of renewable power generation and for power and heat sales, as well as Fortum's more than 29% holding in TGC-1. These joint ventures and the associated company are accounted for using the equity method. The segment does not include Uniper's Russian subsidiary Unipro.

EUR million	IV/2021	IV/2020	2021	2020
Reported				
Sales	267	238	906	929
- power sales	219	188	761	791
- heat sales	44	48	137	134
- other sales	4	2	8	4
Operating profit	75	76	227	252
Share of profit/loss of associates and joint ventures	5	15	62	47
Capital expenditure and gross investments in shares	23	19	83	91
Number of employees			2,627	2,935
EUR million	IV/2021	IV/2020	2021	2020
Comparable				
EBITDA	118	108	404	394
Operating profit	80	76	261	251
Share of profit/loss of associates and joint ventures	5	15	62	47
Return on net assets, %			12.9	11.1
Net assets (at period-end)			2,508	2,431

Power generation and heat production for the Russia segment

TWh	IV/2021	IV/2020	2021	2020
Russian power generation	7.7	7.3	28.6	27.1
Russian heat production	5.5	6.1	17.1	16.4

Prices for the Russia segment

	IV/2021	IV/2020	2021	2020
Average capacity price for CCS and other, tRUB/MW/month* **	177	166	170	156
Average capacity price for CSA, tRUB/MW/month**	1,265	1,129	1,174	1,058
Average capacity price, tRUB/MW/month	646	654	584	608
Achieved power price for the Russia segment, RUB/MWh	2,125	2,056	2,018	1,940
Achieved power price for the Russia segment, EUR/MWh***	25.4	22.5	23.2	23.4

* Including capacity receiving payments under "forced mode status", regulated tariffs, and bilateral agreements.

** Capacity prices paid for the capacity volumes, excluding unplanned outages, repairs, and own consumption.

*** Translated using the average exchange rate.

October–December 2021

Power generation volumes increased by 5% due to higher consumption supported by the economic and oil production recovery from the Covid-19 pandemic. Electricity demand in Tyumen (and other oil & gas regions) mostly reached its pre-crisis level, as a result of fewer restrictions connected to OPEC+ agreements. The divestment of the Argayash coal-fired combined heat and power plant (CHP) plant in the second quarter partly offset the positive effect. Heat production volumes decreased by 10% due to the Argayash CHP plant divestment.

Sales increased by 12%, or EUR 29 million, due to higher power prices and volumes following the economic recovery. This positive effect was partly offset by the Argayash CHP plant divestment. The effect of the change in the Russian rouble exchange rate was EUR 20 million.

Comparable operating profit increased by 5%, or EUR 4 million, due to the stronger rouble and higher power prices. The net effect of the changes to CSA payments was slightly negative; the changes derived from three units entering the four-year period of higher CSA payments, the CSA period expiry for two units as well as corrections to the CSA prices as a result of lower bond yields. The effect of the change in the Russian rouble exchange rate was EUR 6 million.

Comparable share of profits of associates and joint ventures totalled EUR 5 (15) million, including the share of profits of EUR -1 (-2) million from TGC-1, the share of profits of EUR 1 (14) million from the joint ventures for renewables power generation, and the share of profits of EUR 4 (3) million of the joint ventures for heat distribution. The share of profits for the joint ventures for renewables power generation in the fourth quarter of 2020 includes a EUR 9 million gain from the transfer of the Rostov wind power park from the Fortum-Rusnano wind investment fund to the Fortum-Russian Direct Investment Fund (RDIF) joint venture (Notes 3 and 12).

January–December 2021

Power generation volumes increased by 6% due to higher consumption as a result of the economic recovery in 2021. Heat production volumes increased by 4% due to colder weather in the Chelyabinsk and Tyumen areas. This positive effect was partly offset by the Argayash CHP plant divestment in the second quarter.

Sales decreased by 2%, or EUR -23 million, due to the weaker Russian rouble during the first half of 2021. This impact was partly offset by higher power prices and volumes. The effect of the change in the Russian rouble exchange rate was EUR -48 million.

Comparable operating profit increased by 4%, or EUR 10 million. The EUR 17 million positive effect of the sale of the 116-MW CSA-backed solar power project to the Fortum-RDIF joint venture and higher power prices more than offset the effect of the change in the Russian rouble exchange rate of EUR -14 million. The net effect of the changes to CSA payments was slightly negative; the changes derived from three units entering the four-year period of higher CSA payments, the CSA period expiry for two units, as well as corrections to the CSA prices as a result of lower bond yields. The divestment of the Argayash coal-fired CHP plant only had a minor effect on comparable operating profit.

Operating profit was affected by a tax-deductible non-cash impairment of EUR 35 million in connection with the Argayash CHP plant divestment.

Comparable share of profits of associates and joint ventures totalled EUR 62 (47) million, including the share of profits of EUR 33 (24) million from TGC-1, and the share of profits of EUR 23 (18) million from the joint ventures for renewables power generation (Notes 3 and 12). The share of profits from the joint ventures for renewables power generation in 2021 includes a EUR 11 million gain from the transfer of the Kalmykia wind power park from the Fortum-Rusnano wind investment fund to the Fortum-RDIF joint venture. The share of profits for the joint ventures for renewables power generation in 2020 includes a EUR 9 million gain from the transfer of the Rostov wind power park from the Fortum-Rusnano wind investment fund to the Fortum-RDIF joint venture (Notes 6).

In March 2021, Fortum announced its decision to construct the largest solar power plant in Kalmykia in Southern Russia through a joint venture established with RDIF. In December 2021, 78 MW of the capacity was commissioned and the remaining capacity will be commissioned in the second half of 2022. These capacities relate to CSA auctions held in 2018 and 2019.

In March 2021, Fortum sold its 116-MW CSA-backed solar power project to the joint venture with RDIF.

In June 2021, the Fortum-Rusnano wind investment fund sold its 200-MW Kalmykia wind parks to the Fortum-RDIF joint venture.

In July 2021, Fortum signed an agreement to sell its Argayash coal-fired CHP plant to AO JSC Rusatom Smart Utilities. In September 2021, the transaction was concluded. Following the decision earlier in 2021 to transition to gas at Chelyabinsk CHP-2, this transaction will allow Fortum's Russia division to discontinue its use of coal by the end of 2022 and reduce annual CO₂ emissions by approximately 2 million tonnes.

In September 2021, the Fortum-Rusnano wind investment fund (joint venture, Fortum's ownership 50%) began the construction of wind power parks with a total capacity of 237 MW in the Samara region in Russia.

In September 2021, Fortum announced that the Fortum-Rusnano wind investment fund was awarded annual CSA remuneration for 15 years in the range of RUB 16.9–23.8 billion (inflation adjusted) for new wind power generation in a Russian renewables' auction. This corresponds to wind capacity of approximately 430–530 MW per annum (a maximum of 1.4 GW) to be commissioned during years 2025–2027. The average nominal price is expected to be in the range of RUB 2,600–4,200 per MWh (inflation adjusted) during the CSA period.

During 2021, Fortum signed several Memorandums of Understanding (MoU) regarding renewable energy sales in Russia with Novatek, Magnitogorsk Iron and Steel Works, Baker Hughes, and Shell. MoU's were also signed with Electroshield Samara and Sberbank for the supply of wind power in the Samara region and with Mosenergosbyt for the supply of wind power to Sberbank's offices in Nizhny Novgorod. The new agreements support Fortum's strategy to partner with industrial and infrastructure customers to help them reduce their own emissions.

City Solutions

City Solutions is responsible for sustainable solutions for urban areas. The segment comprises heating, cooling, waste-to-energy, and other circular economy solutions, as well as solar power generation, services, and development of new biomass-based businesses. The business operations are located in the Nordics, Poland, and India. The segment has also included Fortum's 50% holding in Stockholm Exergi Holding AB, which was a joint venture accounted for using the equity method. Stockholm Exergi Holding AB was divested in September 2021. The segment does not include the operations of Fortum's subsidiary Uniper.

EUR million	IV/2021	IV/2020	2021	2020
Reported				
Sales	427	337	1,302	1,075
- heat sales	208	164	612	516
- power sales	77	41	205	121
- waste treatment sales*	69	69	250	252
- other sales**	72	62	236	186
Operating profit	14	44	2,671	775
Share of profit/loss of associates and joint ventures	4	19	42	57
Capital expenditure and gross investments in shares	42	116	162	333
Number of employees			1,766	2,093

EUR million	IV/2021	IV/2020	2021	2020
Comparable				
EBITDA	119	90	317	239
Operating profit	73	41	135	47
Share of profit/loss of associates and joint ventures	4	19	42	57
Return on net assets, %			6.1	2.8
Net assets (at period-end)			2,456	3,679

* Waste treatment sales comprise gate fees and environmental construction services.

** Other sales mainly comprise operation, maintenance, and other services, the sale of recycled products, as well as fuel sales.

Heat sales by country

TWh	IV/2021	IV/2020	2021	2020
Finland	1.0	0.8	3.1	2.9
Poland	1.3	1.2	3.8	3.4
Norway	0.6	0.5	1.8	1.5
Other countries	0.1	0.6	1.3	1.9
Total	3.0	3.1	10.0	9.6

Power sales by country

TWh	IV/2021	IV/2020	2021	2020
Finland	0.4	0.4	1.3	1.0
Poland	0.2	0.2	0.7	0.6
Other countries	0.1	0.3	1.3	1.4
Total	0.7	1.0	3.3	3.0

October–December 2021

Heat sales volumes decreased by 3%. The negative effect of the divestment of the Baltic district heating business was partly offset by increased production in other countries, driven by colder weather. The power sales volumes decreased by 30%, mainly due to the divestment of the Baltic district heating business.

Comparable operating profit improved by 78%, or EUR 32 million, as a result of clearly higher heat sales volumes and higher prices in all heating areas. This excludes the Baltics due to the divestment. All business areas improved their results, especially the solar business, which also included the tax-exempt sales gains of EUR 11 million from the

divestment of the 500-MW solar plants in Pavagada and Rajasthan. The profits from the Pavagada and Rajasthan solar park divestments are recognised in comparable operating profit. Further, the Recycling and Waste Solutions also performed well. However, the results were negatively impacted by structural changes, the most significant of these being the divestment of the district heating business in the Baltics with EUR -15 million negative impact on comparable operating profit.

Operating profit was affected by EUR -59 (3) million of items affecting comparability mainly related to the fair value change of non-hedge-accounted derivatives.

Comparable share of profits of associates and joint ventures was impacted by the sale of the 50% ownership in Stockholm Exergi and totalled EUR 4 (19) million. It was mainly related to the share of profits of Turun Seudun Energiantuotanto (TSE).

January–December 2021

Heat sales volumes increased by 4% as temperatures were colder than usual especially during the first and fourth quarter of the year. This positive effect was partly offset by the divestment of the Baltic district heating business. The power sales volumes increased by 10%, mainly supported by a different production mix in the Finnish heat business and the commissioning of the new 250 MW solar power plant in Rajasthan, India. This positive effect was partly offset by the divestment of the Baltic district heating business.

Comparable operating profit increased by 187% mainly as a result of higher heat sales volumes in all heating areas, higher power prices, and higher Norwegian heat prices due to the price link between heat and power prices. Comparable operating profit increased also due to Solar including the total tax-exempt sales gains from the divestment of the 250-MW Pavagada II solar plant and the 250-MW Rajasthan solar plant in India from which EUR 11 million was recorded in the fourth quarter of 2021 and the rest is expected to be recorded during the first half of 2022. The profits from the Pavagada and Rajasthan solar park divestments are recognised in comparable operating profit. In addition, the result was positively affected by operational improvements in the Recycling and Waste Solutions.

Operating profit was affected by EUR 2,536 (728) million of items affecting comparability, mainly related to the tax-exempt capital gains of EUR 2,350 million from the sale of the 50% ownership in Stockholm Exergi Holding AB, and EUR 254 million from the sale of the district heating business in the Baltics, partly offset by the fair value change of non-hedge-accounted derivatives (Note 3).

Comparable share of profits of associates and joint ventures totalled EUR 42 (57) million, EUR 28 (46) million of which is related to the share of profit of Stockholm Exergi until September 2021 (Notes 3 and 12).

In March 2021, Fortum announced that it had signed an agreement to sell its district heating business in the Baltics to Partners Group. In July 2021, Fortum concluded the sale. The total consideration of the sale amounted to approximately EUR 710 million.

In June 2021, Fortum made the investment decision to expand its lithium-ion battery recycling capacity by building a new state-of-the-art hydrometallurgical plant in Harjavalta, Finland. The investment of approximately EUR 24 million will increase Fortum's hydrometallurgical recycling capacity and enable the production of sustainable battery chemicals. The new facility will be able to efficiently recover scarce metals from old electric vehicle lithium-ion batteries while also recycling various waste fractions derived throughout the battery supply chain.

In June 2021, Fortum announced that it had signed an agreement to divest the 250-MW Pavagada II and the 250-MW Rajasthan solar power plants in India to Actis. The parties also signed an agreement targeting potential further investments in solar power plants in India. The total consideration for the divestment on a debt- and cash-free basis, including the effect of deconsolidation of the net debt, amounted to approximately EUR 280 million. The sale of the 250-MW Pavagada II solar plant was concluded in October and the first phase of the Rajasthan plant in November.

In September 2021, Fortum concluded the sale of its 50% ownership in the Swedish district heating and cooling company Stockholm Exergi Holding AB to a consortium comprising APG, Alecta, PGGM, Keva, and AXA. The total consideration of the sale amounted to SEK 29.5 billion (approximately EUR 2.9 billion).

Consumer Solutions

Consumer Solutions is responsible for the electricity and gas retail businesses in the Nordics, Poland, and Spain, including related customer service and invoicing businesses. Fortum is the largest electricity retail business in the

Nordics, with approximately 2.2 million customers across different brands in Finland, Sweden, Norway, Poland, and Spain. The business provides electricity, as well as related value-added and digital services, mainly to retail customers.

EUR million	IV/2021	IV/2020	2021	2020
Reported				
Sales	1,052	370	2,622	1,267
- power sales	920	330	2,253	1,057
- gas sales	91	43	225	139
- other sales	41	-3	144	70
Operating profit	113	49	495	129
Capital expenditure and gross investments in shares	19	14	68	57
Number of employees			1,176	1,048

EUR million	IV/2021	IV/2020	2021	2020
Comparable				
EBITDA	3	38	123	153
Operating profit	-17	21	52	90
Net assets (at period-end)			1,125	565

Sales volumes

TWh	IV/2021	IV/2020	2021	2020
Electricity	8.8	8.1	31.5	29.1
Gas*	1.8	1.6	6.0	4.9

* Not including wholesale volumes.

Number of customers

Thousands*	31 Dec 2021	31 Dec 2020
Electricity	2,120	2,280
E-mobility**	70	60
Gas	50	50
Total	2,230	2,390

* Rounded to the nearest 10,000.

** Measured as average monthly paying customers for the quarter.

October–December 2021

The electricity sales volumes increased by 9%, mainly due to colder weather especially in December. Driven by extremely high power prices and higher sales volumes, total sales revenue increased by 184%. The gas sales volumes increased by 13%, mainly due to an increase in enterprise customers and colder weather in Poland.

The challenging market environment with very high and volatile power prices further increased the tough competition in the Nordic market and retail customers were consequently changing their electricity provider more actively, which resulted in a reduction in the number of electricity customers during the fourth quarter.

Comparable operating profit turned negative and amounted to EUR -17 million, due to higher electricity purchase costs. Required additional electricity volumes were acquired in the spot market at prices that were clearly higher than the agreed customer prices, resulting in higher electricity purchase costs and negative margins. The cold weather in the Nordics during December resulted in higher than expected electricity consumption by customers, which exceeded the hedged volumes. The market tightness also resulted in extremely high prices during peak hours especially in Finland.

Operating profit was affected by EUR 129 (27) million of items affecting comparability, due to the fair value change of non-hedge-accounted derivatives (Note 3).

January–December 2021

The electricity sales volumes increased by 8% mainly due to clearly colder weather in the Nordics during the first and the fourth quarter and increased enterprise customer sales. Total sales revenue increased by 107%, driven by increased volumes and clearly higher prices in the Nordics. The gas sales volumes increased by 22%, mainly due to an increase in enterprise customers in Poland. Several new digital services were launched during the year, and new enterprise contracts were signed with customers in the energy, food processing, real estate, and retail industries.

Comparable operating profit decreased by 42%, mainly due to the high electricity purchase costs resulting from the high and volatile electricity market prices in the third and the fourth quarter and a reduction in the number of customers. Required additional electricity volumes were acquired in the spot market at prices that were clearly higher than the agreed customer prices, resulting in higher electricity purchase costs and negative margins. The negative effect was partially offset by increased unit margins resulting from active development and improvement of the service offerings.

Operating profit was affected by EUR 443 (39) million of items affecting comparability, due to the fair value change of non-hedge-accounted derivatives (Note 3).

Uniper

The Uniper segment comprises Fortum's majority ownership in Uniper, a subsidiary of Fortum. Uniper is a leading international energy company with activities in more than 40 countries. Its business is the secure provision of energy and related services. Its main activities include power generation in Europe and Russia as well as global energy trading and optimisation, which Uniper reports in three businesses – European Generation, Global Commodities, and Russian Power Generation – in its financial statements. Approximately 50% of the power generating capacity is gas-based, 25% coal-based, approximately 15% hydro- or nuclear-based, and 10% is other. The segment includes Uniper's proportionate share of OKG (Note 3).

Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter of 2020, consolidated Uniper's results into its income statement. In the first quarter of 2020, Uniper was consolidated as an associated company into Fortum's income statement, presented in the Other segment. The main reason for the change in cumulative figures and in comparison to the year 2020 is thus the consolidation of Uniper.

EUR million	IV/2021	IV/2020	2021	2020
Reported				
Sales	47,918	19,990	105,992	44,514
- power sales	10,944	6,567	28,365	16,994
of which Nordic outright power sales*	218	146	644	373
- heat sales	152	81	437	191
- gas sales	26,043	9,428	59,577	22,176
- other sales	10,779	3,915	17,612	5,154
Operating profit	1,492	166	-4,901	29
Share of profit/loss of associates and joint ventures	14	35	51	54
Capital expenditure and gross investments in shares**	185	261	683	639
Number of employees			11,494	11,751

EUR million	IV/2021	IV/2020	2021	2020
Comparable				
EBITDA	763	819	1,789	856
Operating profit	578	649	1,120	363
Share of profit/loss of associates and joint ventures	10	25	39	38
Net assets (at period-end)			4,971	7,432

* The Nordic outright power sales includes hydro and nuclear generation. It does not include thermal generation, minorities, customer business, or other purchases.

** The 2020 comparison figures were revised in the first quarter of 2021, due to a revision of the lease adjustment following the finalisation of the purchase price allocation for the Uniper acquisition.

Power generation by source

TWh	IV/2021	IV/2020	2021	2020
Hydropower, Nordics	2.7	2.5	8.1	6.8
Nuclear power, Nordics	3.7	2.8	12.9	7.6
Hydropower, Central Europe	1.1	0.9	4.9	3.3
Thermal power, Central Europe	12.5	8.8	40.9	22.1
Thermal power, Russia	11.9	10.6	43.2	28.5
Total	31.9	25.7	110.0	68.3

Nordic sales volumes

TWh	IV/2021	IV/2020	2021	2020
Nordic sales volume	6.5	5.4	21.4	14.6
of which Nordic outright power sales volume*	6.3	5.3	21.0	14.4

* The Nordic outright power sales volume includes hydro and nuclear generation. It does not include thermal generation, minorities, customer business, or other purchases.

Prices for the Uniper segment

	IV/2021	IV/2020	2021	2020
Uniper's Nordic achieved power price, EUR/MWh*	34.4	27.4	30.7	26.0
Average capacity price for Uniper CCS and other, tRUB/MW/month** ***	168	147	160	136
Average capacity price for Uniper CSA, tRUB/MW/month***	2,165	1,047	1,488	951
Average capacity price for Uniper, tRUB/MW/month	330	292	293	261
Achieved power price for Uniper in Russia, RUB/MWh****	1,604	1,520	1,643	1,554
Achieved power price for Uniper in Russia, EUR/MWh**** *****	19.2	16.6	18.9	18.8

* Uniper's Nordic achieved power price includes hydro and nuclear generation. It does not include thermal generation, minorities, customer business, or other purchases.

** Including capacity receiving payments under "forced mode status", regulated tariffs, and bilateral agreements.

*** Capacity prices paid for the capacity volumes, excluding unplanned outages, repairs, and own consumption.

**** Comparable prices changed from previously reported.

***** Translated using the average exchange rate.

October–December

The Uniper segment's total power generation increased, mainly due to higher nuclear and thermal production. In the United Kingdom and in Germany the thermal generation was higher than the level in the comparison period. In Sweden, the hydro volumes slightly increased despite lower water reservoirs compared to the extraordinary high levels in the previous year. The Swedish nuclear volumes gained from improved availability.

The Nordic achieved power price in the Uniper segment increased by EUR 7 per MWh, up 25% due to the clearly higher Swedish spot prices compared to the fourth quarter of 2020.

Comparable operating profit decreased by 11%. Negative effects in Global Commodities' trading of power and carbon and rescheduled LNG deliveries shifting earnings into 2022 were almost compensated by an intra-year CO₂ emission rights phasing effect that shifted margins from the previous quarters to the fourth quarter of 2021.

The result of the European Generation business declined, due to a lower contribution of the fossil fleet, higher nuclear provisions and structural changes arising from the divestment of the Schkopau lignite power plant. This negative effect was partly offset by higher availability in nuclear generation and higher achieved power prices as well as an intra-year CO₂ emission rights phasing effect that shifted margins from the previous quarters to the fourth quarter.

The Global Commodities business posted a negative result, due to a negative contribution from the trading of power and carbon and rescheduled LNG deliveries shifting earnings into 2022. This negative effect was partly offset by a strong result in the gas midstream business, which was able to benefit from its positions and optimisation of its flexible asset portfolio in the volatile and extraordinary high commodity price environment, despite additional capital requirements.

The result of the Russian Power Generation business increased. The commissioning of Berezovskaya 3 and higher power prices and volumes on the electricity market contributed positively and offset the negative result effect following the expiry of Capacity Supply Agreements for the Shaturskaya, Surgutskaya, and Yaivinskaya power plants. The effect of the change in the Russian rouble exchange rate was EUR +5 million.

Operating profit was affected by EUR 914 (-483) million of items affecting comparability, mainly related to the fair value change of non-hedge-accounted derivatives (Note 3). See section January-December 2021 below for further explanations.

Comparable share of profits of associates and joint ventures totalled EUR 10 (25) million (Notes 3 and 12).

January–December 2021

Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter of 2020, consolidated Uniper's results into its income statement. In the first quarter of 2020, Uniper was consolidated as an associated company into Fortum's income statement, presented in the Other segment. The main reason for the change in cumulative figures and in comparison to the year 2020 is thus the consolidation of Uniper.

Power generation volumes were supported by better availability of the thermal fleet, the commissioning of Datteln 4 in the second quarter of 2020, and the return to commercial operation of the gas-fired Irsching 4 and 5 generating units. Additionally, nuclear volumes increased due to higher availability.

Comparable operating profit amounted to EUR 1,120 (363) million. Predominantly Uniper's gas business benefitted from the extraordinary market developments with volatile and rising prices, despite additional capital requirements. In the first quarter of 2020, Uniper was consolidated as an associated company.

The result of the European Generation business was driven by the commissioning of the Datteln 4 coal-fired power plant at the end of May 2020 and the return to regular commercial operation of the Irsching 4 and 5 gas-fired power plant units in the fourth quarter of 2020. In addition, higher revenues from the UK capacity market and higher production volumes in the nuclear business, due to higher availability, contributed to the improved result. This positive effect was more than offset by the lower result in the Dutch steam business stemming from outages in the third quarter and higher nuclear provisions in the fourth quarter. In addition, in the fossil business, the exceptionally positive margin contributions from the previous year could not be repeated.

The Global Commodities business benefitted from improved results in the international portfolio, driven by the unusual weather conditions in North America and Asian operations especially in the first quarter. The positive business activity in Asia was partly offset by a negative contribution from the trading of power and carbon and rescheduled LNG deliveries phasing earnings into 2022 and affecting the result of the fourth quarter. Despite the already strong performance in 2020, the result of the gas business further improved, benefitting from extraordinary market conditions with volatile and rising gas prices especially during the second half of 2021.

The Russian Power Generation business was at almost the same level as in the previous year. The expiry of CSA payments for four units at the Shaturskaya, Surgutskaya, and Yaivinskaya power plants was more than offset by CSA payments from the commissioning of the Berezovskaya 3 power plant unit in May 2021 as well as by higher prices and volumes on the electricity market.

Operating profit was affected by EUR -6,021 (-333) million of items affecting comparability, mainly related to EUR -5,688 (-706) million of fair value change of non-hedge-accounted derivatives (Note 3). The Uniper segment's future cash flows are largely hedged with forward sell contracts; however, as hedge accounting is not applied for most of the contracts, unrealised changes in the fair values of these derivative instruments are presented in items affecting comparability.

Comparable share of profits of associates and joint ventures totalled EUR 39 (38) million (Notes 3 and 12).

In March 2021, amendments to the Russian Strategic Investment Law were approved. Based on the law, Fortum is allowed to own 100% of Uniper, the majority owner of Unipro PJSC. In July 2021, Fortum withdrew its earlier submitted application for merger control approval from the Russian Federal Antimonopoly Service under the Competition Law to further analyse the requirements of the scope and content of the filing process.

In April 2021, the German Federal Network Agency accepted the bid from the 757-MW Wilhelmshaven power plant as part of the second round of auctions for the closure of hard-coal-fired power plants. Power generation at the plant

ended in December 2021, one year earlier than previously announced. Uniper plans to establish a German national hub for hydrogen in Wilhelmshaven, including an import terminal for green ammonia ('ammonia cracker') and a 410-MW electrolysis plant in connection with the terminal. Uniper is working on a feasibility study and no final investment decision has been made.

In 2021, Uniper started legal proceedings on the Dutch coal phase-out law for the intended 2030 coal exit, as it does not provide appropriate compensation for investments made. Uniper also has the ambition to convert the Maasvlakte site into an ecosystem for sustainable energy production.

In April 2021, Uniper published a stock exchange release ('ad-hoc') with a positive update of its earnings guidance for 2021.

In July 2021, the German Federal Network Agency confirmed the essential status of the Heyden 4 hard-coal power plant as a reserve power plant until the end of September 2022. Also, in July 2021, the German Federal Network Agency accepted the bid from the 345-MW Scholven C power plant as part of the third round of auctions for the closure of hard-coal-fired power plants. The commercial power generation at the plant will end as early as the end of October 2022, slightly earlier than previously announced.

In August 2021, the Higher Administrative Court of North Rhine-Westphalia (OVG) declared in three parallel proceedings that the City of Datteln's 2014 development plan for the Datteln 4 hard-coal-fired power plant are invalid at the request of the City of Waltrop, BUND NRW, and four private individuals. Specifically, the OVG held that the City of Datteln's development plan is based on a deficient regional plan. The court did not admit an appeal. Uniper is a joined party to the proceedings as the permit owner and thus has the right to appeal. In October 2021, Uniper filed complaints against the non-admission of the appeal in relation to the judgements. The City of Datteln, as the direct defendant in the proceedings, has also filed non-admission complaints.

In August 2021, Uniper announced the decisions to accelerate the coal phase-out in the UK by closing one 500-MW unit of the Ratcliffe hard coal-fired power plant as early as at the end of September 2022 and the closure of the remaining three units by the end of September 2024 at the latest.

In September 2021, Fortum and Uniper announced cooperation in offering nuclear decommissioning and dismantling services for nuclear companies. See further details in the Generation segment.

In September 2021, Uniper announced that it was exploring the opportunity of restarting the Happurg pumped storage power plant. The plant has an output of 160 MW and can store water with energy for approximately 850 MWh of electricity, making it the largest pumped storage power plant in Bavaria. With effect from the end of September, Uniper transferred its shares in the Schkopau power plant near Halle/Saale, the last investment in a lignite-fired power plant in the European portfolio. The sale follows the company's strategic goal of accelerating the phase-out of coal-fired power generation and becoming climate-neutral in Europe by 2035.

In October, after a strategic review, Uniper announced plans to fundamentally restructure its Engineering business, which has a total of 1,100 employees mainly located in Germany and the United Kingdom. Under the plans, the future engineering competencies will be solely focused on operating Uniper's own assets and on the growth priorities of decarbonisation and green customer solutions

In October 2021, Uniper published a stock exchange release ('ad-hoc') with a positive update of its earnings guidance for 2021.

In December 2021, Uniper announced that the Staudinger 5 power plant had been awarded the contract by the BNetzA and that commercial electricity generation would therefore be discontinued by the end of May 2023 at the latest and the power plant would be shut down.

In December 2021, Novatek and Uniper announced that they had signed a term-sheet on the long-term supply of low-carbon ammonia. Up to 1.2 million tonnes will be delivered to Uniper customers in Germany and northwestern Europe in the future.

For further information, see Uniper's year-end 2021 results published on 23 February 2022.

Capital expenditures, divestments, and investments in shares

In the fourth quarter of 2021, capital expenditures and investments in shares totalled EUR 356 (623) million. Capital expenditures were EUR 335 (471) million (Notes 3 and 6).

In 2021, capital expenditures and investments in shares totalled EUR 1,407 (4,941) million. Capital expenditures were EUR 1,116 (1,146) million (Notes 3 and 6).

Fortum expects to start, or has started, power and heat production capacity of new power plants and expects to upgrade its existing plants as follows:

	Type	Electricity capacity, MW	Heat capacity, MW	Supply starts/started	Latest announced
Generation					
Pjelax-Böle and Kristinestad Norr, ...Finland	Wind	380		II/2024	22 Dec 2021
City Solutions					
Suomenoja, Finland	Heat pump		20	June 2021	24 Sep 2019
Rajasthan, India	Solar	250		March and May 2021	22 Jun 2021
Uniper					
Irsching 6, Germany	Gas	300		IV/2022	9 Jan 2019
Scholven, Germany	Gas	137	125	IV/2022	6 Feb 2020
Killingholme and Grain, UK	Grid stability			I/2022 and II/2022	23 Feb 2022
Surgutskaya 1, Russia	Gas	20		I/2022	12 Nov 2019
Surgutskaya 2, Russia	Gas	20		IV/2026	6 Feb 2021
Surgutskaya 3, Russia	Gas	20		IV/2027	1 Jul 2021
Surgutskaya 4, Russia	Gas	20		IV/2025	12 Nov 2019
Surgutskaya 6, Russia	Gas	20		III/2024	12 Nov 2019

Generation

In January 2021, Fortum announced that it had finished the construction of two new wind parks in the Nordics: Kalax in Finland and Sørfjord in Norway which subsequently started generating CO₂-free energy for the Nordic market. The wind parks are part of the transaction concluded in 2020 with Energy Infrastructure Partners AG (EIP), and Fortum's ownership is 20%.

In February 2021, Fortum completed the sale of eight small hydropower plants in Sweden with an average annual power generation of 0.1 TWh to Downing Renewables & Infrastructure Trust plc and recording a tax-exempt capital gain of EUR 50 million.

In March 2021, Fortum announced a substantial investment in dam safety in Sweden for an extensive rebuild of the over 100-year-old Forshuvud hydropower plant. Fortum is investing more than SEK 450 million (approximately EUR 44 million) during 2021–2025. This investment guarantees an extended lifetime for the power plant as a supplier of renewable electricity and balancing power for more weather-dependent types of power.

On 22 December 2021, Fortum announced the first investment by the joint team of Fortum and Uniper for wind and solar businesses in Europe. Fortum decided to construct the 380-MW Pjelax-Böle and Kristinestad Norr wind parks in Närpes and in Kristinestad in Finland in partnership with the Finnish energy company Helen Ltd. Construction started in January 2022, and the wind parks are expected to be fully operational at the latest in the second quarter of 2024. Fortum has a 60% majority and Helen holds a 40% minority ownership in the project, and the investment will be

consolidated on Fortum's balance sheet. The total capital expenditure of the project is approximately EUR 360 million, of which Fortum's share is EUR 216 million.

Russia

Together with its joint ventures in Russia, Fortum holds the largest portfolio of wind and solar power parks and projects in Russia, approximately 3.4 GW. Once operational, the wind and solar parks receive a guaranteed CSA price for a period of 15 years.

In 2017 and 2018, the Fortum-Rusnano wind investment fund (joint venture, Fortum's ownership 50%) won the right to build a total of 1,823 MW of wind capacity in CSA auctions. During the second half of 2020, the Fortum-Rusnano wind investment fund sold the 50-MW Ulyanovsk 2 and the 300-MW Rostov wind parks to the Fortum-Russian Direct Investment Fund (RDIF) joint venture. In June 2021, the Fortum-Rusnano wind investment fund additionally sold the 200-MW Kalmykia wind parks to the Fortum-RDIF joint venture. In December 2021, the Fortum-Rusnano wind investment fund started commercial operation of wind farms with a total capacity of 478 MW in the Astrakhan, Volgograd and Rostov regions.

In 2018 and 2019, Fortum won the right to build a total of 116 MW of solar capacity in CSA auctions. In March 2021, Fortum announced the sale of the solar power project to the Fortum-RDIF joint venture and decided to construct the solar power plant through this joint venture. In December 2021, 78 MW of the capacity was commissioned, and the remaining part will be commissioned in the second half of 2022.

In June 2021, the Fortum-Rusnano wind investment fund made an investment decision on the construction of wind power parks with a total capacity of 237 MW in the Samara region in Russia. The investment decision is based on an agreement with the Government of the Samara Region that envisages construction of wind parks with a total capacity of up to 300 MW in the region in 2022–2023. In September 2021, groundbreaking was done, and commissioning of the wind parks is expected in the fourth quarter of 2022.

In July 2021, Fortum signed an agreement to sell its Argayash coal-fired CHP plant to AO JSC Rusatom Smart Utilities. In September 2021, the transaction was concluded. Following the decision earlier in 2021 to transition to gas at Chelyabinsk CHP-2, this transaction will allow the Russia Division to discontinue its use of coal by the end of 2022 and reduce annual CO₂ emissions by approximately 2 million tonnes.

In September 2021, Fortum announced that the Fortum-Rusnano wind investment fund was awarded annual CSA remuneration in the range of RUB 16.9–23.8 billion (inflation adjusted) for new wind power generation in the latest Russian renewables' auction. This corresponds to wind capacity of approximately 430–530 MW per annum (a maximum of 1.4 GW) to be commissioned during years 2025–2027. The number of gigawatts ultimately to be constructed is subject to separate investment decisions. The average nominal price is expected to be in the range of RUB 2,600–4,200 per MWh (inflation adjusted) during the 15-year CSA period from commissioning.

The investment decisions related to the solar and wind capacities won by Fortum and the Fortum-Rusnano wind investment fund in the Russian CSA auctions in 2017, 2018, 2019, and 2021 are made on a case-by-case basis. Fortum's maximum equity commitment is RUB 15 billion.

City Solutions

In March 2021, Fortum announced that it had signed an agreement to sell its district heating business in the Baltics to Partners Group. In July 2021, Fortum concluded the sale. The total consideration of the sale amounted to approximately EUR 710 million. Fortum recorded a tax-exempt capital gain of EUR 254 million in the City Solutions segment's third-quarter 2021 results.

In March 2021, Fortum commissioned 150 MW of the 250-MW Rajasthan solar park in India. The remaining 100 MW was commissioned in May 2021.

In June 2021, Fortum made the investment decision to expand its lithium-ion battery recycling capacity by building a new state-of-the-art hydrometallurgical plant in Harjavalta, Finland. The investment, estimated at EUR 24 million, will increase Fortum's hydrometallurgical recycling capacity and enable the production of sustainable battery chemicals. The plant is expected to be taken into operation in 2023. In March, Fortum's hydrometallurgical battery recycling operations were shortlisted for the EU's Innovation Fund for low-carbon technologies.

In June 2021, Fortum announced that it had signed an agreement to divest the 250-MW Pavagada II and the 250-MW Rajasthan solar power plants in India to Actis. The parties also signed an agreement targeting potential further investments in solar power plants in India. The total consideration for the divestment on a debt- and cash-free basis, including the effect of deconsolidation of the net debt amounted to approximately EUR 280 million. The sale of the 250-MW Pavagada II solar plant was concluded in October and the first phase of the Rajasthan divestment in November.

In September 2021, Fortum concluded the sale of its 50% ownership in the Swedish district heating and cooling company Stockholm Exergi Holding AB to a consortium comprising APG, Alecta, PGGM, Kevala, and AXA. The total consideration of the sale amounted to SEK 29.5 billion (approximately EUR 2.9 billion). Fortum recorded a tax-exempt capital gain of EUR 2,350 million in the City Solutions segment's third-quarter 2021 results.

Uniper

In February 2020, Uniper signed an agreement to sell its 58% stake in Schkopau, a lignite-fired power plant in Saxony-Anhalt in eastern Germany, to Saale Energie GmbH, a subsidiary of the Czech energy producer EPH, which owns 42%. The transfer of ownership took place on 1 October 2021.

Other Operations

In June 2021, Fortum signed an agreement to sell a majority share of its carbon removal startup Puro.earth to Nasdaq, a multinational financial services company. The partnership will create a shared ownership structure designed to accelerate Puro.earth's global growth and long-term market development. Puro.earth is the first marketplace to offer carbon removal from the atmosphere that is verifiable and tradable through an open, online platform.

Operating and regulatory environment

European power markets

Year 2021 turned out to be the complete opposite of year 2020, with European gas, carbon, and power markets breaking record-high levels in both day-ahead and forward products. A cold winter and spring of 2021, increasing consumption of gas in the power and industrial sectors in Asia, lower pipeline gas flows from Russia to Central Europe, and below normal European wind conditions all contributed to unprecedentedly high gas and, consequently, very high power prices. Towards the end of 2021, high Continental European power prices also increasingly influenced power prices in the Nordics, further supported by continuing low precipitation in the Nordics and new interconnectors from the Nordics to Germany and the UK.

According to preliminary statistics, power consumption in the Nordic countries was 111 (104) TWh during the fourth quarter of 2021. The higher power demand in the Nordics, compared to the fourth quarter of 2020, was mainly caused by colder weather but also supported by a slight increase in industrial demand. Temperatures were close to the long-term average and close to 3 degrees below the temperatures in the fourth quarter of 2020. For the full year of 2021, power consumption in the Nordic countries was 404 (384) TWh.

In central western Europe (Germany, France, Austria, Switzerland, Belgium, and the Netherlands), power consumption in the fourth quarter of 2021 was 360 (357) TWh according to preliminary statistics. This is in line with the pre-Covid-19 level of power demand. In 2021, power consumption in central western Europe was 1,359 (1,316) TWh.

In the long term, electricity is expected to continue to gain a significantly higher share of total energy consumption. The electricity demand growth rate will largely be determined by classical drivers, such as macroeconomic and demographic development, but also increasingly by decarbonising the industrial, transport and heating sectors through direct electrification and green hydrogen.

At the beginning of the fourth quarter of 2021, the Nordic water reservoirs were at 83 TWh, which is 18 TWh below the long-term average and 31 TWh lower than one year earlier. The Nordic precipitation and inflow was clearly above normal during the fourth quarter, which increased the water reservoirs compared to normal. At the end of 2021, the reservoirs were at 73 TWh, which is 11 TWh below the long-term average and 32 TWh lower than one year earlier.

In the fourth quarter of 2021, power prices were at exceptionally high levels. The average system spot price in Nord Pool was EUR 96.2 (13.8) per MWh. The average area price in Finland was EUR 115.0 (32.7) per MWh, in the SE3 area in Sweden (Stockholm) EUR 107.8 (25.6) per MWh, and in the SE2 area in Sweden (Sundsvall) EUR 44.5 (15.1) per MWh. In Germany, the average spot price in the fourth quarter of 2021 was EUR 178.9 (38.8) per MWh.

In 2021, the average system spot price in Nord Pool was EUR 62.3 (10.9) per MWh. The average area price in Finland was EUR 72.3 (28.0) per MWh, in the SE3 area in Sweden (Stockholm) EUR 66.0 (21.2) per MWh, and in the SE2 area in Sweden (Sundsvall) EUR 42.6 (14.4) per MWh. In Germany, the average spot price during 2021 was EUR 96.8 (30.5) per MWh.

At the end of February 2022, the Nordic system electricity forward price on Nasdaq Commodities for the remainder of 2022 was around EUR 69 per MWh and for 2023 at around EUR 48 per MWh. The Nordic water reservoirs were at 55 TWh, which is about 5 TWh below the long-term average and 14 TWh lower than one year earlier. The German electricity forward price for the remainder of 2022 was around EUR 225 per MWh and for 2023 around EUR 148 per MWh.

European commodity markets

In the fourth quarter of 2021, gas demand in central western Europe was 652 (662) TWh and 2,218 (2,111) TWh in 2021. The central western European gas storage levels decreased from 413 TWh at the beginning of the quarter to 293 TWh at the end of the quarter, which is 146 TWh lower than one year ago and 129 TWh lower than the five-year average (2017–2021).

Tightness in the gas market has lifted European gas prices to unprecedented levels. The average gas spot price (TTF) in the fourth quarter of 2021 was EUR 95 (15) per MWh. For the full year of 2021, the average gas spot price (TTF) was EUR 47 (9) per MWh. The 2022 forward price increased from EUR 56 per MWh at the beginning of the quarter to EUR 79 per MWh at the end of the quarter, which is EUR 63 per MWh higher than one year earlier.

In the fourth quarter of 2021, there were also strong gains in the EUA market. The price increased from EUR 62 per tonne at the beginning of the quarter to EUR 81 per tonne at the end of the quarter, which is EUR 48 per tonne higher than one year earlier. For the full year of 2021, the average EUA price was EUR 54 per tonne.

Contrary to the gas market, there was a decline in coal prices during the fourth quarter. The forward quotation for coal (ICE Rotterdam) for 2022 decreased from USD 158 per tonne at the beginning of the quarter to USD 99 per tonne at the end of the quarter, which is USD 27 per tonne above the price one year earlier. For the full year of 2021, the average price for 2022 forward was EUR 117 per tonne.

At the end of February 2022, the TTF forward price for gas for the remainder of 2022 was EUR 102 per MWh. The forward quotation for EUA's for 2022 was at the level of EUR 85 per tonne. The forward price for coal (ICE Rotterdam) for the remainder of 2022 was USD 204 per tonne.

Russian power market

Fortum's Russia segment operates thermal power plants mainly in the Tyumen and Khanty-Mansiysk area of western Siberia, where industrial production is dominated by the oil and gas industries, and in the Chelyabinsk area of the Urals, which is dominated by the metal industry. Uniper's Russian subsidiary Unipro PJSC operates in the Smolensk, Moscow, Sverdlovsk, and Krasnoyarsk regions, as well as in the Khanty-Mansiysk Autonomous District.

The Russian market is divided into two price zones; Fortum's Russia division operates in the first price zone (European and Urals part of Russia), while Uniper operates in both the first and second price zones.

According to preliminary statistics, Russian power consumption was 298 (283) TWh during the fourth quarter of 2021. The corresponding figure for the first price zone was 226 (214) TWh and for the second price zone 59 (57) TWh. The increase in consumption resulted from the economic recovery. Russian power consumption in 2021 was 1,090 (1,033) TWh. The corresponding figure for the first price zone was 830 (783) TWh and for the second price zone 217 (209) TWh.

In the fourth quarter of 2021, the average electricity spot price, excluding capacity prices, increased by 17% to RUB 1,405 (1,204) per MWh in the first price zone and by 22% to RUB 1,006 (825) in the second price zone. The spot price in the Urals hub increased by 18% and was RUB 1,266 (1,074) per MWh. In 2021, the average electricity spot price, excluding capacity prices, was RUB 1,405 (1,220) per MWh in the first price zone, RUB 935 (873) in the second price zone, and RUB 1,221 (1,068) per MWh in the Urals hub.

The Russian Government increased the gas price by 3% in July 2021.

In Russia, capacity payments based on Capacity Supply Agreements (CSA) are a key driver for earnings growth, as CSA payments are considerably higher than for capacities selected in Competitive Capacity Selection (CCS) auctions. Currently, Fortum's Russia segment's CSA capacity amounts to 1,926 MW, including 70 MW of solar and wind capacity. These capacities do not include those related to the joint ventures. Correspondingly, Uniper's CSA capacity amounts to 800 MW.

Thermal power plants are entitled to clearly higher CSA payments starting approximately six years after commissioning (see tables below). In 2021, there was an increase in CSA payments for three units of Fortum's Russia segment's generation fleet and for one unit of Fortum's Uniper segment's generation fleet. After the CSA period ends, the units can receive CCS payments from CCS auctions. See the corresponding changes in the table below:

Fortum's Russia segment's units	CSA start date	Higher CSA starts	CSA expiry date
Tyumen CHP 1, unit 2	1 Feb 2011	1 Oct 2016	31 Dec 2020
Chelyabinsk CHP 3, unit 3	1 Jun 2011	1 Nov 2016	31 Dec 2020
Nyagan, unit 1	1 Apr 2013	1 Jan 2018	31 Dec 2021
Nyagan, unit 2	1 Dec 2013	1 Aug 2018	31 Dec 2022
Nyagan, unit 3	1 Jan 2015	1 Jan 2021	31 Dec 2025
Chelyabinsk CHP 4, unit 1	1 Dec 2015	1 Jan 2021	31 Dec 2024
Chelyabinsk CHP 4, unit 2	1 Mar 2016	1 Jan 2021	31 Dec 2024
Ulyanovsk*	1 Jan 2018	n/a	30 Nov 2031
Bugulchansk**	Nov 2016 – Mar 2017	n/a	Nov 2030 – Nov 2031
Pleshanovsk**	1 Mar 2017	n/a	30 Nov 2031
Grachevsk**	1 Mar 2017	n/a	30 Nov 2031

* Wind CSA.

** Solar CSA.

Fortum's Uniper segment's units	CSA start date	Higher CSA starts	CSA expiry date
Surgutskaya-2 GRES-2, unit 7	1 May 2011	1 May 2017	31 Jul 2021
Surgutskaya-2 GRES-2, unit 8	1 Jun 2011	1 Jun 2017	31 Aug 2021
Shaturskaya GRES, unit 7	1 Oct 2010	1 Oct 2016	31 Dec 2020
Yaivinskaya GRES, unit 5	1 Jan 2011	1 Jan 2017	31 Dec 2020
Berezovskaya GRES, unit 3*	1 Nov 2014	1 Nov 2020	31 Oct 2024
Surgutskaya-2 GRES-2, unit 1**	Apr 2022	n/a	Feb 2038
Surgutskaya-2 GRES-2, unit 2**	Dec 2026	n/a	Nov 2042
Surgutskaya-2 GRES-2, unit 3**	Dec 2027	n/a	Nov 2043
Surgutskaya-2 GRES-2, unit 4**	Dec 2025	n/a	Nov 2041
Surgutskaya-2 GRES-2, unit 6**	Sep 2024	n/a	Aug 2040

* Started receiving CSA payments from 1 May 2021 when returning to the market after repairs.

** Modernisation CSA 2.

Fortum's Russia segment's generation capacity not receiving CSA payments, a total of 2,697 MW, is allowed to participate in the annual CCS auctions. Uniper's generation capacities allowed to participate in the CCS auction totalled 10,445 MW. The next CCS auction, for the year 2027, is expected to be held in November 2023.

Year	2020	2021	2022	2023	2024	2025	2026
CCS auction price, tRUB/MW/month, first price zone*	115	134	168	171	182	193	195
CCS auction price, tRUB/MW/month, second price zone*	191	225	264	267	279	303	299
Fortum's Russia segment							
Selected in CCS auction, MW, first price zone	2,331	2,848	3,451	3,904	3,904	4,351	4,852
Fortum's Uniper segment							
Selected in CCS auction, MW, first price zone	7,190	8,829	8,035	8,035	7,225	6,427	5,617
Selected in CCS auction, MW, second price zone	1,600	1,600	1,600	1,600	2,400	2,400	2,400

* Excluding inflation.

In the June 2017 CSA auction, the Fortum-Rusnano wind investment fund won the right to build 1,000 MW of wind capacity. The wind parks were to be commissioned during 2018–2022 and will receive a guaranteed CSA price corresponding to approximately RUB 7,000–9,000 per MWh for a period of 15 years.

In the June 2018 CSA auction, the Fortum-Rusnano wind investment fund won the right to build 823 MW of wind capacity. The wind parks were to be commissioned during 2019–2023 and will receive a guaranteed CSA price corresponding to approximately RUB 7,000–8,000 per MWh for a period of 15 years.

In the June 2018 and 2019 CSA auctions, Fortum won the right to build 110 MW and 6 MW of solar capacity. The power plants will receive a guaranteed CSA price for a period of 15 years, corresponding to approximately RUB 15,000 per MWh and RUB 14,000 per MWh, respectively. In December 2021, 78 MW of the capacity was commissioned and the remaining part will be commissioned in the second half of 2022.

In September 2021, in the most recent CSA auction, Fortum announced that the Fortum-Rusnano wind investment fund won annual CSA remuneration in the range of RUB 16.9–23.8 billion for new wind power generation. This corresponds to wind capacity of approximately 430–530 MW per annum (a maximum of 1.4 GW); the capacity will be commissioned during the years 2025–2027. The number of gigawatts ultimately to be constructed is subject to separate investment decisions. The projects will be covered by CSAs for a period of 15 years from commissioning. The average nominal price is expected to be in the range of RUB 2,600–4,200 per MWh during the CSA period. The estimated prices are inflation adjusted.

Together with its joint ventures in Russia, Fortum is the largest player on the renewable energy market in Russia with a wind and solar portfolio of approximately 3.4 GW projects. Of the wind and solar power plants and projects in the portfolio, 1.2 GW are operational, 0.3 GW are under construction, and 1.9 GW are under development.

More detailed information about the market fundamentals is included in the tables at the end of the report.

Regulatory environment

EU taxonomy rules on nuclear and gas published

At the beginning of December 2021, the first Climate Delegated Act under the EU taxonomy framework on climate change was officially approved by the Council and the European Parliament. At the end of December 2021, the European Commission issued the long-awaited draft Complementary Delegated Act covering nuclear and gas and the final Act was published in February 2022. In the Act both gas and nuclear energy are classified as transitional activities under strict conditions. The Act is subject to a four-month scrutiny period, extendable by two months, during which the Parliament and the Council can either reject or adopt the Act.

Fortum has consistently advocated for a science-based and technology-neutral taxonomy. In broad terms, we welcome the Complementary Delegated Act, as it recognises the contribution of nuclear energy to drive climate mitigation, but we recognise that it leaves several issues open for interpretation. It is also unfortunate that the majority of existing nuclear is not included, as was recommended by both the Commission's own research centre and the

Finnish and Swedish governments. We welcome the recognition of natural gas as a transitional fuel but consider the proposed criteria too restrictive. These criteria will make necessary investments in additional gas-fired power plants more difficult in countries where flexible gas is needed for the security of supply.

EU's gas market package published

In December, the Commission adopted a set of legislative proposals to decarbonise the EU gas market by facilitating the uptake of renewable and low carbon gases, including hydrogen, and to ensure security of energy supply for all citizens in Europe. The proposal largely extends the existing rules that are currently applied to natural gas to cover also hydrogen.

Gas is confirmed to act as a bridging technology and thus the proposal supports the planning and investment security of the respective industries— at least until 2049. Simultaneously, the proposed criteria in the EU taxonomy are highly restrictive for gas. Regarding energy prices, the Commission supports a market-driven approach; however, it suggests member states to, if needed, use voluntary measures based on the Commission's Toolbox Communication (see the next section) in order to keep consumer prices at a reasonable level. The proposals support the non-discriminatory treatment of market participants and unbundling principles for both gas and hydrogen networks.

However, several ambiguities still need to be addressed, e.g. the clarification of technology neutrality in hydrogen production and the methodology to calculate the greenhouse gas emission reduction of low-carbon gases. Further, clarification is needed regarding the discussed controversial 'additionality principle' related to the Renewable Energy Directive (meaning that the corresponding capacity for renewable generation must be added specifically for each newly installed hydrogen production plant (electrolysis)).

EU not to intervene in the energy market despite the price crisis

Unprecedentedly high energy prices have triggered a debate among the EU institutions. The European Commission published its Toolbox Communication in October with the objective to help member states tackle the high energy prices. This toolbox outlined a number of measures that member states can implement to protect vulnerable consumers and industries within the existing regulatory framework.

Although the energy price crisis was discussed at the EU level on multiple occasions during the fourth quarter of 2021, the Commission, together with a broad coalition of member states, highlighted free/market-driven pricing and competitive markets without any need to intervene in the market. The impact of soaring and persisting high energy prices start to be visible in the real economy, and several small- and medium-sized enterprises, including energy suppliers, have already been significantly affected. The exceptional commodity price situation is also putting a strain on utilities with large trading portfolios (including Uniper), as they face clearly higher collateral requirements and consequently need to secure additional liquidity reserves.

New German government with ambitious climate goals started

"The Traffic Light Coalition", the new German Government formed by Social Democrats, Liberals, and Greens, has officially started under the leadership of Chancellor Olaf Scholz. The coalition agreement sets very ambitious climate targets and requires heavy investments to implement those targets (e.g. a target to reach an 80% share of renewables by 2030). Renewable energies shall be expanded massively while the coal exit is intended to be brought forward, ideally to 2030. The crucial role of natural gas for security of supply is well recognized; at the same time, however, the Government is under pressure because the goal of climate neutrality must be achieved in 2045. The Government supports the ramp up of the hydrogen economy, which is important especially to enable decarbonisation of the industry sector.

Nord Stream 2 halted

Following the invasion of Russia on Ukraine, the German government halted the certification process of Nord Stream 2 on 22 February 2022, and the US has put Nord Stream 2 AG, which is a Swiss subsidiary of Gazprom, and its CEO under sanction on 23 February 2022.

For comments on the geopolitical uncertainty due to Russia's invasion on Ukraine, imposed sanctions and possible future sanctions and counter sanctions and their possible impacts on Fortum Group's Russian business and assets, please see section 'Events after the balance sheet date'.

Proposal for Swedish hydrogen strategy published

In November 2021, the Swedish Energy Agency presented a proposal on a national hydrogen strategy. The strategy focuses on “colour-blind” fossil-free hydrogen with a target to have 5 GW of installed electrolyser capacity by 2030 and an additional 10 GW of capacity by 2045.

According to the proposal, the use of hydrogen should contribute to the transition to a fossil-free economy, and at the same time strengthen security of supply in the electricity system. Hydrogen must be used where it is economically efficient and creates the highest system value. Sweden should be an international frontrunner and exporter of climate-friendly products and services based on hydrogen that lower emissions abroad.

The strategy is currently being processed in the Ministry of Infrastructure, but it is still unclear when it will be adopted as the official Swedish hydrogen strategy.

Lack of firm power production in the south of Sweden increases market turmoil

In Sweden, the electricity price differences between the four internal price areas significantly increased in 2021. The increased volatility and lack of balanced and sufficient power supply in southern Sweden have caused many retailers to stop offering fixed-price contracts to their customers. It has also triggered the transmission system operator, Svenska Kraftnät, to announce that more firm dispatchable power must be added to the system and that transmission capacity from north to south needs to be increased.

Finnish river basin management plans approved

In December 2021, the Finnish Government approved the river basin management plans that will guide the future licensing and operation of all industrial plants in the neighbourhood of watercourses. The plans are based on the classification of water bodies and propose measures to reach the desired status of water bodies by 2027.

The proposed measures, e.g. minimum flow requirement, may reduce the regulating hydropower capacity provided by hydropower by up to 20%. Therefore, the hydropower generators consider the government’s decision to pose a significant risk to the operation of the electricity system.

Fortum is committed to the goals of the plans, including reaching good water status. However, due to severe shortcomings in the classification of water bodies, Fortum has appealed to the Supreme Administrative Court regarding the Oulujoki watercourse and the Klobbfjärden sea area around the Loviisa nuclear power plant. Court processes are expected to take several years.

Government permit granted for the final repository for spent nuclear fuel in Sweden – Posiva applies for operating permit for final disposal in Finland

In August 2021, the Swedish Government decided to extract the interim storage decision from SKB's (Svensk Kärnbränslehantering AB) comprehensive final repository system application. Only the increased storage at the interim storage facility was given the go-ahead at that time. In line with the licensing process, the case is now to be decided by the Swedish Land and Environmental Court, and a building and operation permit on the interim storage facility is expected in June/July 2022. The Government decision made in August 2021 created uncertainty with regard to the process to have a legally enforceable building and operation permit for the interim storage facility in place by the end of 2023, when maximum capacity under the current license will be reached. If a legally enforceable permit is not in place by the end of 2023, nuclear operators will not be able to store more spent fuel, and therefore the risk for electricity supply disruptions in the spring of 2024 still remains. In January 2022, the new Swedish Government made a decision to give the go-ahead to the final repository for spent nuclear fuel in Forsmark in Östhammar Municipality and an encapsulation plant in Oskarshamn.

In Finland, the nuclear waste management organisation Posiva Oy announced the submission of the application for the operating license for the encapsulation and final disposal facility (ONKALO®) to the Finnish Ministry of Economic Affairs and Employment in December 2021. Posiva will dispose of the high-level nuclear waste of its owners, Fortum (share of ownership 40%) and Teollisuuden Voima Oyj (TVO) (share of ownership 60%).

Key drivers and risks

For comments on the geopolitical uncertainty due to Russia's invasion on Ukraine, imposed sanctions and possible future sanctions and counter sanctions and their possible impacts on Fortum Group's Russian business and assets, please see section 'Events after the balance sheet date'

Fortum's financial results are exposed to a number of financial, operational, strategic, and sustainability-related risks. Fortum is exposed to these risks both directly and indirectly through its subsidiaries, associated companies, and joint ventures. The principal associated companies and joint ventures are TVO, Forsmarks Kraftgrupp AB, Kemijoki Oy, and TGC-1. For more information, please see each respective company's annual report.

Fortum is the majority shareholder of Uniper. However, Uniper remains a separate listed company operating under German law and regulations and with its own risk management systems. As per the end of the fourth quarter 2021, credit risk, market risk, legal risk, political and regulatory risk, financial risk, and asset project risk are the major sources of uncertainty for Uniper's financial performance. During the fourth quarter the key commodity prices Uniper is exposed to significantly increased, with the short- to mid-term gas future prices reaching unprecedented levels. Although this development is positive for Uniper's earnings, the cash flow risks have increased as especially the margining requirements from Uniper's hedges have grown, and the risk of further margin calls has increased in light of elevated market volatility. For more information about Uniper's risk management systems and risk exposures, please see Uniper's Annual report for 2021.

The increasing geopolitical tensions pose a risk for the Fortum Group, the impacts of which have been assessed. The increasing geopolitical tensions and further escalation could, for example lead to curtailments of physical gas deliveries to Uniper which may require Uniper to source gas in the market at higher prices. In addition, counterparties of the Fortum Group could become subject to sanctions, which may impact current or future business relations. Fortum is actively monitoring the situation in order to ensure continued compliance with prevailing rules and applicable sanctions laws. Moreover, Germany has halted the certification of the Nord Stream 2 gas pipeline for time being. Uniper is currently analysing potential effects of the halted certification process on its financial position, net assets, and operational results. Both Fortum and Uniper are continuing to monitor the situation closely and constantly preparing adapted mitigation measures to minimise the impact of an escalation to Fortum Group.

One of the key factors influencing Fortum's business performance is the Nordic electricity wholesale price. In the Nordics, power prices exhibit significant short- and long-term variations on the back of several factors, including but not limited to weather conditions, outage patterns in production and transmission lines, CO₂ emission allowance prices, fuel prices, and the supply-demand balance. Fortum uses hedging in order to limit the exposure to fluctuations in power prices and reports on the hedging levels quarterly (see 'Outlook').

For Fortum's Russian businesses, the key drivers are economic growth, the rouble exchange rate, and the regulation of the power and heat business. A key profitability driver is the received payments based on the CSA contracts and CCS auctions. The main part of Fortum's generation capacity built after 2007 is entitled to CSA payments for approximately 10 years after commissioning and approximately 15 years for renewable generation. The CSA payments are adjusted for, among other factors, the Government bond yield, the rate of return, the consumer price index (CPI), and earnings from the electricity-only (spot) market (done every three and six years after commissioning of a unit). In addition, thermal power plants are entitled to clearly higher CSA payments starting approximately six years after commissioning.

Fortum is exposed to liquidity and refinancing risks primarily through the need to finance the Group's business operations, including margining and collaterals issued for commercial activities. As a result of the recent volatility increase in commodity prices, the cash flow risk related to margin calls on the Group's hedges has increased. In the fourth quarter, further mitigating actions were taken to increase liquidity and reduce the positions exposed to margin calls.

Fortum has cash flows, assets, and liabilities in currencies other than the euro and is therefore exposed to fluctuations in exchange rates. Currency risk arises mainly from physical and financial trading of commodities, existing and new investments, external financing, as well as internal loans and shareholder loans within the Group. The main currency exposures are toward euro/Swedish krona, euro/Russian rouble, and euro/British pound sterling, arising from Fortum's extensive operations in Sweden, Russia, and the United Kingdom.

Fortum's business activities include energy generation, storage, distribution, and control of operations, as well as the construction, modernisation, maintenance, and decommissioning of power plants or other energy industry facilities.

Any unwanted operational event (which could be caused by e.g. technical failure, human or process error, natural disasters, sabotage, failure of key suppliers, or terrorist attack) can endanger personal safety or lead to environmental or physical damage, business interruptions, project delays, and possible third-party liability. The associated costs can be high, especially in the Group's largest units and projects.

During 2020 and 2021, the Covid-19 pandemic resulted in new and partly unexpected risks as societies and governments across the world implemented drastic measures to contain the spread of the disease. Although the impacts for Fortum have so far been limited and the situation compared to the end of 2020 has improved, the risks related to a prolonged pandemic cannot be ruled out. The main risk factors include lower commodity prices, decreased demand, increased risk of credit defaults and delayed payments, project delays, and increased risk of operational incidents or prolonged maintenance as a result of travel restrictions, absence of key personnel, as well as difficulties in obtaining key materials and spare parts. Fortum is closely monitoring the development of the pandemic and its potential impacts.

For further information about Fortum's risks and risk management systems, see Fortum's Financial Statements for 2020 and Financial Statements for 2021, to be published in week 10 at the latest.

Outlook

Hedging

At the end of 2021, approximately 75% of the Generation segment's estimated Nordic power sales volume was hedged at EUR 34 per MWh for 2022 (at the end of the third quarter of 2021: 65% at EUR 32 per MWh) and approximately 50% at EUR 31 per MWh for 2023 (at the end of the third quarter of 2021: 40% at EUR 31 per MWh).

At the end of 2021, approximately 80% of the Uniper segment's estimated Nordic power sales volume was hedged at EUR 18 per MWh for 2022 (at the end of the third quarter of 2021: 85% at EUR 22 per MWh), approximately 60% at EUR 18 per MWh for 2023 (at the end of the third quarter of 2021: 55% at EUR 21 per MWh) and approximately 20% at EUR 30 per MWh for 2024.

The reported hedge ratios are based on the hedges and power generation forecasts of the Generation segment and the forecasts of the Uniper segment's Nordic generation. The underlying generation assets and definition of hedges differ to some extent and thus are not fully comparable.

The reported hedge ratios may vary significantly, depending on Fortum's and Uniper's actions on the electricity derivatives markets. Hedges are mainly financial contracts, most of them electricity derivatives quoted on Nasdaq Commodities.

Capital expenditure

Fortum estimates its capital expenditure, including maintenance but excluding acquisitions, to be approximately EUR 1,500 million in 2022, of which the share of maintenance capital expenditure is estimated to be approximately EUR 800 million, well below the level of depreciation.

Generation

The Generation segment's achieved Nordic power price typically depends on factors such as hedge ratios, hedge prices, spot prices, availability and utilisation of Fortum's flexible generation portfolio, as well as currency fluctuations. Excluding the potential effects from changes in the power generation mix (currently approximately 45 TWh), a EUR 1 per MWh change in the Generation segment's achieved Nordic power price will result in an approximately EUR 45 million change in the segment's annual comparable operating profit. The achieved power price also includes the results of optimisation of Fortum's hydro and nuclear generation, as well as operations in the physical and financial commodity markets.

Russia

In the Russia segment, the financial effect of the CSAs is expected to be negative in 2022, due to the impact of the expiry of the CSA period of one generation unit, partly offset by a higher bond yield.

For comments on the geopolitical uncertainty due to Russia’s invasion on Ukraine, imposed sanctions and possible future sanctions and counter sanctions and their possible impacts on Fortum Group’s Russian business and assets, please see section ‘Events after the balance sheet date’.

Uniper

Excluding the potential effects from changes in the power generation mix, a EUR 1 per MWh change in the Uniper segment’s power sales price for outright generation (hydro and nuclear, currently approximately 25 TWh) will result in an approximately EUR 25 million change in the segment’s annual comparable operating profit. Uniper also has generation other than hydro and nuclear power, and the sensitivity for that generation is different and is not included in the previously mentioned sensitivity.

With regard to Uniper, reference is made to the guidance that the company publishes quarterly.

Income taxation

In 2022, the comparable effective income tax rate (excluding items affecting comparability) for Fortum is estimated to be in the range of 22-25%. Following the consolidation of Uniper, the weight of the profit in different jurisdictions has resulted in an upward trend in the lower end of the range of the tax rate guidance currently driven by the higher nominal tax rates in the Group’s major operating countries.

Possible impacts, if any, of a global minimum tax as stated in the proposed EU directive from 20 December 2021, are not taken into account in this guidance.

Sustainability

As the majority owner of Uniper, Fortum has consolidated Uniper as a subsidiary as of 31 March 2020.

In this interim report, selected sustainability key performance indicators that include Uniper are disclosed. Indicators following the same calculation principles have been consolidated and are disclosed as one figure. In cases where the definitions currently differ, only one figure for Fortum, excluding Uniper, is presented. No historical figures have been restated.

Fortum highlights the importance of decarbonisation and climate change mitigation, while at the same time the necessity to secure reliable and affordable energy for all. Fortum also gives balanced consideration in its operations to the promotion of energy efficiency and a circular economy, as well as its impacts on personnel and societies.

Based on the above-mentioned priorities, Fortum’s updated sustainability priority areas are:

Climate and resources	Personnel and society	Governance
Climate change and GHG emissions	Health, safety and wellbeing	Business ethics and compliance
Emissions to air, land and water	Diversity, equity and inclusion	Corporate governance
Energy efficiency	Fair and attractive employer	Innovation and digitalisation
Circular economy and waste management	Human rights	Shared value creation
Biodiversity	Stakeholder engagement	Customer rights and satisfaction
Secure and affordable energy supply	Just transition	
Water use and optimisation	Corporate citizenship	

Fortum’s sustainability performance is monitored and disclosed in interim and annual reporting. Fortum publishes an annual Sustainability Report with more extensive information on Fortum’s sustainability performance.

Sustainability targets

Fortum updated its climate targets aligned with the goals of the Paris Agreement in December 2020 and is committed to carbon neutrality by 2050 at the latest. The target covers direct CO₂ emissions (Scope 1) and indirect CO₂ emissions (Scope 2 and 3). Fortum’s roadmap to reduce emissions in Europe has also been defined. Fortum is

committed to at least a 50% CO₂ emissions reduction (Scope 1 and 2) in its European generation by 2030 (compared to base year 2019) and to carbon neutrality (Scope 1 and 2) by 2035 at the latest.

Scope 3 emissions play a significant role in Fortum's total emissions. In December 2021, Fortum committed to reduce Scope 3 greenhouse gas emissions by 35% by 2035 at the latest (compared to base year 2021).

Fortum's biodiversity target is to conduct a minimum of 12 major voluntary measures that improve the living conditions of species and strengthen populations, covering all countries where Fortum has hydropower production, for 2021. The projects focus on threatened species or habitats, in particular, and in 2021 included restoring aquatic and terrestrial habitats, improving fish migration and migratory fish populations, and combating invasive species. In 2021, 13 major measures were implemented and the target was achieved.

For Fortum, excellence in safety and caring about both its own employees and contractors is the foundation of the company's business and an absolute prerequisite for efficient and interruption-free production. Fortum's safety target is measured as Total Recordable Injury Frequency (TRIF), for own personnel and contractors, and the ambitious goal is <1.0 by the end of 2025. Fortum's TRIF was 2.2 in 2021. Fortum also has a target for Lost Time Injury Frequency (LTIF), for own personnel and contractors: ≤1.2 in 2021.

Both Fortum and Uniper are supporters of the Task Force on Climate-related Financial Disclosures (TCFD). Fortum has a long-standing focus on mitigating climate change and adopted the reporting recommendations of the TCFD starting from the financial year 2019.

Fortum executed a review of its lobbying activities and practices during 2021. The review was published in December 2021 and is publicly disclosed on Fortum's website. The summary of the review will also be published as a part of Fortum's Sustainability Report in 2022 and thereafter on a yearly basis.

In the table below, Fortum reports its sustainability performance with selected key indicators.

Group sustainability performance 2021

	IV/2021	IV2020	2021	2020
Climate and resources				
Total CO ₂ emissions*, million tonnes	19.4	17.4	68.7	48.7
Specific CO ₂ emissions from total energy production*, gCO ₂ /kWh	312	315	312	287
Asset availability of power generation plants**, %	83.8	-	80.8	-
Major voluntary measures enhancing biodiversity, no.	-	-	13	-
Personnel and society				
Total Recordable Injury Frequency (TRIF), own personnel and contractors*	2.0	2.3	2.2	2.3
Lost Time Injury Frequency (LTIF), own personnel and contractors*	1.5	1.4	1.5	1.3
Severe occupational accidents*, no.	1	0	3	1
Sickness-related absences, %	4.2	-	3.6	2.9***

Fortum consolidated Uniper as a subsidiary into its income statement from the second quarter of 2020. The figures for 2020 do not include Uniper for the first quarter of 2020.

* 2020 figures include Uniper from the second quarter of 2020.

** The calculation principle changed due to alignment with Uniper. Therefore, figures for 2020 are not available. The 2021 figures include power generation from gas- and coal-fired power plants.

*** The figure does not include Uniper.

Fortum's goal is to achieve excellent financial performance in strategically selected core areas through strong competence and responsible ways of operating. Fortum received a score of A- in the CDP Climate Change 2021 rating, and Uniper received a score of B. In the MSCI ESG Ratings 2021 assessment, Fortum received a "BBB" rating and Uniper a "BB" rating. Both companies have also participated in the ISS ESG Corporate Rating, where Fortum received a "Prime B-" rating and Uniper a "Medium C" rating. In addition, Fortum is listed on the Nasdaq Helsinki exchange and is included in the STOXX Global ESG Leaders, OMX Sustainability Finland, ECPI®, Euronext Vigeo Eurozone 120, and Euronext Vigeo Europe 120 indices.

Climate and resources

Fortum's key performance indicators for climate and resources are related to CO₂ emissions, security of supply, biodiversity, and major Environmental, Health, and Safety (EHS) incidents. Operational-level activities follow the requirements set forth in the ISO 14001 environmental management standard, and 100% of Fortum's power and heat production worldwide has ISO 14001 certification.

Fortum Group's power generation is mainly based on natural gas-fired generation and on carbon dioxide-free hydro and nuclear power. Fortum targets to rapidly reduce the share of coal in power generation. A minor share of Fortum's power generation is currently based on solar and wind, but Fortum targets significant growth in this area over the next five years.

Fortum is also a large district heat producer. Heat is mainly produced at natural gas-fired and energy-efficient CHP plants. In addition, Uniper operates a large commodities trading business and has natural gas storage sites, which play an important role in ensuring a secure and flexible gas supply. Fortum wants to enable the energy transition by providing a reliable and affordable supply of low-carbon energy. In the future, the energy system – and Fortum's asset portfolio – will be based on renewable energy, increasingly on clean gas (e.g. hydrogen), and on nuclear power. In addition, Fortum will continue to offer industrial and infrastructure solutions, e.g., waste-to-energy, grid stability services, as well as energy sales and storage.

In 2021, Fortum's direct CO₂ emissions were 68.7 (48.7) Mt. Of the total CO₂ emissions, 28.9 (17.5) Mt were within the EU and UK emissions trading system (ETS). The estimate for Fortum's free emission allowances in 2021 is approximately 0.4 (0.9) Mt.

Fortum's total CO ₂ emissions* (million tonnes, Mt)	IV/2021	IV/2020	2021	2020
Total emissions	19.4	17.4	68.7	48.7
Emissions subject to ETS	8.2	7.0	28.9	17.5
Free emission allowances	-	-	0.4	0.9
Emissions not subject to ETS in Europe	0.2	0.2	0.7	0.7
Emissions in Russia	11.0	10.2	39.0	30.5

* Fortum consolidated Uniper as a subsidiary into its income statement from the second quarter of 2020. The figures for 2020 do not include Uniper for the first quarter of 2020.

In 2021, Fortum's specific CO₂ emissions from total energy production were 312 (287) gCO₂/kWh.

An uninterrupted and reliable energy supply is critical for society to function. In 2021, the asset availability of Fortum's gas- and coal-fired power plants was, on average, 80.8%.

Major EHS incidents are monitored, reported, and investigated, and corrective actions are implemented. In 2021, there were eight (16) major EHS incidents in Fortum's operations, excluding Uniper. The major EHS incidents consisted of two (6) fires, one (0) explosion, three (8) leaks or spills, one (1) environmental non-compliance, and one (1) INES (International Nuclear Event Scale) level 1 incident. The major EHS incidents did not have significant environmental impacts. As Uniper's definitions of major EHS incidents vary from the rest of the Fortum Group, Uniper's EHS incidents are currently not included in the reporting.

Personnel and society

Fortum's key performance indicators for personnel and society are related to operational and occupational safety and to employee health and wellbeing.

Fortum strives to be a safe workplace for the employees, contractors and service providers who work for the company. A certified ISO 45001 safety management system covers 99.3% of Fortum's power and heat production worldwide.

In 2021, Fortum's TRIF for own personnel and contractors was 2.2 (2.3), and the LTIF for own personnel and contractors was 1.5 (1.3). Thus, Fortum did not meet the target set for LTIF (≤ 1.2). Fortum strives for zero severe occupational accidents. In 2021, there were three (1) severe occupational accidents in the operations, one resulting in a fatality. The fatally injured person was working for a contractor company to reconstruct a guardhouse at Uniper's power plant site in Russia.

Fortum’s goal regarding workplace wellbeing activities is to promote the health and occupational safety of employees and the functionality of the work community. In this interim report, Fortum discloses for the first time the consolidated annual figure for sickness-related absences. In 2021, Fortum’s percentage of sickness-related absences was 3.6.

Fortum’s performance regarding reputation and customer satisfaction, excluding Uniper, is monitored annually through the One Fortum Survey. In 2021, the combined reputation index of all stakeholder groups based on the One Fortum Survey decreased slightly to 70.5 (72.5) points, on a scale of 0–100. Fortum’s overall reputation decreased slightly among most of the stakeholder groups. Among NGOs, the result remained stable. The customer satisfaction index (CSI) varied depending on the business area between 58 and 83 points (61–81), on a scale of 0–100.

Fortum and Uniper expect their business partners to act responsibly and to comply with the requirements set forth in their respective Codes of Conduct and Supplier Codes of Conduct. Fortum assesses the performance of its business partners with supplier qualification and supplier audits. In 2021, Fortum, excluding Uniper, conducted four on-site supplier audits in China and in India. Due to the Covid-19 pandemic and travel restrictions, the possibilities to conduct on-site supplier audits have been very limited. Uniper applies its own processes for ESG Due Diligence and Know Your Counterparty. Both companies are members of the Bettercoal Initiative and use the Bettercoal tools to improve sustainability in the coal supply chain.

Legal actions

There were no material changes in the ongoing legal actions during the fourth quarter of 2021. For further information on legal actions, see Note 20.

Shares and share capital

Fortum shares on Nasdaq Helsinki

January–December 2021	No. of shares traded	Total value EUR	High EUR	Low EUR	Average EUR*	Last EUR
FORTUM	351,450,193	8,314,843,976	27.96	19.72	23.65	26.99

* Volume weighted average.

	31 December 2021	31 December 2020
Market capitalisation, EUR bn	23.8	17.5
Number of shareholders	202,961	203,965
Finnish State holding, %	50.8	50.8
Nominee registrations and direct foreign shareholders, %	25.8	24.2
Households, %	12.4	13.2
Financial and insurance corporations, %	1.7	2.3
Other Finnish investors, %	9.3	9.6

In addition to Nasdaq Helsinki, Fortum shares were traded on several alternative market places, for example Boat, Cboe, and Turquoise, and on the OTC market. In 2021, approximately 70% of Fortum’s shares were traded on markets other than Nasdaq Helsinki (source Bloomberg).

On 31 December 2021, Fortum Corporation’s share capital was EUR 3,046,185,953 and the total number of registered shares was 888,294,465. Fortum Corporation does not hold any of the company’s own shares.

Group personnel

The operations of the Fortum Group are mainly based in the Nordic countries, Central Europe, Russia, United Kingdom, and Poland. The total number of employees at the end of 2021 was 19,140 (19,933).

At the end of 2021, the Generation segment had 1,116 (1,143) employees, Russia 2,627 (2,935), City Solutions 1,766 (2,093), Consumer Solutions 1,176 (1,048), Uniper 11,494 (11,751), and Other Operations 961 (963).

Changes in Group management

In February 2021, Bernhard Günther started as Chief Financial Officer (CFO) and member of Fortum's Executive Management.

In March 2021, Klaus-Dieter Maubach, member of Fortum's Board of Directors, announced his resignation from the Board, as he had been elected the CEO of Uniper. Fortum's Shareholders' Nomination Board evaluated the Board of Directors' ability to function and concluded, based on the recommendation of the Board of Directors, that the Board had full capacity to continue in its current composition until the 2021 Annual General Meeting (AGM).

In March 2021, Tiina Tuomela was appointed the new CFO of Uniper and consequently stepped down from her position at Fortum. Simon-Erik Ollus, was appointed Executive Vice President of Fortum's Generation division and member of Fortum's Executive Management with immediate effect.

In March 2021, Nebahat Albayrak was appointed Senior Vice President Corporate Affairs, Safety, and Sustainability and member of Fortum's Executive Management. Ms Albayrak assumed the role on 1 June 2021. She succeeded Arto Rätty, who retired at the end of October 2021.

In April 2021, Sirpa-Helena Sormunen was appointed as Uniper's new General Counsel and Chief Compliance Officer, and Risto Penttinen was appointed as Uniper's new Executive Vice President, Strategy, Corporate Development and M&A. Nora Steiner-Forsberg was appointed Fortum's General Counsel and member of Fortum's Executive Management, and Eveliina Dahl was appointed Senior Vice President, People and Procurement and member of Fortum's Executive Management. All appointments were effective as of 1 May 2021.

Mr Günther, Mr Ollus, Ms Albayrak, Ms Steiner-Forsberg, and Ms Dahl report to President and CEO Markus Rauramo.

In November 2021, Arun Aggarwal, Senior Vice President, Business Technology, left his position at Fortum. He was succeeded by Sanna Pekari, M.Sc. (Civil Eng.), MBA. Sanna Pekari is not a member of the Fortum Management Team but is reporting directly to the President and CEO, Markus Rauramo.

Annual General Meeting 2021

The AGM of Fortum Corporation was held on 28 April 2021. The AGM adopted the Financial Statements and the Consolidated Financial Statements for the financial period 1 January-31 December 2020 and discharged from liability for the year 2020 all persons who acted as members of the Board of Directors and as President and CEO during the year 2020.

The AGM decided that a dividend of EUR 1.12 per share be paid for the financial year that ended on 31 December 2020. The record date was 30 April 2021, and the dividend of EUR 995 million was paid on 7 May 2021.

The AGM supported the Remuneration Report for the company's governing bodies.

The AGM confirmed the remuneration for the Board of Directors for the upcoming term as follows: for the chair EUR 77,200 per year, for the deputy chair EUR 57,500 per year, for a member EUR 40,400 per year, and for the Board member acting as the chair of the Audit and Risk Committee EUR 57,500 per year if he or she is not simultaneously acting as chair or deputy chair of the Board. In addition, a fee of EUR 600 will be paid for each Board meeting and Board Committee meeting. For Board members living outside Finland in Europe, the fee for each meeting will be doubled, and for Board members living outside Europe, the fee for each meeting will be tripled. For Board members living in Finland, the fee for each Board and Board Committee meeting will be doubled for meetings held outside Finland and tripled for meetings held outside Europe. For Board and Committee meetings held as a telephone conference, the fee will be paid as single to all members.

The AGM decided that the Board of Directors will consist of seven members. Mr Veli-Matti Reinikkala was elected as chair, Ms Anja McAlister as deputy chair, and Ms Essimari Kairisto, Mr Teppo Paavola, Mr Philipp Rösler, and Ms Annette Stube were re-elected as members. Ms Luisa Delgado was elected as a new member.

In addition, Deloitte Oy was re-elected as the auditor with Jukka Vattulainen, APA, as the responsible auditor. The auditor's fee is paid pursuant to an invoice approved by the company.

The AGM authorised the Board of Directors to decide on the repurchase and disposal of the company's own shares up to 20,000,000 shares, which corresponds to approximately 2.25 % of all the shares in the company. Only the unrestricted equity of the company can be used to repurchase own shares on the basis of the authorisation. These authorisations cancelled the authorisation resolved by the AGM of 2020 and will be effective until the next AGM and in any event no longer than for a period of 18 months. These authorisations have not been used as per 2 March 2022.

The AGM authorised the Board of Directors to decide on contributions of a maximum of EUR 500,000 for charitable or similar purposes and to decide on the recipients, purposes, and other terms of the contributions. The authorisation will be effective until the next AGM. As per 2 March 2022, a contribution of 300,000 euros of this authorisation has been used.

Board decisions

At the meeting held after the AGM 2021, Fortum's Board of Directors elected to the Nomination and Remuneration Committee Veli-Matti Reinikkala as chair, and Luisa Delgado and Anja McAlister as members.

Furthermore, the Board elected to the Audit and Risk Committee Essimari Kairisto as chair, and Teppo Paavola, Philipp Rösler, and Annette Stube as members.

Shareholders' Nomination Board

On 6 September 2021, Mr Kimmo Viertola, Director General, Prime Minister's Office, Ownership steering department (Chairman), Mr Jouko Pölonen, President and CEO, Ilmarinen Mutual Pension Insurance Company, and Mr Risto Murto, President and CEO, Varma Mutual Pension Insurance Company were appointed to Fortum's Shareholders' Nomination Board. In addition, Veli-Matti Reinikkala, Chairman of Fortum's Board of Directors is a member of the Shareholders' Nomination Board.

Other major events during the fourth quarter of 2021

On 30 September 2021, Fortum's Board of Directors decided to launch the savings period for year 2022 under its Employee Share Savings (ESS) programme. The ESS programme was established in October 2019; the Board of Directors decides separately on the annual launch of each individual savings period. The total amount of all savings for the 2022 savings period may not exceed EUR 6 million.

On 17 December 2021, Fortum's Board of Directors decided to commence the 2022–2024 long-term incentive (LTI) plan for key employees and executives. The 2022–2024 LTI plan is part of Fortum's ongoing LTI programme and follows the same principles as the previous plan. The performance measures applied to the 2022–2024 LTI plan will be based on the total shareholder return measured relative to the peer group comprising selected European utility and gas companies, as well as a target linked to the reduction of absolute CO₂ emissions based on a fossil fleet review addressing the Group's European generation portfolio. The rewards related to the 2022–2024 LTI plan will be paid in spring 2025, assuming that the performance targets are achieved. The 2022–2024 LTI plan will comprise a maximum number of approximately 140 participants, including the members of Fortum Executive Management. The Board of Directors also decided to commence the 2022–2024 restricted share (RS) plan as a supplement to the LTI programme and reserve shares that potentially will be delivered in spring 2025. The maximum number of shares of the plan that may be delivered as a reward is expected to be approximately 620,000 shares for the 2022–2024 LTI plan and 60,000 shares for the 2022–2024 RS plan.

On 20 December 2021, Fortum Group announced that it had set a reduction target for Scope 3 indirect greenhouse gas emissions as part of its ambitious decarbonisation agenda. The target is to reduce Scope 3 indirect emissions by 35% by 2035 at the latest, compared to the base year 2021. Fortum and Uniper take into account resellers and end-users in the Scope 3 indirect emissions. The Scope 3 target confirms the Group-level commitment to achieve carbon neutrality at the latest by 2050 and is in line with the objectives of the Paris Agreement. In December 2020, Fortum Group announced that it is committed to reduce CO₂ emissions (Scopes 1 and 2) in European power generation by at least 50% by 2030 (base year 2019) and to be carbon neutral at the latest by 2035.

Events after the balance sheet date

On 4 January 2022, Fortum announced that to manage any further market volatility and significant commodity price increases, Fortum's subsidiary Uniper has taken precautionary measures to secure additional liquidity and financial flexibility primarily for the winter season. Fortum provided Uniper with intra-group financing, comprising a shareholder loan and parent company guarantee up to EUR 8 billion on arm's length terms. Uniper has drawn the company's existing EUR 1.8 billion revolving credit facility in full, and Uniper agreed with the German state-owned KfW-Bank on a short-term revolving credit facility of up to EUR 2 billion.

On 4 February 2022, Fortum announced that it has won the right from Solar Energy Corporation of India (SECI) to build two solar power parks with a total capacity of 600 MW in Karnataka, India. Fortum participated in two solar auctions held under SECI's ISTS-X Scheme for the total tendered capacity of 1,200 MW. The two solar projects shall be entitled to fixed tariffs for 25 years under SECI's PPAs (power purchase agreements) of 2.37 INR/kWh for 300 MW and 2.36 INR/kWh for 300 MW. The projects are expected to be commissioned by 2024. For the development of solar-based power generation, Fortum utilises partnerships and other forms of co-operation to maintain an asset-light structure. The solar power parks in Karnataka, India, are planned to be developed together with a partner.

On 21 February 2022, Uniper announced that Uniper's Board of Management resolved to propose to its Annual General Meeting, taking place on 18 May 2022, a dividend payment for the financial year 2021 of EUR 0.07 per share (2020: EUR 1.37) corresponding to a total planned dividend of approximately EUR 26 million (2020: EUR 501 million). In the same ad hoc release, Uniper also provided earnings guidance for 2022.

As announced on 18 January 2022, Fortum initiated cooperation in wind power generation in Russia with Bank GPB during the first quarter of 2022. For this purpose, a 1.3-GW portfolio of wind projects is being transferred from the Fortum-Rusnano wind investment fund (50/50 joint venture) to a joint venture established with Bank GPB. Upon the transfer, the joint venture of Fortum-Rusnano wind investment fund will be dissolved. Following these transactions, Fortum holds the investment fund's most recently (wind auction in September 2021) awarded 1.4 GW of wind capacity for new wind power generation scheduled to be commissioned during the years 2025–2027.

On 3 March 2022, Fortum announced that due to the highly volatile market environment, the company has decided to discontinue the reviews on the strategic future alternatives for its electricity retail business (Consumer Solutions) as well as the Polish district heating business. Fortum will continue to develop the businesses as part of the Group. Moreover, Fortum will evaluate alternatives for further decarbonisation of the Polish assets. Fortum Group is committed to carbon neutrality of its European power and heat generation at the latest by 2035.

On 3 March 2022, Fortum announced that it had decided to apply for new operating license for both units at the nuclear power plant in Loviisa, Finland until the end of 2050. If approved, the plant is expected to generate up to 170 terawatt-hours of CO₂-free electricity over the course of the lifetime extension. Investments related to continuing of operations and lifetime extension will amount to an estimated one billion euros until 2050.

On 24 February 2022, Russia started a widespread invasion into Ukraine. As a consequence, the US, the EU and the UK amongst others have imposed sanctions targeting Russia's ability to access capital and financial markets, sanctioning numerous individuals and banks; as well as trading in general. These sanctions and possible counter sanctions as well as further reactions by the US, the EU and the UK could impact Fortum's operations in Russia.

Meanwhile, uninterrupted gas supply from Russia to Europe has continued. Fortum's Russian operations are also running normally.

Given the uncertainty and risks arising from the geopolitical situation, including imposed sanctions and possible future sanctions and counter sanctions and their consequences, there may be significant impact to the fair values and economic lives of assets; as well as on the commodity prices and related margining requirements in Europe. The book value of Fortum's Russian assets, including the exposure in the Nord Stream 2 pipeline project, was approximately EUR 5.5 billion as of 31 December 2021. Fortum is currently assessing the impact of recent developments and mitigating measures, and specifically the following:

- Germany has halted the certification of the gas pipeline Nord Stream 2, while the US has sanctioned Nord Stream 2 AG, its subsidiaries and the CEO. Fortum has, within its Uniper segment, a financial receivable of approximately EUR 1 billion related to the Nord Stream 2 pipeline project.

- The Russian rouble (RUB) has depreciated significantly from the closing rate as of 31 December 2021. If this prevails, it has a negative translation impact on Fortum Group's earnings, assets and liabilities denominated in RUB.
- The above-mentioned events have led to an increase in European commodity prices and corresponding margining outflows for the Fortum Group. Due to the de-risking and financing measures taken, this has not materially deteriorated Fortum's overall liquidity situation.

Fortum actively monitors the situation in order to ensure continued compliance with prevailing rules and applicable sanctions laws.

Dividend distribution proposal

The distributable funds of Fortum Corporation as at 31 December 2021 amounted to EUR 5,747,917,222 including the profit for the financial period 2021 of EUR 1,816,026,744. The company's liquidity is good and the dividend proposed by the Board of Directors will not compromise the company's liquidity.

The Board of Directors proposes to the Annual General Meeting that a dividend of EUR 1.14 per share be paid for the year 2021.

Based on the number of registered shares as at 2 March 2022, the total amount of dividend would be EUR 1,013 million. The Board of Directors proposes that the remaining part of the distributable funds be retained in the shareholders' equity.

Annual General Meeting 2022

Fortum's Annual General Meeting 2022 is planned to be held on 28 March 2022 and the possible dividend-related dates are:

- The ex-dividend date: 29 March 2022
- The record date for dividend payment: 30 March 2022
- The dividend payment date: 6 April 2022

Espoo, 2 March 2022

Fortum Corporation
Board of Directors

Further information:

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The Board of Directors has approved Fortum's 2021 Financial Statements and Fortum's auditors have issued their unqualified Audit Report for 2021 on 2 March 2022. The Financial Statements Bulletin has been prepared in accordance with International Accounting Standard (IAS) 34, Interim Financial Reporting, as adopted by the EU. The Financial Statements Bulletin is unaudited.

Financial calendar in 2022

Fortum's Financial Statements and Operating and Financial Review for 2021 will be published during week 10 at the latest.

Fortum Corporation
January–December 2021 Financial Statements Bulletin

Fortum will publish three interim reports in 2022:

- January–March on 12 May 2022 at approximately 9.00 EEST
- January–June on 12 August 2022 at approximately 9.00 EEST
- January–September 10 November 2022 at approximately 9.00 EET

Uniper published its 2021 Annual Report on 23 February 2022.

Uniper will publish its interim reports in 2022:

- Financial Results January–March 2022 on 3 May 2022
- Financial Results January–June 2022 on 2 August 2022
- Financial Results January–September 2022 on 3 November 2022

Distribution:

Nasdaq Helsinki
Key media
www.fortum.com

More information, including detailed quarterly information, is available at www.fortum.com/investors

The Financial Statements Bulletin is unaudited.

Condensed consolidated income statement

EUR million	Note	IV/2021	IV/2020	2021	2020
Sales	3	50,079	21,279	112,400	49,015
Other income		5,440	1,260	12,380	4,802
Materials and services		-48,003	-19,127	-105,170	-44,298
Employee benefits		-451	-382	-1,561	-1,195
Depreciation and amortisation	3	-346	-320	-1,281	-1,090
Other expenses		-5,648	-1,782	-14,232	-5,890
Comparable operating profit	3	1,070	928	2,536	1,344
Items affecting comparability	3, 4	942	-470	-3,124	255
Operating profit	3	2,012	458	-588	1,599
Share of profit/loss of associates and joint ventures	3, 12	40	113	192	656
Interest expense		-57	-38	-202	-170
Interest income		40	31	156	111
Other financial items - net		94	-11	154	3
Finance costs - net	7	76	-18	107	-56
Profit before income tax		2,128	554	-289	2,199
Income tax expense	8	-1,125	-142	175	-344
Net profit		1,003	411	-114	1,855
Attributable to:					
Owners of the parent		842	379	739	1,823
Non-controlling interests		162	31	-852	32
		1,003	411	-114	1,855
Earnings per share for profit attributable to the equity owners of the company (EUR per share)					
Basic		0.95	0.43	0.83	2.05

As Fortum currently has no dilutive instruments outstanding, diluted earnings per share is the same as basic earnings per share.

EUR million	Note	IV/2021	IV/2020	2021	2020
Comparable operating profit		1,070	928	2,536	1,344
Impairment charges and reversals		-5	4	-83	2
Capital gains and other related items		-5	-16	2,681	765
Impact from acquisition accounting		-	-	-	-222
Changes in fair values of derivatives hedging future cash flow		1,134	-605	-5,424	-675
Other		-182	147	-299	386
Items affecting comparability	3, 4	942	-470	-3,124	255
Operating profit		2,012	458	-588	1,599

See Note 23 Definitions and reconciliations of key figures.

Condensed consolidated statement of comprehensive income

EUR million	Note	IV/2021	IV/2020	2021	2020
Net profit		1,003	411	-114	1,855
Other comprehensive income					
Items that may be reclassified to profit or loss in subsequent periods:					
Cash flow hedges					
Fair value gains/losses ¹⁾		-600	-268	-1,365	-155
Transfers to income statement		28	39	117	45
Transfers to inventory/property, plant and equipment		-2	1	1	2
Deferred taxes		131	47	265	21
Net investment hedges					
Fair value gains/losses		2	-3	-15	48
Deferred taxes		-2	1	1	-8
Exchange differences on translating foreign operations ²⁾		32	314	322	-524
Share of other comprehensive income of associates and joint ventures		3	13	8	-250
Transfer to income statement due to impact from acquisition accounting	4	-	-	-	222
Other changes		-63	-8	20	-70
		-472	135	-646	-667
Items that will not be reclassified to profit or loss in subsequent periods:					
Remeasurement of investments		-13	-44	-6	-28
Actuarial gains/losses on defined benefit plans		12	-18	226	-244
Actuarial gains/losses on defined benefit plans in associates and joint ventures		0	-2	29	67
		-1	-64	250	-205
Other comprehensive income/expense for the period, net of deferred taxes		-472	71	-397	-873
Total comprehensive income/expense for the period		531	482	-510	982
Total comprehensive income/expense attributable to:					
Owners of the parent		405	444	185	1,052
Non-controlling interests		126	38	-695	-70
		531	482	-510	982

- 1) Fair valuation of cash flow hedges mainly relates to fair valuation of derivatives, such as futures and forwards, hedging commodity price for future transactions, where hedge accounting is applied. When commodity price is higher (lower) than the hedging price, the impact on equity is negative (positive).
- 2) Translation differences from translation of foreign entities, mainly RUB and SEK.

Condensed consolidated balance sheet

EUR million	Note	31 Dec 2021	31 Dec 2020
ASSETS			
Non-current assets			
Intangible assets ¹⁾	10	2,167	2,268
Property, plant and equipment and right-of-use assets	11	19,049	19,367
Participations in associates and joint ventures	12	2,461	2,912
Shares in Nuclear Waste Funds	15	3,515	3,445
Other non-current assets		570	479
Deferred tax assets		2,149	1,089
Derivative financial instruments	5	17,096	2,946
Long-term interest-bearing receivables	13	2,392	2,402
Total non-current assets ¹⁾		49,399	34,908
Current assets			
Inventories ¹⁾		2,275	1,936
Derivative financial instruments	5	65,392	7,531
Short-term interest-bearing receivables	13	715	598
Income tax receivables		161	156
Margin receivables	14	9,163	1,132
Trade and other receivables		14,856	8,906
Liquid funds	14	7,592	2,308
Total current assets ¹⁾		100,155	22,567
Assets held for sale	6	108	335
Total assets		149,661	57,810
EQUITY			
Equity attributable to owners of the parent			
Share capital		3,046	3,046
Share premium		73	73
Retained earnings		10,062	10,149
Other equity components		-1,050	-316
Total		12,131	12,953
Non-controlling interests		1,534	2,624
Total equity		13,665	15,577
LIABILITIES			
Non-current liabilities			
Interest-bearing liabilities	14	8,701	8,785
Derivative financial instruments	5	16,657	2,657
Deferred tax liabilities		827	952
Nuclear provisions	15	3,891	3,866
Other provisions	16	4,108	3,452
Pension obligations, net	17	1,190	1,520
Other non-current liabilities		397	344
Total non-current liabilities		35,771	21,576
Current liabilities			
Interest-bearing liabilities	14	8,519	1,877
Derivative financial instruments	5	71,947	7,937
Other provisions	16	2,299	780
Margin liabilities	14	985	331
Trade and other payables		16,477	9,525
Total current liabilities		100,226	20,451
Liabilities related to assets held for sale	6	-	206
Total liabilities		135,997	42,233
Total equity and liabilities		149,661	57,810

1) In IV/2021, CO₂ emission allowances included in Intangible assets were reclassified to Inventories. Comparatives have been reclassified accordingly. See Note 10 Intangible assets

Condensed consolidated statement of changes in total equity

EUR million	Note	Share capital	Share premium	Retained earnings		Other equity components			Owners of the parent	Non-controlling interests	Total equity
				Retained earnings	Translation of foreign operations	Cash flow hedges	Other OCI items	OCI items associates and joint ventures			
Total equity 1 January 2021		3,046	73	13,097	-2,948	-158	-175	18	12,953	2,624	15,577
IS Net profit				739					739	-852	-114
Translation differences					180	2	2		184	137	322
Other comprehensive income						-982	207	37	-738	20	-718
Total comprehensive income for the period				739	180	-980	209	37	185	-695	-510
Cash dividend				-995					-995	-171	-1,166
Transactions with non-controlling interests				-15					-15	-221	-236
Other				3					3	-3	0
BS Total equity 31 December 2021		3,046	73	12,830	-2,768	-1,138	34	54	12,131	1,534	13,665
Total equity 1 January 2020		3,046	73	12,441	-2,459	-70	60	-108	12,982	252	13,235
IS Net profit				1,823					1,823	32	1,855
Translation differences					-490	-1	-3	2	-492	-32	-524
Other comprehensive income						-87	-231	40	-279	-70	-349
Total comprehensive income for the period				1,823	-490	-88	-235	42	1,052	-70	982
Cash dividend				-977					-977	-160	-1,137
Changes due to business combinations	6									2,847	2,847
Impact from acquisition accounting	4			-84				84	-	-	-
Transactions with non-controlling interests				-107					-107	-247	-354
Other				2					2	1	4
BS Total equity 31 December 2020		3,046	73	13,097	-2,948	-158	-175	18	12,953	2,624	15,577

Translation differences

Translation of financial information from subsidiaries in foreign currency is done using the average rate for the income statement and the end rate for the balance sheet. The exchange rate differences arising from translation (mainly related to RUB and SEK) to EUR are recognised in equity. For information regarding exchange rates used, see Note 1.5 Key exchange rates used in consolidated financial statements.

Impact from acquisition accounting

Consolidation of an associated company results includes recording a share of the associated company's other comprehensive income (OCI). If an associated company is either divested or becomes a subsidiary, IFRS requires that these previously recorded OCI items are reclassified inside equity either via the consolidated income statement or directly to retained earnings, depending on the nature of the OCI item. Reclassification does not have an impact on total equity.

The above resulted in EUR -84 million being reclassified in 2020 from OCI to retained earnings. See Note 4 Comparable operating profit and comparable net profit.

Cash flow hedges

The impact on equity attributable to owners of the parent from fair valuation of cash flow hedges mainly relates to fair valuation of commodity derivatives, such as futures and forwards, hedging commodity sales price of future transactions, where hedge accounting is applied. When commodity market price is higher (lower) than the hedging price, the impact on equity is negative (positive).

Cash dividends

A dividend for 2020 of EUR 1.12 per share, amounting to a total of EUR 995 million, was decided in the Annual General Meeting on 28 April 2021. The dividend was paid on 7 May 2021. See Note 9 Dividend per share.

Condensed consolidated cash flow statement

EUR million	Note	IV/2021	IV/2020	2021	2020
Cash flow from operating activities					
IS Net profit		1,003	411	-114	1,855
Adjustments:					
Income tax expense		1,125	142	-175	344
Finance costs - net		-76	18	-107	56
Share of profit/loss of associates and joint ventures	12	-40	-113	-192	-656
Depreciation and amortisation	3	346	320	1,281	1,090
Operating profit before depreciations (EBITDA)		2,358	777	693	2,688
Items affecting comparability	3, 4	-942	470	3,124	-255
Comparable EBITDA		1,416	1,247	3,817	2,434
Non-cash and other items ¹⁾		940	282	1,506	394
Interest received		27	14	75	46
Interest paid		-39	-51	-202	-208
Dividends received		23	29	124	121
Income taxes paid		-165	-33	-493	-267
Funds from operations ¹⁾		2,202	1,488	4,827	2,520
Change in working capital ¹⁾		-626	-725	144	35
Net cash from operating activities		1,576	763	4,970	2,555
Cash flow from investing activities					
Capital expenditures	3	-329	-419	-1,178	-1,101
Acquisitions of shares	6	-24	-158	-294	-1,801
Proceeds from sales of property, plant and equipment		2	5	20	16
Divestments of shares and capital returns	6	115	21	3,863	1,244
Shareholder loans to associated companies and joint ventures	13	15	-4	-8	-44
Change in margin receivables		-2,723	-566	-7,964	-552
Change in other interest-bearing receivables	13	-65	27	-166	98
Net cash from/used in investing activities		-3,009	-1,093	-5,727	-2,140
Cash flow before financing activities					
		-1,433	-330	-756	415
Cash flow from financing activities					
Proceeds from long-term liabilities	14	3,297	93	3,439	2,569
Payments of long-term liabilities	14	-1,619	-40	-2,315	-507
Change in short-term liabilities	14	2,794	317	5,364	207
Dividends paid to the owners of the parent	9	0	0	-995	-977
Dividends paid to non-controlling interests		-26	-13	-171	-160
Change in margin liabilities		-1,709	-193	649	-623
Other financing items		46	-5	43	-3
Net cash from/used in financing activities		2,783	159	6,013	505
Net increase(+)/decrease(-) in liquid funds		1,350	-172	5,256	920
Liquid funds at the beginning of the period	14	6,240	2,474	2,308	1,435
Foreign exchange differences in liquid funds		2	8	29	-45
Liquid funds at the end of the period	14	7,592	2,308	7,592	2,308

1) In IV/2021, CO₂ emission allowances included in Intangible assets were reclassified to Inventories. See Note 10 Intangible assets. The change is also reflected in Change in working capital and Non-cash and other items. Comparatives have been reclassified accordingly. The change in liabilities to return emission rights continues to be reported in non-cash and other items.

Additional cash flow information

Change in working capital

EUR million	IV/2021	IV/2020	2021	2020
Change in interest-free receivables, decrease(+)/increase(-)	-5,435	-1,812	-5,892	-1,106
Change in inventories, decrease(+)/increase(-) ¹⁾	517	40	-192	306
Change in interest-free liabilities, decrease(-)/increase(+)	4,293	1,047	6,227	835
CF Total ¹⁾	-626	-725	144	35

1) In IV/2021, CO₂ emission allowances included in Intangible assets were reclassified to Inventories. See Note 10 Intangible assets. The change is also reflected in Change in working capital and Non-cash and other items in the cash flow. Comparatives have been reclassified accordingly.

Capital expenditure in cash flow

EUR million	IV/2021	IV/2020	2021	2020
Capital expenditure ¹⁾	335	471	1,116	1,146
Change in not yet paid investments, decrease(+)/increase(-)	-6	-44	78	-6
Capitalised borrowing costs ¹⁾	0	-8	-16	-39
CF Total	329	419	1,178	1,101

1) 2020 comparatives were revised in I/2021 due to a revision of the lease adjustment following the finalisation of the purchase price allocation for the Uniper acquisition.

Acquisition of shares in cash flow

Acquisition of shares, net of cash acquired, amounted to EUR 294 million during 2021 (2020: 1,801). Acquisition of shares mainly relates to the acquisition of Uniper shares. For additional information, see Note 6.1 Acquisitions.

Divestment of shares in cash flow

EUR million	IV/2021	IV/2020	2021	2020
Proceeds from sales of subsidiaries, net of cash disposed	103	9	932	1,156
Proceeds from sales and capital returns of associates and joint ventures	2	0	2,903	49
Proceeds from sales of other investments	10	12	28	40
CF Total	115	21	3,863	1,244

During 2021, Fortum completed the divestment of the 50% stake in the Swedish district heating and cooling company Stockholm Exergi, the district heating business in the Baltics, the Pavagada II and the Rajasthan solar power plants in India, the 80% stake in the Sør fjord wind park in Norway and eight small hydropower plants in Sweden. During 2020, Fortum completed the divestment of the district heating business in Järvenpää and Joensuu, Finland, the 80% stake in the Nordic wind portfolio and the 60% stake in the public charging point operator for electrical vehicles in the Nordics. For further information, see Note 6.2 Disposals.

Change in financial net debt

EUR million	Note	2021	2020
Financial net debt, beginning of the period		7,023	4,833
Comparable EBITDA		3,817	2,434
Non-cash and other items ¹⁾		1,506	394
Paid net financial costs and dividends received		-3	-40
Income taxes paid		-493	-267
Change in working capital ¹⁾		144	35
Capital expenditures		-1,178	-1,101
Acquisitions		-294	-1,801
Divestments and proceeds from sale of property, plant and equipment		3,883	1,260
Change in interest-bearing receivables		-174	54
Dividends to the owners of the parent		-995	-977
Dividends to non-controlling interests		-171	-160
Other financing activities		43	-3
Net cash flow ('-' increase in financial net debt)		6,084	-173
Acquired financial debt		-	2,010
Foreign exchange rate differences and other changes		-150	6
Financial net debt, end of the period	14	789	7,023

1) In IV/2021, CO₂ emission allowances included in Intangible assets were reclassified to Inventories. See Note 10 Intangible assets. The change is also reflected in Change in working capital and Non-cash and other items in the cash flow. Comparatives have been reclassified accordingly. The change in liabilities to return emission rights continues to be reported in non-cash and other items.

Excludes financial net debt relating to assets held for sale. See Note 6 Acquisitions, disposals and assets held for sale.

Capital risk management

The long-term financial targets are:

- Financial net debt/comparable EBITDA below 2x
- Hurdle rates for new investments of WACC
 - +100 bps for green investments
 - +200 bps for other investments

Comparable EBITDA is defined as an alternative performance measure and used as a component in the capital structure target 'Financial net debt-to-Comparable EBITDA'. In 2020, Comparable EBITDA included contribution from Uniper for the period of 1 April to 31 December 2020 since Uniper was consolidated as a subsidiary from 31 March 2020. Until 31 March 2020, Uniper's contribution to the income statement was recognised in the Share of profit/loss of associates and joint ventures.

Fortum targets to have a solid investment grade rating of at least BBB to maintain its financial strength, preserve financial flexibility, and good access to capital markets for the enlarged Group. Fortum and Uniper will carefully manage their balance sheets going forward, focusing on profitability, optimising of cash flow, and tight prioritising of capital expenditure in the current market and business environment.

In July 2021 S&P Global Ratings revised its long-term credit rating for Fortum to BBB, with a stable outlook (previously BBB with Negative Outlook). Fitch Ratings long-term credit rating for Fortum was also revised in June 2021 to BBB, with a stable outlook (previously BBB with Negative Outlook).

S&P Global Ratings long-term credit rating for Uniper was also revised in September 2021 to BBB, with a stable outlook. In July 2021, S&P Global Ratings also revised its long-term rating for Uniper to BBB, with a stable outlook (previously BBB with a negative outlook).

In January 2022, S&P Global Ratings affirmed both Fortum's and Uniper's rating of BBB with a stable outlook. Fortum's dividend policy 'is to pay a stable, sustainable, and over time increasing dividend'.

Financial net debt/comparable EBITDA

EUR million	Note	2021	2020
+ Interest-bearing liabilities		17,220	10,662
- BS Liquid funds		7,592	2,308
- Non-current securities		111	98
- Collateral arrangement securities		549	432
- Securities in interest-bearing receivables		660	530
- BS Margin receivables		9,163	1,132
+ BS Margin liabilities		985	331
+/- Net margin liabilities/receivables		-8,179	-801
Financial net debt	14	789	7,023
IS Operating profit		-588	1,599
+ IS Depreciation and amortisation		1,281	1,090
EBITDA		693	2,689
- IS Items affecting comparability		3,124	-255
Comparable EBITDA		3,817	2,434
Financial net debt/comparable EBITDA		0.2	2.9

See Note 4 Comparable operating profit and comparable net profit for details on items affecting comparability, and Note 14 Interest-bearing net debt, including further details of the financing and liquidity status.

Key figures

From the first quarter of 2021, Fortum discloses two new performance measures: comparable net profit and comparable earnings per share. See Note 4 Comparable operating profit and comparable net profit and Note 23 Definitions and reconciliations of key figures. Uniper has been consolidated as a subsidiary from 31 March 2020. Previously, Uniper's contribution to the income statement was recognised in the Share of profit/loss of associates and joint ventures.

EUR million or as indicated	IV/2021	IV/2020	2021	2020
Reported				
IS Sales	50,079	21,279	112,400	49,015
IS Operating profit	2,012	458	-588	1,599
IS Share of profit/loss of associates and joint ventures	40	113	192	656
IS Net profit	1,003	411	-114	1,855
IS Net profit (after non-controlling interests)	842	379	739	1,823
Earnings per share (basic), EUR	0.95	0.43	0.83	2.05
CF Net cash from operating activities	1,576	763	4,970	2,555
Capital expenditure and gross investments in shares, EUR million	356	623	1,407	4,953
Capital expenditure, EUR million ¹⁾	335	471	1,116	1,146
Number of employees			19,140	19,933

EUR million or as indicated	IV/2021	IV/2020	2021	2020
Comparable				
EBITDA	1,416	1,247	3,817	2,434
IS Operating profit	1,070	928	2,536	1,344
Share of profit/loss of associates and joint ventures	27	63	154	656
Net profit (after non-controlling interests)	693	610	1,778	1,483
Earnings per share (basic), EUR	0.78	0.69	2.00	1.67

EUR million	31 Dec 2021	31 Dec 2020
Financial net debt, EUR million	789	7,023
Adjusted net debt, EUR million	3,227	9,784
Financial net debt/comparable EBITDA	0.2	2.9
Equity per share, EUR	13.66	14.58
Average number of shares, 1,000 shares	888,294	888,294
Diluted adjusted average number of shares, 1,000 shares	888,294	888,294
Number of registered shares, 1,000 shares	888,294	888,294

1) 2020 comparatives were revised in I/2021 due to a revision of the lease adjustment following the finalisation of the purchase price allocation for the Uniper acquisition.

Notes to the condensed consolidated interim financial statements

1. Significant accounting policies

1.1 Basis of preparation

The unaudited condensed interim financial statements have been prepared in accordance with International Accounting Standard (IAS) 34, Interim Financial Reporting, as adopted by the EU. The condensed interim financial report should be read in conjunction with the consolidated financial statements for the year ended 31 December 2020.

The figures in the consolidated interim financial statements have been rounded and consequently the sum of individual figures may deviate from the sum presented. Key figures have been calculated using exact figures.

Part of Fortum's business operations are seasonal, with the comparable operating profit usually being higher for the first and fourth quarter of the year. Fortum consolidated Uniper's income statement from the second quarter of 2020, which is the main reason for the change in quarterly figures. Uniper was accounted for as an associated company until 31 March 2020.

The following symbols show which amounts in the notes reconcile to the items in the income statement, balance sheet and cash flow statement:

IS = Income statement
BS = Balance sheet
CF = Cash flow

Impact of Covid-19 on consolidated financial statements

Fortum has considered the potential impact of the Covid-19 pandemic on its business operations, and concluded the overall effect in the consolidated financial statements not to be significant.

During 2020 and 2021, the Covid-19 pandemic resulted in new and partly unexpected risks as societies and governments across the world implemented drastic measures to contain the spread of the disease. Although the impacts for Fortum have so far been limited, and the situation compared to the end of 2020 has improved, the risks related to a prolonged pandemic cannot be ruled out. The main risk factors include lower commodity prices, decreased demand, increased risk of credit defaults and delayed payments, project delays, and increased risk of operational incidents or prolonged maintenance as a result of travel restrictions, absence of key personnel, as well as difficulties in obtaining key materials and spare parts. Fortum is closely monitoring the development of the pandemic and its potential impacts.

Fortum has assessed whether there are any indications for impairment based on internal and external sources of information, such as the effects of the Covid-19. Fortum does not currently foresee that Covid-19 would have such long-term effects that it would impact the overall values of its non-current assets, such as property, plant and equipment and intangible assets.

1.2 Uniper acquisition

On 8 October 2019, Fortum entered into agreements to acquire all the shares held by funds managed by Elliott Management Corporation and its affiliates ("Elliott") and Knight Vinke Energy Advisors Limited and its affiliates ("Knight Vinke"). Control over Uniper was acquired on 26 March 2020. On 31 March 2020, Fortum consolidated the balance sheet of Uniper. The income statement impact from 26 March 2020 to 31 March 2020 was not material. Fortum's consolidated stake in Uniper was 73.4% on 31 March 2020, and 78.0% on 31 December 2021 (31 Dec 2020: 76.1%). Uniper was accounted for as an associated company until 31 March 2020.

The purchase price accounting for the Uniper acquisition was completed on 31 March 2021. No further fair value adjustments were made to the purchase price allocation presented in the 31 December 2020 financial statements.

In IV/2020 Fortum presented the preliminary purchase price allocation for the Uniper acquisition, which resulted in adjustments to Uniper's 31 March 2020 opening balance sheet. These adjustments led to the restatement of the previous quarters in 2020. Fair value adjustments made to Uniper's 31 March 2020 opening balance sheet mainly related to property, plant and equipment and right-of-use assets, participations in associates and joint ventures, lease liabilities, other provisions, and deferred taxes. Increase in the value of property, plant and equipment resulted in additional depreciation (EUR 16 million in 2021); and increase in the value of the lease liability (due to a lower discount rate) resulted in lower interest cost (EUR 9 million in 2021). The lease adjustment was revised in I/2021 in connection with the finalisation of the purchase price allocation for the Uniper acquisition. Excess of the acquisition value over the fair value of Uniper's net assets (EUR 515 million) is recognised as goodwill. See Note 6.1 Acquisitions.

In connection with the purchase price allocation, Fortum was also required to assess the circumstances giving rise to items recognised in Uniper segment's income statement during the one-year window from the acquisition date. In I/2021, Fortum adjusted impairments (EUR 22 million) and reversals of impairments (EUR 12 million) from Uniper's standalone income statement. These adjustments did not have an impact on Uniper's 31 March 2020 opening balance sheet.

For more information on Uniper acquisition, see Note 1 Significant accounting policies in the 2020 consolidated financial statements.

1.3 Alternative performance measures

According to the ESMA Guidelines on Alternative Performance Measures, an Alternative Performance Measure (APM) is understood as a financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined or specified in the applicable financial reporting framework.

Fortum uses APMs, such as Comparable operating profit and Comparable EBITDA, in the financial target setting and forecasting, management's follow-up of financial performance of segments and the Group, as well as for the allocation of resources in the Group's performance management process. Items affecting comparability are excluded from Comparable operating profit and Comparable EBITDA and disclosed separately in Fortum's consolidated income statement to support the transparency of underlying business performance when comparing results between periods.

Fortum's long-term financial target for capital structure is Financial net debt to comparable EBITDA (see Capital risk management and Note 23 Definitions and reconciliations of key figures).

From the first quarter of 2021, Fortum discloses two new APMs to provide additional financial performance indicators to support meaningful comparison of underlying net profitability between periods.

- Comparable net profit is calculated as comparable operating profit +/- comparable share of profit/loss from associates and joint ventures +/- comparable finance costs – net +/- comparable income tax expense +/- comparable non-controlling interests
- Comparable earnings per share is calculated as comparable net profit divided by average number of shares during the period

See Note 4 Comparable operating profit and comparable net profit and Note 23 Definitions and reconciliations of key figures.

1.4 Accounting policies

The same accounting policies that were applied in the preparation of the consolidated financial statements for the year ended 31 December 2020, have been applied in these condensed interim financial statements. New standards, amendments and interpretations effective from 1 January 2021 have not had a material impact on Fortum's consolidated financial statements.

1.5 Key exchange rates used in consolidated financial statements

The balance sheet date rate is based on the exchange rate published by the European Central Bank for the closing date. The average exchange rate is calculated as an average of daily closing rates from the European Central Bank.

Key exchange rates used in consolidated financial statements:

Average rate	Jan-Dec 2021	Jan-Sept 2021	Jan-June 2021	Jan-Mar 2021	Jan-Dec 2020	Jan-Sept 2020	Jan-June 2020	Jan-Mar 2020
United Kingdom (GBP)	0.8596	0.8636	0.8680	0.8739	0.8897	0.8851	0.8746	0.8623
Norway (NOK)	10.1633	10.2280	10.1759	10.2584	10.7228	10.7115	10.7324	10.4652
Poland (PLN)	4.5652	4.5473	4.5374	4.5457	4.4430	4.4220	4.4120	4.3241
Russia (RUB)	87.1527	88.5335	89.5502	89.6675	82.7248	79.9599	76.6692	73.8205
Sweden (SEK)	10.1465	10.1528	10.1308	10.1202	10.4848	10.5582	10.6599	10.6689
United States (USD)	1.1827	1.1962	1.2053	1.2048	1.1422	1.1250	1.1020	1.1027

Balance sheet date rate	31 Dec 2021	30 Sept 2021	30 June 2021	31 Mar 2021	31 Dec 2020	30 Sept 2020	30 June 2020	31 Mar 2020
United Kingdom (GBP)	0.8403	0.8605	0.8581	0.8521	0.8990	0.9124	0.9124	0.8864
Norway (NOK)	9.9888	10.1650	10.1717	9.9955	10.4703	11.1008	10.9120	11.5100
Poland (PLN)	4.5969	4.6197	4.5201	4.6508	4.5597	4.5462	4.4560	4.5506
Russia (RUB)	85.3004	84.3391	86.7725	88.3175	91.4671	91.7763	79.6300	85.9486
Sweden (SEK)	10.2503	10.1683	10.1110	10.2383	10.0343	10.5713	10.4948	11.0613
United States (USD)	1.1326	1.1579	1.1884	1.1725	1.2271	1.1708	1.1198	1.0956

2. Critical accounting estimates and judgements

The preparation of interim financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities, income and expense. Actual results may differ from these estimates. In preparing these interim financial statements, significant judgements made by management in applying the Group's accounting policies and the key sources of estimation uncertainty were the same as those that applied to the consolidated financial statements for the year ended 31 December 2020.

3. Segment information

Fortum's reportable segments under IFRS are Generation, Russia, City Solutions, Consumer Solutions and Uniper. Other Operations includes corporate functions, R&D and technology development projects.

Fortum revised its reportable segments following the consolidation of Uniper as a subsidiary on 31 March 2020, and reported Uniper as a separate segment from II/2020. Uniper was accounted for as an associated company until 31 March 2020 with three-month time lag, which meant that Fortum's I/2020 results included Fortum's share of Uniper results from 1 October 2019 to 31 March 2020 reported in Other Operations. See also Note 12 Participations in associated companies and joint ventures.

Further, reporting of both the Uniper segment and the Generation segment were impacted by adjustments for the joint ownership in the Swedish nuclear company, OKG Aktiebolag (OKG AB). Fortum and Uniper are co-owners in the Swedish nuclear company OKG AB. OKG AB is consolidated into Uniper Group as a subsidiary with a 45.5% minority representing Fortum's ownership in OKG AB. Fortum accounted for the shareholding in OKG AB as an associated company until 31 March 2020. On 31 March 2020, OKG AB was consolidated as a subsidiary to Fortum Group. Fortum has adjusted Uniper's standalone income statement and balance sheet numbers in respect of Fortum's shareholding in OKG AB, as well as adjusted operating profit, share of profit/loss in associates and joint ventures and net assets of OKG AB recorded in the Generation segment. Consequently, the Group's subsidiary, OKG AB, is split between the two segments according to ownership.

Quarter

EUR million	Note	Generation ¹⁾		Russia		City Solutions ¹⁾		Consumer Solutions		Uniper		Other Operations		Total	
		IV/2021	IV/2020	IV/2021	IV/2020	IV/2021	IV/2020	IV/2021	IV/2020	IV/2021	IV/2020	IV/2021	IV/2020	IV/2021	IV/2020
Income statement data by segment															
Power sales ¹⁾		878	506	219	188	77	41	920	330	10,944	6,567	0	0	13,037	7,633
Heat sales		-	-	44	48	208	164	-	-	152	81	-	-	405	293
Gas sales		77	28	-	-	-	0	91	43	26,043	9,428	-	-	26,211	9,499
Waste treatment sales		0	-	-	-	69	69	-	-	-	-	-	-	69	69
Other sales		10	7	4	2	72	62	41	-3	10,779	3,915	35	38	10,941	4,021
Sales		965	541	267	238	427	337	1,052	370	47,918	19,990	35	38	50,663	21,515
Internal eliminations		15	-86	-1	-1	-11	-19	-8	5	-16	0	-24	-30	-45	-130
Netting of Nord Pool transactions ²⁾														-540	-105
IS External sales		979	455	266	237	416	318	1,044	376	47,902	19,990	11	8	50,079	21,279
Comparable EBITDA		450	220	118	108	119	90	3	38	763	819	-36	-28	1,416	1,247
IS Depreciation and amortisation		-49	-42	-39	-33	-46	-50	-19	-17	-185	-170	-8	-9	-346	-320
IS Comparable operating profit		401	177	80	76	73	41	-17	21	578	649	-44	-36	1,070	928
Impairment charges and reversals		-	2	-5	-	-	-	-	-	0	3	-	-	-5	4
Capital gains and other related items		0	0	0	0	0	0	0	0	-3	-17	-1	0	-5	-16
Impact from acquisition accounting		-	-	-	-	-	-	-	-	-	-	0	-	0	-
Changes in fair values of derivatives															
hedging future cash flow		-31	-18	0	0	-59	3	129	27	1,095	-617	0	-	1,134	-605
Other		0	0	-	-	-	-	-	-	-177	147	-6	-	-182	147
IS Items affecting comparability	4	-31	-17	-5	0	-59	3	129	27	914	-483	-7	0	942	-470
IS Operating profit		370	160	75	76	14	44	113	49	1,492	166	-51	-36	2,012	458
Comparable share of profit/loss of associates and joint ventures	4, 12	8	5	5	15	4	19	-	-	10	25	0	-1	27	63
IS Share of profit/loss of associates and joint ventures	12	17	46	5	15	4	19	-	-	14	35	0	-1	40	113
Gross investments / divestments by segment															
Gross investments in shares	6	4	63	1	-1	0	2	0	-	5	3	10	86	21	152
Capital expenditure ³⁾		72	52	21	20	42	114	19	14	180	258	3	13	335	471
Gross divestments of shares	6	0	0	0	0	286	0	0	10	74	13	0	0	360	24

1) Sales, both internal and external, include effects from realised hedging contracts. Effect on sales can be negative or positive depending on the difference between average contract price and realised spot price. Power sales contains realised result from commodity derivatives, which have not had hedge accounting status under IFRS 9, but have been considered operatively as hedges.

2) Sales and purchases with Nord Pool Spot are netted on Group level on an hourly basis and posted either as revenue or cost depending on if Fortum is a net seller or net buyer during any particular hour.

3) 2020 comparatives were revised in I/2021 due to a revision of the lease adjustment following the finalisation of the purchase price allocation for the Uniper acquisition.

Year-to-date

EUR million	Note	Generation ¹⁾		Russia		City Solutions ¹⁾		Consumer Solutions		Uniper		Other Operations		Total	
		2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Income statement data by segment															
Power sales ¹⁾		2,690	1,878	761	791	205	121	2,253	1,057	28,365	16,994	0	0	34,274	20,841
Heat sales		-	-	137	134	612	516	-	-	437	191	-	-	1,186	841
Gas sales		167	84	-	-	1	1	225	139	59,577	22,176	-	-	59,970	22,400
Waste treatment sales		0	-	-	-	250	252	-	-	-	-	-	-	250	252
Other sales		42	44	8	4	235	185	144	70	17,612	5,154	138	140	18,179	5,598
Sales		2,899	2,006	906	929	1,302	1,075	2,622	1,267	105,992	44,514	138	140	113,860	49,931
Internal eliminations		-143	-421	-3	-2	-39	-64	-14	-2	-29	0	-104	-110	-331	-598
Netting of Nord Pool transactions ²⁾														-1,128	-317
IS External sales		2,756	1,585	903	927	1,264	1,012	2,608	1,264	105,964	44,514	34	30	112,400	49,015
Comparable EBITDA		1,299	886	404	394	317	239	123	153	1,789	856	-114	-94	3,817	2,434
IS Depreciation and amortisation		-189	-164	-142	-143	-182	-191	-71	-63	-668	-494	-28	-35	-1,281	-1,090
IS Comparable operating profit		1,110	722	261	251	135	47	52	90	1,120	363	-142	-129	2,536	1,344
Impairment charges and reversals		-	2	-35	-	-	-	-	-	-48	0	-	-	-83	2
Capital gains and other related items		50	0	1	1	2,608	723	0	0	9	-13	14	53	2,681	765
Impact from acquisition accounting		-	-	-	-	-	-	-	-	-	-	0	-222	0	-222
Changes in fair values of derivatives															
hedging future cash flow		-107	-12	0	0	-72	5	443	39	-5,688	-706	-	-	-5,424	-675
Other		1	0	-	-	-	-	-	-	-294	386	-6	-	-299	386
IS Items affecting comparability	4	-56	-11	-34	1	2,536	728	443	39	-6,021	-333	8	-169	-3,124	255
IS Operating profit		1,054	711	227	252	2,671	775	495	129	-4,901	29	-134	-298	-588	1,599
Comparable share of profit/loss of associates and joint ventures		11	13	62	47	42	57	-	-	39	38	0	502	154	656
IS Share of profit/loss of associates and joint ventures	12	36	29	62	47	42	57	-	-	51	54	0	470	192	656
Gross investments / divestments by segment															
Gross investments in shares	6	7	70	36	48	2	114	-	0	9	3	237	3,572	290	3,807
Capital expenditure ³⁾		168	158	47	43	161	219	68	57	673	635	15	34	1,116	1,146
Gross divestments of shares	6	129	171	18	0	3,870	895	0	10	88	69	19	81	4,122	1,226

1) Sales, both internal and external, include effects from realised hedging contracts. Effect on sales can be negative or positive depending on the difference between average contract price and realised spot price. Power sales contains realised result from commodity derivatives, which have not had hedge accounting status under IFRS 9, but have been considered operatively as hedges.

2) Sales and purchases with Nord Pool Spot are netted on Group level on an hourly basis and posted either as revenue or cost depending on if Fortum is a net seller or net buyer during any particular hour.

3) 2020 comparatives were revised in I/2021 due to a revision of the lease adjustment following the finalisation of the purchase price allocation for the Uniper acquisition.

Segment assets and liabilities

EUR million	Note	Generation		Russia		City Solutions		Consumer Solutions		Uniper		Other Operations		Total	
		31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
Non-interest-bearing assets		6,066	5,780	1,923	2,020	2,874	3,512	1,496	780	26,616	20,646	283	270	39,258	33,009
BS Participations in associates and joint ventures	12	1,005	961	678	577	74	612	-	-	671	729	32	33	2,461	2,912
Eliminations														-386	-57
Total segment assets		7,071	6,742	2,601	2,597	2,949	4,123	1,496	780	27,286	21,375	315	303	41,333	35,863
Interest-bearing receivables	13													3,107	3,000
BS Deferred tax assets														2,149	1,089
Other assets														95,481	15,550
BS Liquid funds														7,592	2,308
BS Total assets														149,661	57,810
Segment liabilities		735	508	93	166	492	445	371	215	22,315	13,943	190	167	24,196	15,443
Eliminations														-386	-57
Total segment liabilities														23,810	15,386
BS Deferred tax liabilities														827	952
Other liabilities														94,140	15,233
Total liabilities included in capital employed														118,777	31,570
Interest-bearing liabilities	14													17,220	10,662
BS Total equity														13,665	15,577
BS Total equity and liabilities														149,661	57,810
Number of employees		1,116	1,143	2,627	2,935	1,766	2,093	1,176	1,048	11,494	11,751	961	963	19,140	19,933

Comparable operating profit including Comparable share of profits from associates and joint ventures and Comparable return on net assets

EUR million	Note	Generation		Russia		City Solutions		Consumer Solutions		Uniper ³⁾	
		31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
Comparable operating profit		1,110	722	261	251	135	47	52	90	1,120	363
Comparable share of profit/loss of associates and joint ventures ¹⁾	4, 12	11	13	62	47	42	57	-	-	39	38
Comparable operating profit including comparable share of profit/loss of associates and joint ventures¹⁾		1,121	735	323	298	177	104	52	90	1,160	401
Segment assets at the end of the period		7,071	6,742	2,601	2,597	2,949	4,123	1,496	780	27,286	21,375
Segment liabilities at the end of the period		735	508	93	166	492	445	371	215	22,315	13,943
Comparable net assets		6,336	6,234	2,508	2,431	2,456	3,679	1,125	565	4,971	7,432
Comparable net assets average²⁾		6,221	6,006	2,516	2,693	2,915	3,679	746	569	7,021	N/A
Comparable return on net assets, %¹⁾		18.0	12.2	12.9	11.1	6.1	2.8	6.9	15.9	16.5	N/A

1) Comparable share of profit/loss of associates and joint ventures for 2020 has been recalculated following the introduction of comparable net profit APM in I/2021.

2) Average net assets are calculated using the opening balance of the financial year and each quarter's closing value.

3) Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter of 2020, consolidated Uniper's results into its income statement. Comparable net assets average and Comparable return on net assets for the Uniper segment are presented from I/2021 onwards as information for full 12 months is available.

4. Comparable operating profit and comparable net profit

4.1 Reconciliation of operating profit to comparable operating profit

Quarter

EUR million	Unadjusted		Impairment charges and reversals		Capital gains and other related items		Impact from acquisition accounting		Changes in fair values of derivatives hedging future cash flow		Other		Reported	
	IV/2021	IV/2020	IV/2021	IV/2020	IV/2021	IV/2020	IV/2021	IV/2020	IV/2021	IV/2020	IV/2021	IV/2020	IV/2021	IV/2020
Sales	89,048	21,412	-	-	-	-	-	-	-38,969	-133	-	-	50,079	21,279
Other income	39,960	6,101	-2	-3	5	16	-	-	-34,445	-4,678	-78	-178	5,440	1,260
Materials and services	-120,149	-19,840	-	-	-	-	-	-	72,057	756	89	-44	-48,003	-19,127
Employee benefits	-601	-381	-	-	-	-	-	-	-	-	150	-1	-451	-382
Depreciation and amortisation	-354	-322	7	-1	-	-	-	-	-	-	-	3	-346	-320
Other expenses	-5,894	-6,514	-	-	1	-	-	-	223	4,659	22	72	-5,648	-1,782
IS Comparable operating profit	-	-	5	-4	5	16	-	-	-1,134	605	182	-147	1,070	928
IS Items affecting comparability	-	-	-5	4	-5	-16	-	-	1,134	-605	-182	147	942	-470
IS Operating profit	2,012	458											2,012	458

Year-to-date

EUR million	Unadjusted		Impairment charges and reversals		Capital gains and other related items		Impact from acquisition accounting		Changes in fair values of derivatives hedging future cash flow		Other		Reported	
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Sales	166,218	42,517	-	-	-	-	-	-	-53,817	6,499	-	-	112,400	49,015
Other income	70,209	10,517	-1	0	-2,682	-784	-	-	-55,010	-4,679	-136	-252	12,380	4,802
Materials and services	-217,515	-38,286	-	-	-	-	-	-	-112,198	-5,805	148	-208	-105,170	-44,298
Employee benefits	-1,718	-1,206	-	-	-	-	-	-	-	-	156	11	-1,561	-1,195
Depreciation and amortisation	-1,364	-1,092	83	-1	-	-	-	-	-	-	-	3	-1,281	-1,090
Other expenses	-16,419	-10,851	-	-	1	20	-	222	2,054	4,659	131	60	-14,232	-5,890
IS Comparable operating profit	-	-	83	-2	-2,681	-765	-	222	5,424	675	299	-386	2,536	1,344
IS Items affecting comparability	-	-	-83	2	2,681	765	-	-222	-5,424	-675	-299	386	-3,124	255
IS Operating profit	-588	1,599											-588	1,599

Impairment charges and reversals

Impairment charges and reversals of previously recognised impairments are adjusted from depreciation and amortisation and presented in items affecting comparability. Impairments in 2021 include EUR 40 million impairment in connection with the sale of the Schkopau lignite power plant in Germany (Uniper segment), and a tax-deductible non-cash impairment of EUR 35 million in connection with the sale of the Argayash CHP plant in Russia (Russia segment).

Capital gains and other related items

Capital gains and other related items in 2021 include EUR 2,350 million gain from the sale of the 50% stake in the Swedish district heating and cooling company, Stockholm Exergi Holding AB, EUR 254 million gain from the sale of the district heating business in the Baltics, and EUR 50 million gain from the sale of eight small hydropower plants in Sweden (see Note 6.2 Disposals). Capital gains and other related items in 2020 included EUR 431 million gain from the divestment of the district heating business in Joensuu, Finland; EUR 291 million gain from divestment of the district heating business in Järvenpää, Finland; and EUR 72 million gain from the divestment of Fortum Recharge AS; (see Note 6.2 Disposals); as well as Uniper acquisition-related costs of EUR 20 million (see Note 6.1 Acquisitions).

Impact from acquisition accounting

Consolidation of an associated company results includes recording a share of the associated company's other comprehensive income (OCI). If an associated company is either divested or becomes a subsidiary, IFRS requires that these previously recorded OCI items are reclassified inside equity either via the consolidated income statement or directly to retained earnings, depending on the nature of the OCI item. Reclassification does not have an impact on total equity.

The above reclassification resulted in a one-time, non-cash income statement impact of EUR -222 million on 31 March 2020 when Uniper became Fortum's subsidiary. This amount represented a part of Fortum's share of Uniper's OCI for the time when Uniper was an associated company, with no impact to Fortum's total equity. The amount mainly related to exchange rate differences arising from translation of foreign operations recorded by Uniper. Fortum's share of Uniper's non-recyclable other comprehensive income, EUR -84 million, was reclassified to retained earnings. See Consolidated statement of changes in equity.

Changes in fair values of derivatives hedging future cash flow

Unrealised changes in the fair values of financial derivative instruments hedging future cash flows that do not qualify for hedge accounting, and physical contracts that are treated as derivatives, are recognised in items affecting comparability.

Impacts from settlement of physical contracts that have been treated as derivatives are adjusted to sales and materials and services to reflect the contract pricing as opposed to market pricing ("contract pricing

adjustment”). Adjustments are needed to improve the understanding of the financial performance when comparing results from one period to another.

Other

Other includes mainly restructuring expenses, adjustments to certain provisions and reversals of temporary reductions in current assets.

4.2 Reconciliation from operating profit to comparable net profit

From the first quarter of 2021, Fortum discloses two new APMs to provide additional financial performance indicators to support meaningful comparison of underlying net profitability between periods, Comparable net profit and Comparable earnings per share.

EUR million	Note	IV/2021	IV/2020	2021	2020
IS Operating profit		2,012	458	-588	1,599
IS Items affecting comparability	4.1	-942	470	3,124	-255
IS Comparable operating profit		1,070	928	2,536	1,344
IS Share of profit/loss of associates and joint ventures		40	113	192	656
Adjustments to share of profit/loss of associates and joint ventures	12	-13	-50	-38	0
Comparable share of profit/loss of associates and joint ventures		27	63	154	656
IS Finance costs - net		76	-18	107	-56
Adjustments to finance costs - net	7	-118	-4	-146	-48
Comparable finance costs - net		-42	-22	-38	-103
Comparable profit before income tax		1,054	969	2,651	1,897
IS Income tax expense		-1,125	-142	175	-344
Adjustments to income tax expense		872	-73	-780	45
Comparable income tax expense		-252	-215	-605	-299
IS Non-controlling interests		-162	-31	852	-32
Adjustments to non-controlling interests		53	-112	-1,121	-82
Comparable non-controlling interests		-109	-143	-268	-114
Comparable net profit		693	610	1,778	1,483
Comparable earnings per share, EUR	23	0.78	0.69	2.00	1.67

Comparable share of profit/loss of associates and joint ventures

Share of profit/loss of associates and joint ventures is adjusted for significant items, similar to adjustments made to arriving at comparable net profit, in those entities that are classified as Fortum’s principal associates and joint ventures. For more information on Fortum’s principal associates and joint ventures, see Note 18 Participations in associated companies and joint ventures in the 2020 consolidated financial statements. In I/2020 and until 31 March 2020 Uniper was Fortum’s associated company.

Comparable finance costs - net

Finance costs – net are adjusted for e.g. nuclear-related items recognised in other financial items - net, fair value changes on financial items, as well as impairment charges and reversals of previously recorded impairment charges on financial items.

Comparable income tax expense

Income tax expense is adjusted for tax impacts on items affecting comparability, adjustments to finance costs – net, tax rate changes and other onetime adjustments.

See also Note 23 Definitions and reconciliations of key figures.

5. Financial risk management

Fortum continues discussions with Uniper and reviews its risk management systems and policies for the combined Group. See Fortum Group's consolidated financial statements for the year ended 31 December 2020 for current financial risk management objectives and policies.

Fair value hierarchy information

Financial instruments that are measured in the balance sheet at fair value are presented according to following fair value measurement hierarchy:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices);

Level 3: inputs for the asset or liability that is not based on observable market data (unobservable inputs).

See also accounting policies in the consolidated financial statements 2020, in Note 15 Financial assets and liabilities by fair value hierarchy.

Financial assets

EUR million	Level 1		Level 2		Level 3		Netting ¹⁾		Total	
	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
In non-current assets										
Other investments ²⁾	71	75	46	43	99	70			216	188
Derivative financial instruments										
Commodity derivatives										
Hedge accounting			62	52			-9	-29	53	23
Non-hedge accounting	5,136	1,030	11,708	1,563	207	138	-96	-24	16,955	2,707
Interest rate and currency derivatives										
Hedge accounting			54	170					54	170
Non-hedge accounting			34	46					34	46
Interest-bearing receivables	111	98			36	17			147	116
Total in non-current assets	5,318	1,203	11,904	1,874	342	225	-105	-53	17,460	3,250
In current assets										
Derivative financial instruments										
Commodity derivatives										
Hedge accounting	50		572	185			-207	-60	416	125
Non-hedge accounting	22,876	2,851	45,575	5,090	326	6	-4,028	-655	64,750	7,292
Interest rate and currency derivatives										
Hedge accounting			57	26					57	26
Non-hedge accounting			170	89					170	89
Other receivables			13	62					13	62
Interest-bearing receivables	596	432		46	4	5			600	483
Total in current assets	23,522	3,283	46,387	5,498	330	11	-4,235	-715	66,006	8,077
Total in assets	28,840	4,486	58,291	7,372	672	237	-4,340	-768	83,465	11,326

1) Receivables and liabilities from electricity and other commodity standard derivative contracts against exchanges with same delivery period are netted in Fortum, except in Uniper-segment.

2) Other investments mainly include shares in unlisted companies.

Financial liabilities

EUR million	Level 1		Level 2		Level 3		Netting ¹⁾		Total	
	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
In non-current liabilities										
Interest-bearing liabilities ²⁾			1,669	2,145					1,669	2,145
Derivative financial instruments										
Commodity derivatives										
Hedge accounting			257	106			-9	-29	248	77
Non-hedge accounting	4,874	634	11,336	1,598	259	254	-96	-24	16,373	2,462
Interest rate and currency derivatives										
Hedge accounting			27	56					27	56
Non-hedge accounting			8	63					8	63
Total in non-current liabilities	4,874	634	13,297	3,967	259	254	-105	-53	18,326	4,802
In current liabilities										
Interest-bearing liabilities			549	497					549	497
Derivative financial instruments										
Commodity derivatives										
Hedge accounting	420		2,721	304			-207	-60	2,934	244
Non-hedge accounting	20,316	2,545	52,531	5,612	86	10	-4,028	-655	68,905	7,512
Interest rate and currency derivatives										
Hedge accounting			4	14					4	14
Non-hedge accounting			103	167					103	167
Total in current liabilities	20,736	2,545	55,908	6,594	86	10	-4,235	-715	72,496	8,434
Total in liabilities	25,610	3,179	69,205	10,561	345	264	-4,340	-768	90,822	13,236

1) Receivables and liabilities from standard electricity and other commodity derivative contracts against exchanges with same delivery period are netted in Fortum, except in Uniper-segment.

2) Fair valued part of bonds when hedge accounting is applied (fair value hedge).

At the end of December 2021, the net fair value of commodity derivatives was EUR -6,225 million, including assets of EUR 82 billion and liabilities of EUR 88 billion (EUR -149 million in December 2020, including assets of EUR 10 billion and liabilities of EUR 10 billion). The increase from December 2020 mainly relates to derivative financial instruments in the Uniper segment resulting from higher market prices for commodities.

Net fair value amount of interest rate and currency derivatives was EUR 171 million, including assets of EUR 315 million and liabilities of EUR 143 million. Fortum has cash collaterals based on collateral agreements with some counterparties. At the end of December 2021, Fortum had received EUR 152 million from collateral agreements. The received cash was booked as a short-term liability.

Regarding derivative financial instruments, see Note 4 Comparable operating profit and comparable net profit and Note 16 Other provisions. Regarding the interest-bearing receivables and liabilities, see Note 13 Interest-bearing receivables, Note 14 Interest-bearing net debt and Note 19 Pledged assets and contingent liabilities.

Changes in fair value hierarchy Level 3

	1 Jan 2021	Purchases	Sales	Settle-ments	Gains / losses in income statement	Transfers into level 3	Transfers out of level 3	Gains / losses in OCI	31 Dec 2021
On balance sheet, net									
Other investments	70	31			-3	52	-52	1	99
Commodity derivatives, fair values	382		166	-2	219				765
Commodity derivative, day-1 gains and losses	-501		-100	26					-575
Interest-bearing receivables	22	19		-6	5				40
Total on balance sheet, net	-27	50	66	18	221	52	-52	1	329

6. Acquisitions, disposals and assets held for sale

6.1 Acquisitions

EUR million	IV/2021	IV/2020	2021	2020
Gross investments in shares in subsidiary companies	0	72	210	3,646
Gross investments in shares in associated companies and joint ventures	6	66	44	119
Gross investments in other shares	15	15	36	42
Total	21	152	290	3,807

Acquisitions during 2021

Gross investments in shares during 2021 were EUR 290 million (2020: 3,807). Acquisition of subsidiary shares mainly relate to the acquisition of Uniper shares. During 2021 Fortum invested EUR 35 million (2020: 44) in wind partnerships in Russia.

In June 2021, the Fortum-Rusnano wind investment fund sold the 200-MW Kalmykia wind parks to the Fortum-Russian Direct Investment Fund (RDIF) joint venture.

Uniper acquisition in March 2020

On 8 October 2019, Fortum entered into agreements to acquire all the shares held by funds managed by Elliott Management Corporation and its affiliates (“Elliott”) and Knight Vinke Energy Advisors Limited and its affiliates (“Knight Vinke”). The transaction was closed in two tranches. Control over Uniper was acquired on 26 March 2020 upon closing of the first tranche of the agreement, 19.6% of the shares. A liability for the maximum amount of shares in the second tranche, 3.8% of the shares, was recognised on the acquisition date. The second tranche of the agreement was closed on 8 May 2020 with the maximum amount of shares.

At 31 March 2020 Fortum’s consolidated stake in Uniper was 73.4%. The total purchase consideration for the combined shareholding was EUR 2.6 billion, which increased Fortum’s total investment in Uniper to EUR 6.5 billion.

EUR million	Uniper
Acquisition of shares	2,858
Liquid funds in acquired companies	-1,328
Acquisition of shares in cash flow	1,530
Interest-bearing liabilities in acquired companies	1,414
Other financial net debt in acquired companies	596
Gross investments in shares	3,540

Acquisition accounting

The purchase price allocation on the Uniper acquisition was completed on 31 March 2021. Fair value adjustments were mainly made to property, plant and equipment and right-of-use assets, participations in associates and joint ventures, lease liabilities, other provisions, and deferred taxes. Excess of the acquisition value over Uniper’s net assets is presented as goodwill. Fortum elected to measure non-controlling interest in Uniper based on the proportionate value of acquired net assets.

Acquired net assets are presented in the following table.

EUR million	31 Mar 2020
ASSETS	
Goodwill	1,779
Other intangible assets	980
Property, plant and equipment and right-of-use assets	9,268
Participations in associates and joint ventures	750
Derivative financial instruments	21,958
Interest-bearing receivables	1,840
Shares in Nuclear Waste Funds	1,602
Margin receivables	413
Trade and other receivables	7,236
Deferred tax and income tax assets	1,021
Inventories	1,565
Liquid funds	1,328
Total assets	49,739
LIABILITIES	
Derivative financial instruments	21,084
Interest-bearing liabilities	1,575
Pension obligations	953
Nuclear provisions	1,758
Other provisions	3,935
Deferred tax and income tax liabilities	348
Margin liabilities	924
Trade and other payables	7,852
Total liabilities	38,428
Net assets on Uniper's balance sheet	11,312
Less goodwill on Uniper's balance sheet ¹⁾	-1,779
Net assets from Uniper excluding goodwill	9,533
Purchase consideration	2,587
Previously held equity interest	4,613
Acquisition value	7,201
Non-controlling interest on Uniper's balance sheet	-424
Non-controlling interest from Uniper acquisition	-2,423
Total non-controlling interest (NCI)	-2,847
Goodwill	515

1) Goodwill on Uniper's balance sheet is deducted as it is not an identifiable asset of Fortum according to IFRS.

Acquired net assets were based on Uniper's first quarter 2020 financial report published on 7 May 2020. Balance sheet line items have been classified in accordance with Fortum's balance sheet categorisation and, as such, is not fully comparable to Uniper's standalone balance sheet. Further, Fortum and Uniper are both co-owners in the Swedish nuclear company OKG AB. OKG AB is consolidated into Uniper Group as a subsidiary with a 45.5% minority representing Fortum's ownership in OKG AB. Fortum accounted for the shareholding in OKG AB as an associated company until 31 March 2020, and consolidated OKG AB as a subsidiary from 31 March 2020.

Shareholding in Uniper has been acquired in stages as Fortum held 49.99% of Uniper shares prior to the acquisition of control on 26 March 2020. Under IFRS, the previously held associated company interest is fair valued upon gaining control, and any gain or loss from the difference between the balance sheet value and the fair value of the interest is recognised to the consolidated income statement. The fair value of the previously held associated company interest in Uniper was EUR 4,613 million. The fair value was based on Uniper share price at 26 March 2020, slightly adjusted by a premium for significant influence. There are no significant unobservable inputs used in the valuation (market approach corresponding to fair value hierarchy level 2). No gain or loss was recognised from fair valuing the previously held equity interest as the fair value was approximately equal to the carrying amount.

Acquisition-related costs of EUR 20 million are included in items affecting comparability in the 2020 consolidated income statement. See Note 4 Comparable operating profit and comparable net profit.

Other acquisitions during 2020

During 2020, Fortum invested EUR 25 million to the wind investment fund 50/50 owned by Fortum and Rusnano in Russia.

During 2020, Fortum's joint venture, the Fortum-Rusnano wind investment fund, sold the 50-MW Ulyanovsk 2 and the 300-MW Rostov wind farms to a new joint venture established with RDIF aimed at the operation of renewable power plants in Russia.

6.2 Disposals

EUR million	IV/2021	IV/2020	2021	2020
Gross divestments of shares in subsidiary companies	350	9	1,196	1,156
Gross divestments of shares in associated companies and joint ventures	1	3	2,898	31
Gross divestments of other investments	10	12	28	40
Total	360	24	4,122	1,226

Disposals during 2021

On 22 June 2021, Fortum announced that it had signed an agreement to divest the 250-MW Pavagada II and the 250-MW Rajasthan solar power plants in India to Actis. The total consideration from the divestment on a debt and cash-free basis, including the effect of deconsolidating of the net debt amounted to approximately EUR 280 million. The sale of Pavagada II was concluded in October 2021 and the first phase of Rajasthan divestment in November 2021. Fortum recorded a tax-exempt sales gain of EUR 11 million in the fourth quarter 2021 comparable operating profit of the City Solutions segment.

In February 2020, Uniper signed an agreement with Saale Energie GmbH, a subsidiary of the Czech company Energetický a průmyslový holding, a. s., on the sale of the interest in the Schkopau lignite-fired power plant in Germany. Uniper is the operator of the power plant and holds a stake of about 58%. Saale Energie holds a stake of around 42% in the Schkopau power plant and took over Uniper's stake effective 1 October 2021.

On 20 September 2021, Fortum concluded the sale of its 50% ownership in the Swedish district heating and cooling company Stockholm Exergi Holding AB (publ) to a consortium of European institutional investors of APG, Alecta, PGGM, Keva, and AXA. The total consideration of the sale amounted to SEK 29.5 billion (approximately EUR 2.9 billion). Fortum recorded a tax-exempt capital gain of EUR 2,350 million in the City Solutions segment's third-quarter 2021 results.

On 12 March 2021, Fortum announced that it had signed an agreement to sell its district heating business in the Baltics to Partners Group. On 2 July 2021, Fortum concluded the sale. The total consideration of the sale amounted to approximately EUR 710 million. Fortum recorded a tax-exempt capital gain of EUR 254 million in the City Solutions segment's third-quarter 2021 results.

On 2 March 2021, Fortum announced it had decided to construct the largest solar power plant in Russia through a joint venture established with RDIF. In December 2021, 78 MW of the capacity was commissioned and the remaining capacity will be commissioned in the second half of 2022. The power plant is based on capacities won by Fortum in CSA auctions in 2018 and 2019. In March 2021, Fortum sold the CSA-backed solar power project to the joint venture with RDIF, which had a positive effect of EUR 17 million in the first quarter 2021 comparable operating profit of the Russia segment.

In December 2020, Fortum decided to sell eight small hydropower plants in Sweden with an average annual power generation of 0.1 TWh to Downing Renewables & Infrastructure Trust plc. The total purchase price on a debt and cash free basis is EUR 64.5 million. The transaction closed on 2 February 2021.

In December 2019, Fortum and Credit Suisse Energy Infrastructure Partners (CSEIP) signed an agreement whereby funds advised by CSEIP acquired an 80% stake in Fortum's Nordic wind portfolio. The transaction, excluding the

Sørfjord wind park, which was still under construction, was closed on 14 May 2020. The transaction on Sørfjord wind park was closed on 20 January 2021.

Disposals during 2020

On 3 July, Fortum announced it had agreed to sell the district heating business in Järvenpää, Finland for EUR 375 million to a consortium consisting of Vantaa Energy Ltd, Infranode, and Keva. Fortum completed the transaction on 19 August 2020 and recorded a tax-exempt capital gain of EUR 291 million in the City Solutions segment's third-quarter 2020 results.

On 27 April 2020, Fortum signed an agreement to sell 60% of its public charging point operator, Fortum Recharge AS, for electrical vehicles in the Nordics to Infracapital. The transaction closed on 29 May 2020, and Fortum recorded a tax-exempt capital gain of EUR 72 million in Other Operation's second-quarter 2020 results. The cash consideration was EUR 87 million.

In December 2019, Fortum and Credit Suisse Energy Infrastructure Partners (CSEIP) signed an agreement whereby funds advised by CSEIP acquired an 80% stake in Fortum's Nordic wind portfolio. The total consideration on a debt- and cash-free basis was approximately EUR 170 million. The transaction, excluding the Sørfjord wind park, which was still under construction, was closed on 14 May 2020.

In December 2019, Fortum signed an agreement to sell its district heating business in Joensuu, Finland to Savon Voima Oyj. The total consideration on a debt- and cash-free basis was approximately EUR 530 million. The transaction was completed on 10 January 2020, and Fortum recorded a tax-exempt capital gain of EUR 431 million in the City Solutions segment's first quarter 2020 results.

6.3 Assets held for sale

Assets held for sale at 31 December 2021 include equity investment in Javelin, UK (Uniper segment), and the Öresundverket power plant in Malmö, Sweden (Uniper segment).

Assets held for sale at 31 December 2020 included Schkopau lignite-fired power plant (Uniper segment) and Sørfjord wind park (Generation segment). The transaction on Schkopau power plant was closed on 1 October 2021, and the transaction on Sørfjord wind park on 20 January 2021.

EUR million	31 Dec 2021	31 Dec 2020
Assets held for sale		
Intangible assets and property, plant and equipment and right-of-use assets	25	230
Deferred tax assets	-	9
Other non-current and current assets	83	96
BS Total	108	335
Liabilities related to assets held for sale		
Interest-bearing liabilities	-	43
Deferred tax liabilities	-	33
Pension and asset retirement obligations	-	18
Other liabilities and provisions	-	112
BS Total	-	206

7. Finance costs - net

EUR million	IV/2021	IV/2020	2021	2020
Interest expense				
Borrowings	-44	-43	-170	-186
Leasing and other interest expenses ¹⁾	-14	-4	-49	-23
Capitalised borrowing costs ¹⁾	0	8	16	39
IS Total	-57	-38	-202	-170
Interest income				
Loan receivables and deposits	37	27	135	96
Leasing and other interest income	3	4	21	16
IS Total	40	31	156	111
Other financial items - net				
Return from nuclear funds, nuclear fund adjustment and unwinding of nuclear provisions	125	-7	146	19
Fair value changes, impairments and reversals	-7	11	-1	29
Unwinding of discounts on other provisions and pension obligations	-20	-13	3	-45
Other financial expenses and income	-4	-2	5	0
IS Total	94	-11	154	3
IS Finance costs - net	76	-18	107	-56
EUR million	IV/2021	IV/2020	2021	2020
IS Finance costs - net	76	-18	107	-56
Adjustments to finance costs - net				
Return from nuclear funds, nuclear fund adjustment and unwinding of nuclear provisions	-125	7	-146	-19
Fair value changes, impairments and reversals	7	-11	1	-29
Comparable finance costs - net	-42	-22	-38	-103

1) 2020 comparatives were revised in I/2021 due to a revision of the lease adjustment following the finalisation of the purchase price allocation for the Uniper acquisition.

Interest expenses on borrowings in 2021 totalled EUR 170 million (2020: 186) including interest expenses on loans of EUR 146 million (2020: 160), and EUR 24 million (2020: 26) interest cost – net from derivatives hedging the loan portfolio. Interest expenses from leases were EUR 32 million (2020: 21) and other interest expenses were EUR 16 million (2020: 2).

Interest income in 2021 of EUR 156 million (2020: 111) includes EUR 128 million (2020: 88) interest income from shareholder loan receivables and other loan receivables, and EUR 7 million (2020: 8) from deposits. Interest income from leases was EUR 15 million (2020: 12) and other interest income was EUR 5 million (2020: 4).

Return from Nuclear Funds include interest income from the Finnish Nuclear waste fund and changes in fair values in the Swedish Nuclear waste fund. The change between 2021 and 2020 in unwinding of discount on other provisions and pension obligations comes mainly from a positive effect of changes in discount rates on other provisions in the Uniper segment.

8. Income taxes

Income taxes during 2021 totalled EUR 175 million (tax income) (2020: -344 tax expense). The effective income tax rate according to the income statement was 60.7% (2020: 15.7%). The comparable effective income tax rate, excluding the impact of the share of profit from associated companies, joint ventures as well as items affecting comparability, tax rate changes and other major one-time income tax effects, was 24.2% (2020: 24.1%). In I/2021, Fortum introduced Comparable net profit APM, which resulted in recalculation of the comparable effective income tax rate. 2020 comparative has been recalculated accordingly. See Note 1 Significant accounting policies and Note 4 Comparable operating profit and comparable net profit.

Fortum has paid taxes in previous years regarding ongoing tax disputes. The appeal processes are ongoing and based on legal analysis and legal opinions the payments are booked as a receivable, EUR 113 million (31 Dec 2020:

114), included in Income tax receivables. For additional information see Note 20 Legal actions and official proceedings.

9. Dividend per share

Dividends proposed by the Board of Directors are not recognised in the financial statements until they have been approved by the company's shareholders at the Annual General Meeting. A dividend in respect of 2021 of EUR 1.14 per share, amounting to a total dividend of EUR 1,013 million based on the amount of shares registered as at 2 March 2022, is to be proposed at the planned Annual General Meeting on 28 March 2022.

A dividend for 2020 of EUR 1.12 per share, amounting to a total of EUR 995 million, was decided in the Annual General Meeting on 28 April 2021. The dividend was paid on 7 May 2021.

A dividend for 2019 of EUR 1.10 per share, amounting to a total of EUR 977 million, was decided in the Annual General Meeting on 23 April 2020. The dividend was paid on 5 May 2020.

10. Intangible assets

EUR million	31 Dec 2021	31 Dec 2020
Goodwill	1,021	1,069
Contract-based	514	534
Other	632	664
BS Total	2,167	2,268

In IV/2021, CO₂ emission allowances included in Other intangible assets were reclassified to Inventories in order to better reflect the nature of these assets. Comparatives have been reclassified accordingly.

Changes in other intangible assets during 2021 mainly relate to depreciation, partly offset by capital expenditures and translation differences, as well as divestments.

11. Property, plant and equipment, and right-of-use assets

Property, plant and equipment, and right-of-use assets amounted to EUR 19,049 million (31 Dec 2020: 19,367). Changes during 2021 mainly relate to depreciation, partly offset by capital expenditures and translation differences, as well as divestments.

12. Participations in associates and joint ventures

12.1 Participations in associates and joint ventures

Changes in participations in associates and joint ventures

EUR million	31 Dec 2021	31 Dec 2020
Opening balance 1 January	2,912	6,435
Acquisitions ¹⁾	-	750
Investments	44	119
Share of profit of associates and joint ventures	192	656
Dividend income received	-113	-116
Divestments and capital returns ²⁾	-569	-47
Reclassifications ¹⁾	-58	-4,663
OCI items in associates and joint ventures	38	-183
Translation differences and other adjustments	14	-40
BS Closing balance	2,461	2,912

1) Acquisitions and reclassifications in 2020 mainly relate to Uniper consolidation at 31 March 2020.

2) Divestments and capital returns mainly related to the sale of Stockholm Exergi AB, for additional information see Note 6.2 Disposals.

Fortum and Uniper are co-owners in the Swedish nuclear company OKG AB. Fortum accounted for the shareholding in OKG AB as an associated company until 31 March 2020. As of 31 March 2020, OKG AB was consolidated as a subsidiary to Fortum Group.

12.2 Share of profit/loss of associates and joint ventures

EUR million	IV/2021	IV/2020	2021	2020
Uniper SE	-	-	-	469
TGC-1	-1	-2	33	24
Stockholm Exergi AB	-	16	28	46
Other associates and joint ventures	41	99	131	117
IS Share of profit/loss of associates and joint ventures	40	113	192	656

EUR million	IV/2021	IV/2020	2021	2020
IS Share of profit/loss of associates and joint ventures	40	113	192	656
Adjustments to share of profit/loss of associates and joint ventures	-13	-50	-38	0
Comparable share of profit/loss of associates and joint ventures	27	63	154	656

Uniper

Fortum previously accounted for Uniper as an associated company with a three-month time lag as Fortum published interim reports before Uniper's financial information was available. As of the first quarter 2020, Fortum revised its financial reporting schedule and reports its quarterly results after Uniper. Fortum's first quarter results therefore included Fortum's share of Uniper's results from 1 October 2019 to 31 March 2020.

Fortum's share of Uniper's IV/2019 profits, EUR 162 million, included a reversal of the adjustment which Fortum already made in IV/2019 related to the impact from the reinstatement of the UK capacity market. Fortum also made a reversal of EUR 389 million (after tax) related to the negative impact of Uniper's IV/2019 impairments.

Fortum's share of Uniper's I/2020 profits, EUR 307 million, included a reversal of EUR 61 million after tax related to the negative impact of Uniper's I/2020 impairments.

In the purchase price allocation for the acquisition of 49.99% of the shares in Uniper, Fortum recorded a fair value adjustment of EUR 613 million (after tax), relating to political and regulatory risks of certain generation and production assets of Uniper. If Uniper reports negative impacts relating to these generation and production assets, Fortum assesses the potential need to use this fair value adjustment to reverse these negative impacts. Fortum has assessed and concluded to use the fair value adjustment to reverse the majority of this negative impact from the impairments reported by Uniper in their IV/2019 and I/2020 results.

The remaining fair value adjustment from the purchase price allocation for the acquisition of 49.99% of the shares in Uniper ceased to exist on 31 March 2020. Following the consolidation of Uniper as a subsidiary, Fortum has prepared a new purchase price allocation. See Note 6.1 Acquisitions.

13. Interest-bearing receivables

EUR million	31 Dec 2021	31 Dec 2020
Interest-bearing receivables	2,971	2,804
Finance lease receivables	136	196
Total	3,107	3,000

EUR million	Carrying amount		Fair value	
	31 Dec 2021	31 Dec 2021	31 Dec 2020	31 Dec 2020
Long-term loan receivables from associates and joint ventures	1,138	1,185	1,113	1,161
Non-current securities	111	111	98	98
Other long-term interest-bearing receivables	1,024	1,024	1,010	1,010
Total long-term interest-bearing receivables	2,273	2,320	2,221	2,270
Collateral arrangement securities	549	549	432	432
Other short-term interest-bearing receivables	149	149	151	151
Total short-term interest-bearing receivables	698	698	582	582
Total	2,971	3,018	2,804	2,852

Long-term interest-bearing receivables from associated companies and joint ventures, EUR 1,138 million (31 Dec 2020: 1,113), include EUR 955 million from Swedish nuclear companies, Forsmarks Kraftgrupp AB and Ringhals AB (31 Dec 2020: 964), which are mainly funded with shareholder loans, pro rata to each shareholder's ownership.

14. Interest-bearing net debt

Financial net debt and adjusted net debt

EUR million	31 Dec 2021	31 Dec 2020
+ Interest-bearing liabilities	17,220	10,662
- BS Liquid funds	7,592	2,308
- Non-current securities	111	98
- Collateral arrangement securities	549	432
- Securities in interest-bearing receivables	660	530
- BS Margin receivables	9,163	1,132
+ BS Margin liabilities	985	331
+/- Net margin liabilities/receivables	-8,179	-801
Financial net debt	789	7,023
+ BS Pension obligations	1,190	1,520
+ Other asset retirement obligations	872	821
- BS Share of Finnish and Swedish Nuclear Waste Funds	3,515	3,445
+ BS Nuclear provisions	3,891	3,866
+ Nuclear provisions net of assets in Nuclear Waste Funds	375	421
+ Total provisions net of assets in Nuclear Waste Funds	2,438	2,762
Adjusted net debt	3,227	9,784

Financial net debt decreased during the year by EUR 6,234 million from EUR 7,023 million to EUR 789 million in December 2021. Liquid funds increased by EUR 5,284 million from EUR 2,308 million to EUR 7,592 million in December 2021. The higher commodity prices lead to higher margin requirements and the net margin receivables therefore increased by EUR 7,378 million from EUR 801 million to EUR 8,179 million in December 2021. Interest-bearing liabilities increased by EUR 6,558 million from EUR 10,662 million to EUR 17,220 million in December 2021.

The change in Financial net debt from September 2021 is a decrease by EUR 1,337 million from EUR 2,126 million on 30 September 2021 to EUR 789 million. Liquid funds increased by EUR 1,356 million from EUR 6,236 million on 30 September 2021 to EUR 7,592 million. The higher commodity prices lead to higher margin requirements and the net margin receivables therefore increased by EUR 4,455 million from EUR 3,724 million on 30 September 2021 to EUR 8,179 million. Interest-bearing liabilities increased by EUR 4,544 million from EUR 12,676 million on 30 September 2021 to EUR 17,220 million.

Fortum has a collateral arrangement to release cash from the Nordic Power Exchange. This arrangement is presented with equal amounts, EUR 549 million (31 Dec 2020: 432), as a short-term interest-bearing liability and an interest-bearing receivable.

Underfunded pension obligations and asset retirement obligations, net of share in nuclear waste funds, are included in adjusted net debt.

Interest-bearing liabilities

EUR million	31 Dec 2021	31 Dec 2020
Non-current loans	7,756	7,891
Current loans	8,389	1,716
Total loans	16,144	9,607
Non-current lease liabilities	945	894
Current lease liabilities	130	161
Total lease liabilities	1,075	1,055
Total	17,220	10,662

Loans

EUR million	Carrying amount		Fair value	
	31 Dec 2021	31 Dec 2021	31 Dec 2020	31 Dec 2020
Bonds	3,705	3,919	4,258	4,521
Loans from financial institutions	4,183	4,222	2,576	2,638
Reborrowing from the Finnish State Nuclear Waste Management Fund ¹⁾	1,165	1,213	1,145	1,210
Other long-term interest-bearing liabilities	433	463	447	488
Total long-term loans ²⁾	9,487	9,817	8,425	8,857
Collateral arrangement liability	549	549	432	432
Other short-term interest-bearing liabilities	6,109	6,109	750	750
Total short-term loans	6,658	6,658	1,182	1,182
Total	16,144	16,475	9,607	10,039

1) The reborrowing from the Finnish State Nuclear Waste Management Fund includes the part relating to Loviisa nuclear power plant as well as borrowing done through TVO.

2) Includes current portion of long-term liabilities of EUR 1,731 million (31 Dec 2020: 534).

In May 2021 Fortum repaid a maturing bond of EUR 500 million.

In December 2021 Fortum signed new bilateral financing agreements to further strengthen the liquidity position. These agreements consisted of a EUR 400 million bank loan (maturing in September 2024), a EUR 500 million bank loan (maturing in June 2023 with extension option of eight months) and a revolving credit facility of EUR 800 million (maturing in December 2022 with extension option of one year), of which EUR 500 million was drawn as of 31 December 2021. Additionally, Fortum withdrew the core revolving credit facility EUR 1,750 million in December 2021.

In December 2021 Uniper extended the existing EUR 400 million bank loan, maturing in September 2022, to mature in March 2023 and signed a new EUR 150 million bank loan with maturity in January 2024. Additionally, Uniper withdrew a revolving credit facility EUR 1,800 million in December 2021.

Current loans, EUR 8,389 million (31 Dec 2020: 1,716), include the current portion of long-term loans, EUR 1,731 million (31 Dec 2020: 534), and short-term loans, EUR 6,658 million (31 Dec 2020: 1,182).

Current portion of long-term loans, EUR 1,731 million, consist of EUR 1,000 million bond maturing in September 2022, EUR 450 million term loan, and EUR 281 million other loans. The EUR 450 million term loan is part of the EUR 2,000 million loan originally maturing in October 2022 of which EUR 1,550 million was prepaid in December 2021.

Short-term loans have increased by EUR 2,847 million, from EUR 3,811 million on 30 September 2021 to EUR 6,658 million on 31 December 2021. The use of commercial paper programmes increased by EUR 895 million to EUR 3,129 million.

The average interest rate for the portfolio of EUR loans was 0.6% at the balance sheet date (31 Dec 2020: 0.9%). The average interest rate on total loans and derivatives was 1.3% at the balance sheet date (31 Dec 2020: 1.5%). Part of the external loans, EUR 925 million (31 Dec 2020: 634), have been swapped to RUB and the average interest cost for these loans, including cost for hedging the RUB, was 8.3% at the balance sheet date (31 Dec 2020: 6.2%).

Maturity of loans

EUR million	31 Dec 2021
2022	8,389
2023	3,848
2024	867
2025	18
2026	772
2027 and later	2,251
Total	16,144

Loans maturing in 2022 include EUR 3,129 million commercial papers, EUR 2,300 million revolving credit facilities and EUR 1,731 million current portion of long-term loans. Maturities in 2022 also include EUR 736 million loans with no contractual due date.

Maturity of undiscounted lease liabilities

EUR million	31 Dec 2021
Due within a year	154
Due after one year and within five years	433
Due after five years	758
Total	1,344

Liquid funds

EUR million	31 Dec 2021	31 Dec 2020
Deposits and securities with maturity more than 3 months	47	410
Cash and cash equivalents	7,545	1,898
BS Total	7,592	2,308

Liquid funds totalling EUR 7,342 million (31 Dec 2020: 2,107) are placed with counterparties that have an investment grade credit rating.

At the end of the reporting period, the Group's liquid funds totalled EUR 7,592 million (31 Dec 2020: 2,308). Liquid funds include EUR 2,966 million held by the Uniper segment (31 Dec 2020: 289). Russian subsidiaries held EUR 300 million (31 Dec 2020: 244) of liquid funds in the form of cash and bank deposits.

Committed credit facilities

At the end of the reporting period, Fortum had undrawn committed credit facilities amounting to EUR 400 million. The undrawn facilities consisted of EUR 300 million of the total new EUR 800 million bilateral revolving credit facility maturing in December 2022 with borrower's one year extension option, and EUR 100 million committed overdraft limits that are valid until further notice.

The EUR 1,750 million revolving credit facility with maturity in June 2023 and Uniper's revolving credit facility of EUR 1,800 million with maturity in September 2025 were both totally drawn in December 2021.

15. Nuclear-related assets and liabilities

Fortum owns Loviisa nuclear power plant in Finland, and through the acquisition of Uniper, OKG Aktiebolag (OKG) and Barsebäck Kraft AB (Barsebäck) nuclear power companies in Sweden. Fortum and Uniper are co-owners in the Swedish nuclear company OKG AB. Fortum accounted for the shareholding in OKG AB as an associated company until 31 March 2020. As of 31 March 2020, OKG AB was consolidated as a subsidiary to Fortum Group.

On Fortum's consolidated balance sheet, Share in the Nuclear Waste Fund and the Nuclear provisions relate to Loviisa, OKG and Barsebäck nuclear power plants. Fortum also has minority interests in other nuclear power companies, i.e. Teollisuuden Voima Oyj (TVO) in Finland and Forsmarks Kraftgrupp AB (Forsmark) in Sweden. The minority shareholdings are classified as associated companies and joint ventures and are consolidated with equity method. Both the Finnish and the Swedish companies are non-profit making, i.e. electricity production is invoiced to the owners at cost according to local GAAP.

In Finland and Sweden nuclear operators are legally obligated for the decommissioning of the plants and the disposal of spent fuel (nuclear waste management). In both countries, the nuclear operators are obligated to secure the funding of nuclear waste management by paying to government managed nuclear waste funds. The nuclear operators also have to give securities to guarantee that sufficient funds exist to cover future expenses of decommissioning of the power plant and the disposal of spent fuel.

15.1 Nuclear-related assets and liabilities for consolidated nuclear power plants

EUR million	31 Dec 2021	31 Dec 2020
Carrying values on the balance sheet		
BS Nuclear provisions	3,891	3,866
BS Fortum's share of the Nuclear Waste Funds	3,515	3,445
Fortum's share of the fair value of the net assets in the Nuclear Waste Funds in Finland and Sweden	3,924	3,886
Share of fund not recognised on the balance sheet	408	441

Nuclear provision and fund accounted for according to IFRS

Nuclear provisions include the provision for the decommissioning and the provision for the disposal of spent fuel. Provisions are based on the total cost estimate in which future costs are discounted to net present value.

The carrying value of nuclear provisions, calculated according to IAS 37, increased by EUR 25 million compared to 31 December 2020, totalling EUR 3,891 million at 31 December 2021.

Fortum's share of the Nuclear Waste Funds are from an IFRS perspective overfunded by EUR 408 million, since Fortum's share of the Funds on 31 December 2021 was EUR 3,924 million and the carrying value on the balance sheet was EUR 3,515 million. The Fund on Fortum's balance sheet can at maximum be equal to the amount of the provisions according to IFRS. As long as the Fund is overfunded from an IFRS perspective, other financial items are adjusted positively if the provisions increase more than the Fund, and negatively if the provision decreases below the actual value of the fund.

Legal liability for Loviisa nuclear power plant

The legal liability on 31 December 2021, decided by the Ministry of Economic Affairs and Employment in December 2021, was EUR 1,148 million.

The legal liability is based on a cost estimate, which is updated every year; and a technical plan, which is updated every three years. The legal liability is determined by assuming that the decommissioning would start at the beginning of the year following the assessment year and discounting is not applied in determining the amount.

Fortum's share in the Finnish Nuclear Waste Management Fund

According to the Nuclear Energy Act, Fortum is obligated to contribute funds in full to the State Nuclear Waste Management Fund to cover the legal liability. Fortum contributes funds to the Finnish State Nuclear Waste Management Fund based on the yearly funding obligation target decided by the governmental authorities in connection with the decision of size of the legal liability. The current funding obligation target decided in December 2021 is EUR 1,148 million.

Borrowing from the State Nuclear Waste Management Fund

Participants in the Finnish State Nuclear Waste Management Fund are allowed to borrow from the fund according to certain rules. Fortum uses the right to borrow back and has pledged shares in Kemijoki Oy as security for the loans. The loans are renewed annually. See Note 14 Interest-bearing net debt and Note 19 Pledged assets and contingent liabilities.

OKG and Barsebäck nuclear power plants in Sweden

In Sweden, Svensk Kärnbränslehantering AB (SKB), a company owned by the nuclear operators, takes care of all nuclear waste management-related activities on behalf of nuclear operators. SKB receives its funding from the Swedish Nuclear Waste Fund, which in turn is financed by the nuclear operators.

Nuclear waste fees and guarantees are normally updated every three years by governmental decision after a proposal from the Swedish Radiation Safety Authority (SSM). From September 2018, the proposal is prepared by the National Debt Office. The proposal is based on cost estimates done by SKB and the license holders. An updated technical plan for nuclear waste management was decided by SKB in September 2019 and was handed in to SSM in the end of 2019. In December 2020, the Swedish government decided the waste fees and guarantees for year 2021 only. Nuclear waste fees paid by licensees with a unit/units that are still in operation are currently based on future costs with the assumed lifetime of 50 years for each unit of a nuclear power plant. The fee is calculated in relation to the energy delivered and set as an amount of öre (1 öre = SEK 0.01) per kWh delivered. For Barsebäck, which have no units in operation, the fee is determined as a fixed fee in SEK per year.

15.2 Nuclear power plants in associated companies and joint ventures

Forsmark and TVO are non-profit making companies, i.e. electricity production is invoiced to the owners at cost. Invoiced cost is accounted according to local GAAP. In addition to the invoiced electricity production cost, Fortum makes IFRS adjustments to comply with Fortum's accounting principles. These adjustments include also Fortum's share of the companies' nuclear waste funds and nuclear provisions.

The tables below present the 100% figures relating to nuclear funds and provisions for the companies as well as Fortum's net share.

Nuclear-related assets and liabilities relating to associated companies (100%)

	31 Dec 2021	31 Dec 2020
Carrying values with Fortum assumptions		
Nuclear provisions	4,347	3,674
Share of the Nuclear Waste Fund	3,556	3,406
of which Fortum's net share consolidated with equity method	-215	-59
Fortum's share of the fair value of the net assets in the Nuclear Waste Funds	1,150	880
Receivables from the waste fund that are overfunded (underfunded) from an IFRS perspective	-	14
of which TVO overfunded	-	73

TVO's legal liability, provision and share of the fund are based on same principles as described above for Loviisa nuclear power plant.

Participants in the Finnish State Nuclear Waste Management Fund are allowed to borrow from the fund according to certain rules. Fortum is using the right to reborrow funds through TVO based on its ownership. See more information in Note 14 Interest-bearing net debt.

Forsmark's provision and share of the fund are based on same principles as described above for OKG and Barsebäck nuclear power plants.

Status of TVO's Olkiluoto 3 project in Finland

Fortum is participating in the country's fifth nuclear power plant unit, Olkiluoto 3 (OL3), through the shareholding in Teollisuuden Voima Oyj (TVO) with an approximately 25% share representing some 400 MW in capacity. Olkiluoto 3 (OL3), currently under test production phase, was procured as a fixed-price turnkey project from a consortium (Plant Supplier) formed by Areva GmbH, Areva NP SAS and Siemens AG. As stipulated in the plant contract, the consortium companies have joint and several liability for the contractual obligations.

In March 2018, TVO signed a comprehensive settlement agreement with the plant supplier consortium companies Areva NP, Areva GmbH, and Siemens AG as well as with Areva Group parent company Areva SA, a company wholly owned by the French State. The settlement agreement concerned the completion of the OL3 project and related disputes, and it entered into force in late March 2018. The supplier consortium companies committed to ensuring that the funds dedicated to the completion of the OL3 project will be adequate and will cover all applicable guarantee periods, including setting up a trust mechanism funded by Areva companies to secure the financing of the costs of completing the OL3 project. During the period under review, replenishing the trust was finished according to the terms of the 2018 Global Settlement Agreement (GSA), but it was replenished according to the amendment agreement which entered into force in July 2021.

TVO and the Areva–Siemens consortium negotiated since summer 2020 on the terms of the OL3 project completion. In addition, the Areva companies were preparing a financial solution which ensure the necessary funding for the companies to complete the OL3 project. The parties reached a consensus in their negotiations regarding the main principles of the OL3 project completion in May 2021, and the agreements regarding the amendments to the OL3 project 2018 Global Settlement Agreement (GSA) were signed in June 2021. Certain conditions had to be fulfilled in order for the agreements to enter into force, and all conditions were fulfilled on 13 July 2021.

Key matters of the agreement were:

- The Areva companies' trust mechanism, established in the GSA of 2018 was replenished in July with EUR 432 million.
- Both parties are to cover their own costs as of July 2021 until end of February 2022.
- In the case that the plant supplier consortium companies would not complete the OL3 project until the end of February 2022, they would pay an additional compensation for delays, depending on the date of completion.
- In connection with the agreement entering into force, the plant supplier paid EUR 207 million of the EUR 400 million delay compensation as agreed in the GSA 2018.

The Radiation and Nuclear Safety Authority (STUK) granted a fuel loading permit for the OL3 plant unit in March 2021, and the fuel loading was completed in April 2021. The completion of fuel loading meant that OL3 is now a nuclear power plant in use. On 16 December 2021, STUK granted TVO permission for making the reactor critical and conducting low power tests. The first criticality of OL3 was reached on 21 December 2021. OL3's electricity production starts in March 2022, once the plant unit has been connected to the national grid. Regular electricity production starts in July 2022.

16. Other provisions

EUR million	31 Dec 2021	31 Dec 2020
Supplier- and customer-related	2,893	948
Asset retirement	872	821
Power production-related	653	643
Gas distribution-related	354	378
Environmental remediation and similar	253	261
Personnel-related	368	247
Other	1,013	933
Total	6,406	4,232
BS Of which current provisions	2,299	780
BS Of which non-current provisions	4,108	3,452

Additions to supplier-related provisions mainly relate to Uniper segment's electricity sales contracts for which the own-use exemption under IFRS 9 is applied. The provision increased to account for increased electricity prices and the associated higher purchasing costs. Purchases are, however, hedged using derivative financial instruments whose fair value measurement has offsetting effects recognised in items affecting comparability (see Note 4 Comparable operating profit and comparable net profit). Future cash outflows from the utilisation of the provision are offset by cash inflows from the hedges.

17. Pension obligations

Fortum Group has a number of pension schemes in accordance with local conditions and practices in the countries in which it operates, including defined benefit plans where the pension obligation is based on actuarial calculations using assumptions for discount rate, future salary and pension increases, inflation and mortality.

Changes during 2021 mainly relate to changes in discount rates and fair value of plan assets.

Net defined benefit liability

EUR million	31 Dec 2021	31 Dec 2020
Present value of defined benefit obligation	4,437	4,636
Fair value of plan assets	3,290	3,117
Net defined benefit liability	1,146	1,518
Of which Germany	1,051	1,350
Presented on the balance sheet as follows:		
BS Pension obligations, net	1,190	1,520
Pension assets in Other non-current assets	44	2

Discount rates

The following discount rates have been used for the calculation of the present value of the defined benefit obligation:

%	31 Dec 2021	31 Dec 2020
Germany	1.2	0.8
United Kingdom	2.0	1.5
Finland	1.0	0.3

18. Capital and other commitments

Capital and other commitments are contractual or regulatory obligations that are not recognised as liabilities on the balance sheet, or disclosed as contingent liabilities.

Capital commitments

EUR billion	31 Dec 2021	31 Dec 2020
Property, plant and equipment and intangible assets	1.0	0.8

Long-term purchase commitments

Fortum has long-term contractual purchase obligations of approximately EUR 88.8 billion at 31 December 2021 (31 Dec 2020: 113.1), of which EUR 16.3 billion is due within one year (31 Dec 2020: 6.3). These contracts are generally take-or-pay in nature and primarily relate to the purchase of natural gas. Price paid for natural gas is normally tied to market reference prices, as dictated by market conditions and the procurement behaviour of wholesale market customers. The conditions of these long-term contracts are reviewed at certain specific intervals (usually every three years) as part of contract negotiations and may thus change accordingly. The decrease in contractual purchase obligations is primarily attributable to the termination of a long-term LNG procurement contract.

Other commitments

Teollisuuden Voima Oyj (TVO) is building Olkiluoto 3, the nuclear power plant, which is funded through external loans, share issues and shareholder loans according to shareholders' agreement between the owners of TVO. At 31 December 2021, Fortum had EUR 232 million (31 Dec 2020: 232) outstanding receivables regarding Olkiluoto 3, and is additionally committed to providing at maximum EUR 100 million. TVO shareholder loan is classified as participation in joint ventures. For more information, see Note 15 Nuclear-related assets and liabilities.

For more information on other commitments, see Note 34 Capital and other commitments of the consolidated financial statements 2020.

19. Pledged assets and contingent liabilities

Fortum has issued direct and indirect guarantees and warranties on own behalf and on behalf of associated companies and joint ventures, which may obligate Fortum to make payments on the occurrence of certain events. For the Swedish nuclear companies there are two types of guarantees given. The Financing Amount is given to cover Fortum's share of the uncovered part in the Nuclear Waste Fund, assuming no further production and that no further nuclear waste fees are paid in. The uncovered amount is calculated by the authorities and is based on the difference between the expected costs and the funds to cover these costs at the time of the calculation. The Supplementary Amount constitutes a guarantee for deficits that can arise as a result of unplanned events.

The Guarantee given on behalf of Teollisuuden Voima Oyj to the Finnish State Nuclear Waste Management Fund increased following the fuel loading in Olkiluoto 3 and amounts to EUR 122 million (31 Dec 2020: 26). The guarantee covers the unpaid legal liability due to periodisation, as well as risks for unexpected future costs.

For more information, see Note 15 Nuclear-related assets and liabilities.

Further, Fortum has pledged certain assets for debt and other commitments, both on own behalf and on behalf of others, including EUR 269 million (31 Dec 2020: 269) for shares pledged in Kemijoki Oy as a security for borrowing from the Finnish State Nuclear Waste Management Fund, EUR 81 million (31 Dec 2020: 105) of real estate mortgages for the liability to the Finnish State Nuclear Waste Management Fund, as well as EUR 41 million (31 Dec 2020: 275) of other real estate mortgages.

For more information, see Note 35 Pledged assets and contingent liabilities of the consolidated financial statements 2020.

20. Legal actions and official proceedings

Various routine court actions, arbitration proceedings, tax and regulatory investigations and proceedings are currently pending against entities of the Group, and further actions or proceedings may be instituted or asserted in the future. In addition to disputes under public law, this in particular includes legal actions and proceedings on contract amendments and price adjustments initiated in response to market upheavals and the changed economic situation in the gas and electricity sectors (also as a consequence of the energy transition) and concerning anticompetitive and fraudulent practices, as well as general commercial contract disputes.

The aforementioned proceedings include several court and arbitration proceedings with major customers and major suppliers, also initiated in some instances by the Group, concerning contract amendments and price adjustments in long-term supply contracts and procurement options for electricity and gas, as well as long-term contracts for storage capacity in response to the altered situation brought about by market upheavals, and also reimbursements of costs. In some of these cases, the validity of the price-adjustment clauses applied, and of the contracts in their entirety is in dispute. Long-term LNG and gas procurement contracts generally include the option for producers and importers to adjust the terms in line with changed market conditions. On this basis, the Group is currently involved in court and arbitration proceedings and continuously conducts extensive negotiations with producers. The possibility of further legal disputes cannot be excluded. Applying the provisions of IAS 37.92, Fortum is making no additional disclosures on the proceedings presented or on the associated risks or measures taken, particularly because such disclosure could prejudice their outcome.

Furthermore, proceedings are pending concerning the clarification of regulatory requirements. Applying the provisions of IAS 37.92, Fortum is making no additional disclosures on the proceedings presented or on the associated risks or measures taken, particularly because such disclosure could prejudice their outcome.

Public-law disputes are pending, in particular, in connection with the operating license and the planning basis for the hard-coal power plant in Datteln, Germany. Applying the provisions of IAS 37.92, Fortum is making no additional disclosures on the proceedings presented or on the associated risks or measures taken, particularly because such disclosure could prejudice their outcome.

Tax cases in Belgium

On 16 June 2020, the Court of Appeal of Ghent, Belgium, ruled in favour of Fortum on Fortum's income tax assessments in Belgium for the year 2008. The decision concerns Fortum's Belgian financing company, Fortum EIF NV, which granted internal financing to a Swedish group company for financing of an acquisition in Russia. The Belgian tax authorities argued that Fortum EIF should not benefit from the notional interest deduction regime in Belgium and disagreed with the Court of Appeal ruling. In September 2020, the Belgian tax authorities filed an appeal to the Supreme Court.

The additional taxes claimed for 2008 amount to EUR 36 million. Fortum has similar tax cases pending for the years 2009-2012 and expects the remaining years to follow the decisions for 2008. The disputed amount for years 2008-2012 totals EUR 113 million. All taxes have been paid and recognised as income tax receivables. Should the decision from the Court of Appeal of Ghent become final, the possible repayment of the disputed amounts of EUR 113 million would have a positive cash flow effect for Fortum.

21. Related party transactions

Related parties are described in more detail in the consolidated financial statements for the year ended 31 December 2020. On 31 March 2020, Uniper SE was reclassified from an associated company to a subsidiary. Transactions with Uniper Group companies are presented until 31 March 2020. In addition, transactions with any Uniper Group's related parties that have become Fortum Group's related parties through the acquisition are disclosed from 31 March 2020.

Transactions with associates, joint ventures and other related parties

EUR million	IV/2021	IV/2020	2021	2020
Sales	8	48	230	201
Purchases	150	266	773	624
Other income	19	29	342	89
Interest income on loan receivables	5	5	25	15

Balances with associates, joint ventures and other related parties

EUR million	31 Dec 2021	31 Dec 2020
Long-term interest-bearing loan receivables	1,138	1,113
Trade and other receivables	110	307
Long-term loan payables	228	293
Short-term loan payables	131	84
Trade and other payables	114	256

Other related parties are entities that are not consolidated on materiality grounds. For more information, see Note 1 Significant accounting policies of the consolidated financial statements 2020.

In addition, Fortum has long-term purchase commitments of approximately EUR 1.9 billion at 31 December 2021 from associates and joint ventures.

Other transactions with related parties

At the end of 2020, the Finnish State owned 50.76% of Fortum's shares. There has been no change in the number of shares the Finnish State owns in Fortum during 2021.

In June 2021, the Fortum-Rusnano wind investment fund sold the 200-MW Kalmykia wind parks to the Fortum-Russian Direct Investment Fund (RDIF) joint venture. Fortum recorded a gain of EUR 11 million from the transfer in the share of profits from associates and joint ventures.

On 2 March 2021, Fortum announced it had decided to construct the largest solar power plant in Russia through a joint venture established with RDIF. The power plant is based on capacities won by Fortum in CSA auctions in 2018 and 2019. In March 2021, Fortum sold the CSA-backed solar power project to the joint venture with RDIF.

During 2020, Fortum's joint venture, the Fortum-Rusnano wind investment fund, sold the 50-MW Ulyanovsk 2 and the 300-MW Rostov wind farms to a new joint venture established with RDIF aimed at the operation of renewable power plants in Russia. Fortum recorded a gain of EUR 9 million from the transfer of the Rostov wind farm in the share of profits from associates and joint ventures.

22. Events after the balance sheet date

On 24 February 2022, Russia started a widespread invasion into Ukraine. As a consequence, the US, the EU and the UK amongst others have imposed sanctions targeting Russia's ability to access capital and financial markets, sanctioning numerous individuals and banks; as well as trading in general. These sanctions and possible counter sanctions as well as further reactions by the US, the EU and the UK could impact Fortum's operations in Russia.

Meanwhile, uninterrupted gas supply from Russia to Europe has continued. Fortum's Russian operations are also running normally.

Given the uncertainty and risks arising from the geopolitical situation, including imposed sanctions and possible future sanctions and counter sanctions and their consequences, there may be significant impact to the fair values and economic lives of assets; as well as on the commodity prices and related margining requirements in Europe. The book value of Fortum's Russian assets, including the exposure in the Nord Stream 2 pipeline project, was approximately EUR 5.5 billion as of 31 December 2021. Fortum is currently assessing the impact of recent developments and mitigating measures, and specifically the following:

- Germany has halted the certification of the gas pipeline Nord Stream 2, while the US has sanctioned Nord Stream 2 AG, its subsidiaries and the CEO. Fortum has, within its Uniper segment, a financial receivable of approximately EUR 1 billion related to the Nord Stream 2 pipeline project.
- The Russian rouble (RUB) has depreciated significantly from the closing rate as of 31 December 2021. If this prevails, it has a negative translation impact on Fortum Group's earnings, assets and liabilities denominated in RUB.
- The above-mentioned events have led to an increase in European commodity prices and corresponding margining outflows for the Fortum Group. Due to the de-risking and financing measures taken, this has not materially deteriorated Fortum's overall liquidity situation.

Fortum actively monitors the situation in order to ensure continued compliance with prevailing rules and applicable sanctions laws.

On 18 January 2022, Fortum announced that 1.3 GW portfolio of wind projects is being transferred from the Fortum-Rusnano wind investment fund (50/50 joint venture) to a joint venture recently established with Bank GPB. Upon the transfer, the joint venture of Fortum-Rusnano wind investment fund will be dissolved.

23. Definitions and reconciliations of key figures

Alternative performance measures

Business performance	Definition	Reason to use the measure	Reference to reconciliation
Comparable EBITDA	Operating profit + depreciations and amortisations - items affecting comparability	Comparable EBITDA is representing the underlying cash flow generated by the total Group and segments. Used as a component in the capital structure target of Financial net debt to Comparable EBITDA.	Key ratios after cash flow statement
Comparable operating profit	Operating profit - items affecting comparability	Comparable operating profit is used in financial target setting and forecasting, management's follow up of financial performance and allocation of resources in the group's performance management process.	Income statement
Items affecting comparability	Impairment charges and reversals + capital gains and other related items + impact from acquisition accounting + changes in fair values of derivatives hedging future cash flow + other	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Impairment charges and reversals	Impairment charges and related provisions (mainly dismantling), as well as the reversal of previously recorded impairment charges. Impairment charges are adjusted from depreciation and amortisation, and reversals from other income.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Capital gains and other related items	Capital gains and transaction costs from acquisitions, which are adjusted from other income and other expenses respectively. Profits are reported in comparable operating profit, if this reflects the business model.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Impact from acquisition accounting	Non-cash accounting impact resulting from reclassifying part of Uniper's other comprehensive income to the income statement when Uniper was consolidated as a subsidiary.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Changes in fair values of derivatives hedging future cash flow	Effects from financial derivatives hedging future cash flows where hedge accounting is not applied or own use exemption cannot be used according to IFRS 9 and are adjusted from other income or expense to sales and materials and services respectively when calculating Fortum's alternative performance measures.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement

Business performance	Definition	Reason to use the measure	Reference to reconciliation
Other	Restructuring and cost management expenses, and other miscellaneous non-operating items, which are adjusted mainly from materials and services or employee benefits.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Comparable share of profit/loss of associates and joint ventures	Share of profit/loss of associates and joint ventures +/- significant adjustments for share of profit /loss in principal associates and joint ventures.	Component used in calculating comparable net profit and comparable return on net assets.	Note 4 Comparable operating profit and comparable net profit
Comparable finance costs – net	Finance costs – net +/- return from nuclear funds, nuclear fund adjustment and unwinding of nuclear provisions +/- fair value changes on financial items +/- impairment charges and reversals of previously recorded impairment charges on financial items.	Component used in calculating comparable net profit.	Note 4 Comparable operating profit and comparable net profit
Comparable profit before income tax	Comparable operating profit +/- comparable share of profit/loss of associates and joint ventures +/- comparable finance costs – net.	Subtotal in comparable net profit calculation.	Note 4 Comparable operating profit and comparable net profit
Comparable income tax expense	Income tax expense excluding taxes on items affecting comparability, adjustments to finance costs – net, tax rate changes and other onetime adjustments.	Component used in calculating comparable net profit.	Note 4 Comparable operating profit and comparable net profit
Comparable net profit	Comparable operating profit +/- comparable share of profit/loss of associates and joint ventures +/- comparable finance costs - net +/- comparable income tax expense +/- comparable non-controlling interests.	Comparable net profit is used to provide additional financial performance indicators to support meaningful comparison of underlying net profitability between periods.	Note 4 Comparable operating profit and comparable net profit
Comparable return on net assets, %	$\frac{\text{Comparable operating profit} + \text{comparable share of profit /loss in associates and joint ventures}}{\text{Comparable net assets average}} \times 100$	Comparable return on net assets is used in financial target setting and forecasting, management's follow up of financial performance and allocation of resources in the group's performance management process.	Note 3 Segment information
Adjustment for Share of profit/loss in associates and joint ventures	Adjustment for material items affecting comparability	Share of profit/loss in associates and joint ventures is included in profit component in the comparable return on net assets calculation and the adjustments are done based on similar components as in Items affecting comparability.	Note 3 Segment information
Comparable net assets	Non-interest-bearing assets - non-interest-bearing liabilities - provisions (non-interest-bearing assets and liabilities do not include finance-related items, tax and deferred tax and assets and liabilities from fair valuations of derivatives used for hedging future cash flows).	Comparable net assets is a component in Comparable return on net assets calculation where return on capital allocated directly to the businesses is measured.	Note 3 Segment information

Capital structure	Definition	Reason to use the measure	Reconciliation
Financial net debt / comparable EBITDA	<u>Financial net debt</u> Comparable EBITDA	Financial net debt to Comparable EBITDA is Fortum's long-term financial target for capital structure.	Key ratios after cash flow statement
Financial net debt	Interest-bearing liabilities - liquid funds - securities in interest-bearing receivables +/- net margin liabilities/receivables	Financial net debt is used in the follow-up of the indebtedness of the group and it is a component in the capital structure target of Financial net debt to Comparable EBITDA.	Note 14 Interest-bearing net debt
Adjusted net debt	Financial net debt + underfunded pension obligations and asset retirement obligations, net of share in nuclear waste funds	Adjusted net debt is used in the follow-up of the indebtedness of the group.	Note 14 Interest-bearing net debt

Other key figures

Share based key figures

Earnings per share (EPS)	$\frac{\text{Profit for the period - non-controlling interests}}{\text{Average number of shares during the period}}$
Comparable earnings per share	$\frac{\text{Comparable net profit}}{\text{Average number of shares during the period}}$
Equity per share	$\frac{\text{Shareholder's equity}}{\text{Number of shares at the end of the period}}$

Other key figures

Capital expenditure	Capitalised investments in property, plant and equipment and intangible assets including maintenance, productivity, growth and investments required by legislation including borrowing costs capitalised during the construction period. Maintenance investments expand the lifetime of an existing asset, maintain usage/availability and/or maintains reliability. Productivity investments improve productivity in an existing asset. Growth investments' purpose is to build new assets and/or to increase customer base within existing businesses. Legislation investments are done at certain point of time due to legal requirements.
Gross investments in shares	Investments in subsidiary shares, shares in associated companies and joint ventures and other investments. Investments in subsidiary shares are net of liquid funds and grossed with interest-bearing liabilities and other items included in financial net debt in the acquired company.

Tax key figures

Effective income tax rate, %	$\frac{\text{Income tax expense}}{\text{Profit before income tax}} \times 100$
Comparable effective income tax rate, %	$\frac{\text{Comparable income tax}}{\text{Comparable profit before income tax excluding comparable share of profit/loss from associated companies and joint ventures}} \times 100$

Reconciliations of alternative performance measures

Comparable EBITDA

EUR million	Note	IV/2021	IV/2020	2021	2020
IS Operating profit		2,012	458	-588	1,599
+ IS Depreciation and amortisation		346	320	1,281	1,090
EBITDA		2,358	777	693	2,688
- IS Items affecting comparability	4	-942	470	3,124	-255
Comparable EBITDA		1,416	1,247	3,817	2,434

Comparable operating profit

EUR million	Note	IV/2021	IV/2020	2021	2020
IS Operating profit		2,012	458	-588	1,599
- IS Items affecting comparability	4	-942	470	3,124	-255
IS Comparable operating profit	4	1,070	928	2,536	1,344

Items affecting comparability

EUR million	Note	IV/2021	IV/2020	2021	2020
Impairment charges and reversals		-5	4	-83	2
Capital gains and other related items	6	-5	-16	2,681	765
Impact from acquisition accounting		-	-	-	-222
Changes in fair values of derivatives hedging future cash flow		1,134	-605	-5,424	-675
Other		-182	147	-299	386
IS Items affecting comparability	4	942	-470	-3,124	255

Comparable net profit

EUR million	Note	IV/2021	IV/2020	2021	2020
IS Net profit		1,003	411	-114	1,855
- IS Items affecting comparability	4	-942	470	3,124	-255
- Adjustments to share of profit/loss of associates and joint ventures	12	-13	-50	-38	0
- Adjustments to finance costs - net	7	-118	-4	-146	-48
- Adjustments to income tax expenses		872	-73	-780	45
- IS Non-controlling interests		-162	-31	852	-32
- Adjustments to non-controlling interests		53	-112	-1,121	-82
Comparable net profit	4	693	610	1,778	1,483

Comparable earnings per share

	Note	IV/2021	IV/2020	2021	2020
Comparable net profit, EUR million	4	693	610	1,778	1,483
Average number of shares during the period, 1 000 shares		888,294	888,294	888,294	888,294
Comparable earnings per share, EUR		0.78	0.69	2.00	1.67

Financial net debt and adjusted net debt

EUR million	Note	31 Dec 2021	31 Dec 2020
+ Interest-bearing liabilities		17,220	10,662
- BS Liquid funds		7,592	2,308
- Non-current securities		111	98
- Collateral arrangement securities		549	432
- Securities in interest-bearing receivables		660	530
- BS Margin receivables		9,163	1,132
+ BS Margin liabilities		985	331
+/- Net margin liabilities/receivables		-8,179	-801
Financial net debt	14	789	7,023
+ BS Pension obligations		1,190	1,520
+ Other asset retirement obligations		872	821
- BS Share of Finnish and Swedish Nuclear Waste Funds		3,515	3,445
+ BS Nuclear provisions		3,891	3,866
+ Nuclear provisions net of assets in Nuclear Waste Funds		375	421
+ Total provisions net of assets in Nuclear Waste Funds		2,438	2,762
Adjusted net debt		3,227	9,784

See Note 14 Interest-bearing net debt.

Financial net debt/comparable EBITDA

EUR million	Note	2021	2020
+ Interest-bearing liabilities		17,220	10,662
- BS Liquid funds		7,592	2,308
- Non-current securities		111	98
- Collateral arrangement securities		549	432
- Securities in interest-bearing receivables		660	530
- BS Margin receivables		9,163	1,132
+ BS Margin liabilities		985	331
+/- Net margin liabilities/receivables		-8,179	-801
Financial net debt	14	789	7,023
IS Operating profit		-588	1,599
+ IS Depreciation and amortisation		1,281	1,090
EBITDA		693	2,689
- IS Items affecting comparability		3,124	-255
Comparable EBITDA		3,817	2,434
Financial net debt/comparable EBITDA		0.2	2.9

Market conditions and achieved power prices

Power consumption

TWh	IV/2021	IV/2020	2021	2020
Nordic countries	111	104	404	383
Central western Europe	360	357	1,359	1,316
Central western European gas demand	652	662	2,218	2,111
Russia	298	283	1,090	1,033
Tyumen	24	22	90	86
Chelyabinsk	10	10	37	36
Russia Urals area	70	66	256	246
Russia Siberia area	59	57	217	209

Average prices	IV/2021	IV/2020	2021	2020
Spot price for power in Nord Pool power exchange, EUR/MWh	96.2	13.8	62.3	10.9
Spot price for power in Finland, EUR/MWh	115.0	32.7	72.3	28.0
Spot price for power in Sweden, SE3, Stockholm EUR/MWh	107.8	25.6	66.0	21.2
Spot price for power in Sweden, SE2, Sundsvall EUR/MWh	44.5	15.1	42.6	14.4
Spot price for power in the First Price Zone of Russia, RUB/MWh ¹⁾	1,405	1,204	1,405	1,220
Spot price for power in the Second Price Zone of Russia, RUB/MWh ¹⁾	1,006	825	935	873
Average capacity price for the Russia segment, tRUB/MW/month	646	654	584	608
Average capacity price for the Uniper segment, tRUB/MW/month	330	292	293	261
Spot price for power in Germany, EUR/MWh	178.9	38.8	96.8	30.4
Average regulated gas price in Urals region, RUB/1000 m ³	4,137	4,016	4,077	3,977
Average capacity price for the Russia segment's CCS, tRUB/MW/month ^{2) 3)}	177	166	170	156
Average capacity price for the Russia segment's CSA, tRUB/MW/month ³⁾	1,265	1,129	1,174	1,058
Average capacity price for the Uniper segment's CCS, tRUB/MW/month ^{2) 3)}	168	147	160	136
Average capacity price for the Uniper segment's CSA, tRUB/MW/month ³⁾	2,165	1,047	1,488	951
Spot price for power (market price), Urals hub, RUB/MWh ¹⁾	1,266	1,074	1,221	1,068
CO ₂ , (ETS EUA), EUR/tonne CO ₂	69	28	54	25
Coal (ICE Rotterdam), USD/tonne	159	58	117	50
Oil (Brent Crude), USD/bbl	80	45	71	43
Spot price for gas (TTF), EUR/MWh	95	15	47	9

1) Excluding capacity tariff.

2) Including capacity receiving payments under "forced mode status", regulated tariffs, and bilateral agreements.

3) Capacity prices paid for the capacity volumes, excluding unplanned outages, repairs, and own consumption.

Water reservoirs and gas storage levels

TWh	31 Dec 2021	31 Dec 2020
Nordic water reservoirs level	73	105
Nordic water reservoirs level, long-term average	84	84
Central western European gas storage levels	293	439

Export/import

TWh (+ = import to, - = export from Nordic area)	IV/2021	IV/2020	2021	2020
Export / import between Nordic area and Continental Europe + Baltics	-11	-6	-29	-24
Export / import between Nordic area and Russia	3	1	9	3
Export / import Nordic area, Total	-8	-5	-20	-21

Power market liberalisation in Russia

%	IV/2021	IV/2020	2021	2020
Share of power sold at the liberalised price	82	79	79	77

Achieved power prices

	IV/2021	IV/2020	2021	2020
Generation segment's Nordic achieved power price, EUR/MWh	51.9	35.2	42.8	34.8
Uniper segment's Nordic achieved power price, EUR/MWh	34.4	27.4	30.7	26.0
Russia segment's achieved power price, RUB/MWh	2,125	2,056	2,018	1,940
Russia segment's achieved power price, EUR/MWh ¹⁾	25.4	22.5	23.2	23.4
Uniper segment's achieved power price in Russia, RUB/MWh ²⁾	1,604	1,520	1,643	1,554
Uniper segment's achieved power price in Russia, EUR/MWh ^{1) 2)}	19.2	16.6	18.9	18.8

1) Translated using average exchange rate.

2) Comparable prices changed from previously reported.

Fortum's production and sales volumes

Uniper sales and production volumes are disclosed from the second quarter of 2020.

Power generation

TWh	IV/2021	IV/2020	2021	2020
Power generation in Nordics	18.9	16.9	68.8	59.2
Power generation in other European countries	13.8	10.1	46.9	26.7
Power generation in Russia	19.6	17.9	71.9	55.6
Power generation in other countries	0.1	0.1	0.5	0.6
Total	52.4	45.1	188.1	142.1

Heat production

TWh	IV/2021	IV/2020	2021	2020
Heat production in Nordics	1.9	1.6	5.5	5.1
Heat production in other European countries	1.9	2.5	8.7	7.1
Heat production in Russia	6.2	6.7	19.1	17.4
Total	9.9	10.8	33.4	29.6

Power generation capacity by segment

MW	31 Dec 2021	31 Dec 2020
Generation ¹⁾	8,041	8,163
Russia	4,672	4,928
City Solutions	559	988
Uniper ²⁾	33,828	36,218
Total	47,099	50,297

1) Including 440 MW of Meri-Pori power plant, which is under reserve capacity agreement during period July 2020 - June 2022.

2) Including 875 MW of Heyden 4 power plant, which is under reserve capacity agreement during period July 2021 - September 2022.

Heat production capacity by segment

MW	31 Dec 2021	31 Dec 2020
Russia	7,613	8,437
City Solutions	3,026	4,057
Uniper	6,232	7,017
Total	16,871	19,511

Power generation by source in the Nordic area

TWh	IV/2021	IV/2020	2021	2020
Hydro and wind power	8.8	9.0	31.4	29.6
Nuclear power	10.0	7.6	36.4	28.6
Thermal power	0.1	0.2	1.0	1.0
Total	18.9	16.9	68.8	59.2

Power generation by source in the Nordic area

%	IV/2021	IV/2020	2021	2020
Hydro and wind power	46	53	46	50
Nuclear power	53	45	53	48
Thermal power	1	1	1	2
Total	100	100	100	100

Power generation by source in other European countries

TWh	IV/2021	IV/2020	2021	2020
Hydro and wind power	1.1	0.9	4.9	3.3
Thermal power	12.7	9.2	42.0	23.4
Total	13.8	10.1	46.9	26.7

Power generation by source in other European countries

%	IV/2021	IV/2020	2021	2020
Hydro and wind power	8	9	10	12
Thermal power	92	91	90	88
Total	100	100	100	100

Power sales

EUR million	IV/2021	IV/2020	2021	2020
Power sales in Nordics	1,961	802	5,319	2,494
Power sales in other European countries ¹⁾	10,091	6,251	26,005	16,226
Power sales in Russia	502	407	1,750	1,411
Power sales in other countries	2	4	24	19
Total	12,556	7,464	33,098	20,150

1) Including commodity trading.

Heat sales

EUR million	IV/2021	IV/2020	2021	2020
Heat sales in Nordics	163	82	403	271
Heat sales in other European countries	213	153	660	410
Heat sales in Russia	51	54	154	145
Total	427	289	1,217	825

Power sales by area

TWh	IV/2021	IV/2020	2021	2020
Finland	6.1	6.2	23.0	23.1
Sweden	14.9	13.2	53.5	44.7
Russia	23.4	21.5	84.9	68.3
Norway	3.7	4.0	13.7	13.8
Germany ¹⁾	72.3	123.8	334.9	338.8
United Kingdom	5.9	5.8	19.5	13.0
Netherlands	17.0	2.2	22.4	6.3
Other countries	0.0	2.2	7.6	8.1
Total	143.2	178.8	559.4	516.0

1) Including commodity trading.

Nord Pool transactions are calculated as a net amount of hourly sales and purchases at the Group level.

Heat sales by area

TWh	IV/2021	IV/2020	2021	2020
Russia	6.1	6.7	19.0	17.4
Finland	1.0	0.8	3.1	2.9
Norway	0.6	0.5	1.8	1.5
Poland	1.3	1.2	3.8	3.4
Germany	0.8	1.0	3.6	2.4
Netherlands	0.9	1.0	3.2	2.3
Other countries	0.1	0.6	1.3	1.9
Total	10.9	11.8	35.9	31.7