Financial performance and position

Strong results and efficient strategy implementation.

Key financial ratios [1)]

	2017	2016	2015
Return on capital employed, %	7.1	4.0	22.7
Comparable net debt/EBITDA	0.8	0.0	-1.7

1) Key financial ratios are based on total Fortum, including discontinued operations. See ▸ Definitions of key figures.

Key figures

EUR million	2017	2016	2015	Change 17/16
Sales				
IS Continuing operations	4,520	3,632	3,459	24%
Discontinued operations	-	-	274	
Total Fortum	4,520	3,632	3,702	24%
Comparable EBITDA				
IS Continuing operations	1,275	1,015	1,102	26%
Discontinued operations	-	-	163	
Total Fortum	1,275	1,015	1,265	26%
Comparable operating profit				
IS Continuing operations	811	644	808	26%
Discontinued operations	-	-	114	
Total Fortum	811	644	922	26%
Operating Profit				
IS Continuing operations	1,158	633	-150	83%
- of sales %	25.6	17.4	-4.3	
Discontinued operations	-	-	4,395	
Total Fortum	1,158	633	4,245	83%
- of sales %	25.6	17.4	114.7	
Share of profits from associates and joint ventures				
IS Continuing operations	148	131	20	13%
Discontinued operations	-	-	0	
Total Fortum	148	131	20	13%
Profit before income tax				
IS Continuing operations	1,111	595	-305	87%
- of sales %	24.6	16.4	-8.8	
Discontinued operations	-	-	4,393	
Total Fortum	1,111	595	4,088	87%
- of sales %	24.6	16.4	110.4	
Earnings per share, EUR				
IS Continuing operations	0.98	0.56	-0.26	75%
Discontinued operations	-	-	4.92	
Total Fortum	0.98	0.56	4.66	75%
CF Net cash from operating activities, continuing operations	993	621	1,228	60%
Shareholders' equity per share, EUR	14.69	15.15	15.53	-3%
Interest-bearing net debt (at end of period) *	988	-48	-2,195	2,158%
Return on shareholders' equity total Fortum, %	6.6	3.7	33.4	
Equity-to-assets ratio, %	61	62	61	

* Net cash in 2015 and 2016

We are satisfied with the progress of our strategy implementation during the year. Following the earlier Ekokem and Hafslund transactions, we announced the bid for Uniper towards the end of 2017. By investing in Uniper, Fortum continues the capital redeployment to enable a more efficient use of our balance sheet. The offer period commenced in November. At the end of the initial acceptance period in mid-January 2018, 46.93% of Uniper's shares had been tendered to our offer, including E.ON's 46.65% shareholding. Uniper shareholders who have not yet accepted our offer still have a chance to do so within the additional acceptance period.

Uniper's and Fortum's businesses complement each other well. Together Fortum and Uniper have a good strategic mix of assets – both clean and secure – as well as the expertise required to successfully and affordably drive Europe's transition towards a low-carbon energy system. We aim to take an active role in driving European energy transition. We see plenty of opportunities for co-operation with Uniper to add value for all stakeholders, and we have entered into talks with Uniper to formalise the relationship between our companies after the transaction is finalised. We truly see our investment as a win-win for all involved.

The Hafslund restructuring was concluded in the fourth quarter and the new business structure is in place. Together with our new colleagues from Hafslund, we have updated the strategies for both our Consumer Solutions and City Solutions divisions. We have now set the path forward and will be working together on implementing the strategy. We target annual synergies of EUR 15–20 million by the end of 2020.

In line with our strategy, we are not only focusing on taking part in the European power sector consolidation, we are also investing in new renewable generation and targeting a gigawatt-scale portfolio of wind and solar power. In January 2018 we commissioned Russia's first industrial wind power site with a capacity of 35 MW. In addition, we have recently started the implementation of other wind power plants in the Nordics and Russia and invested in solar power in Russia, and commissioned our largest solar power plant in India.

In the fourth quarter our performance improvement was broad-based, with comparable operating profit increasing in all operative segments. The Generation, City Solutions and Russia segments continued to perform well, while the Consumer Solutions segment continues to be under pressure due to the tight competitive situation. The acquisitions of Ekokem and Hafslund are already impacting our results positively, further strengthened by our continued Fortum-wide focus on efficiency. We have now reached the targeted EUR 100 million savings in fixed costs announced in 2016. The cost savings have enabled us to invest in new ventures for the future. Going forward we will continue to focus on cost efficiency and investment prioritisation.

Sustainability and safety continue to be very important for us at Fortum. 2017 was a challenging year in terms of occupational safety. We did not reach our targets for lost workday injury frequency, especially for contractors. This was a clear disappointment, even though we succeeded in reducing the number of severe accidents to only one. We continue to be committed to keeping our promise to provide a safe workplace for all. In 2017, our CO_2 emissions decreased slightly. Our specific emissions remained at the same level as the previous year and continue to be at a low level compared to other European power producers.

As the strategy implementation and capital redeployment continues, our dividend payment capability will be further strengthened. Fortum's Board of Directors is proposing an unchanged dividend of EUR 1.10 per share for the calendar year 2017. Our ambition is to pay a stable, sustainable and over time increasing dividend now and in the future, and given the prevailing market conditions, our goal is to avoid a temporary dividend cut.

Uniper investment

In September 2017, Fortum announced it had signed a transaction agreement with E.ON under which E.ON had the right to decide to tender its 46.65% shareholding in Uniper SE into Fortum's public takeover offer. In November, Fortum launched a voluntary public takeover offer to all Uniper shareholders at a total value of EUR 22 per share implying a premium of 36% to the price prior to intense market speculation on a potential transaction at the end of May. The offer is subject to competition and regulatory approvals. Already in October 2017, Fortum received approval from the US competition authorities. Fortum expects to finalise the transaction in mid-2018.

The investment in Uniper delivers on Fortum's previously announced capital redeployment strategy and investment criteria. Uniper's businesses are well aligned with Fortum's core competencies, are close to Fortum's home markets and are highly cash generative. Fortum expects the investment to deliver an attractive return that will support the company in accelerating the development and implementation of sustainable energy technologies, without sacrificing a competitive dividend.

The offer will be financed with existing cash resources and committed credit facilities, with Barclays Bank PLC originally underwriting 100% of the credit facilities, including ongoing liquidity requirements. In October the credit facilities were syndicated to selected relationship banks of Fortum. Dividends received from the stake in Uniper will contribute to a stable and sustainable dividend for Fortum's shareholders. Fortum will account for Uniper as an associated company unless control according to IFRS is attained; as such, EBITDA and cash flow contribution, as well as the EPS effect on Fortum's results, will depend on the final outcome of the offer. As a result of this transaction, Fortum's leverage will rise above our given guidance for net debt/EBITDA level of around 2.5x. Over time however, Fortum expects its cash generation in combination with the dividend from Uniper to reduce this level towards the stated target.

In January 2018, Fortum announced that shareholders representing 46.93% of the shares in Uniper had accepted the offer during the initial acceptance period, including E.ON. Uniper shareholders who have not tendered their shares to the offer within the initial acceptance period can still tender during the additional acceptance period that began on 20 January 2018 and ending on 2 February 2018. Fortum expects to publish the total amount of shares tendered on 7 February 2018.

Hafslund transaction

On 26 April 2017, Fortum and the City of Oslo entered into an agreement to restructure their ownership in Hafslund ASA, one of the largest listed power groups in the Nordic region. On 4 August 2017, Fortum concluded the restructuring of the ownership in Hafslund. Fortum sold its 34.1% stake in Hafslund ASA to the City of Oslo, acquired 100% of Hafslund Markets AS and 50.0% of Hafslund Varme AS (renamed as Fortum Oslo Varme AS) including the City of Oslo's waste-to-energy company Klemetsrudanlegget AS (renamed as Fortum Oslo Varme KEA AS), and 10% of Hafslund Produksjon Holding AS.

The total debt-free price of the acquisitions was EUR 940 million. The combined net cash investment of the transactions, including the dividend received in May 2017, was EUR 230 million. Fortum booked a one-time tax-free sales gain in its 2017 results, totalling EUR 324 million, which corresponds to EUR 0.36 earnings per share. Transaction costs of EUR 4 million for the acquisitions were included in Items affecting comparability. The acquired businesses were consolidated into Fortum Group from 1 August 2017.

Reorganisation of operations

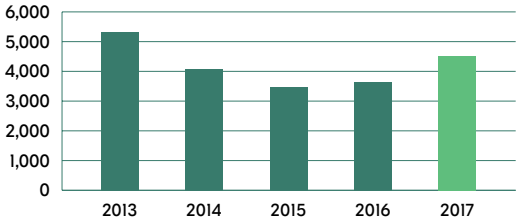
As of 1 March 2017, the City Solutions division was divided into two separate divisions: City Solutions and Consumer Solutions, reported as separate segments. City Solutions comprises heating and cooling, waste-to-energy, biomass and other circular economy solutions. Consumer Solutions comprises electricity and gas retail businesses in the Nordics and in Poland, including the customer service, invoicing and collection business. (Nordic customer services previously reported under the Other segment). Comparison figures in accordance with the new organisational structure were published on 11 April 2017.

Comparability of information presented in tables

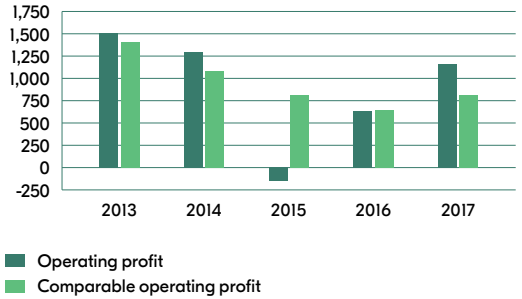
Following the divestment of the Swedish distribution business, Distribution segment is treated as discontinued operations in 2015. Financial results discussed in this operating and financial review are for the continuing operations of Fortum Group unless otherwise stated.

In addition, as of 2014, presented figures have been rounded and consequently the sum of individual figures may deviate from the sum presented. Figures in brackets refer to the comparison period unless otherwise stated.

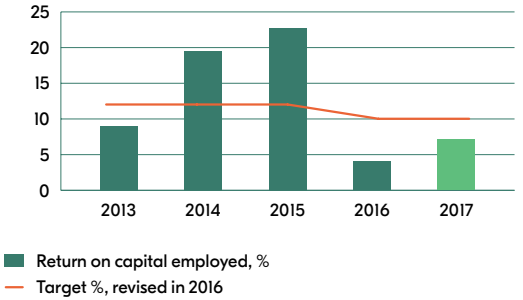
Sales, EUR million



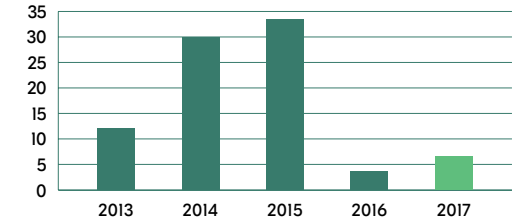
Operating profit and comparable operating profit, EUR million



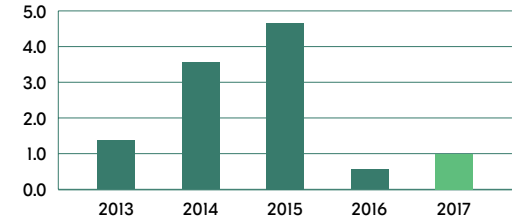
Return on capital employed total Fortum, %



Return on shareholders' equity total Fortum, %



Earnings per share total Fortum, EUR



Financial results

Sales by segment

EUR million	2017	2016	Change 17/16
Generation	1,677	1,657	1%
City Solutions	1,015	782	30%
Consumer Solutions	1,097	668	64%
Russia	1,101	896	23%
Other	102	92	11%
Netting of Nord Pool transactions [1)]	-367	-384	
Eliminations	-103	-79	
IS Total	**4,520**	**3,632**	**24%**

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

Comparable EBITDA by segment

EUR million	2017	2016	Change 17/16
Generation	603	527	14%
City Solutions	262	186	41%
Consumer Solutions	57	55	4%
Russia	438	312	40%
Other	-83	-64	-30%
IS Total	**1,275**	**1,015**	**26%**

Comparable operating profit by segment

EUR million	2017	2016	Change 17/16
Generation	478	417	15%
City Solutions	98	64	53%
Consumer Solutions	41	48	-15%
Russia	296	191	55%
Other	-102	-77	-32%
IS Total	**811**	**644**	**26%**

Operating profit by segment

EUR million	2017	2016	Change 17/16
Generation	501	338	48%
City Solutions	102	86	19%
Consumer Solutions	39	59	-34%
Russia	295	226	31%
Other	221	-77	387%
IS Total	**1,158**	**633**	**83%**

For further information see ▸ Note 5 Segment reporting.

In 2017, sales were EUR 4,520 (3,632) million. The increase was mainly due to the strengthening Russian rouble and the consolidation of Ekokem, Hafslund and DUON. Comparable EBITDA totalled EUR 1,275 (1,015) million. Comparable operating profit totalled EUR 811 (644) million. Comparable operating profit was positively impacted by the consolidation of Hafslund, higher achieved power prices, lower real estate and capacity taxes in Swedish nuclear and hydro power plants and by improved result in the Russian operations. Operating profit totalled EUR 1,158 (633) million. Fortum's operating profit for the period was impacted by items affecting comparability of EUR 347 (-11) million, including updated provisions, sales gains, transaction costs and the IFRS accounting treatment (IAS 39) of derivatives mainly used for hedging, as well as nuclear fund adjustments (▸ Note 5). The sales gains include a one-time tax-free sales gain of EUR 324 million from the divestment of the 34.1% stake in Hafslund ASA (▸ Note 38).

In 2017, Fortum reached the targeted EUR 100 million savings in fixed costs announced in 2016. At the same time, the cost spend has been shifted to businesses under development and new ventures.

The share of profit from associates and joint ventures was EUR 148 (131) million, of which Hafslund represented EUR 39 (51) million, TGC-1 EUR 32 (38) million and Fortum Värme EUR 66 (66) million. The share of profit from Hafslund is based on the company's published fourth-quarter 2016 and January–June 2017 interim reports. The share of profit from TGC-1 is based on the company's published fourth-quarter 2016 and January-September 2017 interim reports (▸ Note 18). Due to the restructuring of Hafslund and the divestment of Fortum's 34.1% share in the company, Fortum will no longer have share of profits from Hafslund ASA.

Net finance costs amounted to EUR 195 (169) million, including costs relating to financing arrangements for the Uniper transaction.

Profit before income taxes was EUR 1,111 (595) million.

Taxes for the period totalled EUR 229 (90) million. The effective income tax rate according to the income statement was 20.6% (15.2%). The comparable effective income tax rate, excluding the impact of the share of profit from associated companies and joint ventures as well as non-taxable capital gains and other major one-time income tax effects, was 18.8% (20.0%) (▸ Note 12).

The profit for the period was EUR 882 (504) million. Earnings per share were EUR 0.98 (0.56), of which EUR -0.14 per share was related to a Swedish income tax case and EUR 0.38 (-0.02) per share was related to items affecting comparability (▸ Note 6 and ▸ Note 36).

Cash flow

In 2017, net cash from operating activities increased by EUR 372 million to EUR 993 (621) million, due to a EUR 260 million increase in comparable EBITDA, a EUR 193 million decrease in realised foreign exchange gains and losses, a EUR 133 million decrease in income taxes paid and a EUR 183 decrease in working capital compared to the previous year. The foreign exchange gains and losses of EUR -83 (110) million relate to the rollover of foreign exchange contract hedging loans to Russian and Swedish subsidiaries. In June 2016, Fortum paid income taxes in Sweden totalling EUR 127 million regarding an ongoing tax dispute. The change in working capital in 2017 was EUR 81 (-102) million. The biggest impact was the effect of the daily cash settlements for futures in Nasdaq OMX Commodities Europe (▸ Additional cash flow information).

Investments excluding acquisitions increased by EUR 58 million to EUR 657 (599) million compared to the previous year. Acquisition of shares amounted to EUR 972 (695) million mainly

Financial position and cash flow

EUR million	2017	2016	Change 17/16
Interest expense	-164	-169	3%
Interest income	32	30	7%
Fair value gains and losses on financial instruments	-12	-2	-500%
Other financial expenses - net	-50	-29	-72%
IS Finance costs - net	**-195**	**-169**	**-15%**
Interest-bearing liabilities	4,885	5,107	-4%
Less: Liquid funds	3,897	5,155	-24%
Interest-bearing net debt	**988**	**-48**	**2,158%**

due to the Hafslund transaction in 2017 and the acquisitions of Ekokem and Polish DUON in 2016. Divestment of shares, mainly the Hafslund transaction, amounted to EUR 741 million (39). Net cash used in investing activities decreased to EUR 807 (1,701) million including the increase in cash collaterals of EUR -3 (-359) million given as trading collaterals to commodity exchanges.

Cash flow before financing activities was EUR 187 (-1,080) million, mainly impacted by the Hafslund transaction.

In 2017, Fortum paid dividends totalling EUR 977 (977) million. Payments of long-term liabilities totalled EUR 543 (934) million, including the repayment of bonds of EUR 343 million and other loan repayments of EUR 200 million. The net decrease in liquid funds was EUR 1,241 (3,064) million.

Assets and capital employed

At the end of the reporting period, total assets amounted to EUR 21,753 (21,964) million, a decrease of EUR 211 million. Liquid funds at the end of the period amounted to EUR 3,897 (5,155) million. Capital employed decreased by EUR 477 million and was EUR 18,172 (18,649) million.

Equity

Equity attributable to owners of the parent company totalled EUR 13,048 (13,459) million.

The decrease in equity attributable to owners of the parent company was EUR 411 million, mainly due to the net profit for the period of EUR 866 million, translation differences of EUR -369 million and the dividend payment of EUR 977 million.

Financing

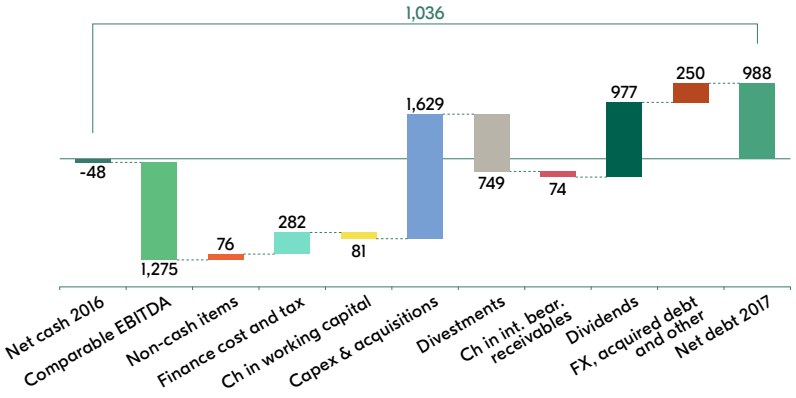
Net debt increased by EUR 1,036 million to EUR 988 (-48) million.

At the end of the reporting period, the Group's liquid funds totalled EUR 3,897 (5,155) million. Liquid funds include cash and bank deposits held by PAO Fortum amounting to EUR 246 (105) million. In addition to liquid funds, Fortum's undrawn committed credit facilities totalled EUR 1.8 billion (▸Note 23), excluding committed credit facilities of EUR 12.0 billion for Fortum's offer for Uniper shares.

Net financial expenses totalled EUR 195 (169) million, of which net interest expenses were EUR 132 (139) million. Net financial expenses include costs relating to financing arrangements of the Uniper transaction.

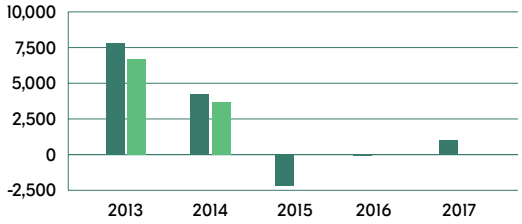
In September 2017, Standard & Poor's and Fitch Ratings placed both Fortum's long-term and short-term credit ratings on credit watch negative on possible adverse impacts of the planned Uniper investment. In January 2018, Standard & Poor's downgraded Fortum's long-term credit rating from BBB+ to BBB with a Negative Outlook due to the Uniper investment. The short-term rating was affirmed at level A-2. Fitch Ratings rates Fortum's long-term credit rating at level BBB+ and the short-term rating at level F2.

Change in net debt during 2017, EUR million

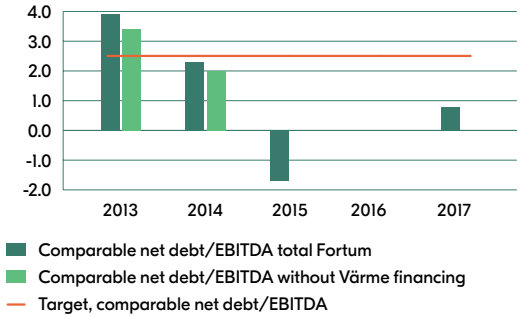


At the end of 2016 Fortum was in net cash position, see Financial position and cash flow table above.

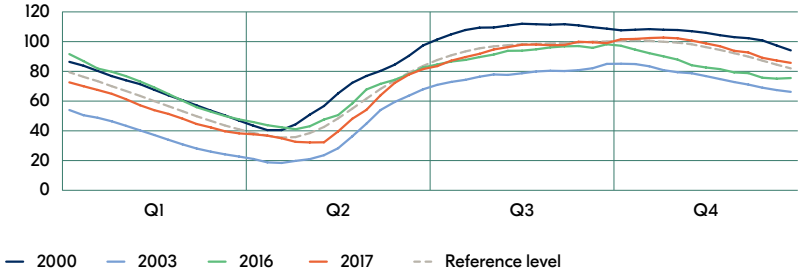
Interest-bearing net debt, EUR million



Comparable net debt/EBITDA



Nordic water reservoirs, energy content, TWh



Source: Nord Pool

Key figures

At the end of 2017, the comparable net debt to EBITDA ratio was 0.8 (0.0).

Gearing was 7% (0%) and the equity-to-assets ratio 61% (62%). Equity per share was EUR 14.69 (15.15). Return on capital employed improved to 7.1% (4.0%). Fortum targets a long-term Return on capital employed of at least 10%.

Market conditions

Nordic countries

According to preliminary statistics, electricity consumption in the Nordic countries was 392 (390) terawatt-hours (TWh) in 2017.

At the beginning of 2017, the Nordic water reservoirs were at 75 TWh, which is 8 TWh below the long-term average and 23 TWh lower compared to the previous year. At the end of 2017, the reservoirs were 86 TWh, which is 3 TWh above the long-term average and 11 TWh higher compared to the previous year. Precipitation in the Nordics, was clearly above the normal level both in the fourth quarter and during the full year 2017.

The average system spot price in Nord Pool for the year 2017 was EUR 29.4 (26.9) per MWh, and the average area price in Finland was EUR 33.2 (32.4) per MWh and EUR 31.2 (29.2) per MWh in Sweden (SE3, Stockholm). The main driver for the price increase was the clearly higher marginal cost of coal condensing power, which has contributed to stronger continental prices and increased exports from the Nordics.

In Germany, the average spot price in 2017 increased to EUR 34.2 (29.0) per MWh.

The market price of CO_2 emission allowances (EUA) increased from EUR 6.5 per tonne at the beginning of the year to EUR 8.2 per tonne at the end of 2017.

Russia

Fortum operates both 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. The Russian market is divided in two price zones and Fortum operates in the First Price Zone.

Russian electricity consumption in 2017 was 1,035 (1,027) TWh and the corresponding figure for the First Price Zone was 799 (787) TWh.

In 2017, the average electricity spot price, excluding capacity price, was unchanged at RUB 1,204 (1,204) per MWh in the First Price Zone.

Power consumption

TWh	2017	2016	2015
Nordic countries	392	390	381
Russia	1,035	1,027	1,007
Tyumen	95	94	93
Chelyabinsk	33	35	35
Russia Urals area	261	259	258

Average prices

TWh	2017	2016	2015
Spot price for power in Nord Pool power exchange, EUR/MWh	29.4	26.9	21.0
Spot price for power in Finland, EUR/MWh	33.2	32.4	29.7
Spot price for power in Sweden, SE3, Stockholm, EUR/MWh	31.2	29.2	22.0
Spot price for power in Sweden, SE2, Sundsvall, EUR/MWh	30.8	29.0	21.2
Spot price for power in European and Urals part of Russia, RUB/MWh [1]	1,204	1,204	1,154
Average capacity price, tRUB/MW/month	535	481	359
Spot price for power in Germany, EUR/MWh	34.2	29.0	31.6
Average regulated gas price in Urals region, RUB/1,000 m^3	3,685	3,614	3,488
Average capacity price for old capacity, tRUB/MW/month [2]	148	140	149
Average capacity price for new capacity, tRUB/MW/month [2]	899	815	641
Spot price for power (market price), Urals hub, RUB/MWh [1]	1,041	1,054	1,047
CO_2, (ETS EUA), EUR/tonne CO_2	6	5	8
Coal (ICE Rotterdam), USD/tonne	84	59	57
Oil (Brent Crude), USD/bbl	55	45	54

1) Excluding capacity tariff.

2) Capacity prices paid only for the capacity available at the time.

Water reservoirs

TWh	31 Dec 2017	31 Dec 2016	31 Dec 2015
Nordic water reservoirs level	86	75	98
Nordic water reservoirs level, long-term average	83	83	83

Export/import

TWh (+ = import to, - = export from Nordic area)	2017	2016	2015
Export/import between Nordic area and Continental Europe+Baltics	-15	-10	-18
Export/import between Nordic area and Russia	6	6	4
Export/import Nordic area, total	-9	-4	-14

European business environment and carbon market

Revision of the EU ETS approved

After two and a half years of legislative processing the revision of the EU Emissions Trading Scheme (ETS) for the period 2021–2030 was adopted in December. The new rules will increase the annual emission reduction target of the ETS from the current 1.74% to 2.2%. From the carbon market balance and pricing perspective the essential improvement is the strengthening of the Market Stability Reserve (MSR), including a temporary doubling of the intake rate from 12% to 24% during 2019–2023 and cancellation of allowances from the reserve from 2023 onwards. In addition, the new directive includes a provision for voluntary cancellation of allowances from the market.

However, the agreed setup is not yet in line with the Paris Climate Agreement and meets only the lower end of the EU 2050 goal to reduce emissions by 80–95% by 2050.

Swedish hydropower legislation

In June, the Swedish Government released a proposal on revision of hydro legislation including changes in the Environmental Act. This is a follow-up of the Swedish energy agreement done in summer 2016 and includes adjustments to meet requirements based on the EU Water Framework Directive. The aim is to mitigate environmental impacts and facilitate more efficient power production. According to the proposal, environmental permits for hydropower should be revised during a 20-year period in accordance with a national plan for prioritisation. The Ministry of Environment aims to have the revised legislation in place in March 2018.

Fortum emphasises the need to reform the Swedish system for hydro management. However, the proposal fails in ensuring a fair balance between environmental improvements and power production and a reasonable level of legal certainty.

The energy agreement requires hydro power companies to carry the full cost of environmental improvements. The largest hydro power companies are planning a joint fund in order to

secure financing for the improvements. The fund is expected to be in operation from July 2018 provided that the revision of hydro legislation has been completed.

Swedish nuclear waste fund fee approved

In December, the Swedish Government decided on the waste fund fees for the period 2018–2020. The fees are based on a new structure with a calculated lifetime of 50 years and on parts of the funds capital being invested in shares.

Swedish nuclear and hydro taxes adopted

In May, the Swedish Parliament adopted the proposed changes of nuclear and hydropower taxation in accordance with the energy agreement from June 2016. Starting from 1 July 2017, the tax on installed effect in nuclear reactors decreased by 90%, from SEK 14,770/MW/month to SEK 1,500/MW/month, and on 1 January 2018 the tax was abolished. The hydropower real-estate tax will be reduced from 2.8% to 0.5% in four steps by 2020.

Development of Nordic energy cooperation

Development of regional energy cooperation in the Nordic context moved forward in 2017. Following the June 2017 report by independent investigator Jorma Ollila, the Nordic energy ministers discussed the report in their annual meeting in November. They agreed on next-step actions to implement these proposals, including a proposal to establish a Nordic electricity market forum comprising various actors in the sector to discuss topics particularly related to development of the Nordic regional power market.

Segment reviews

Generation

The Generation segment comprises power production in the Nordics including nuclear, hydro and thermal power production, powerportfolio optimisation, trading and industrial intelligence, and nuclear services globally.

EUR million	2017	2016	Change 17/16
Sales	1,677	1,657	1%
- power sales	1,649	1,635	1%
of which Nordic power sales [1]	1,342	1,339	0%
- other sales	28	22	27%
Comparable EBITDA	603	527	14%
Comparable operating profit	478	417	15%
Operating profit	501	338	48%
Share of profits from associates and joint ventures [2]	-1	-34	97%
Comparable net assets (at period-end)	5,672	5,815	-2%
Comparable return on net assets, %	8.4	6.9	22%
Capital expenditure and gross investments in shares	264	203	30%
Number of employees	1,035	979	6%

1) The Nordic power sales income and volume includes hydro and nuclear generation, excluding minorities. It does not include thermal generation, minorities, customer business or other purchases.

2) Power plants are often built jointly with other power producers, and owners purchase electricity at cost including interest cost and production taxes. 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 2017, the Generation segment's total power generation in the Nordic countries was 44.2 (45.3) TWh. CO_2-free production accounted for 99% (99%) of the total production.

Comparable EBITDA increased to EUR 603 (527) million. Comparable operating profit improved to EUR 478 (417) million. The increase was mainly related to the higher achieved power price, and lower real-estate and capacity taxes in Swedish hydro and nuclear power plants, and was partly offset by lower nuclear production volumes resulting from the closure of Oskarshamn 1 and lower nuclear availability.

Operating profit clearly increased to EUR 501 (338) million and was positively affected by EUR 23 (-79) million of the IFRS accounting treatment (IAS 39) of derivatives mainly used for hedging Fortum's power production, updated provisions, and by nuclear fund adjustments (▸ Note 5).

The share of profits from associated companies and joint ventures totalled EUR -1 (-34) million (▸ Note 18).

The Nordic power price achieved in the Generation segment was EUR 31.8 (31.0) per MWh, EUR 0.8 per MWh higher than in 2016. The average system spot price of electricity in Nord Pool was EUR 29.4 (26.9) per MWh. The average area price in Finland was EUR 33.2 (32.4) per MWh and in Sweden (SE3, Stockholm) EUR 31.2 (29.2) per MWh.

Power generation by source

TWh	2017	2016	Change 17/16
Hydro power, Nordic	20.7	20.7	0%
Nuclear power, Nordic	23.0	24.1	-5%
Thermal power, Nordic	0.5	0.5	0%
Total in the Nordic countries	**44.2**	**45.3**	**-2%**

Nordic sales volume

TWh	2017	2016	Change 17/16
Nordic sales volume	51.8	52.4	-1%
of which Nordic Power sales volume [1]	42.2	43.2	-2%

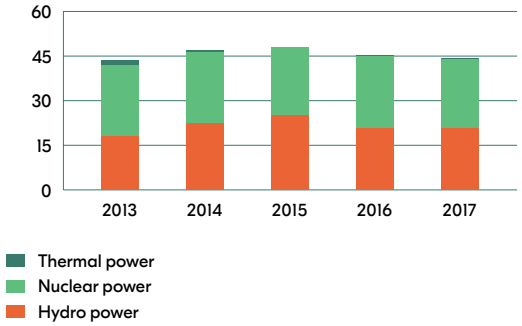
1) The Nordic power sales income and volume includes hydro and nuclear generation, excluding minorities. It does not include thermal generation, minorities, customer business or other purchases.

Sales price

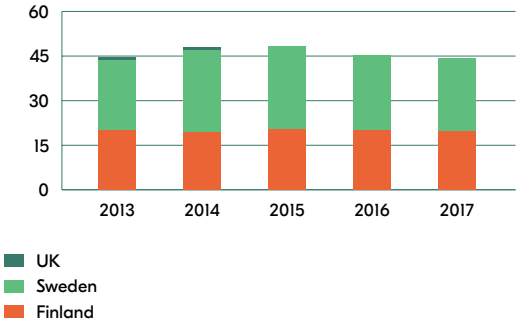
EUR/MWh	2017	2016	Change 17/16
Generation's Nordic power price [2]	31.8	31.0	3%

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

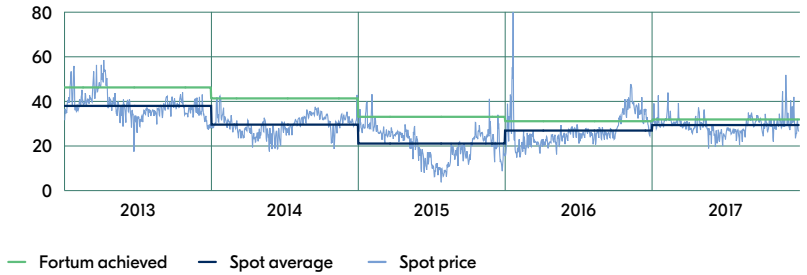
Generation segment's power generation in the Nordic area by source, TWh



Generation segment's power generation by area, TWh



Nord Pool, power price, 2013–2017, EUR/MWh



Source: Nord Pool, Fortum

City Solutions

City Solutions develops sustainable city solutions into a growing business for Fortum. The segment comprises heating and cooling, waste-to-energy, biomass and other circular economy solutions. The business operations are located in the Nordics, the Baltic countries and Poland. The segment also includes Fortum's 50% holding in Fortum Värme, which is a joint venture and is accounted for using the equity method.

EUR million	2017	2016	Change 17/16
Sales	1,015	782	30%
- heat sales	523	448	17%
- power sales	121	122	-1%
- other sales	370	212	75%
Comparable EBITDA	262	186	41%
Comparable operating profit	98	64	53%
Operating profit	102	86	19%
Share of profits from associates and joint ventures	80	76	5%
Comparable net assets (at period-end)	3,728	2,873	30%
Comparable return on net assets, %	5.5	5.9	-7%
Capital expenditure and gross investments in shares	556	807	-31%
Number of employees	1,907	1,701	12%

In April 2017, Ekokem was rebranded to Fortum. The rebranded Ekokem forms City Solutions' Recycling and Waste Solutions unit.

On 4 August 2017, Fortum concluded the restructuring of its ownership in Hafslund. Fortum's 50% ownership in Fortum Oslo Varme (the combined company of Hafslund's Heat business area and Fortum Oslo Varme KEA has been consolidated as a subsidiary to Fortum in the results of City Solutions as of 1 August 2017.

Heat sales volumes amounted to 10.0 (8.7) TWh. Power sales volumes from CHP production totalled 2.6 (2.8) TWh, of which Fortum Oslo Varme's share was 0.7 TWh.

Sales increased to EUR 1,015 (782) million, mainly as a consequence of the consolidation of Ekokem and Fortum Oslo Varme.

Comparable EBITDA increased and totalled EUR 262 (186) million. Comparable operating profit improved to EUR 98 (64) million. The consolidation of Fortum Oslo Varme had a positive effect of EUR 29 million on the comparable EBITDA and EUR 15 million on the comparable operating profit. In addition, the consolidation of Ekokem, improved power prices and fuel mix contributed positively to the results.

Operating profit totalled EUR 102 (86) million, including EUR 4 (22) of items affecting comparability (Note 5).

The share of profits from associated companies and joint ventures totalled EUR 80 (76) million, including the share of profit from Fortum Värme (Note 18).

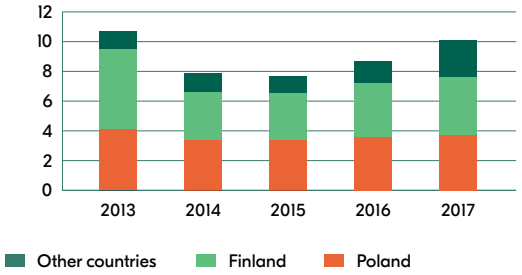
Heat sales by country

TWh	2017	2016	Change 17/16
Finland	3.9	3.6	8%
Poland	3.7	3.6	3%
Other countries	2.5	1.5	67%
Total	**10.0**	**8.7**	**15%**

Power sales by country

TWh	2017	2016	Change 17/16
Finland	1.5	1.5	0%
Poland	0.4	0.7	-43%
Other countries	0.7	0.6	17%
Total	**2.6**	**2.8**	**-7%**

Heat sales by country, TWh



Consumer Solutions

Consumer Solutions comprises electricity and gas retail businesses in the Nordics and Poland, including the customer service, invoicing and debt collection business. Fortum is the largest electricity retail business in the Nordics, with approximately 2.5 million customers across different brands in Finland, Sweden, Norway and Poland. The business provides electricity and related value-added products as well as new digital customer solutions.

EUR million	2017	2016	Change 17/16
Sales	1,097	668	64%
- power sales	862	528	63%
- other sales	235	139	69%
Comparable EBITDA	57	55	4%
Comparable operating profit	41	48	-15%
Operating profit	39	59	-34%
Comparable net assets (at period-end)	638	154	314%
Capital expenditure and gross investments in shares	493	120	311%
Number of employees	1,543	961	61%

On 4 August 2017, Fortum concluded the restructuring of its ownership in Hafslund. Hafslund Markets has been consolidated into the results of Consumer Solutions as of 1 August 2017

Electricity and gas sales volumes totalled 24.4 (14.8) TWh. The total customer base at the end of the period was 2.49 (1.36) million.

Sales increased to EUR 1,097 (668) million, mainly due to the consolidation of Polish DUON and Hafslund.

Comparable EBITDA amounted to EUR 57 (55) million and comparable operating profit was EUR 41 (48) million. The consolidation of Hafslund had a positive effect of EUR 22 million on the comparable EBITDA and EUR 13 million on the comparable operating profit. The result improvement was offset by the lower average margin in electricity and gas products and higher costs arising from the increased focus and spend on the development of new digital services. The renegotiated invoicing service agreements for external distribution companies also had a negative impact on the results.

Operating profit declined to EUR 39 (59) million affected by sales gains and the IFRS accounting treatment (IAS 39) of derivatives, mainly used for hedging, EUR -2 (11) million (Note 5).

Sales volumes

TWh	2017	2016	Change 17/16
Electricity	20.5	12.3	67%
Gas *	4.0	2.5	60%

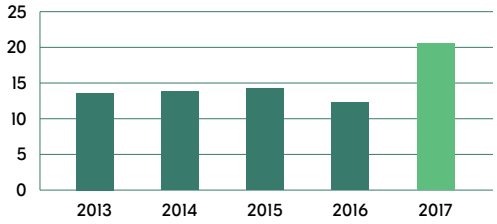
* Not including wholesale volumes.

Number of customers

Thousands *	2017	2016	Change 17/16
Electricity	2,470	1,350	83%
Gas	20	10	100%
Total	**2,490**	**1,360**	**83%**

* Rounded to the nearest 10,000.

Electricity sales, TWh



Russia

The Russia segment comprises power and heat generation and sales in Russia. The segment also includes Fortum's over 29% holding in TGC-1, which is an associated company and is accounted for using the equity method.

EUR million	2017	2016	Change 17/16
Sales	1,101	896	23%
- power sales	837	691	21%
- heat sales	258	199	30%
- other sales	6	6	0%
Comparable EBITDA	438	312	40%
Comparable operating profit	296	191	55%
Operating profit	295	226	31%
Share of profits from associates and joint ventures	31	38	-18%
Comparable net assets (at period-end)	3,161	3,284	-4%
Comparable return on net assets, %	10.1	8.0	26%
Capital expenditure and gross investments in shares	277	201	38%
Number of employees	3,495	3,745	-7%

After the completion of the multi-year investment programme in March 2016, Fortum's total capacity in Russia amounts to 4,794 MW, including 35 MW of solar power acquired at the end of 2017. The generation capacity built after the year 2007 amounts to 2,333 MW. Under the Russian Capacity Supply Agreement (CSA – "new capacity") this capacity entitles Fortum to guaranteed payments for approximately ten years after the commissioning of each new unit. The received capacity payments vary depending on age, location, type and size of the plant, as well as on seasonality and availability. The CSA payments can also vary somewhat on an annual basis, as they are linked to Russian Government long-term bonds with eight to ten years maturity.

In March 2017, the System Administrator of the wholesale market published its annual data which is the basis for the CSA payment calculation. These components comprise among others the weighted average cost of capital (WACC), the consumer price index (CPI) and re-examination of earnings from the electricity-only (spot) market (done every three and six years after commissioning of a unit). Fortum's CSA payment for 2017 was revised upwards to compensate for lower earnings from the electricity-only market. In addition, certain power plants were entitled to higher CSA payments when entering into the seven-to-ten year time period of generation. The increase of the CSA payment was somewhat offset by lower Government bond rates and consumer price index (CPI).

Fortum's Russian capacity generation, totalling 2,461 MW, was allowed to participate in the Competitive Capacity Selection (CCS – "old capacity") for 2017. All Fortum plants offered in the auction were selected. Fortum has obtained forced mode status for 195 MW of its capacity, i.e. it receives higher-rate capacity payments.

In 2017, the Russia segment's power sales volumes amounted to 30.5 (29.5) TWh and heat sales volumes totalled 19.8 (20.7) TWh. The power volumes increased due to commissioning of the Chelyabinsk GRES unit 3.

Sales increased to EUR 1,101 (896) million, mainly supported by the strengthening of the Russian rouble, higher received CSA payments, the change in the heat supply scheme in Tyumen and commissioning of the Chelyabinsk GRES unit 3.

The Russia segment's comparable EBITDA was EUR 438 (312) million and the comparable operating profit was EUR 296 (191) million. The Russian rouble had a positive effect of EUR 31 million. The commissioning of the new unit, higher received CSA payments, higher power volumes, as well as improved bad-debt collections also affected the results positively.

Operating profit was EUR 295 (226) million, including sales gains of EUR 0 (35) million (Note 5).

The share of profits from associated companies and joint ventures totalled EUR 31 (38) million (Note 18).

Key electricity, capacity and gas prices for Fortum Russia

	2017	2016	Change 17/16
Electricity spot price (market price), Urals hub, RUB/MWh	1,041	1,054	-1%
Average regulated gas price, Urals region, RUB/1,000 m³	3,685	3,614	2%
Average capacity price for CCS "old capacity", tRUB/MW/month [1]	148	140	6%
Average capacity price for CSA "new capacity", tRUB/MW/month [1]	899	815	10%
Average capacity price, tRUB/MW/month	535	481	11%
Achieved power price for Fortum in Russia, RUB/MWh	1,813	1,734	5%
Achieved power price for Fortum in Russia, EUR/MWh [2]	27.5	23.5	17%

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

2) Translated using average exchange rate.

Capital expenditure, divestments and investments in shares

EUR million	2017	2016
Capital expenditure		
Intangible assets	18	3
Property, plant and equipment	672	588
Total	**690**	**591**
Gross investments in shares		
Subsidiaries	982	813
Associated companies	135	17
Available for sale financial assets	8	14
Total	**1,125**	**844**

See also ▸Note 17.2 Capital expenditure.

Fortum expects to start the supply of power and heat from new power plants and to upgrade existing plants as follows:

	Type	Electricity capacity MW	Heat capacity MW	Supply starts
Generation				
Loviisa, Finland	Nuclear	6		2018
Hydro plants in Sweden and Finland	Hydro	~12		2018
City Solutions				
Zabrze, Poland	CHP	75	145	2018
Russia				
Ulyanovsk	Wind	35		1 Jan 2018
Ulyanovsk	Wind	50 [1)]		H1 2019
Other				
Solberg, Sweden	Wind	75 [2)]		Q1 2018
Åstadblåheia, Norway	Wind	50		2018
Sørfjord, Norway	Wind	97		2019
Karnataka, India	Solar	100		Q4 2017

1) Fortum-RUSNANO wind investment fund is a joint venture and Fortum's share is 50%.

2) Skellefteå Kraft AB (SKAB) is participating in the project with a 50% (37.5 MW) share.

Generation

Through its interest in Teollisuuden Voima Oyj (TVO), Fortum is participating in the building of Olkiluoto 3 (OL3), a 1,600-MW nuclear power plant unit in Finland. The plant's start of regular electricity production is expected to take place in May 2019, according to the plant supplier AREVA-Siemens Consortium.

Olkiluoto 3 is funded through external loans, share issues and shareholder loans according to shareholder agreements between the owners and TVO. As a 25% shareholder in Olkiluoto 3, Fortum has committed to funding of the project pro rata. At the end of December 2017, Fortum's shareholder loans to TVO amounted to EUR 145 million and the outstanding commitment for was EUR 88 million (▸Note 20).

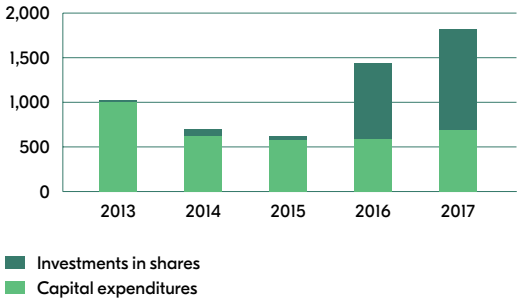
City Solutions

On 30 March 2017, the final decision regarding the minority redemption process of Ekokem Oyj shares was made by the arbitration court, bringing Fortum's ownership to 100%.

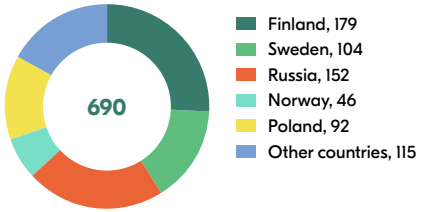
Consumer Solutions

In May 2017, Fortum agreed to sell 100% of its shares in the Polish gas infrastructure company DUON Dystrybucja S.A. to Infracapital,

Capital expenditure and gross investments in shares, EUR million



Capital expenditure by country, EUR million



the infrastructure investment arm of M&G Investments. DUON Dystrybucja S.A. is transporting grid gas and LNG in Poland. The company was acquired as part of the acquisition of the electricity and gas sales company Grupa DUON S.A. (currently Fortum Markets Polska S.A.) in 2016. The divestment was concluded on 28 July 2017. The sale had a minor positive impact on Fortum's 2017 results.

Russia

On 27 April 2017, Fortum and RUSNANO, a Russian state-owned development company, signed a 50/50 investment partnership (joint venture) in order to secure the possibility of a Russian Capacity Supply Agreement (CSA) wind portfolio. In June, 1,000 MW of the bids of the Fortum-RUSNANO wind investment fund were selected in the Russian renewable energy auction. The bids were for projects to be commissioned during 2018–2022 with a price corresponding to approximately EUR 115–135 per MWh. The projects will be covered by CSA for a period of 15 years. The investment decisions will be made on a case-by-case basis within the total mandate of the wind investment fund. Fortum's equity stake in the wind investment fund totals a maximum of RUB 15 billion (currently approximately EUR 220 million). The amount is to be invested over time (approx. 5 years), subject to separate investment decisions. The investment fund has selected Vestas as the supplier of wind turbines in Russia. In October 2017,

the wind investment fund made an investment decision on the first 50-MW wind farm. The wind farm is expected to start production during the first half of 2019.

In November 2017, Fortum completed the replacement investment at the Chelyabinsk GRES power plant. The new combined-cycle gas turbine (CCGT) unit with 247.5 MW of electricity generation capacity and 174 MW of heat capacity started commercial operation. The new turbine replaces the previous eight turbine generators in the power plant. This unit is not within the scope of the previously completed larger investment programme and consequently receives Competitive Capacity Selection (CCS) payments. Fortum's Chelyabinsk GRES site has electricity generation capacity of 742 MW and heat production capacity of 988 MW.

On 30 November 2017, Fortum signed an agreement to acquire three solar power companies from Hevel Group, Russia's largest integrated solar power company. The transaction was closed in December 2017. All three power plants are operational with a total capacity of 35 MW. The plants will receive Capacity Supply Agreement (CSA) payments for approximately 15 years after commissioning at an average CSA price corresponding to approximately EUR 430/MWh. The plants were commissioned in 2016 and 2017. Hevel Group will provide operation and maintenance services for all three power plants.

Other

In January 2017, Fortum finalised the acquisition of three wind power projects from the Norwegian company Nordkraft. The transaction consists of the Nygårdsfjellet wind farm, which is already operational, as well as the fully-permitted Ånstadblåheia and Sørfjord projects. The wind farms are expected to be commissioned in 2018 and 2019. When built, the total installed capacity of the three wind farms will be approximately 170 MW. On 29 September 2017, Fortum announced the decision to invest in the Sørfjord wind farm in northern Norway. The Sørfjord wind park will have 23 wind turbines with a total capacity of 97 megawatts. The wind turbines for Sørfjord will be delivered by Siemens Gamesa Renewable Energy.

In March 2017, Fortum commissioned the 70-MW solar plant at Bhadla solar park in Rajasthan, India and in December 2017 Fortum commissioned the 100-MW solar plant at Pavagada solar park in Karnataka, India. Fortum won a reverse auction for the projects in 2016. The power plants will operate based on a Power Purchase Agreement (PPA), with a fixed tariff for 25 years. The Power Purchase Agreements have been made with National Thermal Power Corporation Limited (NTPC), India's largest power utility.

Research and development

Sustainability is at the core of Fortum's strategy and, alongside Fortum's current businesses, the company is carefully exploring and developing new sources of growth within renewable energy production.

Fortum's goal is to be at the forefront of energy technology and application development. To accelerate innovation and the commercialisation of new offerings, Fortum is strengthening its in-house innovation and digitalisation efforts and building partnerships with leading global suppliers, promising technology and service companies, and research institutions. Fortum makes direct and indirect investments in start-ups that have promising new innovations focused on connectivity, have disruptive potential and accelerate the transition towards a circular economy. Fortum also invests in technologies that support better utilisation of the current asset base and that can create new markets and products for Fortum. The company is continuously looking for emerging clean energy solutions and for solutions that increase resource and system efficiency.

The Group reports its R&D expenditure on a yearly basis. In 2017, Fortum's R&D expenditure was EUR 53 (52) million, or 1.2% (1.4%) of sales.

EUR million	2017	2016	2015	Change 17/16
R&D expenditure, EUR million	53	52	47	2%
R&D expenditure, % of sales	1.2	1.4	1.4	

Changes in Fortum's Management

On 8 February 2017, Markus Rauramo, Executive Vice President, City Solutions, was appointed Chief Financial Officer of the company as of 1 March 2017 following Timo Karttinen's resignation from his CFO duties. At the same time, Per Langer, Senior Vice President, Technology and New Ventures, was appointed Executive Vice President, City Solutions, also as of 1 March 2017.

On 20 March 2017, Mikael Rönnblad, M.Sc. (Econ.), was appointed Executive Vice President, Consumer Solutions, and member of Fortum's Executive Management. Rönnblad started in his position on 15 May 2017.

On 31 October 2017, Matti Ruotsala, Deputy CEO, retired from the company.

On 9 November 2017, Fortum announced that Tapio Kuula, member of the Board of Directors and former President and CEO had passed away after a long illness. On 15 November 2017, Fortum's Shareholders' Nomination Board evaluated and confirmed the Board of Directors' ability to function with seven members until the Annual General Meeting 2018.

Annual General Meeting 2017

Fortum Corporation's Annual General Meeting, which was held in Helsinki on 4 April 2017, adopted the financial statements of the parent company and the Group for the financial period 1 January–31 December 2016, and discharged the members of Fortum's Board of Directors and the President and CEO from liability for the year 2016.

The Annual General Meeting decided to pay a dividend of EUR 1.10 per share for the financial year that ended on 31 December 2016. The record date for the dividend payment was 6 April 2017, and the dividend payment date was 13 April 2017.

The Annual General Meeting confirmed the remuneration of EUR 75,000 per year to the Chairman, EUR 57,000 per year to the Deputy Chairman, EUR 40,000 per year to each member of the Board, as well as EUR 57,000 per year to the Board member acting as the Chairman of the Audit and Risk Committee if he or she is not at the same time acting as Chairman or Deputy Chairman of the Board. In addition, a EUR 600 meeting fee is paid for Board meetings as well as for committee meetings. The meeting fee is doubled for Board members who live outside Finland in Europe and tripled for members living outside Europe. For Board members

living in Finland, the fee for each Board and Board Committee meeting is doubled for meetings held outside Finland and tripled for meetings outside Europe. For Board and Committee meetings held as a telephone conference, the basic meeting fee is paid to all members. No fee is paid for decisions made without a separate meeting.

The Annual General Meeting also confirmed the number of members in the Board of Directors to be eight. Ms Sari Baldauf was re-elected as Chairman, Mr Matti Lievonen was elected as a new member and Deputy Chairman, Mr Heinz-Werner Binzel, Ms Eva Hamilton, Mr Kim Ignatius, Mr Tapio Kuula and Mr Veli-Matti Reinikkala were re-elected as members, and Ms Anja McAlister was elected as a new member.

In addition, Authorised Public Accountant Deloitte & Touche Ltd (Deloitte Ltd as of 1 June 2017) was re-elected as auditor, with Authorised Public Accountant Ms Reeta Virolainen as the principal auditor. The auditor's fee is paid pursuant to an invoice approved by the company.

The Annual General Meeting authorised the Board of Directors to decide on the repurchase and disposal of the company's own shares up to a maximum number of 20,000,000 shares, which corresponds to approximately 2.25 per cent of all the shares in the company. It was also decided that own shares could be repurchased or disposed of in connection with acquisitions, investments or other business transactions, or be retained or cancelled. The repurchases or disposals could not be made for the purposes of the company's incentive and remuneration schemes. The authorisation cancelled the authorisation resolved by the Annual General Meeting of 2016 and it will be effective until the next Annual General Meeting and, in any event, for a period of no longer than 18 months.

At the meeting held after the Annual General Meeting, Fortum's Board of Directors elected from among its members to the Nomination and Remuneration Committee Matti Lievonen as Chairman and Sari Baldauf, Eva Hamilton, and Tapio Kuula as members. Furthermore, the Board elected to the Audit and Risk Committee Kim Ignatius as Chairman and Heinz-Werner Binzel, Anja McAlister and Veli-Matti Reinikkala as members.

Shareholders Nomination Board

On 9 October 2017, Pekka Timonen (Chairman), Director General of the Ministry of Economic Affairs and Employment, Timo Ritakallio, President and CEO, Ilmarinen Mutual Pension Insurance Company, and Elli Aaltonen, Director General, The Social Insurance Institution of Finland KELA, were appointed to Fortum's Shareholders' Nomination Board. In addition, Sari Baldauf, Chairman of Fortum's Board of Directors, is a member of the Shareholders' Nomination Board.

Other events during the reporting period

On 19 December 2017, Fortum announced that the Board of Directors has decided to commence the 2018–2020 long-term incentive (LTI) plan for key employees and executives. The 2018–2020 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 2018–2020 LTI plan will be based on cumulative Earnings Per Share over three years and Total Shareholder Return measured relative to the European Utilities Group, both with an equal weight of 50%. The 2018–2020 LTI plan will comprise approximately 110 participants, including the members of Fortum Executive Management. The maximum number of shares that may potentially be delivered as a reward under the 2018–2020 LTI plan, based on the currently prevailing price of Fortum's share, is expected not to exceed 700,000 shares.

Events after the balance sheet date

On 8 January 2018, E.ON SE announced that it had decided to tender its 170,720,340 Uniper SE shares (corresponding to 46.65% of shares and voting rights) into Fortum's public takeover offer.

On 19 January 2018, Fortum announced that 46.93% of the share capital and the voting rights in Uniper were tendered during the initial acceptance period of Fortum's voluntary public takeover offer for the outstanding shares of Uniper corresponding to 171,736,647 shares. The initial acceptance period ended on 16 January 2018 and the additional acceptance period resumed on 20 January 2018 and will end on 2 February 2018.

Key drivers and risks

Fortum's financial results are exposed to a number of economic, strategic, political, financial and operational risks.

One of the key factors influencing Fortum's business performance is the wholesale price of electricity in the Nordic region. The key drivers behind the wholesale price development in the Nordic region are the supply-demand balance, the prices of fuel and CO_2 emission allowances, and the hydrological situation.

The world economy has recently been growing at an increasing pace. The overall economic growth impacts commodity and CO_2 emission allowance prices, which has an effect on the Nordic wholesale price of electricity. In Fortum's Russian business, the key drivers are economic growth, the rouble exchange rate, regulation around the heat business, and the further development of the electricity and capacity markets. In all regions, fuel prices and power plant availability also impact profitability. In addition, increased volatility in exchange rates due to financial turbulence could have both translation and transaction effects on Fortum's financials, especially through the Russian rouble and Swedish krona.

In the Nordic countries, the regulatory and fiscal environment for the energy and environmental management sectors has also added risks for companies. The main strategic risk is that the regulatory and market environment develops in a way that we have not been able to foresee and prepare for. In response to these uncertainties, Fortum has analysed and assessed a number of future energy market and regulation scenarios, including the impact of these on different generation forms and technologies. As a result, Fortum's strategy was renewed in 2016 to include broadening the base of revenues and diversification into new businesses, technologies and markets. The environmental management business is based on the framework and opportunities created by environmental regulation. Being able to respond to customer needs created by the tightening regulation is a key success factor.

For further details on Fortum's risks and risk management, see the ▸ Risk management section of the Operating and financial review and ▸ Note 3 Financial risk management.

Outlook

Nordic market

Electricity is expected to continue to gain a higher share of total energy consumption. Electricity demand in the Nordic countries is expected to grow by approximately 0.5% on average, while the growth rate for the next few years will largely be determined by macroeconomic developments in Europe, and especially in the Nordic countries.

The price of oil and coal in 2017, was on a clearly higher level compared to the previous year. The price of CO_2 emission allowances (EUA) also increased during the fourth quarter of 2017. The price of electricity for the upcoming 12 months decreased in the Nordics due to a stronger hydrological balance but increased in Germany due to higher fuel prices.

Late in January 2018, the forward quotation for coal (ICE Rotterdam) for the remainder of 2018 was around USD 88 per tonne and the market price for CO_2 emission allowances for 2018 around EUR 8.90 per tonne. The Nordic system electricity forward price at Nasdaq Commodities for the remainder of 2018 was around EUR 27 per MWh and for 2019 around EUR 26 per MWh. In Germany, the electricity forward price for the remainder of 2018 and 2019 was around EUR 35 per MWh. Nordic water reservoirs were about 2 TWh below the long-term average, and were 7 TWh higher than a year earlier.

Generation

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

As a result of the nuclear stress tests in the EU, the Swedish Radiation Safety Authority (SSM) has decided on new regulations for Swedish nuclear reactors. For the operators, this means that safety investments should be in place no later than 2020.

The process to review the Swedish nuclear waste fees is done in a three-year cycle. The Swedish Nuclear Fuel and Waste Management Co (SKB) has updated the new technical plan including earlier shut down of some nuclear plants for the SSM to review. The final decision on the new nuclear waste fees for years 2018–2020 was made by the Swedish Government in December 2017 and was in line with SSM's proposal to the Government. On 25 October 2017, the Swedish Parliament decided on changes in the legal framework impacting calculations of nuclear waste fees and the investment of the nuclear waste fund. In the revised legal framework the assumed operating time for calculating the waste fee is 50 years, as opposed to the previous assumption of 40 years. The fund is now also allowed to invest in other financial instruments in addition to bonds. Based on these changes the annual waste fees for Fortum will increase by approximately EUR 8 million.

On 3 July 2017, Fortum announced the decision by the Administrative Court in Stockholm, Sweden, related to Fortum Sverige AB's hydro production-related real-estate tax assessments for the years 2009–2014. The Court decided in Fortum's favour. The disputed amount for the five years was a total of SEK 508 million (EUR 52 million). Fortum will book the tax income (subject to income tax) only after the legal decision has entered into force. Hydropower plants have been subject to a real-estate tax rate that has resulted in an approximately 12 times higher real-estate tax per kWh compared to any other production, due to different tax rates and different valuation factors. The tax authority has appealed the decision.

In October 2016, the Swedish Energy Agency presented a concrete proposal on how to increase the production of renewable electricity by 18 TWh in 2020–2030 within the electricity certificate system, as part of the Energy Agreement. In April 2017, the Swedish Government decided that the increase will be carried out in a linear manner.

In September 2016, the Swedish Government presented the budget proposal for the coming years. One of the key elements was the proposal that the taxation of different energy production forms should be more equal, and the tax burden of nuclear and hydro should be taken to the level of other production technologies. The budget states that the nuclear capacity tax will be reduced to 1,500 SEK/MW per month from 1 July 2017 and abolished on 1 January 2018. As a result, the tax for Fortum decreased by EUR 32 million due to the tax decrease and by another EUR 5 million due to the premature closure of Oskarshamn 1 in the middle of the year. In 2017, the capacity tax was EUR 52 million. In 2018, there is no capacity tax. As stated in the Government's budget, the hydropower real-estate tax will decrease from 2.8% to 0.5%; the tax will be reduced in four steps: in January 2017 to 2.2%; in January 2018 to 1.6%; in January 2019 to 1.0%; and in January 2020 to 0.5%. In 2017, the tax for Fortum decreased by EUR 20 million to EUR 95 million. In addition to the decrease in the tax rate, the hydropower real-estate tax values, which are linked to electricity prices, will be updated in 2019. The real-estate tax values are updated every six years. With the current low electricity prices, the tax values in 2019 would be clearly lower than today. The process for renewing existing hydro permits will also be reformed.

In 2015, the Swedish OKG AB decided to permanently discontinue electricity production at Oskarshamn's nuclear plant units 1 and 2. Unit 1 was shut down on 17 June 2017, approximately 2 weeks earlier than planned, and unit 2 has been out of operation since June 2013. The closing processes for both units are estimated to take several years.

City Solutions

In City Solutions, stable growth, cash flow and earnings are achieved through investments in new plants and through acquisitions. Fuel cost, availability, flexibility and efficiency as well as gate fees are key drivers in profitability, but also the power supply/demand balance, electricity price and the weather affect profitability.

In May 2016, the Finnish Government decided to increase the tax on heating fuels by EUR 90 million annually from 2017 onwards. The negative impact on Fortum is estimated to be approximately EUR 5 million per year.

The development of acquired business operations of Fortum Oslo Varme is estimated to require integration-related one-time costs and increased investments over the coming years. The realisation of cost synergies are estimated to gradually start materialising from 2019 onwards with targeted annual synergies of EUR 5–10 million expected to be achieved by the end of 2020.

Consumer Solutions

After the acquisition of Hafslund Markets in August, a new business strategy for Consumer Solutions, was approved by the Fortum Board of Directors in December. The strategic objective is to establish Consumer Solutions as the leading consumer business in the Nordics, with a customer-centric multi-brand structure.

Competition in the Nordic electricity retail market is expected to remain challenging, with continued pressure on sales margins and increasing customer churn. To counter the market challenges and create a solid foundation for competitive operations, Consumer Solutions will increase its resources and cost spend on developing new digital services for consumers.

The combined Hafslund Markets and Fortum Markets business, while largely complementary, have identified synergy potential, in terms of both revenue and costs. The short-term priority will be on achieving identified revenue synergies by leveraging established best practices and providing additional products and services to the whole customer base. The realisation of cost synergies will start materialising once the integration of Hafslund Markets is completed, expected from 2019, with cost synergy realisation gradually increasing over the coming years, and targeted annual synergies of approximately EUR 10 million to be achieved by the end of 2020.

Russia

The Russia segment's new capacity generation built after 2007 under the Russian Capacity Supply Agreement (CSA) has been a key driver for earnings growth in Russia, as it receives considerably higher capacity payments than the old capacity. Fortum will receive guaranteed capacity payments for a period of approximately 10 years from the commissioning of a plant. The received CSA payment will vary depending on the age, location, size and type of the plants, as well as on seasonality and availability. CSA payments can vary somewhat annually because they are linked to Russian Government long-term bonds with 8 to 10 years maturity. In addition, the regulator will review the earnings from the electricity-only market three and six years after the commissioning of a unit and could revise the CSA payments accordingly. Furthermore, the level of the CSA payments increases starting from the seventh year of the 10-year period.

In June 2017, 1,000 MW of the bids of the 50/50-owned Fortum-RUSNANO wind investment fund were selected in the Russian wind auction. The bids are for projects to be commissioned during the years 2018–2022 with a price corresponding to approximately EUR 115–135 per MWh. The projects will be covered by CSA for a period of 15 years.

The long-term Competitive Capacity Selection (CCS) for the years 2017–2019 was held at the end of 2015, the CCS for the year 2020 in September 2016, and the CCS for the year 2021 in September 2017. All Fortum plants offered in the auction were selected. Fortum also obtained forced mode status, i.e. it receives payments for the capacity at a higher rate for some of the "old capacity". For the years 2017–2019, forced mode status was obtained for 195 MW; for the year 2020, 175 MW, and for the year 2021, 105 MW.

In December 2017, Fortum acquired three solar power companies from Hevel Group, Russia's largest integrated solar power company. All three power plants are operational and will receive CSA payments for approximately 15 years after commissioning at an average CSA price corresponding to approximately EUR 430/MWh. The plants were commissioned in 2016 and 2017.

Fortum's Ulyanovsk wind farm is listed in the registry of capacity as of January 2018. The 35 MW power plant is Russia's first industrial wind park. It will receive CSA payments for a guaranteed period of 15 years.

The Russian gas price increased by 3.9% in July 2017 and the increase of the annual average gas price for 2017 was 2.0%.

Capital expenditure and divestments

Fortum currently estimates its capital expenditure, including maintenance but excluding acquisitions, to be in the range of EUR 600–700 million in 2018 most of which is related to hydro and CHP capacity as well as new investments in renewables. The maintenance capital expenditure in 2018 is estimated at approximately EUR 300 million, well below the level of depreciation.

Taxation

The effective corporate income tax rate for Fortum in 2018 is estimated to be 19–21%, excluding the impact of the share of profits of associated companies and joint ventures, non-taxable capital gains, and a Swedish income tax case.

On 11 May 2017, the Administrative Court in Stockholm, Sweden, gave its decisions related to Fortum's income tax assessments for the year 2013. The Court's decisions were not in Fortum's favour. Fortum has appealed the decisions. If the decisions remain in force despite the appeal, the negative impact on the net profit would be approximately EUR 28 million (approximately SEK 273 million). Fortum has not made a provision for this, as, based on legal analysis, the EU Commission's view and supporting legal opinions, the cases should be ruled in Fortum's favour. The assessments concern the loans given in 2013 by Fortum's Dutch financing company to Fortum's subsidiaries in Sweden. The interest income for these loans was taxed in the Netherlands. The Swedish tax authority considers just over a half of the interest relating to each loan as deductible, i.e. deriving from business needs. The rest of the interest is seen as non-deductible. The decisions are based on the changes in the Swedish tax regulation in 2013.

On 30 June 2017, the Court of Appeal in Stockholm, Sweden, ruled against Fortum related to Fortum's income tax assessments in Sweden for the years 2009–2012. Due to the decision of the Court of Appeal, Fortum booked a tax cost of 1,175 MSEK (EUR 123 million) in the second-quarter 2017 results. The booking did not have any cash flow effect for Fortum, as the additional taxes and interest have already been paid in 2016. The case concerns Fortum's right to deduct intra-group interest expenses in Sweden in the years 2009–2012. Fortum restructured its operations and reallocated loans in 2004–2005 to secure future operations. Fortum does not agree with the Court's decision and had applied for the right to appeal from the Supreme Administrative Court.

Hedging

At the end of 2017, approximately 70% of Generation's estimated Nordic power sales volume was hedged at EUR 28 per MWh for 2018, and approximately 40% at EUR 25 per MWh for 2019.

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

Sustainability

Business model

Fortum's business activities cover the production and sales of electricity and heat, waste-to-energy and circular economy solutions as well as energy-sector expert services and various consumer solutions. Fortum is the third largest power generator and the largest electricity retailer in the Nordic countries. Globally, the company is one of the leading heat producers. As two thirds of Fortum's power production is hydro and nuclear, it is also among the lowest-emitting generators in Europe.

Fortum's ambition is to increase its CO_2-free power generation. The company also has generation capacity based on fossil fuels, located mainly in Russia, and it has worked to increase its efficiency and reduce its specific emissions. Fortum is focusing on increasing its solar and wind power capacity heavily over the coming years.

With core operations in 10 countries, Fortum employs a diverse team of close to 9,000 energy-sector professionals. Fortum has 128 hydro power plants as well as 26 CHP (combined heat and power), condensing and nuclear power plants. Globally, the company supplies heat in 22 cities and towns and has five main waste treatment facilities. Fortum's key markets are the Nordic and Baltic countries, Russia, Poland and India.

Sustainability approach

Fortum strives for balanced management of economic, social and environmental responsibility in the company's operations, emphasising the following focus areas:

Economic responsibility	Social responsibility	Environmental responsibility
Economic benefits to our stakeholders	Operational and occupational safety	Energy and resource efficiency
Long-term value and growth	Secure energy supply for customers	Reduction of environmental impacts
Sustainable supply chain	Personnel wellbeing	Climate-benign energy production and systems
Customer satisfaction	Business ethics and compliance	Solutions for sustainable cities

The Group-level sustainability targets are linked to the main sustainability focus areas and emphasise Fortum's role in society. They measure not only environmental and safety targets, but also Fortum's reputation, customer satisfaction, employee wellbeing, and the security of power and heat production. Targets are set annually and are based on continuous operational improvement.

The achievement of the sustainability targets is monitored in monthly, quarterly and annual reporting. Fortum publishes a yearly Sustainability Report with additional information on the company's sustainability performance.

Group sustainability targets and performance

	Target	2017	2016
Economic responsibility			
Reputation index, based on One Fortum Survey	70.7	72.3	72.5
Customer satisfaction index (CSI), based on One Fortum Survey	Level "good", 70–74	64–76	67–79
Environmental responsibility			
Specific CO_2 emissions from total energy production as a five-year average, g/kWh	<200	188	188
Energy-efficiency improvement by 2020, base-line year 2012, GWh/a	>1,400	1,502	1,372
Major EHS incidents, no.	≤21	20	22
Social responsibility			
Energy availability of CHP plants, %	>95.0	96.1	97.4
Total recordable injury frequency (TRIF), own personnel	≤2.5	1.8	1.9
Lost workday injury frequency (LWIF), own personnel	≤1.0	1.2	1.0
Lost workday injury frequency (LWIF), contractors	≤3.5	4.2	3.0
Severe occupational accidents, no.	≤5	1	5
Quality of investigation process of occupational accidents, major EHS incidents and near misses	Level 1.0	Level 0.75	-
Sickness-related absences, %	≤2.3	2.2 *	2.3 *

* Excluding DUON and Hafslund

Fortum is listed on the Nasdaq Helsinki exchange and is included in the STOXX Global ESG Leaders, OMX GES Sustainability Finland, ECPI® and Euronext Vigeo Eurozone 120 indices. Fortum is also ranked in category A- in the annual CDP (formerly the Carbon Disclosure Project) rating 2017, and it has received a Prime Status (B-) rating by the German oekom research AG.

Fortum's sustainability reporting covers all functions under Fortum's operational control, including subsidiaries in all countries of operation. Sustainability information relating to Hafslund Markets' and Fortum Oslo Varme's operations is included in Fortum's reporting as of August 2017. The figures for power and heat generation, capacities and investments include also figures from Fortum's share in associated companies and joint ventures that sell their production to the owners on cost basis. The Meri-Pori power plant is included fully in sustainability figures as Fortum has the environmental permit.

Sustainability risks

Fortum's operations are exposed to risks, which if materialised can have adverse effects on the environment and the safety and security of employees, contractors and neighbouring societies. Key sustainability risks are presented in the Risk management part in the Operating and financial review. Climate change and the need for decarbonisation and resource efficiency is changing energy industry in a profound way and these changes also create new business opportunities for Fortum.

Sustainability governance and policies

Sustainability management at Fortum is strategy-driven and is based on the company's Values, the Code of Conduct, the Supplier Code of Conduct, the Sustainability Policy and other Group policies and their specifying instructions. As sustainability is an integral part of Fortum's strategy, the highest decision making of these issues falls on the duties of the Board of Directors, who share joint responsibility on sustainability matters.

Fortum Executive Management decides on the sustainability approach and Group-level sustainability targets that guide annual planning. The targets are ultimately approved by Fortum's Board of Directors. Fortum's line management is responsible for the implementation of the Group's policies and instructions and for day-to-day sustainability management. Realisation of the safety targets is a part of Fortum's short-term incentive system.

Fortum is a participant of the UN Global Compact initiative and the UN Caring for Climate initiative. Fortum respects and supports the International Bill of Human Rights, the United Nations Convention on the Rights of the Child, and the core conventions of the International Labour Organisation (ILO). Additionally, Fortum recognises in its operations the UN Guiding Principles on Business and Human Rights, the statutes of the OECD Guidelines for Multinational Enterprises, the International Chamber of Commerce's anti-bribery and anti-corruption guidelines, and the Bettercoal initiative's Code on responsible coal mining.

Business ethics

The Fortum Code of Conduct and Fortum Supplier Code of Conduct define how we treat others, engage in business, safeguard corporate assets, and how Fortum expects suppliers and business partners to operate. Fortum's Board of Directors is responsible for the company's mission and Values and has approved the Fortum Code of Conduct. Fortum has zero tolerance for corruption and fraud and does not award donations to political parties or political activities, religious organisations, authorities, municipalities or local administrations.

In addition to internal reporting channels, Fortum employees and partners can report suspicions of misconduct confidentially to the Fortum Head of Internal Audit via the "raise-a-concern channel" on Fortum's internal and external web pages.

Suspected misconduct and measures related to ethical business practices and compliance with regulations are regularly reported to the Audit and Risk Committee.

No cases of suspected corruption or bribery related to Fortum's operations were reported in 2017.

Fortum's main internal policies and instructions guiding sustainability

			Social responsibility		
	Economic responsibility	Environmental responsibility	Social and employee matters	Human rights	Anti-corruption and bribery
Values	x	x	x	x	x
Code of Conduct	x	x	x	x	x
Supplier Code of Conduct	x	x	x	x	x
Disclosure Policy	x		x		
Group Risk Policy	x	x	x	x	x
Sustainability Policy (including environmental, and health and safety policies)	x	x	x	x	x
Minimum Requirements for EHS Management		x	x	x	
Biodiversity Manual		x			
Group Manual for Sustainability Assessment		x	x	x	x
Human Resources Policy			x	x	
Leadership Principles			x	x	
Accounting Manual	x	x	x		
Investment Manual	x	x	x		x
Group Instructions for Anti-Bribery	x		x		x
Group Instructions for Safeguarding Assets	x		x		x
Group Instructions for Conflicts of Interest	x		x		x
Anti-Money-Laundering Manual	x		x		x
Compliance Guidelines for Competition Law	x		x		x
Security Guidelines		x	x	x	
Policy for Sponsoring and Donations	x		x	x	x
Group Instructions for Compliance Management	x	x	x	x	x

Economic responsibility

Fortum's goal is to achieve excellent financial performance in strategically selected core areas through strong competence and responsible ways of operating. Fortum measures financial performance with return on capital employed (target: at least 10%) and capital structure (target: comparable net debt/EBITDA around 2.5).

Fortum is a significant economic actor in its operating countries. The most significant direct monetary flows of Fortum's operations come from revenue from customers, procurements of goods and services from suppliers, compensation to lenders, dividends to shareholders, growth and maintenance investments, employee wages and salaries, and taxes paid. In 2017, investments in CO_2-free production were EUR 375 (270) million.

Fortum supports social development and wellbeing in its operating countries by e.g. paying taxes. The tax benefits Fortum produces to society include not only corporate income taxes but also several other taxes. In 2017, Fortum's taxes borne were EUR 445 (365) million. Fortum publishes its tax footprint annually.

Targets for reputation and customer satisfaction are monitored annually. In the One Fortum Survey in 2017 company reputation among key stakeholders was 72.3 (72.5) points (on a scale of 1–100) and exceeded the target of 70.7 points. The stakeholder groups selected for the One Fortum Survey differ between the years 2016 and 2017. The reference value for the 2017 target-setting (70.7) is the reputation index (69.7) given by the same stakeholder groups in 2016. The Group target (70–74 points) for customer satisfaction was achieved among all business areas, but not in retail electricity sales. The Recycling and Waste Solutions unit was not part of the One Fortum survey in 2017.

Fortum's total purchasing volume in 2017 was EUR 3.2 (2.5) billion and Fortum had about 16,000 suppliers of goods and services. Fortum expects its business partners to act responsibly and to comply with the Fortum Code of Conduct and the Fortum Supplier Code of Conduct. Fortum assesses the performance of its business partners with supplier qualification and supplier audits. In 2017, Fortum audited a total of 11 (13) suppliers in China, India, Russia, Slovenia, Estonia and Finland. Most of the non-compliances identified in the audits in 2017 were related to occupational safety, working hours and remuneration.

Environmental responsibility

Fortum's Group-level environmental targets are related to CO_2 emissions, energy efficiency, and major environmental, health and safety (EHS) incidents.

The Group Sustainability Policy together with the Minimum Requirements for EHS Management steer Fortum's environmental management. Investments, acquisitions and divestments are assessed based on the sustainability assessment criteria defined in the Group's Investment Manual. Operational-level activities follow the requirements set forth in the ISO 14001 environmental management standard, and 99.8% (99.9%) of Fortum's power and heat production worldwide has ISO 14001 certification.

Circular economy

Fortum's aim is to promote resource efficiency improvements and the transition towards a more extensive circular economy. Resource efficiency and maximising the added value of waste and biomass are key priorities in the environmental approach, as defined in the Group Sustainability Policy.

In 2017, Fortum received a total of 1.2 million tonnes of non-hazardous waste and 640,000 tonnes of hazardous waste from customers. As much of the waste stream as possible is recycled, recovered or reused. Waste that is unsuitable for recycling or reuse as a material is incinerated in Fortum's waste-to-energy plants in the Nordic countries and Lithuania.

Sustainable energy production

Fortum's energy production is primarily based on carbon dioxide-free hydropower and nuclear power and on energy-efficient combined heat and power (CHP). In line with the strategy, Fortum is targeting a gigawatt-scale solar and wind portfolio.

In 2017, Fortum's power generation was 73.2 (73.1) TWh and heat production 28.6 (27.8) TWh. 61% (62%) of the total power generation was CO_2-free. In the EU area, 96% (96%) of the power generation was CO_2-free. In 2017, Fortum built and acquired 294 MW of renewable, carbon-free production.

The main fuels that Fortum uses to produce electricity and heat are natural gas, nuclear fuel, coal, waste-derived fuels and biomass fuels. The most significant fuel was natural gas, which accounted for 62% (62%) of the total fuel consumption. The next highest fuel use was uranium 21% (23%). Coal accounted for 10% (10%) of the total fuel use, and waste-derived fuels and biomass fuels 3% (2%) and 3% (3%), respectively. Russia accounted for 99% of the use of natural gas and 51% of the use of coal.

Climate change mitigation

Fortum expects the concern about climate change to increase the demand for low-carbon production and energy-efficient solutions and products. Fortum aims to mitigate climate change by investing in CO_2-free energy production and by improving energy and resource efficiency. Fortum is also adapting its operations to climate change in production planning and in the assessment of growth projects and investments.

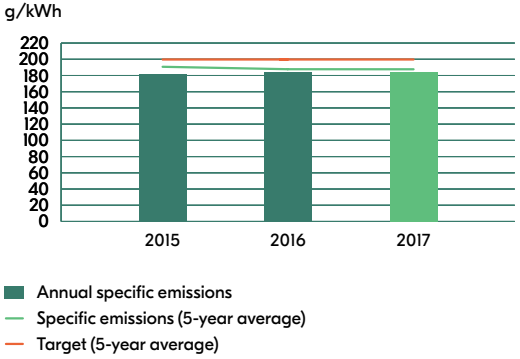
In 2017, Fortum's direct CO_2 emissions were 18.3 (18.6) Mt. 84% (83%) of CO_2 emissions originated from Russian power plants. Direct CO_2 emissions decreased due to the reduction in condensing power production. Of the total CO_2 emissions, 2.3 (2.7) Mt were within the EU's emissions trading scheme (ETS). The estimate for Fortum's free emission allowances is 1.0 (1.0) Mt.

Fortum's direct CO_2 emissions

Fortum's total CO_2 emissions (million tonnes, Mt)	2017	2016	2015
Total emissions	18.3	18.6	19.2
Emissions subject to ETS	2.3	2.7	2.1
Free emissions allowances	1.0	1.0	1.3
Emissions in Russia	15.4	15.5	17.0

Fortum's specific carbon dioxide emissions from total energy production remained at the same level and were 184 (184) g/kWh. The specific CO_2 emissions from total energy production as a five-year average were at 188 (188) g/kWh, which is better than Fortum's Group target of 200 g/kWh.

Specific carbon dioxide emissions of total energy production in 2015–2017



Fortum has had a Group target to achieve annual energy improvements of more than 1,400 GWh by 2020 compared to 2012. This target was reached (1,502 GWh/a) by the end of 2017.

Decreasing environmental impact

Emissions into air

Fortum's activities cause various emissions to air. In addition to carbon dioxide (CO_2) emissions, these include flue-gas emissions such as sulphur dioxide (SO_2), nitrogen oxide (NO_x) and particle emissions. All power plants operate in compliance with their air emission limits.

Fortum's flue-gas emissions into air

1,000 tonnes	2017	2016	2015
Sulphur dioxide emissions	18.8	22.5	19.9
Nitrogen oxide emissions	27.5	26.0	26.8
Particle emissions	15.8	16.8	17.8

Water withdrawal

Fortum uses large volumes of water at various types of power plants and in district heat networks. In most cases, power plants do not consume water – the water is discharged back to the same water system from where it was withdrawn. Fortum withdrew a total of 2,100 (2,100) million m^3 of water in power and heat production; 94% of this amount was used as cooling water.

Radioactive waste

In 2017, 23.4 (19.6) tonnes of spent nuclear fuel was removed from Loviisa power plant's reactors in Finland. High-level radioactive spent fuel is stored in an interim storage at the Loviisa power plant site. The final disposal of the high-level radioactive waste is scheduled to begin at Olkiluoto in Eurajoki in the first half of the 2020s.

Biodiversity

Fortum's main impacts on biodiversity are related to hydropower production. Fuel procurement and flue-gas emissions may also have a negative impact on biodiversity. On the other hand, increasing CO_2-free production mitigates the biodiversity loss caused by climate change. Fortum's Biodiversity Manual, revised in 2017, defines the company's approach in biodiversity management.

Environmental incidents

Fortum's target is fewer than 21 major EHS incidents annually. Major EHS incidents are monitored, reported and investigated, and corrective actions are implemented. In 2017, there were 20 (22) major EHS (environmental, health and safety) incidents in Fortum's operations. There were 10 (11) environmental incidents, out of which eight were spills. Fortum paid fines totalling RUB 8,000 (EUR 121) for the permit violation involving exceeding the wastewater emission limit in Russia. The major EHS incidents did not have significant environmental impacts.

Social responsibility

Fortum's social responsibility targets are related to the secure supply of electricity and heat for customers, operational and occupational safety as well as employee wellbeing.

Employees

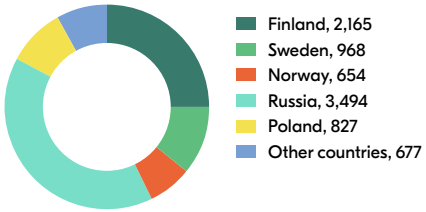
The Group Human Resources Policy is based on the company's Values, Leadership Principles and Code of Conduct. The HR Policy guides the daily work in the company, and the implementation of the policy is followed up regularly through the employee engagement survey, the annual performance and development discussions, as well as other feedback practices.

Fortum's operations are mainly based in the Nordic countries, Russia, Poland and the Baltic Rim area. The total number of employees at the end of 2017 was 8,785 (8,108). The number of employees increased mainly due to the acquisition of Hafslund.

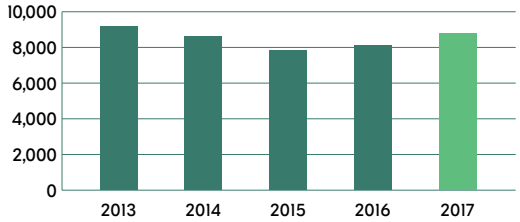
Group employee statistics

	2017	2016	2015
Number of employees, 31 December	8,785	8,108	7,835
Average number of employees	8,507	7,994	8,009
Total amount of employee benefits, EUR million	423	334	351
Departure turnover, %	10.5	13.0	8.6
Permanent employees, %	95.2	96.1	96.0
Full-time employees, % (of permanent employees)	98.1	98.5	98.3
Female employees, %	32	29	29
Females in management, %	29	25	33

Number of employees by country, 31 December 2017



Number of employees, 31 December



Occupational safety

For Fortum, excellence in safety is the foundation of the company's business and an absolute prerequisite for efficient and interruption-free production. Fortum strives to be a safe workplace for the employees and for the contractors and service providers who work for the company. The Group Sustainability Policy, the Minimum Requirements for EHS Management and more detailed Group-level EHS manuals steer the work. A certified OHSAS 18001 safety management system covers 98.4% (99.9%) of Fortum's power and heat production worldwide.

2017 was a challenging year in terms of occupational safety. Only the total recordable incident frequency (TRIF) for own employees and the number of severe accidents met the set target level.

The TRIF for Fortum employees was 1.8 (1.9) per one million working hours, which is better than the target (≤ 2.5). The lost-workday injury frequency (LWIF) for own personnel was 1.2 (1.0), which did not meet the set target level (≤1.0).

The lost workday injury frequency (LWIF) for contractors continues to be Fortum's main challenge. The LWIF for contractors per million working hours was 4.2 (3.0), and Fortum did not achieve the target of ≤3.5. The same challenge applies to the combined LWIF (own employees and contractors): the result was 2.4 (1.8), exceeding the target of 1.9.

In 2018, Fortum will implement new tools to assess contractor safety performance as part of the supplier qualification process and will also evaluate their safety practices in a more systematic manner during work. Fortum will also introduce external safety training for both the management level and key individuals leading safety work as well as the most challenging business areas.

In 2017, as in 2016, there were no accidents leading to a fatality in the company's operations.

Open leadership, personnel development and wellbeing

In late 2017, Fortum launched the company's revised Values and new Leadership Principles. The Open Leadership framework supports cooperation across units and aims to create an environment that fosters innovation, flexibility and agility.

ForCare, Fortum's programme for overall wellbeing at work, aims to promote health, safety, employee work capacity and work community functionality. As part of ForCare, the Energise Your Day wellbeing programme was launched in several new operating countries in 2017. The percentage of sickness-related absences excluding DUON and Hafslund was 2.2 (2.3), which is better than the target level of ≤2.3. The percentage of sickness-related absences for Hafslund was 3.0.

Respect for human rights

Fortum's goal is to operate in accordance with the UN Guiding Principles on Business and Human Rights, and to apply these principles in own operations as well as in country and partner risk assessments and supplier audits.

A sustainability assessment, including a human rights evaluation, is carried out for investment projects – especially in new operating areas – and also for new countries where Fortum plans to expand the sales of products and services. In 2017, 15 (28) of these assessments were made.

In 2017, there were no grievances related to human rights filed through Fortum's formal grievance channels, nor were there any grievances carried over from the previous year.

Society

An uninterrupted and reliable energy supply is critical for society to function. With planned preventive maintenance and condition monitoring, Fortum ensures that the power plants operate reliably to produce the electricity and heat customers need. The energy availability of the company's CHP plants in 2017 was, on average, 96.1%; the target was above 95%.

Fortum's operations impact the local communities where the power plants are located, and the company engages in many kinds of collaboration with local stakeholders. Fortum's Policy for Sponsoring and Donations was revised in late 2017. According to the policy Fortum's sponsoring will focus on wellbeing of children and youth, renewable energy projects, R&D and innovations supporting Fortum's strategy, recycling, recovery and reutilization. The company also does significant collaboration with different research and development projects, particularly with Nordic universities. In 2017, Fortum's support for activities promoting the common good totalled about EUR 4.9 (2.9) million. The grants awarded by Fortum Foundation were about EUR 696,000 (675,000). Fortum Foundation is not part of Fortum Group.

Risk management

Risk management framework and objectives

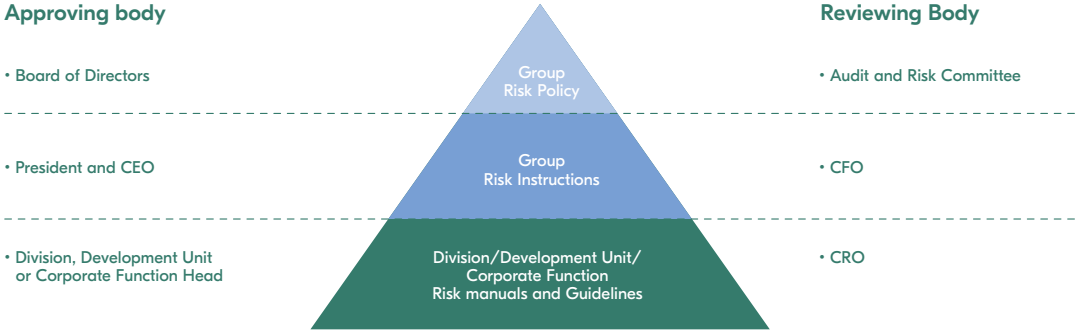
Fortum's Risk Management framework is comprised of the Group Risk Policy and supporting documents. The Group Risk Policy includes an overview of Fortum's risk management systems consisting of the general principles of risk management and the main features of the risk management process. The objective of the risk management systems are to;

- support the development of the Group strategy,
- support strategy execution,
- support the achievement of agreed targets within acceptable risk levels so that the Group's ability to meet financial commitments is not compromised,
- ensure the understanding of material risks and uncertainties affecting Fortum, and
- support the prevention of accidents that can have a severe effect on the health and safety of employees or third parties, and from incidents that can have a material impact on Fortum's assets, reputation or the environment.

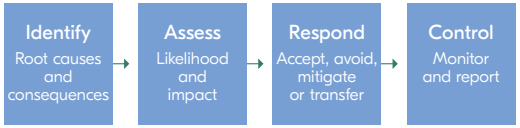
Risk management organisation

The main principle is that risks are managed at source meaning that each Division, Development Unit and Corporate Function Head is responsible for managing risks that arise within their business operations. However, in order to take advantage of synergies, certain risks are managed centrally. For example, Group Treasury is responsible for managing financial risks and cyber and information security risks are managed by Corporate Security. The Audit and Risk Committee (ARC) is responsible for monitoring the efficiency of the company's risk management systems and for annually reviewing the Group Risk Policy and the material risks and uncertainties. Corporate Risk Management, a function headed by the Chief Risk Officer (CRO) reporting to the CFO, provides instructions and tools which support the Group in running an efficient risk management process. Corporate Risk Management is responsible for assessing and reporting maturity of risk management in Divisions, Development Units and Corporate Functions and for providing independent monitoring and reporting of material risk exposures to Group Management, the ARC and the Board of Directors. Risk control functions and controllers in the business monitor and report risks to the CRO.

Corporate Risk Policy Structure



Risk management process



Fortum's risk management process is designed to support the achievement of agreed targets by ensuring that risk management activities are consistent with the general principles of risk management and that risks are monitored and followed-up in a prudent manner. The main features of risk management process consist of event identification, risk assessment, risk response and risk control. Identification is carried out according to a structured process and risks are assessed in terms of impact and likelihood according to a Group-common methodology. Impact is assessed not only in monetary terms, but also in terms of health and safety, the environment and reputation. Risk owners, responsible for implementing actions to respond to the risk, are defined by the business and operational management. Risk responses can be to avoid, mitigate, transfer or absorb the risk. Risk control processes, which include monitoring and reporting of risks, are designed to support compliance with approved instructions, manuals and guidelines and to ensure that risk exposures remain within approved limits and mandates.

Fortum's Board of Directors annually approves the Group Risk Policy and the CEO annually approves Group Risk Instruction

covering commodity market risks, counterparty credit risks, and operational risks. Fortum also has other Group policies and instructions covering e.g. compliance, sustainability, treasury and cyber and information security risks which are aligned with the Group Risk Policy. Risk mandates or limits are defined for commodity market risks, counterparty credit risks and financial risks.

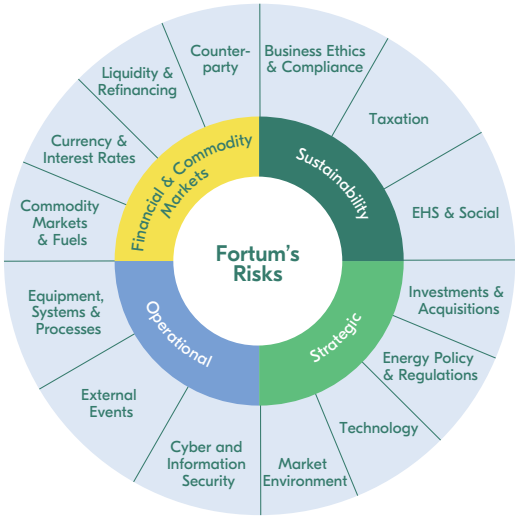
Risk factors

Strategic risks

The main strategic risk is that the regulatory and market environment develops in way that we have not been able to foresee and prepare for. Future energy market and regulation scenarios, including the impact of these to Fortum's business, are continuously assessed and analysed. It is part of Fortum's strategy to, in the long-term, broaden the base of revenues and diversify into new businesses, technologies and markets.

Risks which could hinder Fortum in executing this strategy are continuously assessed, monitored and reported as part of the strategy work. These risks include an inability to identify and carry out successful investments and acquisitions with the related project and integration risks, inability to manage and respond to changes in energy policy and the regulatory environment, and inability to manage and respond to changes in technology.

Fortum Risk Map



Investment and acquisition risks

Fortum's strategy includes growth of operations in new businesses, technologies and geographies, and any future investment or acquisition, including partnerships, entails risk such as:

- increased overall operating complexity and requirements for management, personnel and other resources,
- the need to understand the value drivers and their uncertainties in investments or potential acquisition targets,
- the need to understand and manage new markets with different cultural and compliance requirements,
- the need to understand and manage risks related to sustainability and safety issues.

These risks are managed as part of the investment process which includes requirements for risk identification and assessment and action plans before investment decisions are made, and also sets requirements to follow-up risks in projects and acquisitions.

Energy policy and regulation risks

The energy business is heavily influenced by national and EU-level energy policies and regulations, and Fortum's strategy has been developed based on scenarios of the future development of the regulatory environment in both existing and potential new businesses and market areas. The overall complexity and possible regulatory changes in Fortum's various operating countries pose a risk if we are not able to anticipate, identify and manage those changes efficiently.

Fortum maintains an active dialogue with the bodies involved in the development of laws and regulations in order to manage these risks and proactively contribute to the development of the energy policy and regulatory framework.

Nordic/EU

Fortum's strategy in the power sector is based on a market-driven development, which would mean more interconnections and competition supported by increasing policy harmonization. Even if the Nordic power market has a long tradition of harmonization, national policies vary considerably when it comes to e.g. taxation, permitting, subsidies and market model meaning that we have to manage risks related to both EU regulation and national regulation. Potential risks related to the future energy and climate policy framework include;

- The development towards integrated, flexible and dynamic power market hampered by increasing policy costs and uncoordinated national mechanisms,
- Overlapping national carbon policies diluting the EU ETS and carbon price despite the ETS reform,
- Increasing cost burden for hydro power in Finland, driven by fish obligations, grid costs and real estate taxation and unbalanced implementation of the EU Water Framework directive in Sweden, potentially leading to lower production volumes,
- Sustainability requirements for forest biomass leading to reduced availability and increasing costs,
- Implementation of national waste incineration taxes or other measures due to opposition to incineration hampers the competitiveness of waste-to-energy,
- Substantial retroactive changes and/or discontinuation of prevailing CHP support schemes in Baltic countries and Poland or deteriorating competitiveness of CHP due to fuel tax increases,
- Emergence of windfall tax discussions following possible positive electricity and carbon price development.

The inter-linkage of these issues as well as national measures such as taxation create uncertainty and changes in policies in one area could undermine the effects of policy changes in other areas.

Russia

Russia is exposed to political, economic and social uncertainties and risks resulting from changes in regulation, legislation, economic and social upheaval and other similar factors. The current economic sanctions may be enlarged and/or extended having direct and indirect impacts on the business environment. The main policy-related risks in Russia are linked to the development of the whole energy sector, part of which, like the wholesale power market, is liberalised while other parts, like gas, heat, and retail electricity, are not. The wholesale power market deregulation in Russia has been implemented to a large extent according to original plans. However, regulated sectors are inherently always exposed to a risk of regulatory changes which could affect Fortum's operations.

Technology risks

Fortum's strategy includes developing or acquiring new technologies, as well as digitalizing the business. Fortum's R&D and innovation activities focus on the development of the energy system towards a future solar economy. Fortum is, for example, developing circular economy, bio-economy and other renewable energy concepts as well as innovative solutions for its customers. New technologies expose Fortum to risks related to intellectual property rights, data privacy and viability of technologies. Technology risks are managed primarily through developing a diversified portfolio of projects consisting of different technologies.

Sustainability risks

Corporate social responsibility and sustainable development are integral parts of Fortum's strategy. Fortum gives balanced consideration to economic, environmental and social responsibility. Changes to laws, regulations and the business environment can pose a risk if not identified and managed effectively and the same applies to changes in views of our main stakeholders. In order to identify and manage these risks, Fortum endorses a number of international voluntary charters, standards and guidelines in the area of sustainability, conducts stakeholder surveys annually and has defined internal policies and instructions on how to conduct business. Corporate Functions, Divisions and Development units identify and assess sustainability risks related to their operations and define mitigation measures annually. Corporate Sustainability executes oversight as part of the Group's risk management process.

Environmental, health and safety and social risks

Operating power and heat generation plants, circular economy services and waste management involves use, storage and transportation of fuels and materials that can have adverse effects on the environment and expose personnel, contractors and third parties to safety risks. Assessment of environmental risks and preparedness to operate in exceptional and emergency situations follows legislative requirements as well as the requirements in the environmental management standard (ISO 14001). The same approach, based on the requirements in the operational health and safety standard (OHSAS 18001), applies to risks related to occupational health and safety and actions in emergency situations.

Environmental, health and safety (EHS) risks as well as social risks related to Fortum's supply chain are evaluated through supplier qualification, internal and external audits and risk assessments including partner and country risk assessment. Corrective and preventive actions are implemented when necessary. EHS related risks together with social risks arising in investments are evaluated in accordance with Fortum's Investment manual. Environmental risks and liabilities in relation to past actions have been assessed and provisions have been made for future remedial costs.

Fortum's operations are exposed to physical risks caused by climate change, including changes in weather patterns that could alter energy demand and, for instance, hydropower production volumes. Higher precipitation and temperatures may affect hydropower production, dam safety, and also bioenergy supply and availability. Fortum adapts its operations to the changing climate and takes it into consideration, for example, in production and maintenance planning and in evaluating growth and investment projects.

Tax risk

Fortum operates in a number of countries and is therefore exposed to changes in taxation and how tax authorities interpret tax laws. Changes in the international fiscal environment have created a tax environment that is leading to new or increased taxes and new interpretations of existing tax laws which has decreased the predictability and visibility around how our operations are taxed.

Fortum's tax policy aims to identify simple and cost-efficient solutions to manage taxes in a sustainable manner. Fortum's tax policy is based on a principle that tax is a consequence of business and that compliance with tax rules and legislation and transparency result in a correct tax contribution. This policy leaves no room for artificial or other aggressive solutions. Fortum is continuously following the development of tax related issues and their impact on the Group and maintains an active dialogue with tax authorities in unclear cases. Tax-related issues are communicated openly both internally and externally and Fortum's tax footprint is published annually.

Business ethics and compliance risks

Fortum's operations are subject to laws, rules and regulations set forth by the relevant authorities, exchanges, and other regulatory bodies in all markets in which Fortum operates. Fortum's ability to operate in certain countries may be affected by future changes to local laws and regulations.

Fortum Code of Conduct enhances the understanding of the importance of business ethics for all Fortum employees, contractors and partners. Prevention of corruption is one of the Code of Conduct's focus areas. Fortum has procedures for anti-corruption including prevention, oversight, reporting and enforcement based on the requirements prescribed in international legislation. Fortum's supplier code of conduct sets

sustainability requirements for suppliers of goods and services. The Supplier Code of Conduct is based on the principles of the United Nations Global Compact and is divided into four sections: business principles including anti-corruption, human rights, labour standards and environment.

Fortum systematically identifies, assesses, mitigates and reports compliance risks including risks related to sustainability and business ethics. Internal controls are implemented to prevent the possibilities of unauthorised activities or non-compliance with Group policies and instructions.

Financial & commodity market risks

Commodity market and fuel risks

Fortum's business is exposed to fluctuations in prices and availability of commodities used in the production and sales of energy products. The main exposure is toward electricity prices and volumes, prices of emissions and prices and availability of fuels. Fortum hedges its exposure to commodity market risks in accordance with annually approved Hedging Guidelines, Strategies and Mandates. For further information on hedge ratios, exposures, sensitivities and outstanding derivatives contracts, see ▸Note 3 Financial risk management.

Electricity price and volume risks

In competitive markets, such as in the Nordic region, the wholesale price of electricity is determined as the balance between supply and demand. The short-term factors affecting electricity prices and volumes on the Nordic market include hydrological conditions, temperature, CO_2 allowance prices, fuel prices, economic development and the import/export situation.

Electricity price risks are hedged by entering into electricity derivatives contracts, primarily on the Nasdaq Commodities power exchange. Hedging strategies are continuously evaluated as electricity and other commodity market prices, the hydrological balance and other relevant parameters change. Hedging of the Generation segment's power sales is performed in EUR on a Nordic level covering both Finland and Sweden, and the currency component of these hedges in the Swedish entity is currently not hedged. In Russia, electricity prices and capacity sales are the main sources of market risk. The electricity price is highly correlated with the gas price and exposure is mitigated through the use of fixed-price bilateral agreements. In India, the electricity price received from solar production are fixed through long term power-purchasing agreements.

Emission and environmental value risks

The European Union has established an emissions trading scheme to reduce the amount of CO_2 emissions. In addition to the emissions trading scheme, there are other trading schemes in environmental values in place in Sweden, Norway and Poland. Part of Fortum's power and heat generation is subject to requirements of these schemes. There is currently no trading scheme in Russia for emissions or other environmental values.

The main factor influencing the prices of CO_2 allowances and other environmental values is the supply and demand balance. Fortum hedges its exposure to these prices and volumes through the use of CO_2 futures and environmental certificates.

Fuel price and volume risks

Power and heat generation requires use of fuels that are purchased on global or local markets. The main fuels used by Fortum are natural gas, uranium, coal, various biomass-based fuels and waste. The main risk factor for fuels that are traded on global markets such as coal and natural gas, is the uncertainty in price. Prices are largely affected by demand and supply imbalances that can be caused by, for example, increased demand growth in developing countries, natural disasters or supply constraints in countries experiencing political or social unrest. For fuels traded on local markets, such as bio-fuels, the volume risk in terms of availability of the raw material of appropriate quality is more significant as there may be a limited number of suppliers. Due to the sanctions and economic development in Russia, the risks related to imported fuels from Russia have increased.

In the Nordic market, exposure to fuel prices is limited due to Fortum's flexible generation capacity which allows for switching between different fuels according to prevailing market conditions. In some cases, the fuel price risk can be transferred to the customer. The remaining exposure to fuel price risk is mitigated through fixed-price physical delivery contracts or derivative contracts. The main fuel source for heat and power generation in Russia is natural gas. Natural gas prices are partially regulated, so the price risk exposure is limited.

Liquidity and refinancing risks

Fortum's business is capital intensive and there is a regular need to raise financing. Fortum maintains a diversified financing structure in terms of debt maturity profile, debt instruments and geographical markets. Liquidity and refinancing risks are managed through a combination of cash positions and committed credit facility agreements with its core banks. The credit risk of cash positions has been mitigated by diversifying the deposits to high-credit quality financial institutions and issuers of corporate debt. In relation to the offer for Uniper shares, Fortum has commitments from 10 relationship banks to provide credit facilities at the request of Fortum in an aggregate amount of up to EUR 12,000 million.

Currency and interest rate risks

Fortum's debt portfolio consists of interest-bearing liabilities and derivatives on a fixed- and floating-rate basis with differing maturity profiles. Fortum manages the duration of the debt portfolio through use of different types of financing contracts and interest rate derivative contracts such as interest rate swaps.

Fortum's currency exposures are divided into transaction exposures (foreign exchange exposures relating to contracted cash flows and balance sheet items where changes in exchange rates will have an impact on earnings and cash flows) and translation exposure (foreign exchange exposure that arises when profits and balance sheets in foreign entities are consolidated at the Group level). The main principle is that material transaction exposures should be hedged while translation exposures are not hedged, or are hedged selectively. An exception is the Generation segment's hedging of power sales in Sweden where the currency component is currently not hedged. The main translation exposures toward the

EUR/RUB, EUR/SEK and EUR/NOK are monitored continuously. Changes in these currency rates affect Fortum's profit level and equity when translating results and net assets to euros.

Counterparty risks

Fortum is exposed to counterparty risk whenever there is a contractual arrangement with an external counterparty including customers, suppliers, partners, banks, clearing houses and trading counterparties.

Credit risk exposures relating to financial derivative instruments are often volatile. The majority of commodity derivatives are cleared through exchanges such as Nasdaq OMX commodities. The trend toward more use of futures contracts instead of forward contracts is decreasing the credit exposure toward clearing houses. Derivatives contracts are also entered into directly with external counterparties and such contracts are limited to high-credit-quality counterparties active on the financial or commodity markets.

Due to the financing needs and management of liquidity, Fortum has counterparty credit exposure to a number of banks and financial institutions. The majority of the exposure is toward Fortum's key relationship banks, which are highly creditworthy institutions, but also includes exposure to the Russian financial sector in terms of deposits with financial institutions as well as to banks that provide guarantees for suppliers and contracting parties. Deposits in Russia have been concentrated to the most creditworthy state-owned or controlled banks.

Credit risk exposures relating to customers is spread across a wide range of industrial counterparties, small businesses and private individuals over a range of geographic regions. The majority of exposure is to the Nordic market, Poland and Russia. The risk of non-payment in the electricity and heat sales business in Russia is higher than in the Nordic market. In order to manage counterparty credit risk, Fortum has routines and processes to identify, assess and control exposure. Credit checks are performed before entering into commercial obligations and exposure limits are set for larger individual counterparties. Creditworthiness is monitored through the use of internal and external sources so that mitigating actions can be taken when needed. Mitigating actions include demanding collateral, such as guarantees, managing payment terms and contract length, and the use of netting agreements.

Operational risks

Operational risks are defined as the negative effects resulting from inadequate or failed internal processes, systems or equipment, or from external events. Process-related risks are assessed and controls for the most relevant risks are defined and implemented as part of the internal controls framework. Equipment and system risks are primarily managed through monitoring and maintenance planning. In addition, all Fortum's industrial assets are covered by a Group Master Policy covering property damage and business interruption risks which mitigates the impact of internal and external events.

Operational risks at production facilities

Combined heat and power (CHP) and recycling and waste

CHP production and the recycling and waste business involve the use, storage and transportation of fuels and waste (including hazardous waste). Leakage and contamination of the surrounding environment could lead to clean-up costs and third-party liabilities. An explosion or fire at a facility could cause damages to the plant or third-parties and lead to possible business interruption. These risks are mitigated by condition monitoring, preventive maintenance and other operational improvements as well as competence development of personnel operating the plants. Requirements for waste are clearly specified and samples are tested for selected incoming waste deliveries. Risks in large CHP projects are mitigated through contract structures and insurance coverage.

Hydro power

Operational events at hydro power generation facilities can lead to physical damages, business interruptions, and third- party liabilities. A long-term program is in place for improving the surveillance of the condition of dams and for securing the discharge capacity in extreme flood situations. In Sweden, third-party liabilities from dam failures are strictly the plant owner's responsibility. Together with other hydro power producers, Fortum has a shared dam liability insurance program in place that covers Swedish dam failure liabilities up to SEK 10,000 million.

Nuclear power

Fortum owns the Loviisa nuclear power plant, and has minority interests in two Finnish and two Swedish nuclear power companies. At the Loviisa power plant, the assessment and improvement of nuclear safety is a continuous process performed under the supervision of the Radiation and Nuclear Safety Authority of Finland (STUK).

Third-party liability relating to nuclear accidents is strictly the plant operator's responsibility and must be covered by insurance. As the operator of the Loviisa power plant, Fortum has a statutory liability insurance policy of 600M SDR (Special Drawing Right) and the same type of insurance policies are in place for the operators where Fortum has a minority interest.

Cyber and information security risks

Fortum's business operations are dependent on well-functioning IT and information management systems and processes. Due to the nature of the business, large amounts of data are processed, often in real-time, and used for decision-making and in internal and external communication and reporting. Securing information and availability of the systems are essential for Fortum. Cyber security risks, including risks related to information, industrial control systems (ICS), digitalization and privacy, are managed centrally by Corporate Security. Group instructions and procedures set requirements for managing and mitigating cyber security risks.

General Data Protection Regulation will become applicable on 25th of May 2018. The regulation contains a number of requirements related to processing personal data. Therefore, Fortum has established a Group-wide program to ensure the fulfilment of the requirements.

IT functions in the business, support functions and outsourcing partners are responsible for identifying and mitigating operational IT security related risks as well as managing IT security incidents. IT functions are also responsible for IT service continuity.

Fortum share and shareholders

Fortum Corporation's shares have been listed on Nasdaq Helsinki since 18 December 1998. The trading code is FORTUM (until 25 January 2017: FUM1V). Fortum Corporation's shares are in the Finnish book entry system maintained by Euroclear Finland Ltd which also maintains the official share register of Fortum Corporation.

Share key figures

EUR	2017	2016	2015
Earnings per share			
Continuing operations	0.98	0.56	-0.26
Discontinued operations	-	-	4.92
Total Fortum	0.98	0.56	4.66
Cash flow per share total Fortum	1.12	0.7	1.55
Cash flow per share, continuing operations	1.12	0.7	1.38
Equity per share	14.69	15.15	15.53
Dividend per share	1.10 [1)]	1.10	1.10
Extra dividend per share	-	-	-
Payout ratio, %	112.2 [1)]	196.4	23.6
Dividend yield, %	6.7 [1)]	7.5	7.9

1) Board of Directors' proposal for the Annual General Meeting 28 March 2018.

For full set of share Key figures 2008–2017, see the section ▸ Key figures in the Financial Statements.

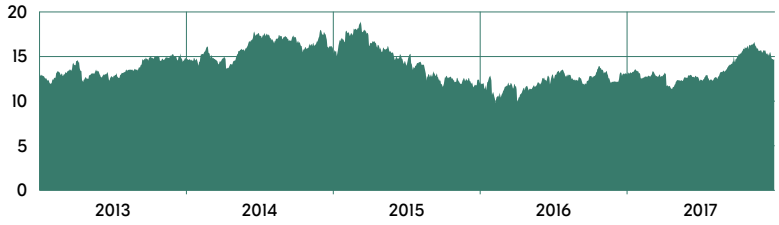
Shareholders value, share price performance and volumes

Fortum's mission is to deliver excellent value to its shareholders. Fortum's share price has appreciated approximately 15% during the last five years, while Dow Jones European Utility Index has increased 11%. During the same period Nasdaq Helsinki Cap index has increased 67%. During 2017 Fortum's share price appreciated approximately 13%, while Dow Jones European Utility index increased 7% and Nasdaq Helsinki Cap index increased 5%.

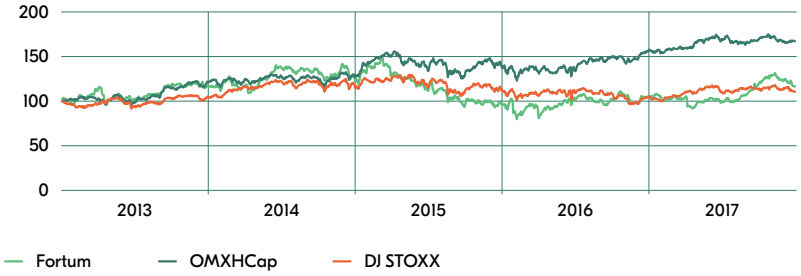
In 2017, a total of 582.9 million (2016: 611.6) Fortum Corporation shares, totalling EUR 8,906 million, were traded on the Nasdaq Helsinki. The highest quotation of Fortum Corporation shares during 2017 was EUR 18.94, the lowest EUR 12.69, and the volume-weighted average EUR 15.28. The closing quotation on the last trading day of the year 2017 was EUR 16.50 (2016: 14.57). Fortum's market capitalisation, calculated using the closing quotation of the last trading day of the year, was EUR 14,658 million (2016: 12,944).

In addition to the Nasdaq Helsinki, Fortum shares were traded on several alternative market places, for example at Boat, Cboe and Turquoise, and on the OTC market as well. In 2017, approximately 61% (2016: 63%) of Fortum's shares were traded on markets other than the Nasdaq Helsinki Ltd.

Market capitalisation, EUR billion



Share quotations, index 100 = quote on 2 January 2013



Share capital

Fortum has one class of shares. By the end of 2017 a total of 888,367,045 shares had been issued. Each share entitles the holder to one vote at the Annual General Meeting. All shares entitle holders to an equal dividend. At the end of 2017 Fortum Corporation's share capital, paid in its entirety and entered in the trade register, was EUR 3,046,185,953.00.

Shareholders

At the end of 2017, the Finnish State owned 50.76% of the company's shares. The Finnish Parliament has authorised the Government to reduce the Finnish State's holding in Fortum Corporation to no less than 50.1% of the share capital and voting rights.

The proportion of nominee registrations and direct foreign shareholders was 30.6 % (2016: 28.1%).

Shareholders, 31 December 2017

Shareholders	No. of shares	Holding %
Finnish State	450,932,988	50.76
The Finnish Social Insurance Institution	7,030,896	0.79
Ilmarinen Mutual Pension Insurance Company	6,220,000	0.70
Kurikan Kaupunki	6,203,500	0.70
The State Pension Fund	4,600,000	0.52
Elo Mutual Pension Insurance Company	4,000,000	0.45
Varma Mutual Pension Insurance Company	3,050,167	0.34
The Local Government Pensions Institution	2,568,955	0.29
Nordea Suomi Pro fund	2,545,929	0.29
Schweizerische Nationalbank	1,977,723	0.22
Danske Invest Suomi Osakeyhtiö fund	1,239,436	0.14
Society of Swedish Literature in Finland	1,156,375	0.13
Etera Mutual Pension Insurance Company	1,132,142	0.13
Seligson & Co OMX 25 fund	905,751	0.10
Nominee registrations and direct foreign ownership [1)]	269,923,008	30.38
Other shareholders in total	124,880,175	14.06
Total number of shares	**888,367,045**	**100.00**

1) Excluding Schweizerische Nationalbank.

By shareholder category	% of total amount of shares
Finnish shareholders	
Corporations	1.27
Financial and insurance institutions	1.19
General government	55.08
Non-profit organisations	1.42
Households	10.21
Non-Finnish shareholders	30.83
Total	**100.00**

Breakdown of share ownership, 31 December 2017

Number of shares owned	No. of shareholders	% of shareholders	No. of shares	% of total amount of shares
1—100	36,689	28.83	2,002,060	0.22
101—500	49,757	39.09	13,304,536	1.50
501—1,000	19,695	15.47	14,551,606	1.64
1,001—10,000	20,023	15.73	52,398,992	5.90
10,001—100,000	1,035	0.81	22,764,187	2.56
100,001—1,000,000	74	0.06	23,013,521	2.59
1,000,001—10,000,000	12	0.01	41,725,123	4.70
over 10,000,000	1	0.00	450,932,988	50.76
	127,286	**100.00**	**620,693,013**	**69.87**
In the joint book-entry account and in special accounts on 31 December			73,276	0.01
Nominee registrations			267,600,756	30.12
Total			**888,367,045**	**100.00**

Management interests 31 December 2017

At the end of 2017, the President and CEO and other members of the Fortum Management Team owned 200,667 shares (2016: 315,653) representing approximately 0.02% (2016: 0.04%) of the total shares in the company.

A full description of the shareholdings and interests in long-term incentive schemes of the President and CEO and other members of the Fortum Executive Management Team is shown in ▸Note 10 Employee benefits.

Authorisations from the Annual General Meeting 2017

In 2017, the Annual General Meeting decided to authorise the Board of Directors to decide on the repurchase and disposal of the company's own shares up to a maximum number of 20,000,000 shares, which corresponds to approximately 2.25% of all the shares in the company. The authorisation is effective for a period of 18 months from the resolution of the General Meeting. The authorisation had not been used by the end of 2017.

Dividend policy

The dividend policy ensures that shareholders receive a fair remuneration for their entrusted capital, supported by the company's long-term strategy that aims at increasing earnings per share and thereby the dividend. When proposing the dividend, the Board of Directors looks at a range of factors, including the macro environment, balance sheet strength as well as future investment plans. Fortum Corporation's target is to pay a stable, sustainable and over time increasing dividend, in the range of 50–80% of earnings per share, excluding one-off items.

Dividend distribution proposal

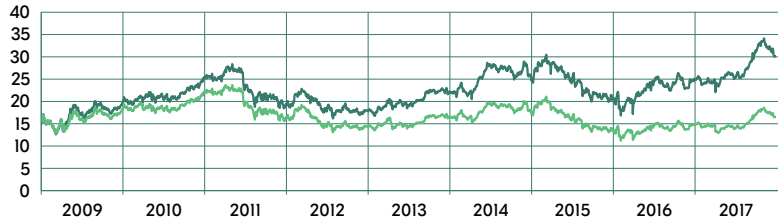
The distributable funds of Fortum Corporation as at 31 December 2017 amounted to EUR 5,170,240,554.04 including the profit of the financial period 2017 of EUR 932,525,770.24. The company's liquidity is good and the dividend proposed by the Board of Directors will not compromise the company's liquidity.

The Board of Directors proposes to the Annual General Meeting that a dividend of EUR 1.10 per share be paid for 2017.

Based on the number of registered shares as at 1 February 2018 the total amount of dividend proposed to be paid is EUR 977,203,749.50. The Board of Directors proposes that the remaining part of the distributable funds will be retained in shareholders' equity.

The Annual General Meeting will be held on 28 March 2018 at 11:00 EET at Finlandia Hall in Helsinki.

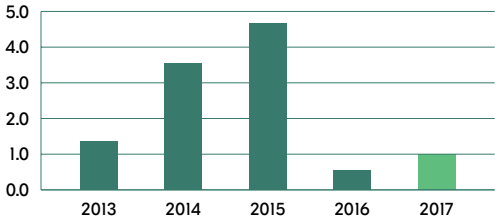
Total shareholder return, EUR



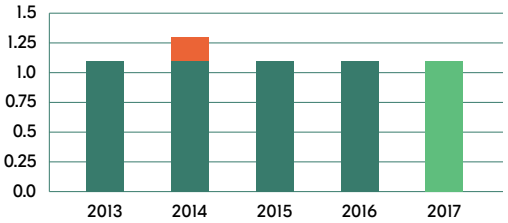
— Fortum's share price, (EUR 16.50)

— Fortum's total shareholder return, EUR 30.10 (dividends reinvested)

Earnings per share total Fortum, EUR



Dividend per share, EUR



The dividend for 2017 represents the Board of Directors' proposal for the Annual General Meeting in March 2018.
Fortum paid extra dividend of EUR 0.20 per share for the financial year that ended 31 Dec 2014.