fortum

Join the change

Fortum Corporation

Interim Report January–March 2019

Fortum Corporation
Domicile Espoo
Business ID 1463611-4

Contents

Tables to the Interim Report

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

Fortum Corporation
Interim Report January-March 2019
26 April 2019 at 9:00 EEST

Positive effect of improved prices offset by lower hydro volumes

January-March 2019

- Comparable EBITDA was EUR 545 (538) million, +1%
- Comparable operating profit was EUR 408 (405) million, +1%
- Operating profit was EUR 358 (482) million, -26%
- Earnings per share were EUR 0.38 (0.43), of which EUR -0.04 (0.07) related to items affecting comparability
- Strong cash flow from operating activities totalled EUR 751 (273) million; the increase was mainly due to the change in settlements for futures

Summary of outlook

- The Generation segment's Nordic generation hedges: approximately 75% hedged at EUR 32 per MWh for the remainder of 2019, and approximately 55% at EUR 31 per MWh for 2020. From the beginning of 2019, the reported hedge prices also include the effect of proxy hedging. This change had a minor effect on the prices
- Capital expenditure, including maintenance but excluding acquisitions, is expected to be in the range of EUR 600-650 million in 2019. In 2020, capital expenditure is expected to decline

Key financial ratios

EUR million	2018	LTM
Return on capital employed, %	6.7	6.5
Comparable net debt/EBITDA	3.6	3.3

Key figures

EUR million	I/19	I/18	2018	LTM
Sales	1,690	1,585	5,242	5,347
Comparable EBITDA	545	538	1,523	1,530
Comparable operating profit	408	405	987	990
Operating profit	358	482	1,138	1,014
Share of profits of associates and joint ventures	111	47	38	102
Profit before income taxes	424	493	1,040	971
Earnings per share, EUR	0.38	0.43	0.95	0.90
Net cash from operating activities	751	273	804	1,282
Shareholders’ equity per share, EUR	13.14	13.64	13.33	
Interest-bearing net debt (at the end of the period)	4,995	899	5,509	

Fortum's President and CEO Pekka Lundmark:

"Following an upward market in 2018, commodity prices in the first quarter of 2019 were generally on a higher level than a year earlier. During the first quarter, however, prices fluctuated and decreased slightly, reflecting some macro uncertainty in the market. With the exception of coal, most commodity prices have recovered in the beginning of the second quarter. At the beginning of the year, Nordic hydro reservoirs were below normal levels, but the situation improved clearly during the quarter.

The first-quarter results were impacted by two main drivers: higher power prices and lower hydro production volumes. The Generation segment's Nordic hedge price for 2019 is clearly above last year's level, and with the spot prices in the first quarter also above last year's prices, the achieved power price for the Generation segment increased by 14%. Unfortunately, the low reservoir levels at the beginning of the quarter negatively affected our hydro production, offsetting almost all of the positive effect of the higher power prices.

The Consumer Solutions segment showed a clear result improvement, partly due to improved margins and partly due to favourable market conditions in the quarter that temporarily increased profitability. The City Solutions segment improved its result mainly due to improved performance of the recycling and waste business. The result of the Russia segment improved, measured in roubles, but suffered from the unfavourable rouble-euro exchange rate.

We have continued to implement our strategy with a current focus on operational excellence to maintain our benchmark performance. The internal work to identify improvement areas continues and, based on current analysis, we see potential for improvements with an annual result effect in the tens of millions. Cash flow optimisation and capital expenditure prioritisation continue to be at the top of our agenda, in order to strengthen the balance sheet. In February, we successfully issued a EUR 2.5 billion bond at competitive prices, reaffirming market confidence in Fortum. The bond proceeds were used to repay the Uniper acquisition financing facility from last year and a maturing higher-cost bond. The refinancing resulted in a more balanced debt maturity profile.

In line with our strategy, we have also continued the focused growth in the power value chain. In India, Fortum won the right to build a 250-megawatt solar plant in Rajasthan. In Finland, Fortum's 90-megawatt Kalax wind power project was approved for the Finnish national renewables scheme. The granted premium in the Finnish scheme is very low, which supports our projection that wind power in the Nordics is becoming competitive in its own right and that no new support schemes are needed.

In February, we were pleased to re-start discussions with Uniper in order to establish in earnest how our companies can work together. The discussions in the various work streams have proceeded well. As we believe a thorough process is required to look at all the possibilities in detail, it will still take some time before we have tangible results to share.

Over the quarter, we have been engaged in discussions with our stakeholders about Fortum's climate commitments and the impact of our energy production. We welcome the opportunities for dialogue on the ways by which Europe can transition to low-carbon energy production in the decades ahead. Fortum is one of Europe's lowest emitting utilities and our European production fleet of today is very much in line with the goals of the Paris Agreement. We support the net-zero emissions target for 2050. Consequently, Fortum targets to report along the guidelines of the Task Force on Climate-related Financial Disclosures as part of the 2019 annual reporting package. We will also continue to encourage European leaders to seek a common path to implementing the transition to a carbon-neutral society in a controlled manner, without compromising the security of supply. On this quest, further strengthening and broadening of the EU emissions trading scheme is key."

Financial results

Sales by segment

EUR million	I/19	I/18	2018	LTM
Generation	601	498	1,842	1,945
City Solutions	405	381	1,110	1,134
Consumer Solutions	669	547	1,759	1,881
Russia	298	336	1,069	1,031
Other Operations	26	23	103	106
Netting of Nord Pool transactions	-192	-161	-516	-547
Eliminations	-117	-39	-125	-203
Total	**1,690**	**1,585**	**5,242**	**5,347**

Comparable EBITDA by segment

EUR million	I/19	I/18	2018	LTM
Generation	259	253	763	769
City Solutions	137	131	310	316
Consumer Solutions	41	31	110	120
Russia	135	142	417	410
Other Operations	-25	-19	-78	-84
Total	**545**	**538**	**1,523**	**1,530**

Comparable operating profit by segment

EUR million	I/19	I/18	2018	LTM
Generation	223	220	628	631
City Solutions	92	88	135	139
Consumer Solutions	26	17	53	62
Russia	99	104	271	266
Other Operations	-32	-24	-99	-107
Total	**408**	**405**	**987**	**990**

Operating profit by segment

EUR million	I/19	I/18	2018	LTM
Generation	204	279	736	661
City Solutions	94	88	130	136
Consumer Solutions	-6	16	75	53
Russia	99	104	273	268
Other Operations	-32	-5	-76	-103
Total	**358**	**482**	**1,138**	**1,014**

January-March 2019

Fortum's sales increased by 7%, mainly driven by higher power prices. Comparable operating profit increased by 1%; however, the positive impact of the higher achieved power price was almost entirely offset by lower hydro volumes.

Operating profit for the period was impacted by EUR -50 (77) million of items affecting comparability, mainly from the fair-value change of non-hedge-accounted derivatives (Note 4).

The share of profit from associates and joint ventures increased to EUR 111 (47) million; a major part of which is the share of profit of EUR 49 (-) million from Uniper, which is consolidated as an associated company as of 30 June 2018. Stockholm Exergi accounted for EUR 35 (40) million and TGC-1 for EUR 8 (5) million. The share of profit from Uniper and TGC-1 are based on the companies' published fourth-quarter 2018 interim reports (Note 11).

Net finance costs amounted to EUR 46 (36) million.

Profit before income taxes was EUR 424 (493) million.

Taxes for the period totalled EUR 65 (94) million. The effective income tax rate, according to the income statement, was 15.2% (19.0%). The comparable effective income tax rate, excluding the impact of the share of profit from associated companies and joint ventures, non-taxable capital gains, and tax rate changes was 20.9% (21.0%) (Note 7).

The profit for the period was EUR 359 (400) million. Earnings per share were EUR 0.38 (0.43), of which EUR -0.04 (0.07) per share were related to items affecting comparability.

Financial position and cash flow

Cash flow

In January-March 2019, net cash from operating activities was strong and increased by EUR 478 million to EUR 751 (273) million, mainly impacted by a EUR 292 (-91) million change in settlements for futures on Nasdaq Commodities and a EUR -22 (-109) million change in working capital.

Capital expenditure increased by EUR 17 million to EUR 150 (133) million. Fortum entered into a non-cash collateral arrangement to release pledged cash from the Nordic power exchange, which had a major positive impact of EUR 310 million on the change in cash collaterals and restricted cash. In the comparison period in the first quarter of 2018, cash collaterals increased by EUR 63 million. Net cash from investing activities increased to EUR 167 (-213) million. Consequently, cash flow before financing activities improved substantially to EUR 918 (60) million.

Proceeds from long-term liabilities were EUR 2,506 (31) million, arising from the issuance of new bonds totalling EUR 2.5 billion under the Euro Medium Term Note (EMTN) programme. The proceeds from the issued bonds were used to repay the bridge financing of EUR 1,750 million related to the acquisition of Uniper shares and repayment of a bond of EUR 750 million. The total payments of long-term liabilities were EUR 2,507 (456) million. The net increase in liquid funds was EUR 1,073 (-383) million.

Assets and capital employed

At the end of the reporting period, total assets amounted to EUR 23,363 (22,409 at the end of 2018) million. Liquid funds at the end of the period increased to EUR 1,692 (584 at the end of 2018) million. Capital employed was EUR 18,627 (18,170 at the end of 2018) million.

Equity

Equity attributable to owners of the parent company totalled EUR 11,674 (11,841 at the end of 2018) million. The 2018 dividend of EUR 1.10 per share was approved by the 2019 Annual General Meeting on 26 March 2019 and paid on 4 April 2019. The decrease in equity of EUR 167 million was mainly related to recorded dividends for 2018 totalling EUR 977 million which was partly offset by the EUR 380 million positive impact from fair valuation of cash flow hedges, positive translation differences of EUR 197 million, and the net profit for the period of EUR 341 million.

Financing

Net debt decreased by EUR 514 million to EUR 4,995 (5,509 at the end of 2018) million. As the Annual General Meeting was held on 26 March 2019 and the dividend was paid on 4 April 2019, net debt for the first quarter of 2019 was not impacted by the dividend payment.

At the end of the reporting period, the Group's liquid funds totalled EUR 1,692 (584 at the end of 2018) million. Liquid funds include cash and bank deposits of EUR 463 (317 at the end of 2018) million held by PAO Fortum. At the end of the first quarter, Fortum had, in addition to liquid funds, undrawn committed credit facilities amounting to EUR 1,800 (1,800) million (Note 13).

On 19 February 2019, Fortum issued bonds with a total nominal amount of EUR 2.5 billion under its EMTN programme. The bonds were issued in three tranches with the following maturities; EUR 1,000 million with a 0.875% fixed coupon maturing on 27 February 2023; EUR 750 million with a 1.625% fixed coupon maturing on 27 February 2026; EUR 750 million with a 2.125% fixed coupon maturing on 27 February 2029. The proceeds from the issued bonds were used to repay the bridge financing of EUR 1,750 million related to the acquisition of Uniper shares and repayment of a bond of EUR 750 million, which resulted in a more balanced debt maturity profile.

Net financial expenses totalled EUR 46 (36) million, of which net interest expenses were EUR 42 (33) million. Interest expenses include EUR 13 million, which represents the remaining amortised cost due to the prepayment of the bridge financing for the acquisition of Uniper shares.

Standard & Poor's long-term credit rating for Fortum is BBB with Negative Outlook. The short-term rating is at level A-2. Fitch Ratings long-term credit rating for Fortum is BBB with Stable Outlook. The short-term rating is at level F3. Having a solid investment-grade rating is a key priority for Fortum.

Key figures

At the end of the reporting period, the comparable net debt-to-EBITDA ratio for the last 12 months was 3.3x (3.6x at the end of 2018). The target is to steer the leverage from the current net debt-to-EBITDA ratio towards the long-term over-the-cycle target of approximately 2.5x.

Gearing was 42% (46% at the end of 2018) and the equity-to-assets ratio was 51% (54% at the end of 2018). Equity per share was EUR 13.14 (13.33 at the end of 2018). Return on capital employed (ROCE) for the last 12 months was 6.5% (6.7% at the end of 2018). Fortum targets a long-term over-the-cycle return on capital employed of at least 10%.

Segment reviews

In 2018, the development units 'M&A and Solar & Wind Development' and 'Technology and New Ventures', reported within Other Operations, were reorganised and parts of the operations moved to the existing divisions. From the beginning of 2019, the management and segment reporting was changed accordingly. The wind business is reported as part of the Generation segment and the solar business as well as the bio-based solutions as part of the City Solutions segment. The Russian wind and solar operations continue as a part of the Russia segment. From the beginning of 2019, Other Operations comprises corporate functions, technology and innovation, internal and external ventures, R&D, as well as Fortum's shareholding in Uniper, which is consolidated as an associated company from 30 June 2018. The restated figures in accordance with the new organisational structure were published on 19 March 2019.

Generation

Generation is responsible for Nordic power production. The division comprises nuclear, hydro, wind, and thermal power production, as well as power portfolio optimisation, trading, industrial intelligence, and nuclear services globally.

EUR million	I/19	I/18	2018	LTM
Sales	601	498	1,842	1,945
- power sales	554	490	1,771	1,835
of which Nordic power sales*	417	414	1,415	1,418
- other sales	46	8	71	109
Comparable EBITDA	259	253	763	769
Comparable operating profit	223	220	628	631
Operating profit	204	279	736	661
Share of profits from associates and joint ventures**	14	-2	-72	-56
Comparable net assets (at period-end)	6,228	5,835	6,485	
Comparable return on net assets, %			10.8	11.0
Capital expenditure and gross investments in shares	38	47	262	253
Number of employees	1,091	1,059	1,091	

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

** Power plants are often built jointly with other power producers, and owners purchase 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 19 in the Consolidated Financial Statements 2018).

Power generation by source

TWh	I/19	I/18	2018	LTM
Hydropower, Nordic	4.8	6.4	19.1	17.6
Wind power, Nordic	0.1	0.1	0.3	0.4
Nuclear power, Nordic	6.3	6.3	22.8	22.7
Thermal power, Nordic	0.1	0.0	0.1	0.2
Total	**11.4**	**12.8**	**42.3**	**40.9**

Nordic sales volumes

TWh	I/19	I/18	2018	LTM
Nordic sales volume	13.3	14.2	48.7	47.8
of which Nordic power sales volume*	10.8	12.3	40.8	39.3

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

Sales price

EUR/MWh	I/19	I/18	2018	LTM
Generation's Nordic power price*	38.4	33.6	34.6	36.0

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

January-March 2019

The Generation segment's total power generation in the Nordic countries decreased due to lower hydropower volumes, as hydro reservoir levels were at a low level at the beginning of the quarter. Towards the end of the quarter, the reservoir levels improved compared to the long-term average. The operational performance was good in the quarter and the load factor for nuclear generation was at a good level. The CO_2-free production accounted for 99% (100%) of the total power production.

The achieved power price in the Generation segment increased by EUR 4.8 per MWh, +14%, driven by higher hedge and spot prices as well as successful optimisation of hydropower production.

Comparable operating profit increased marginally. The higher achieved power price had a clear positive impact. The lower hydropower volumes, however, offset almost all of the positive impact of the higher price.

Operating profit was mainly affected by EUR -20 (59) million of fair-value change of non-hedge-accounted derivatives (Note 4).

City Solutions

City Solutions is responsible for developing sustainable solutions for urban areas into a growing business for Fortum. The division comprises heating, cooling, waste-to-energy, biomass, and other circular economy solutions, as well as solar power production. The business operations are located in the Nordics, the Baltic countries, Poland, and India. The division also includes Fortum's 50% holding in Stockholm Exergi, which is a joint venture and is accounted for using the equity method.

EUR million	I/19	I/18	2018	LTM
Sales	405	381	1,110	1,134
- heat sales	253	265	604	592
- power sales	55	40	134	149
- waste treatment sales*	62	50	211	223
- other sales**	35	26	161	170
Comparable EBITDA	137	131	310	316
Comparable operating profit	92	88	135	139
Operating profit	94	88	130	136
Share of profits from associates and joint ventures	39	44	74	69
Comparable net assets (at period-end)	3,845	3,867	3,794	
Comparable return on net assets, %			5.5	5.5
Capital expenditure and gross investments in shares	72	29	242	285
Number of employees	2,016	1,959	2,017	

* Waste treatment sales comprise gate fees and environmental construction services.
** Other sales mainly comprise operation and maintenance services, sale of recycled products, and fuel sales.

Heat sales by country

TWh	I/19	I/18	2018	LTM
Finland	1.4	1.6	3.8	3.7
Poland	1.5	1.7	3.5	3.2
Norway	0.7	0.8	1.6	1.6
Other countries	0.7	0.8	1.9	1.8
Total	4.3	4.8	10.8	10.3

Power sales by country

TWh	I/19	I/18	2018	LTM
Finland	0.7	0.5	1.4	1.6
Poland	0.2	0.2	0.5	0.4
Other countries	0.2	0.3	1.0	1.0
Total	1.1	1.0	2.9	3.0

January-March 2019

Heat sales volumes declined by 10%, negatively impacted by clearly warmer weather compared to the previous year. In Finland, the power sales volume increased by 40%, as the combined heat and power (CHP) plants had higher load factors. The power sales volume in other countries were lower in the first quarter of 2019 as a consequence of the sale of a majority share of the Indian solar portfolio in 2018.

Comparable operating profit increased by 5%, mainly due to improved results in the recycling and waste business. In addition, higher power prices had a positive effect, which was partly offset by lower heat volumes as the weather was warmer than the previous year. In the comparison period in the first quarter of 2018, the Indian solar portfolio contributed to the comparable operating profit.

Operating profit was marginally affected by EUR 2 (1) million of fair-value change of non-hedge-accounted derivatives (Note 4).

The share of profits from associated companies and joint ventures totalled EUR 39 (44) million, the main part of which was related to the share of profit from Stockholm Exergi, EUR 35 (40) million (Note 11). The decline was mainly due to warmer weather and higher fuel prices compared to the previous year.

Consumer Solutions

Consumer Solutions is responsible for the electricity and gas retail businesses in the Nordics and Poland, including the customer service, invoicing, and debt collection businesses. 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 as well as related value added and digital services.

EUR million	I/19	I/18	2018	LTM
Sales	669	547	1,759	1,881
- power sales	599	482	1,547	1,664
- other sales	70	65	212	217
Comparable EBITDA	41	31	110	120
Comparable operating profit	26	17	53	62
Operating profit	-6	16	75	53
Comparable net assets (at period-end)	647	792	648	
Capital expenditure and gross investments in shares	13	10	47	50
Number of employees	1,455	1,510	1,399	

Sales volumes

TWh	I/19	I/18	2018	LTM
Electricity	10.0	10.6	30.3	29.7
Gas*	1.4	1.5	4.1	4.0

* Not including wholesale volumes.

Number of customers

Thousands*	I/19	I/18	2018
Electricity	2,430	2,470	2,440
Gas	30	20	30
Total	2,460	2,490	2,470

* Rounded to the nearest 10,000.

January-March 2019

The electricity sales volume decreased by 6%, mainly due to the smaller customer base and warmer weather compared to one year earlier. Higher market prices was the main driver for the increase in sales. The tough competition in the Nordics continued with high customer churn.

Comparable operating profit increased by 53%, mainly supported by higher sales margins. More than half of the improvement was due to favourable market conditions that temporarily increased profitability in certain areas of the customer portfolio.

Operating profit was affected by EUR -32 (-1) million of fair-value change of non-hedge-accounted derivatives (Note 4).

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	I/19	I/18	2018	LTM
Sales	298	336	1,069	1,031
- power sales	248	248	872	872
- heat sales	49	88	193	154
- other sales	1	0	4	5
Comparable EBITDA	135	142	417	410
Comparable operating profit	99	104	271	266
Operating profit	99	104	273	268
Share of profits from associates and joint ventures	9	5	36	40
Comparable net assets (at period-end)	3,030	3,091	2,789	
Comparable return on net assets, %			10.3	10.4
Capital expenditure and gross investments in shares	5	16	117	106
Number of employees	2,910	3,401	2,941	

Russian power generation and heat production

TWh	I/19	I/18	2018	LTM
Russian power generation	8.3	8.3	29.6	29.5
Russian heat production	6.9	8.8	20.4	18.5

Key electricity, capacity, and gas prices for Fortum Russia

	I/19	I/18	2018	LTM
Electricity spot price (market price), Urals hub, RUB/MWh	1,128	1,011	1,043	1,072
Average regulated gas price, Urals region, RUB/1000 m^3	3,883	3,755	3,801	3,833
Average capacity price for CCS and other, tRUB/MW/month* **	162	158	148	149
Average capacity price for CSA, tRUB/MW/month**	1,196	1,147	1,075	1,087
Average capacity price, tRUB/MW/month	678	661	609	614
Achieved power price for Fortum in Russia, RUB/MWh	2,002	1,872	1,888	1,924
Achieved power price for Fortum in Russia, EUR/MWh***	26.4	26.8	25.6	25.5

* Including capacity receiving payments under "forced mode status", regulated tariffs, and bilateral agreements.
** Capacity prices paid for the capacity volumes, excluding unplanned outages, repairs, and own consumption.
*** Translated using the average exchange rate.

In 2018, Fortum and STS Corporation established the Yustek joint venture for the heat distribution and supply in Chelyabinsk. The operations of the Yustek joint venture started in November 2018 and became fully operational in January 2019 by obtaining the single heat supplier status and related tariffs. Fortum has transferred the heat networks in Chelyabinsk and certain heat-only boilers with a capacity of 1,661 MW to the Yustek joint venture under a lease agreement.

January-March 2019

Power generation volumes remained stable. Heat production volumes decreased, following the transfer of the heat distribution business in Chelyabinsk, including certain heat-only boilers, to the Yustek joint venture.

Sales declined, impacted by the weaker Russian rouble and the transfer of the heat distribution business in Chelyabinsk to the Yustek joint venture.

Comparable operating profit decreased by 5%, due to the weaker Russian rouble, which had an impact of EUR -8 million. Higher received Capacity Supply Agreement (CSA) payments and higher electricity margins had a positive effect on the results. The positive effect was, however, partly offset by the transfer of the heat distribution business in Chelyabinsk to the Yustek joint venture. In 2018 the businesses transferred to the Yustek joint venture had a marginal annual effect on the comparable operating profit in Russia. The increase in CSA payments was related to Nyagan 2 receiving higher payments for the last years of the CSA period starting from the third quarter of 2018.

Other Operations

Other Operations comprises corporate functions, technology and innovation, internal and external ventures, R&D, as well as Fortum's shareholding in Uniper, which is consolidated as an associated company from 30 June 2018 (Note 6).

The share of profits from associated companies and joint ventures totalled EUR 49 (-) million, which is the share of profit from Uniper (Note 11).

The total acquisition cost for Uniper, including direct costs relating to the acquisition, is reported in 'Participations in associated companies and joint ventures'. The purchase price allocation will be completed in the second quarter of 2019. As Uniper publishes its interim reports later than Fortum, Fortum's share of Uniper's results will be accounted for with a time lag of one quarter, with potential adjustments. Fortum’s January-March 2019 Interim Report includes Fortum’s share of Uniper's fourth-quarter 2018 results (Note 6). Uniper will report its January-March 2019 results on 7 May 2019.

Capital expenditures, divestments, and investments in shares

In the first quarter of 2019, capital expenditures and investments in shares totalled EUR 135 (120) million (Note 6). Capital expenditures were EUR 129 (103) million (Note 4).

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

	Type	Electricity capacity, MW	Heat capacity, MW	Supply starts/started
Generation				
Hydro plants in Sweden and Finland	Hydro	~15		2019
Sørfjord, Norway	Wind	97		IV/2019
Kalax, Finland**	Wind	90		-
City Solutions				
Zabrze, Poland	CHP	75	145	1 Apr 2019
Kivenlahti, Finland	Bio HOB*		58	2020
Pavagada 2, India	Solar	250		III/2019
Rajasthan, India	Solar	250		IV/2020
Russia				
Solar**	Solar	110		2021-2022

* Biofuel-fired heat-only boiler (HOB).
** Subject to separate investment decision.

Generation

Through its interest in Teollisuuden Voima (TVO), Fortum is participating in the building of Olkiluoto 3 (OL3), a 1,600-MW nuclear power plant unit in Finland. OL3 is funded through external loans, share issues, and shareholder loans according to shareholder agreements between the owners and TVO. As a 25% shareholder in OL3, Fortum has committed to funding of the project pro rata. At the end of the reporting period, Fortum's outstanding receivables regarding OL3 were EUR 170 million and the outstanding commitment was EUR 63 million. According to the time plan updated by plant supplier Areva-Siemens consortium in November 2018, the plant is expected to start regular electricity production in January 2020. In March 2019, the Finnish Government granted an operating licence for OL3. In April 2019, TVO informed that the plant supplier will update the time plan during June 2019 (Note 18).

In March 2019, Fortum’s Kalax wind power project in Närpes, Finland, was approved for the Finnish national renewables scheme. The effect of the wind power park is expected to be approximately 90 MW and the annual power generation approximately 300 GWh. The Kalax wind park will receive a subsidy of EUR 2.87 per MWh if the market price for power is below EUR 30 per MWh. The Kalax project is still subject to an investment decision by Fortum.

On 1 January 2019, Fortum acquired all remaining C-shares of TVO entitling it to the power production of the Meri-Pori coal condensing power plant. Fortum is now entitled to 100% of the power production of the plant, an increase from 67% previously. The Meri-Pori power plant is mainly used in Fingrid’s capacity reserve and as back-up capacity.

In Norway, Fortum is constructing the 97-MW Sørfjord wind farm, which is expected to be commissioned in the fourth quarter of 2019.

City Solutions

In March 2019, Fortum announced that it had won the right from Solar Energy Corporation of India to build a 250-MW solar power plant in Rajasthan, India. Commissioning of the plant is expected in the fourth quarter of 2020.

In June 2018, Fortum won the right to build a 250-MW solar power plant in the Pavagada solar park in Karnataka, India. The capital expenditure is estimated to be approximately EUR 160 million. The estimated capital expenditure increased from the previously communicated EUR 120 million mainly due to the imposition of a import duty on solar panels, which according to the power purchase agreement will be compensated, and due to changes in foreign exchange rates. Commissioning of the plant is expected in the third quarter of 2019.

In June 2018, Fortum signed an agreement to sell a 54% share of its solar power company operating four solar power plants in India to UK Climate Investments (40%) and Elite Alfred Berg (14%). In April 2019, Elite Alfred Berg used their option to buy an additional 2% from Fortum.

In 2015, Fortum decided to build a new multi-fuel CHP plant in Zabrze, Poland. The new plant is primarily fuelled by refuse-derived fuel (RDF) and coal, but it can also use a mixture of fuels. The new plant replaces the existing purely coal-fired units in Zabrze and Bytom. It has a production capacity of 145 MW of heat and 75 MW of electricity. Commissioning was somewhat delayed from the original plan and commercial operations started on 1 April 2019.

Russia

In April 2019, the Ministry of Energy of the Russian Federation selected Fortum and Energy Sales Company Vostok's 50/50 joint venture to become the guaranteed electricity retail supplier to 1.5 million customers in the Chelyabinsk region as of 1 July 2019. The decision was made based on an auctioning process held in March 2019 and is still subject to the joint venture fulfilling the tender obligations. In the auction, the joint venture committed to a 100% reimbursement of the RUB 4.8 billion debt of Chelyabenergosbyt, corresponding to approximately EUR 66 million. The transaction will require a limited equity investment from Fortum as the joint venture plans to finance the major part of the reimbursement with external debt. For Fortum, the financial net impact of the reimbursement is substantially decreased by the fact that Fortum is the single largest creditor with EUR 11 million of the debt.

In June 2018, Fortum won the right to build 110 MW of solar capacity in a CSA auction. The power plants are to be commissioned during the years 2021-2022.

In June 2018, the Fortum-Rusnano wind investment fund (Fortum's ownership 50%) won the right to build 823 MW of wind capacity in a CSA auction. The wind parks were to be commissioned during the years 2019-2023. During the fourth quarter of 2018, the wind investment fund made an investment decision on a 100-MW wind farm. Power production is expected to start during the first half of 2020.

In June 2017, the Fortum-Rusnano wind investment fund won the right to build 1,000 MW of wind capacity in a CSA auction. The wind parks were to be commissioned during the years 2018-2022. In October 2017 and October 2018, the wind investment fund made investment decisions on a 50-MW and a 200-MW wind farm, respectively. On 1 January 2019, the 50-MW wind farm started operation. Power production at the 200-MW wind farm is expected to start during the first half of 2020.

The investment decisions related to the renewable capacities won by Fortum and the Fortum-Rusnano wind investment fund in 2017 and 2018 are made on a case-by-case basis. Fortum’s maximum equity commitment is RUB 15 billion. In the longer term, Fortum seeks to maintain an asset-light structure by forming potential partnerships and other forms of cooperation.

Operating and regulatory environment

Nordic countries

According to preliminary statistics, electricity consumption in the Nordic countries was 116 (121) TWh during the first quarter of 2019. The lower consumption was mainly driven by warmer weather during the first quarter of 2019 compared to the same period last year. Industrial demand was close to unchanged.

At the beginning of 2019, the Nordic water reservoirs were at 74 TWh, which is 9 TWh lower than the long-term average and 12 TWh lower than one year earlier. At the end of the first quarter of 2019, the reservoirs were at 39 TWh, which is 3 TWh below the long-term average and 5 TWh higher than one year earlier.

In the first quarter of 2019, the average system spot price in Nord Pool was EUR 46.9 (38.6) per MWh. The average area price in Finland was EUR 47.5 (42.0) per MWh and in Sweden (SE3, Stockholm) EUR 46.5 (39.0) per MWh. The clearly higher marginal cost for coal condense and low Nordic water reservoirs were the main reasons for the price increase and this impact overshadowed the mild and windy weather.

In Germany, the average spot price increased to EUR 40.9 (35.5) per MWh in the first quarter of 2019.

The market price of CO_2 emission allowances (EUA) was volatile during the quarter and decreased from EUR 25 per tonne at the beginning of the year to EUR 22 per tonne at the end of the first quarter of 2019. The average price of CO_2 emission allowances was EUR 22 (10) in the first quarter.

Russia

Fortum operates mainly in the Tyumen and Khanty-Mansiysk area of Western Siberia, where industrial production is dominated by the oil and gas industries, and in the Chelyabinsk area of the Urals, which is dominated by the metal industry. The Russian market is divided into two price zones and Fortum operates in the First Price Zone (European and Urals part of Russia).

According to preliminary statistics, Russian electricity consumption was 289 (289) TWh during the first quarter of 2019. The corresponding figure for the First Price Zone was 220 (220) TWh.

In the first quarter of 2019, the average electricity spot price, excluding capacity prices, increased by 10% to RUB 1,309 (1,187) per MWh in the First Price Zone. The spot price in the Urals hub increased by 12% and was RUB 1,128 (1,011) per MWh.

More detailed information about the market fundamentals is included in the tables at the end of the report (pages 59-61).

European regulatory environment

Taxonomy of sustainable finance progressing

On 28 March, the European Parliament adopted its resolution on the Commission's proposal for the taxonomy of sustainable finance. This regulation establishes the framework to gradually create a unified classification system on what can be considered an environmentally sustainable economic activity. In the Parliament's resolution, nuclear power, non-renewable energy, gas pipelines, and waste incineration are not considered sustainable.

Being classified non-sustainable could increase the financing costs of those investments and likely result in exclusion from public financing and cause reputational damage. There is also a risk that the taxonomy will be used as a reference for future EU legislation.

As such, the sustainable finance initiative is in line with Fortum's strategy. However, initiatives to promote sustainable investments in the energy sector have to be technology-neutral and aim for low-carbon fossil-free solutions rather than generally promoting investments in certain types of renewables.

EU 2050 climate strategy not proceeding in the Council

The European Commission’s proposal for the EU 2050 climate strategy has recently encountered conflicting views among the member states. The European Council's conclusions on 22 March refer to carbon neutrality, but failed to specify any timeframe to reach it. The German position is pending due to the country's internal climate policy debate, and they have not been able to support any date for reaching the EU net-zero emissions. The EU leaders are expected to return to the subject in June, but further delays in the finalisation of the strategy are expected.

On 14 March, the European Parliament approved a non-binding resolution on the strategy including support for climate neutrality in 2050 and for increasing the 2030 climate target to 55% from the existing 40%.

Fortum is of the opinion that the target for 2050 and a cost-efficient emission reduction pathway for 2030-2050 should be confirmed as soon as possible. In Fortum’s view, carbon pricing will be the key measure for reaching carbon neutrality.

New taxes for fossil fuels proposed in Sweden

On 10 April, the Swedish government proposed new taxes on fossil fuels used for heat production in CHP plants. According to the Department of Finance, the annual tax revenues for Sweden from the CHP tax could amount to SEK 450 million. If approved, the new tax would have negative financial implications for Stockholm Exergi.

Reshaping of EU's hydropower legislation

The EU Water Framework Directive (WFD) is undergoing a fitness check by the EU Commission. In addition, the Commission released its fifth WFD implementation report on 26 February looking at the status of water bodies in each member state.

The Commission's recommendations for Finland and Sweden are demanding and may have a significant impact on hydropower, resulting in production losses and additional costs for environmental measures. If a revision is made without fully considering hydropower's valuable contribution to a carbon-free energy system, it will have an unintentional adverse effect on both the climate and the energy system.

Fortum believes that the current WFD as such is still reasonably fit for its purpose and doesn't need to be revised. However, the Common Implementation Strategy guidance documents should be reviewed and harmonised to make them consistent with the directive.

Nordic Ministerial Declaration on Carbon Neutrality

On 25 January, five Nordic countries agreed on closer cooperation to tackle climate change. In the Ministerial Declaration on Nordic Carbon Neutrality, the countries declared to follow the 1.5 ^{o}C goal in policymaking, to raise the level of climate ambitions by 2020, and to achieve carbon neutrality sooner than other countries. The role of the private sector and support for research, development, and innovation are highly visible in the declaration.

Fortum welcomes the declaration and looks forward to concrete proposals for cooperation.

Electricity end-user prices frozen in Poland

On 1 January, the amended law on the excise tax for electricity sales entered into force, but was amended again on 4 March following discussions with the European Commission and pressure from market participants. The related secondary legislation concerning compensation methodology to compensate losses for electricity suppliers is still under preparation. According to the Ministry of Energy, the lowered end-user electricity prices would be applicable only during 2019.

This intervention has made the regulatory environment more uncertain in Poland. This market intervention, including the planned compensation mechanism that can be regarded as illegal state aid, is expected to be challenged by the European Commission. Fortum is working jointly with the trade associations and other relevant bodies to clarify the new legislation.

Key drivers and risks

Fortum's financial results are exposed to a number of economic, strategic, energy policy and regulation, financial, and operational risks. Fortum is exposed to these risks both directly and indirectly through its associated companies and joint ventures.

Some of the key factors influencing Fortum's business performance are the European commodity and electricity wholesale prices. The key short-term drivers behind the electricity wholesale price development in the Nordic region are the prices of fuels and CO_2 emission allowances, the hydrological situation, temperature, economic development, and the electricity import-export balance.

Global economic growth impacts commodity and CO_2 emission allowance prices, which, in turn, impact the Nordic wholesale price of electricity. In all regions, fuel prices and power plant availability also impact profitability. In addition, increased volatility in exchange rates could have both translation and transaction effects on Fortum's financials, especially through the Russian rouble and Swedish krona.

In the Nordic countries, changes in the regulatory and fiscal environment add risks for the energy and environmental management sectors. 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 updated strategy includes broadening of the revenue base 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 Fortum's Russian business, the key drivers are economic growth, the rouble exchange rate, regulation of the heat business, and the further development of the electricity and capacity markets. A key profitability driver is the received capacity payment based on the CSA contracts and Competitive Capacity Selection (CCS) auctions. The main part of Fortum's generation capacity built after 2007 is entitled to CSA payments for approximately 10 years after commissioning of each new unit (approximately 15 years for renewable generation). The received capacity payments vary, depending on the age, location, type, and size of the plant, as well as on seasonality and availability. The CSA payments are adjusted for, among other factors, 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). In addition, thermal power plants are entitled to clearly higher CSA payments starting approximately six years after commissioning.

For further information about the risks, see Fortum's Annual Report.

Outlook

Hedging

At the end of March 2019, approximately 75% of the Generation segment's estimated Nordic power sales volume was hedged at EUR 32 per MWh for the remainder of 2019, and approximately 55% at EUR 31 per MWh for 2020 (at the end of 2018: 45% at EUR 29 per MWh). From the beginning of 2019, the reported hedge prices also include the effect of proxy hedging. The change had a minor effect on the prices. There was no change to the calculation method of the hedge ratio.

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.

Capital expenditure and divestments

Fortum currently estimates its capital expenditure, including maintenance but excluding acquisitions, to be in the range of EUR 600-650 million in 2019. This includes solar and wind investments, which can be divested through the capital recycling business model. The maintenance capital expenditure in 2019 is estimated at approximately EUR 300 million, well below the level of depreciation.

In 2020, capital expenditure is expected to decline.

Nordic market

Electricity is expected to continue to gain a higher share of total energy consumption. Electricity demand in the Nordic countries during the next few years is expected to grow annually by approximately 0.5% on average. The growth rate will largely be determined by the macroeconomic development in Europe and especially in the Nordic countries and, in the longer term, also by the rate of electrification of industry, transportation, and heating.

During the first quarter of 2019, oil prices increased, while coal and EUA prices decreased. In mid-April 2019, the forward quotation for coal (ICE Rotterdam) for the remainder of 2019 was around USD 64 per tonne and the market price for EUAs for 2019 at the level of EUR 24 per tonne. The Nordic system electricity forward price on Nasdaq Commodities for the remainder of 2019 was around EUR 39 per MWh and for 2020 around EUR 37 per MWh. In Germany, the electricity forward price for the remainder of 2019 was around EUR 44 per MWh and for 2020 around EUR 49 per MWh. The Nordic water reservoirs were about 3 TWh below the long-term average and 5 TWh higher than one year earlier.

Generation

The Generation segment's achieved Nordic power price typically depends on factors such as hedge ratios, hedge prices, spot prices, availability and utilisation of Fortum's flexible production portfolio, as well as 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. The achieved power price also includes the results of optimisation of Fortum's hydro and nuclear production, as well as operations in the physical and financial commodity markets.

On 19 June 2018, the Swedish parliament adopted new hydro legislation that came into force on 1 January 2019. In the new legislation it is stated that the industry shall create a joint hydropower fund to finance major parts of the environmental actions needed. A fund has been established with a total financial cap of SEK 10 billion to be paid over a 20-year period. The major utilities will contribute to the fund based on their share of hydropower production. Fortum's share is 23% of the fund's total financing. In addition to the new legislation, the government issued an ordinance that came into force on 11 January 2019 to establish a national prioritisation plan for the revision of hydropower permits.

On 11 June 2018, the Swedish Administrative Court of Appeal gave its decisions on Fortum Sverige AB's hydropower production-related real-estate tax assessments for the years 2009-2014. The court decisions were not in Fortum's favour. Fortum applied for the right to appeal from the Supreme Administrative Court, but did not receive permission to appeal. As the Administrative Court, the Administrative Court of Appeal in Stockholm, and the Supreme Administrative Court have handled only the arguments concerning state aid, the case concerning the other legal arguments is now transferred back to the Administrative Court. The disputed amount, excluding interest for the time period, totals approximately SEK 510 million (approximately EUR 50 million). Moreover, Fortum's Swedish companies have appeals for 2011-2016 pending in the Administrative Court relating to the real-estate tax rate for their hydropower plants referring to the same legal grounds. Fortum has paid the real-estate tax in accordance with the legislation. If the final court decision is unfavourable to Fortum, it will not impact Fortum's results. In December 2018, Fortum Sverige AB filed a complaint to the EU Commission regarding the Swedish real-estate tax for hydropower plants for 2017 and prior years. Fortum has asked the Commission to investigate whether the Swedish legislation regarding the real-estate tax for hydropower plants and the Swedish court decisions are in line with EU state aid rules.

According to the Swedish Government's budget proposal for the coming years, presented in September 2016, the Swedish hydropower real-estate tax will decrease from 2.8% to 0.5%. The tax is being 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 2018, the tax for Fortum was EUR 65 million. In addition to the decrease in the tax rate, the hydropower real-estate tax values, which are linked to electricity prices, were updated in 2019. The real-estate tax values are updated every six years. In 2019, the hydropower real-estate tax for Fortum is estimated to decrease by approximately EUR 20 million from 2018.

City Solutions

In City Solutions, growth in cash flow and earnings are mainly achieved through investments in new plants and through acquisitions. Heat prices, fuel cost, availability, flexibility and efficiency of the plants, as well as gate fees for receiving waste are key drivers for profitability, but power prices and weather conditions also affect profitability. Fortum aims to create new businesses with potential for sizeable profit contribution, e.g. within the areas of waste and recycling and bio economy.

The development of Fortum Oslo Varme's business operations is estimated to require one-time integration-related costs and investments over the coming years. The realisation of cost synergies is 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.

In March 2019, Fortum announced that it had won the right from Solar Energy Corporation of India to build a 250-megawatt (MW) solar power plant in Rajasthan, India. The solar park will be entitled to a fixed tariff of 2.48 INR/kWh for 25 years. Commissioning of the plant is expected in the fourth quarter of 2020.

In June 2018, Fortum won the right to build a 250-MW solar power plant in the Pavagada solar park in Karnataka, India. The capital expenditure is estimated to be approximately EUR 160 million, and the solar park will be entitled to a fixed tariff of 2.85 INR/kWh for 25 years. The estimated capital expenditure increased from the previously communicated amount due to the imposition of a import duty on solar panels, which according to the power purchase agreement will be compensated, and due to changes in foreign exchange rates. Commissioning of the plant is expected in 2019.

Consumer Solutions

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

The combined Hafslund Markets and Fortum Markets business, while largely complementary, has 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 in 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

In the Russia segment, capacity payments based on CSA contracts are a key driver for earnings growth, as it receives considerably higher capacity payments than through the CCS auctions. Currently, Fortum's CSA capacity amounts to 2,368 MW. In February 2019, the System Administrator of the wholesale market published data on the WACC and the CPI for 2018, which were used to calculate the 2019 CSA price. The CSA payments were revised downwards accordingly to reflect the lower bond rates. The regulator also reviewed the guaranteed CSA payments by re-examining earnings from the electricity-only market and revised the CSA payments upwards due to the lower earnings from the electricity-only market. In addition, thermal power plants are entitled to clearly higher CSA payments starting approximately six years after commissioning. In 2019, no such increase in CSA payments is expected.

Fortum’s other Russian generation capacity, totalling 2,544 MW, is allowed to participate in the CCS auctions. The long-term CCS for the years 2018-2021 were held in 2015, 2016, and 2017. All Fortum plants offered in the auctions were selected. Fortum also obtained "forced mode status", i.e. it receives payments for the capacity at a higher rate for some of the units at the Argayash power plant. For the years 2018-2019, "forced mode status" was obtained for 195 MW; for the year 2020 for 175 MW, and for the year 2021 for 105 MW. The CCS price, excluding payments for "forced mode status" was 111 tRUB/MW/month for 2018, 110 tRUB/MW/month for 2019, 115 tRUB/MW/month for 2020, 134 tRUB/MW/month for 2021. The CCS auction for 2022-2024 is expected to be held in July 2019, and for 2025 in November 2019.

In June 2018, Fortum won the right to build 110 MW of solar capacity in a CSA auction. The power plants are to be commissioned during 2021-2022 and will receive a guaranteed CSA price corresponding to approximately RUB 14,000 per MWh for a period of 15 years.

In June 2018, the Fortum-Rusnano wind investment fund (Fortum's ownership 50%) won the right to build 823 MW of wind capacity in a CSA auction. The wind parks were to be commissioned during 2019-2023 and will receive a guaranteed CSA price corresponding to approximately RUB 7,000-8,000 per MWh for a period of 15 years. In December 2018, the wind investment fund made an investment decision on a 100-MW wind farm.

In June 2017, the Fortum-Rusnano wind investment fund won the right to build 1,000 MW of wind capacity in a CSA auction. The wind parks were to be commissioned during 2018-2022 and will receive a guaranteed CSA price corresponding to approximately RUB 7,000-9,000 per MWh for a period of 15 years. In October 2017 and October 2018, the wind investment fund made investment decisions on a 50-MW and a 200-MW wind farm, respectively.

Fortum estimates the Russian annual average gas price growth to be 3% in 2019.

Other Operations

For information on the financial impact of the Uniper shareholding, please see Note 6.

Income taxation

In 2019, the effective corporate income tax rate for Fortum is estimated to be 19-21%, excluding the impact of the share of profits of associated companies and joint ventures, non-taxable capital gains, as well as tax rate changes.

In June 2018, the Swedish Government decided to lower the Swedish corporate tax in two steps, from the current 22.0% to 21.4%, effective January 2019, and to 20.6%, effective January 2021.

In March 2018, the Swedish Supreme Administrative Court decided not to grant leave to appeal to Fortum with respect to the interest deduction cases relating to the years 2009-2012. The unfavourable decision of the Administrative Court of Appeal from June 2017 therefore remains in force. The additional tax and interest, in total SEK 1,175 million (EUR 122 million), was paid in 2016 and booked as a cost in the second-quarter 2017 results. There are strong grounds to argue that these decisions of the Administrative Court of Appeal and the Supreme Administrative Court violate EU law and fundamental rights under EU law. On these grounds, Fortum filed a summons application in December 2018 to the District Court of Stockholm in which damages are claimed from the Swedish state in these cases. Fortum also filed a request to initiate a mutual agreement procedure between Sweden and the Netherlands for the year 2012 (Note 18).

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, 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 2018, Fortum's R&D expenditure was EUR 56 (53) million, or 1.1% (1.2%) of sales.

Sustainability

Fortum gives balanced consideration in its operations to climate and resource issues, as well as its impacts on personnel and society, emphasising the following focus areas:

Personnel and society		Climate and resources
Economic benefits to 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. A new target in 2019 is the Contractor safety improvement index measuring how well Fortum has managed to implement measures targeting improvements in contractor safety.

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 2019*

	Target	I/19	I/18	2018	Five-year average
Climate and resources					
Specific CO_2 emissions from total energy production as a five-year average, g/kWh	< 200	194	181	186	187
Major EHS incidents, no.	≤ 18	0	10	18	-
Personnel and society					
Energy availability of CHP plants, %	> 95.0	97.6	96.8	96.4	-
Lost Workday Injury Frequency, own personnel and contractors	≤ 1.7	2.1	1.4	1.8	-
Severe occupational accidents, no.	0	0	0	4	-
Quality of investigation process of occupational accidents, major EHS incidents and near misses	Level 3.0	Level 3.0	Level 3.0	Level 3.0	-
GAP index, implementation of EHS minimum requirements	Level 3.0	Level 2.0	-	Level 2.0	-
Contractor safety improvement index	Level 2.0	-**	-	-	-
Sickness-related absences, %	≤ 2.5	3.8***	3.1***	2.8	-

* Group targets for energy efficiency, Reputation index, and Customer Satisfaction index are monitored annually.
** The reporting of the Contactor safety improvement index starts from II/19.
*** Sickness-related absences in January-February.

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 (long-term target: at least 10%) and capital structure (long-term target: comparable net debt/EBITDA around 2.5x).

Fortum is listed on the Nasdaq Helsinki exchange and is included in the STOXX Global ESG Leaders, OMX Sustainability Finland, ECPI®, Euronext Vigeo Eurozone 120, Euronext Vigeo Europe 120, MSCI ESG Ratings, and Equileap Gender Equality indices. Fortum is also ranked in category B in the annual CDP Climate Change rating 2018, and it has received a Prime Status (B-) rating by ISS-oekom Corporate Rating.

Fortum's sustainability reporting covers all functions under Fortum's operational control, including subsidiaries in all countries of operation.

Climate and resources

Fortum's environmental targets are related to CO_2 emissions, energy efficiency, and major Environmental, Health, and Safety (EHS) incidents. Operational-level activities follow the requirements set forth in the ISO 14001 environmental management standard, and 99.9% (99.8%) of Fortum's power and heat production worldwide has ISO 14001 certification.

Fortum’s aim is to promote resource efficiency improvements and the transition towards a more extensive circular economy. Fortum’s energy production is primarily based on carbon dioxide-free hydropower and nuclear power and on energy-efficient CHP. In line with the strategy, Fortum is targeting a multi-gigawatt solar and wind portfolio. 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.

In January-March 2019, Fortum’s direct CO_2 emissions were 5.9 (6.3) Mt. Of the total CO_2 emissions, 0.9 (1.0) Mt were within the EU’s Emission Trading Scheme (ETS). The estimate for Fortum’s free emission allowances in 2019 is 0.7 (0.8) Mt.

Fortum's total CO_2 emissions (million tonnes, Mt)	I/19	I/18	2018	LTM
Total emissions	5.9	6.3	20.1	19.7
Emissions subject to ETS	0.9	1.0	2.5	2.3
Free emission allowances	-	-	0.8	-
Emissions in Russia	4.8	5.1	16.9	16.6

In January-March 2019, Fortum’s specific carbon dioxide emissions from total energy production were 194 (181) g/kWh. The specific CO_2 emissions from total energy production as a five-year average were 187 (186) g/kWh, which is better than Fortum’s Group target of 200 g/kWh.

Fortum’s target regarding major EHS incidents is to have no more than 18 major EHS incidents annually. Major EHS incidents are monitored, reported and investigated, and corrective actions are implemented. In January-March 2019, there were 0 (10) major EHS incidents in Fortum’s operations.

Personnel and society

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

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, contractors, and service providers who work for the company. A certified OHSAS 18001 or ISO 45001 safety management system covers 97.0% (98.4%) of Fortum’s power and heat production worldwide.

In January-March 2019, the combined Lost Workday Injury Frequency (LWIF) for own personnel and contractors was 2.1 (1.4), which was worse than the set target level (≤1.7). In January-March 2019, there were no severe occupational accidents in the company's operations. The Group target for 2019 is zero severe occupational accidents.

In January-March 2019, the quality of the investigation process of occupational accidents, major EHS incidents, and serious near misses was at the level of 3.0, achieving the set target level (3.0).

In January-March 2019, the GAP index was at the level of 2.0, which did not meet the set target level (3.0). The GAP index measures how well the Group's EHS minimum requirements are realised at the power plant level. The most significant deviations were detected in companies that Fortum had acquired in recent years and at the sites operated by contractors.

Fortum's goal of workplace wellbeing activities is to promote the health and occupational safety of employees and the functionality of the work community. In January-March 2019, the percentage of sickness-related absences was 3.8 (3.1), which did not meet the target level of ≤ 2.5.

An uninterrupted and reliable energy supply is critical for society to function. The energy availability of the company’s CHP plants in January-March 2019 was, on average, 97.6% (96.8%), outperforming the target of >95.0%.

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 January-March 2019, Fortum conducted a total of 7 (2) supplier audits in Poland, China and Indonesia.

Shares and share capital

Fortum shares on Nasdaq Helsinki

January-March 2019	No. of shares traded	Total value EUR	High EUR	Low EUR	Average EUR*	Last EUR
FORTUM	105,775,091	2,070,613,191	21.14	18.23	19.57	18.23

* Volume weighted average.

	31 March 2019	31 March 2018
Market capitalisation, EUR million	16,194	15,502
Number of shareholders	127,181	129,097
Finnish State holding, %	50.8	50.8
Nominee registrations and direct foreign shareholders, %	29.5	30.0
Households, %	9.7	10.3
Financial and insurance corporations, %	1.9	1.4
Other Finnish investors, %	8.2	7.5

In addition to Nasdaq Helsinki, Fortum shares were traded on several alternative market places, for example Boat, Cboe and Turquoise, and on the OTC market. In the first quarter of 2019, approximately 73% of Fortum's shares were traded on markets other than Nasdaq Helsinki.

On 31 March 2019, Fortum Corporation's share capital was EUR 3,046,185,953 and the total number of registered shares was 888,294,465. Fortum Corporation does not hold any of the company's own shares.

On 26 March 2019, 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 of 20,000,000 shares, which corresponds to approximately 2.25% of all the shares in the company. The authorisation will be effective until the next Annual General Meeting and, in any event, for a period no longer than 18 months. The authorisation has not been used as of 26 April 2019.

Group personnel

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 March 2019 was 8,276 (8,286 at the end of 2018).

At the end of March 2019, the Generation segment had 1,091 (1,091 at the end of 2018) employees, City Solutions 2,016 (2,017 at the end of 2018), Consumer Solutions 1,455 (1,399 at the end of 2018), Russia 2,910 (2,941 at the end of 2018), and Other Operations 804 (838 at the end of 2018).

Annual General Meeting 2019

Fortum Corporation's Annual General Meeting on 26 March 2019 adopted the Financial Statements and the Consolidated Financial Statements for the financial period 1 January-31 December 2018, and discharged from liability the members of the Fortum Board of Directors and the President and CEO for the year 2018.

The Annual General Meeting decided to pay a dividend of EUR 1.10 per share for the financial year that ended on 31 December 2018. The record date for the dividend payment was 28 March 2019 and the dividend payment date was 4 April 2019.

The Annual General Meeting confirmed the remuneration for Board service for the upcoming term as follows: EUR 75,000 per year for the Chairman, EUR 57,000 per year for the Deputy Chairman, EUR 40,000 per year for a Member, and EUR 57,000 per year for the Board member acting as the Chairman of the Audit and Risk Committee if he or she is not simultaneously acting as Chairman or Deputy Chairman of the Board. In addition, a fee of EUR 600 will be paid for each Board meeting and Board Committee meeting. For Board members living outside Finland in Europe, the fee for each meeting will be doubled, and for Board members living outside Europe, the fee for each meeting will be tripled. For Board members living in Finland, the fee for each Board and Board Committee meeting will be doubled for meetings held outside Finland and tripled for meetings held outside Europe. For Board and Committee meetings held as a telephone conference, the basic meeting fee will be paid to all members. No fee will be paid for decisions made without a separate meeting.

The Annual General Meeting decided that the number of the members in the Board of Directors will be nine. Mr Matti Lievonen was elected as Chairman, Klaus-Dieter Maubach as Deputy Chairman, and Ms Eva Hamilton, Mr Kim Ignatius, Ms Essimari Kairisto, Ms Anja McAlister, Mr Veli-Matti Reinikkala, Mr Marco Ryan and Mr Philipp Rösler as Members.

In addition, Deloitte Oy was re-elected as the auditor with Reeta Virolainen, APA, 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 maximum of 20,000,000 shares, which corresponds to approximately 2.25 per cent of all the shares in the company. Only the unrestricted equity of the company can be used to repurchase own shares on the basis of the authorisation. It was also decided that own shares cannot be repurchased or disposed for the purposes of the company's incentive and remuneration schemes. These authorisations cancelled the authorisations resolved by the Annual General Meeting of 2018 and they will be effective until the next Annual General Meeting and in any event no longer than for a period of 18 months. The authorisations have not been used as of 26 April 2019.

The Annual General Meeting authorised the Board of Directors to decide on contributions in the total maximum amount of EUR 500,000 for charitable or similar purposes, and to decide on the recipients, purposes and other terms of the contributions. The authorisation will be effective until the next Annual General Meeting. The authorisation has not been used as of 26 April 2019.

Board decisions

At the meeting held after the Annual General Meeting 2019, Fortum’s Board of Directors elected to the Nomination and Remuneration Committee Matti Lievonen as Chairman and Eva Hamilton, Klaus-Dieter Maubach and Anja McAlister as members. Furthermore, the Board elected to the Audit and Risk Committee Kim Ignatius as Chairman and Essimari Kairisto, Veli-Matti Reinikkala, Marco Ryan and Philipp Rösler as members.

Dividend payment

The Annual General Meeting 2019 decided to pay a dividend of EUR 1.10 per share for the financial year that ended 31 December 2018. The record date for the dividend was 28 March 2019 and the dividend payment date was 4 April 2019.

Espoo, 25 April 2019

Fortum Corporation
Board of Directors

Further information:

Investor Relations and Financial Communications: Ingela Ulfves, tel. +358 40 515 1531, Måns Holmberg, tel. +358 44 518 1518, Rauno Tiihonen, tel. +358 10 453 6150, Pirjo Lifländer, tel. +358 40 643 3317, and investors@fortum.com

Media: Pauliina Vuosio, tel. +358 50 453 2383

The condensed Interim Report has been prepared in accordance with International Accounting Standard (IAS) 34, Interim Financial Reporting, as adopted by the EU. The interim financials have not been audited.

Financial calendar in 2019

- January-June 2019 Half-year Financial Report on 19 July at approximately 9:00 EEST
- January-September 2019 Interim Report on 24 October at approximately 9:00 EEST

Distribution:

Nasdaq Helsinki
Key media
www.fortum.com

More information, including detailed quarterly information, is available on Fortum's website at www.fortum.com/investors

Condensed consolidated income statement

EUR million	Note	Q1 2019	Q1 2018	2018	Last twelve months
Sales	4	1,690	1,585	5,242	5,347
Other income		21	24	130	127
Materials and services		-917	-825	-2,795	-2,887
Employee benefits		-122	-113	-459	-468
Depreciation and amortisation	4,9,10	-137	-133	-536	-540
Other expenses		-127	-133	-594	-588
Comparable operating profit	4	**408**	**405**	**987**	**990**
Items affecting comparability		-50	77	151	24
Operating profit	4	**358**	**482**	**1,138**	**1,014**
Share of profit/loss of associates and joint ventures	4, 11	111	47	38	102
Interest expense		-51	-41	-148	-158
Interest income		9	8	34	35
Fair value gains and losses on financial instruments		-1	0	-8	-9
Other financial expenses - net		-2	-2	-15	-15
Finance costs - net		-46	-36	-136	-146
Profit before income tax		**424**	**493**	**1,040**	**971**
Income tax expense	7	-65	-94	-181	-152
Profit for the period		**359**	**400**	**858**	**817**
Attributable to:					
Owners of the parent		341	384	843	800
Non-controlling interests		19	16	15	18
		359	**400**	**858**	**817**
Earnings per share for profit attributable to the equity owners of the company (EUR per share)					
Basic		**0.38**	0.43	0.95	0.90

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

EUR million	Note	Q1 2019	Q1 2018	2018	Last twelve months
Comparable operating profit		**408**	**405**	**987**	**990**
Impairment charges	4	-3	0	-4	-7
Capital gains and other	4, 6	3	26	102	79
Changes in fair values of derivatives hedging future cash flow	4	-46	54	98	-2
Nuclear fund adjustment	4, 14	-5	-4	-45	-46
Items affecting comparability		-50	77	151	24
Operating profit		**358**	**482**	**1,138**	**1,014**

See Definitions for key ratios

Condensed consolidated statement of comprehensive income

EUR million	Q1 2019	Q1 2018	2018	Last twelve months
Profit for the period	**359**	**400**	**858**	**817**
Other comprehensive income				
Items that may be reclassified to profit or loss in subsequent periods:				
Cash flow hedges				
Fair value gains/losses in the period [1)]	255	-186	-778	-337
Transfers to income statement	227	19	15	223
Transfers to inventory/fixed assets	-1	0	-2	-3
Deferred taxes	-102	34	162	26
Net investment hedges				
Fair value gains/losses in the period	-21	49	32	-38
Deferred taxes	4	-10	-6	8
Exchange differences on translating foreign operations [2)]	205	-250	-525	-70
Share of other comprehensive income of associates and joint ventures	-48	-2	-37	-83
Other changes	4	-1	0	5
	524	**-346**	**-1,141**	**-271**
Items that will not be reclassified to profit or loss in subsequent periods:				
Actuarial gains/losses on defined benefit plans	0	0	3	3
Actuarial gains/losses on defined benefit plans in associates and joint ventures	-39	0	43	4
	-39	**0**	**46**	**7**
Other comprehensive income for the period, net of deferred taxes	**485**	**-346**	**-1,094**	**-263**
Total comprehensive income for the period	**844**	**54**	**-236**	**554**
Total comprehensive income attributable to				
Owners of the parent	814	38	-239	537
Non-controlling interests	30	16	3	17
	844	**54**	**-236**	**554**

1) Fair valuation of cash flow hedges mainly relates to fair valuation of derivatives, such as futures and forwards, hedging electricity price for future transactions, where hedge accounting is applied. When electricity price is higher (lower) than the hedging price, the impact on equity is negative (positive).

2) Translation differences from translation of foreign entities, mainly RUB and SEK.

Condensed consolidated balance sheet

EUR million	Note	Mar 31 2019	Mar 31 2018	Dec 31 2018
ASSETS				
Non-current assets				
Intangible assets	9	1,119	1,094	1,087
Property, plant and equipment and right-of-use assets	10	10,231	10,245	9,981
Participations in associates and joint ventures	4, 11	6,032	2,074	5,978
Share in State Nuclear Waste Management Fund	14	903	838	899
Other non-current assets		142	109	139
Deferred tax assets		80	61	70
Derivative financial instruments	5	202	247	229
Long-term interest-bearing receivables	12	679	833	683
Total non-current assets		**19,388**	**15,502**	**19,065**
Current assets				
Inventories		235	218	233
Derivative financial instruments	5	231	275	326
Short-term interest-bearing receivables	12	411	458	409
Income tax receivables		127	156	172
Trade and other receivables		1,279	1,158	1,620
Deposits and securities (maturity over three months)		37	84	29
Cash and cash equivalents		1,655	3,420	556
Liquid funds	13	1,692	3,504	584
Total current assets		**3,975**	**5,770**	**3,344**
Total assets		**23,363**	**21,272**	**22,409**
EQUITY				
Equity attributable to owners of the parent				
Share capital		3,046	3,046	3,046
Share premium		73	73	73
Retained earnings		8,783	9,039	9,232
Other equity components		-229	-41	-510
Total		**11,674**	**12,117**	**11,841**
Non-controlling interests		**267**	**255**	**236**
Total equity		**11,941**	**12,372**	**12,077**
LIABILITIES				
Non-current liabilities				
Interest-bearing liabilities	13	5,866	3,338	5,007
Derivative financial instruments	5	233	188	362
Deferred tax liabilities		855	791	720
Nuclear provisions	14	903	838	899
Other provisions	15	88	90	91
Pension obligations		99	102	98
Other non-current liabilities		181	169	182
Total non-current liabilities		**8,225**	**5,515**	**7,358**
Current liabilities				
Interest-bearing liabilities	13	821	1,066	1,086
Derivative financial instruments	5	439	309	829
Trade and other payables [1)]		1,938	2,009	1,058
Total current liabilities		**3,198**	**3,384**	**2,973**
Total liabilities		**11,423**	**8,900**	**10,332**
Total equity and liabilities		**23,363**	**21,272**	**22,409**

1) Trade and other payables as of 31 March 2019 include dividend EUR 977 million decided in the Annual General Meeting on 26 March 2019. Dividend was paid on 4 April 2019. Trade and other payables as of 31 March 2018 include dividend EUR 977 million decided in the Annual General Meeting 28 March 2018. Dividend was paid on 10 April 2018.

Condensed consolidated statement of changes in total equity

EUR million	Share capital	Share premium	Retained earnings: Retained earnings	Retained earnings: Translation of foreign operations	Other equity components: Cash flow hedges	Other equity components: Other OCI items	Other equity components: OCI items associated companies and joint ventures	Owners of the parent	Non-controlling interests	Total equity
Total equity 31 December 2018	**3,046**	**73**	**11,937**	**-2,705**	**-638**	**99**	**30**	**11,841**	**236**	**12,077**
Net profit for the period			341					341	19	359
Translation differences				192	5	1	-1	197	8	205
Other comprehensive income			0		380	-17	-87	276	4	280
Total comprehensive income for the period			340	192	385	-16	-88	814	30	844
Cash dividend			-977					-977		-977
Other			-4					-4	0	-4
Total equity 31 March 2019	**3,046**	**73**	**11,296**	**-2,513**	**-254**	**83**	**-58**	**11,674**	**267**	**11,941**
Total equity 31 December 2017	**3,046**	**73**	**12,062**	**-2,187**	**-40**	**70**	**24**	**13,048**	**239**	**13,287**
Impact from change in accounting principle (IFRS 9 and 15)			7					7		7
Total equity 1 January 2018	**3,046**	**73**	**12,069**	**-2,187**	**-40**	**70**	**24**	**13,055**	**239**	**13,295**
Net profit for the period			384					384	16	400
Translation differences				-252	0	1	-1	-251	1	-250
Other comprehensive income			0		-132	39	-2	-95	-1	-96
Total comprehensive income for the period			384	-252	-132	41	-3	38	16	54
Cash dividend			-977					-977		-977
Other			1					1		1
Total equity 31 March 2018	**3,046**	**73**	**11,477**	**-2,438**	**-172**	**110**	**21**	**12,117**	**255**	**12,372**
Total equity 31 December 2017	**3,046**	**73**	**12,062**	**-2,187**	**-40**	**70**	**24**	**13,048**	**239**	**13,287**
Impact from change in accounting principle (IFRS 9 and 15)			7					7		7
Total equity 1 January 2018	**3,046**	**73**	**12,069**	**-2,187**	**-40**	**70**	**24**	**13,055**	**239**	**13,295**
Net profit for the period			843					843	15	858
Translation differences				-519	0	1	-1	-518	-7	-525
Other comprehensive income			0		-599	28	6	-564	-5	-569
Total comprehensive income for the period			843	-519	-598	29	6	-239	3	-236
Cash dividend			-977					-977	-6	-983
Other			2					2	0	2
Total equity 31 December 2018	**3,046**	**73**	**11,937**	**-2,705**	**-638**	**99**	**30**	**11,841**	**236**	**12,077**

Translation differences

Translation differences impacted equity attributable to owners of the parent company with EUR 197 million during Q1 2019 (Q1 2018: -251). Translation differences are mainly related to RUB and SEK. Part of this translation exposure has been hedged and the foreign currency hedge result amounting to EUR -16 million during Q1 2019 (Q1 2018: 51), is included in the other OCI items.

Translation of financial information from subsidiaries in foreign currency is done using average rate for the income statement and end rate for the balance sheet. The exchange rate differences occurring from translation to EUR are booked to equity. For information regarding exchange rates used, see Note 2 Accounting policies.

Cash flow hedges

The impact on equity attributable to owners of the parent from fair valuation of cash flow hedges, EUR +385 million during Q1 2019 (Q1 2018: -132), mainly relates to fair valuation of derivatives, such as futures and forwards, hedging electricity price for future transactions, where hedge accounting is applied. When electricity price is higher (lower) than the hedging price, the impact on equity is negative (positive).

Cash dividends

A dividend for 2018 was decided in the Annual General Meeting on 26 March 2019 and paid on 4 April 2019. See Note 8 Dividend per share.

Condensed consolidated cash flow statement

EUR million	Note	Q1 2019	Q1 2018	2018	Last twelve months
Cash flow from operating activities					
Profit for the period		**359**	**400**	**858**	**817**
Adjustments:					
Income tax expenses	7	65	94	181	152
Finance costs - net		46	36	136	146
Share of profit of associates and joint ventures	11	-111	-47	-38	-102
Depreciation and amortisation	9, 10	137	133	536	540
Operating profit before depreciations (EBITDA)		**496**	**615**	**1,674**	**1,555**
Items affecting comparability	4	50	-77	-151	-24
Comparable EBITDA		**545**	**538**	**1,523**	**1,530**
Non-cash flow items		-7	-3	-90	-94
Interest received		4	4	23	23
Interest paid		-68	-90	-171	-149
Dividends received		0	0	61	61
Realised foreign exchange gains and losses		-5	42	231	184
Income taxes paid		9	-17	-94	-68
Other items		3	-2	-9	-4
Funds from operations		**482**	**473**	**1,474**	**1,483**
Change in settlements for futures		292	-91	-524	-141
Change in working capital		-22	-109	-146	-59
Net cash from operating activities		**751**	**273**	**804**	**1,282**
Cash flow from investing activities					
Capital expenditures	9, 10	-150	-133	-579	-596
Acquisitions of shares	6	-12	-18	-4,088	-4,082
Proceeds from sales of fixed assets	9, 10	0	0	38	38
Divestments of shares	6	8	0	259	267
Shareholder loans to associated companies and joint ventures	12	0	-1	-24	-23
Change in cash collaterals and restricted cash	12	310	-63	-36	337
Change in other interest-bearing receivables	12	12	2	31	41
Net cash from investing activities		**167**	**-213**	**-4,398**	**-4,018**
Cash flow before financing activities		**918**	**60**	**-3,594**	**-2,736**
Cash flow from financing activities					
Proceeds from long-term liabilities	13	2,506	31	1,764	4,239
Payments of long-term liabilities	13	-2,507	-456	-586	-2,637
Change in short-term liabilities	13	159	-20	135	314
Dividends paid to the owners of the parent	8	0	0	-977	-977
Other financing items		-3	2	-9	-14
Net cash used in financing activities		**155**	**-444**	**326**	**925**
Net increase(+)/decrease(-) in liquid funds		**1,073**	**-383**	**-3,268**	**-1,812**
Liquid funds at the beginning of the period	13	**584**	**3,896**	**3,896**	**3,504**
Foreign exchange differences in liquid funds		35	-8	-43	0
Liquid funds at the end of the period	13	**1,692**	**3,504**	**584**	**1,692**

Realised foreign exchange gains and losses

Realised foreign exchange gains and losses relate mainly to financing of Fortum's Russian and Swedish subsidiaries and the fact that the Group's main external financing currency is EUR. The foreign exchange gains and losses arise from rollover of foreign exchange contracts hedging these internal loans as major part of the forwards are entered into with short maturities i.e. less than twelve months.

Change in settlements for futures

In Fortum's cash flow statement the daily cash settlements for futures are shown in cash flow from operating activities whereas the changes in cash collaterals for forwards are included in cash flow from investing activities. The daily cash settlements are included in trade and other receivables and the cash collaterals are included in the short-term interest-bearing receivables, see Note 12 Interest-bearing receivables for additional information.

Additional cash flow information

Change in working capital

EUR million	Q1 2019	Q1 2018	2018	Last twelve months
Change in interest-free receivables, decrease(+)/increase(-)	48	-104	-186	-34
Change in inventories, decrease(+)/increase(-)	0	12	-3	-15
Change in interest-free liabilities, decrease(-)/increase(+)	-71	-17	43	-11
Total	**-22**	**-109**	**-146**	**-59**

Capital expenditure in cash flow

EUR million	Q1 2019	Q1 2018	2018	Last twelve months
Capital expenditure	129	103	584	610
Change in not yet paid investments, decrease(+)/increase(-)	24	32	5	-3
Capitalised borrowing costs	-3	-1	-10	-12
Total	**150**	**133**	**579**	**596**

Capital expenditures for intangible assets and property, plant and equipment were in Q1 2019 EUR 129 million (Q1 2018: 103). Capital expenditure in cash flow in Q1 2019 EUR 150 million (Q1 2018: 133) is including payments related to capital expenditure made in previous year i.e. change in trade payables related to investments EUR 24 million (Q1 2018: 32) and excluding capitalised borrowing costs EUR -3 million (Q1 2018: -1), which are presented in interest paid.

Acquisition of shares in cash flow

Acquisition of shares, net of cash acquired, amounted to EUR 12 million during Q1 2019 (Q1 2018: 18). For additional information, see note 6 Acquisitions and disposals.

Divestment of shares in cash flow

EUR million	Q1 2019	Q1 2018	2018	Last twelve months
Proceeds from sales of subsidiaries, net of cash disposed	4	0	88	92
Proceeds from sales of associates and joint ventures	0	0	171	171
Proceeds from sales of other investments	4	0	0	4
Total	**8**	**0**	**259**	**267**

During Q1 2019 there were no material divestments. For further information, see note 6 Acquisitions and disposals.

Capital structure and key figures

Fortum updated its strategy and reconfirmed the dividend policy and long-term financial targets in November 2018. Financial targets give guidance on Fortum's view of the company's long-term value creation potential, its growth strategy and business activities. The long-term over-the-cycle financial targets are Return on capital employed, ROCE at least 10% and Comparable net debt to EBITDA around 2.5 times.

Change in net debt

EUR million	Q1 2019	Q1 2018	2018	Last twelve months
Net debt, beginning of the period	**5,509**	**988**	**988**	**899**
Impact from change in accounting principle (IFRS 16 and IFRS 9)	99	1	1	99
Foreign exchange rate differences	-34	-16	15	-3
Comparable EBITDA	545	538	1,523	1,530
Non-cash flow items	-7	-3	-90	-94
Paid net financial costs	-65	-45	138	118
Income taxes paid	9	-17	-94	-68
Change in working capital	270	-200	-670	-200
Capital expenditures	-150	-133	-579	-596
Acquisitions	-12	-18	-4,088	-4,082
Divestments	8	0	298	306
Shareholder loans to associated companies	0	-1	-24	-23
Change in other interest-bearing receivables	321	-61	-5	377
Dividends	0	0	-977	-977
Other financing activities	-3	2	-12	-17
Net cash flow (- increase in net debt)	915	62	-4,580	-3,727
Fair value change of bonds, amortised cost valuation, debt from non-cash collateral arrangement, acquired debt and other changes [1)]	335	-11	-75	271
Net debt, end of the period	**4,995**	**899**	**5,509**	**4,995**

1) Q1 2019 includes impact from a non-cash collateral arrangement amounting to EUR 309 million, see Note 13 Interest-bearing net debt.

Comparable Net debt/EBITDA ratio

EUR million	Last twelve months	2018
Interest-bearing liabilities	6,687	6,093
- Liquid funds [1)]	1,692	584
Net debt [2)]	**4,995**	**5,509**
Operating profit	1,014	1,138
+ Depreciation and amortisation	541	536
EBITDA	**1,555**	**1,674**
- Items affecting comparability	24	151
Comparable EBITDA	**1,530**	**1,523**
Comparable net debt/EBITDA	**3.3**	**3.6**

1) Net debt is calculated as interest-bearing liabilities minus liquid funds without deducting interest-bearing receivables amounting to EUR 1,091 million (Dec 31 2018: 1,092).

2) Net debt as of 31 March 2019 does not include impact from dividend payment of EUR 977 million, that took place 4 April 2019.

Return on capital employed, %

EUR million	Last twelve months	2018
Profit before income tax	**970**	**1,040**
Interest expenses	158	148
Other financial expenses [1]	25	26
+Interest and other financial expenses	**183**	**174**
Profit before taxes + interest and other financial expenses	**1,153**	**1,214**
1) Other financial expenses as disclosed in Note 12 Finance costs-net in Financial statements 2018		
Capital employed		
Total assets	**23,363**	**22,409**
Total liabilities	11,423	10,332
- Interest-bearing liabilities	6,687	6,093
- Total interest-free liabilities	**4,736**	**4,239**
Capital employed	**18,627**	**18,170**
Capital employd at the end of previous period	**16,776**	**18,172**
Average capital employed	**17,702**	**18,171**
Return on capital employed, %	**6.5 %**	**6.7 %**

Key ratios

Definition of key figures are presented in Note 21.

	Mar 31 2019	Mar 31 2018	Dec 31 2018	Last twelve months
Comparable EBITDA, EUR million	545	538	1,523	**1,530**
Earnings per share (basic), EUR	0.38	0.43	0.95	**0.90**
Capital employed, EUR million	18,627	16,776	18,170	
Interest-bearing net debt, EUR million	4,995	899	5,509	
Capital expenditure and gross investments in shares, EUR million	135	120	4,672	**4,687**
Capital expenditure, EUR million	129	103	584	**610**
Return on capital employed, %			6.7	**6.5**
Return on shareholders' equity, %			6.8	**6.7**
Comparable net debt / EBITDA			3.6	**3.3**
Interest coverage			10.0	**8.3**
Interest coverage including capitalised borrowing costs			9.2	**7.5**
Funds from operations/interest-bearing net debt, %			26.8	**29.7**
Gearing, %	42	7	46	
Equity per share, EUR	13.14	13.64	13.33	
Equity-to-assets ratio, %	51	58	54	
Number of employees	8,276	8,731	8,286	
Average number of employees	8,224	8,748	8,767	
Average number of shares, 1,000 shares	888,294	888,312	888,312	
Diluted adjusted average number of shares, 1,000 shares	888,294	888,312	888,312	
Number of registered shares, 1,000 shares [1]	888,294	888,367	888,294	
Number of registered shares excluding treasury shares, 1,000 shares	888,294	888,294	888,294	

1) On 17 December 2018, Board of Directors decided to cancel all 72,580 treasury shares owned by the company without decreasing the share capital. The cancellation was entered in the Trade Register on 21 December 2018.

Notes to the condensed consolidated interim financial statements

1. Basis of preparation

The condensed interim financial statements have been prepared in accordance with International Accounting Standard (IAS) 34, Interim Financial Reporting, as adopted by the EU. The condensed interim financial report should be read in conjunction with the consolidated financial statements for the year ended 31 December 2018.

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

Due to the seasonal nature of Fortum's operations the comparable operating profits are usually higher for the first and fourth quarter of the year. Columns labelled as "LTM" or "last twelve months" are presenting figures for twelve months preceding the reporting date.

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

Fortum uses Alternative performance measures (APMs) in the financial target setting and forecasting, management's follow up of financial performance of segments and the group as well as allocation of resources in the group's performance management process. The business performance of the operations cannot be compared from one period to another without adjusting for items affecting comparability and therefore they are excluded from Comparable operating profit and Comparable EBITDA. The main business performance measurements have been used consistently since 2005.

Fortum's financial targets for capital structure and long-term value creation and profitability are measured with Comparable net debt to EBITDA (long-term over-the-cycle target: around 2.5 times) and Return on capital employed (long-term over-the-cycle target: at least 10%).

Definitions and reconciliation tables are presented in the section 'Capital structure and key figures' after cash flow statement and in Note 21.

2. Accounting policies

The same accounting policies and presentation have been followed in these condensed interim financial statements as were applied in the preparation of the consolidated financial statements for the year ended 31 December 2018 except for the new IFRS 16 Leases standard that was adopted 1 January 2019. Other standards effective from 1 January 2019 do not have a material impact on Fortum's financial statements.

2.1 New standards effective from 1 January 2019 onwards

Adoption of IFRS 16 standard

IFRS 16 Leases standard has been adopted as of 1 January 2019. IFRS 16 requires lessees to recognise all leases, except for short-term leases (lease term less than 12 months), leases of low value assets, and leases for which consideration is based on lessee’s performance, in the balance sheet as right-of-use assets and lease liabilities. The assets and liabilities are recognised based on the present value of future lease payments. The right-of-use asset is depreciated on a straight-line basis during the lease term. In addition, the assets’ carrying values are reviewed continuously to determine whether there is any indication of impairment. However, at transition, Fortum has applied the relief in IFRS 16 that permits reliance on assessment of onerous contracts.

Interest expense from lease liabilities is recognised using the effective interest method, presented in Finance costs – net. In the cash flow statement, the principal portion of the lease payment is presented under Payments of long-term liabilities, and the interest portion as Interest paid under Funds from operations. For leases not capitalised due to exemptions in the standard, the lease payments are recognised on a straight-line basis and presented in Other expenses.

For lessors, there are no significant changes.

Fortum has applied the standard using the modified retrospective method, which means the comparative figures are not restated. Right-of-use assets have been recognised equal to the value of lease liabilities, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the balance sheet before the initial application. In addition, Fortum has applied the exemption of not recognising short-term leases and leases of low-value assets in the balance sheet.

IFRS 16 - Transition impacts

The application of IFRS 16 had the following impact to the 1 January 2019 opening balance:

• Increase of EUR 96 million in Property, plant and equipment and right-of-use assets
• Increase of EUR 99 million in Interest-bearing liabilities
• Decrease of EUR 1 million in Other non-current assets
• Decrease of EUR 3 million in Other provisions
• Decrease of EUR 1 million in Trade and other payables

Reconciliation of lease liabilities and operating lease commitments on transition is presented below:

EUR million	
Operating lease commitments 31 December 2018	**216**
Leases not yet commenced but to which Fortum is committed	-41
Leases with variable payments not included in the measurement of lease liabilities	-16
Exempted from recognition	-12
Discounting effect	-28
Other changes	-20
Lease liabilities 1 January 2019	**99**

The majority of right-of-use assets are office buildings and land areas. No new leases were identified as leases according to IFRS 16.

The weighted average incremental borrowing rate applied to lease liabilities on 1 January 2019 was 1.9%.

Accounting policies according to IFRS 16

A contract is or contains a lease if Fortum has a right to control the use of an identified asset for a non-cancellable period of time in exchange for consideration. When determining the non-cancellable period, Fortum assesses the probability of exercising extension and termination options by considering all relevant facts and circumstances.

When the future lease payments are revised due to changes in index-linked considerations or due to changes in lease terms, the right-of-use asset and the corresponding lease liability is remeasured to reflect these changes. Any differences that may arise from these reassessments, are recognised in the income statement.

2.2 Other new standards and interpretations

Physical settlement of contracts to buy or sell a non-financial item (IFRS 9)

In March 2019, IFRIC published an agenda decision on Physical settlement of contracts to buy or sell a non-financial item (IFRS 9). The decision clarifies how an entity applies IFRS 9 to fixed price contracts to buy or sell a non-financial item that are fair valued through profit or loss even though the contract is physically settled. The published agenda decision discusses the presentation of these contracts in the income statement and will not have an impact to net profit. Fortum is currently assessing the impacts to its accounting principles and presentation.

2.3 The key exchange rates applied in the Fortum Group accounts

The balance sheet date rate is based on exchange rate published by the European Central Bank for the closing date. The average exchange rate is calculated as an average of each month's ending rate from the European Central Bank during the year and ending rate previous year.

Key exchange rates for Fortum Group applied in the accounts:

Average rate	Jan-Mar 2019	Jan-Dec 2018	Jan-Sept 2018	Jan-June 2018	Jan-Mar 2018
Sweden (SEK)	10.3776	10.2591	10.2392	10.1722	9.9962
Norway (NOK)	9.7491	9.6432	9.6121	9.6294	9.6737
Poland (PLN)	4.2961	4.2614	4.2467	4.2316	4.1790
Russia (RUB)	75.6930	73.8035	72.9249	71.5430	69.7770

Balance sheet date rate	Mar 31 2019	Dec 31 2018	Sept 30 2018	June 30 2018	Mar 31 2018
Sweden (SEK)	10.3980	10.2548	10.3090	10.4530	10.2843
Norway (NOK)	9.6590	9.9483	9.4665	9.5115	9.6770
Poland (PLN)	4.3006	4.3014	4.2774	4.3732	4.2106
Russia (RUB)	72.8564	79.7153	76.1422	73.1582	70.8897

3. Critical accounting estimates and judgements

The preparation of interim financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities, income and expense. Actual results may differ from these estimates. Provisions for present obligations require management to assess the best estimate of the expenditure needed to settle the present obligation at the end of the reporting period.

In preparing these interim financial statements, the significant judgements made by management applying the Group's accounting policies and the key sources of estimation uncertainty were the same as those that applied to the consolidated financial statements for the year ended 31 December 2018.

4. Segment information

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

In November 2018, Fortum announced that the solar and wind businesses were reorganised and the wind operations became a business area within the Generation segment and the solar operations within the City Solutions segment. Previously these were included in Other Operations. The Russian wind and solar operations continue as a part of the Russia segment.

Fortum has restated its 2018 comparison segment reporting figures in accordance with the new organisation structure. The restated and previously communicated quarterly information for 2018 were published on 19 March 2019 and can be found in the Interim reports section in Fortum's webpage.

Quarter		Generation[1)]		City Solutions[1)]		Consumer Solutions		Russia		Other Operations		Total	
EUR million	Note	Q1 2019	Q1 2018	Q1 2019	Q1 2018	Q1 2019	Q1 2018	Q1 2019	Q1 2018	Q1 2019	Q1 2018	Q1 2019	Q1 2018
Income statement data by segment													
Power sales [2)]		554	490	55	40	599	482	248	248	0	0	1,456	1,260
Heat sales		0	0	253	265	0	0	49	88	0	0	302	354
Waste treatment sales		0	0	62	50	0	0	0	0	0	0	62	50
Other sales		46	8	35	26	70	65	1	0	26	23	178	122
Sales		**601**	**498**	**405**	**381**	**669**	**547**	**298**	**336**	**26**	**23**	**1,999**	**1,786**
Internal eliminations		-113	-9	-12	-11	29	-1	0	0	-20	-18	-117	-39
Netting of Nord Pool transactions [3)]												-192	-161
External sales		488	490	393	370	697	545	298	336	6	5	1,690	1,585
Comparable EBITDA		**259**	**253**	**137**	**131**	**41**	**31**	**135**	**142**	**-25**	**-19**	**545**	**538**
Depreciation and amortisation		-35	-34	-45	-43	-15	-14	-36	-37	-6	-5	-137	-133
Comparable operating profit		**223**	**220**	**92**	**88**	**26**	**17**	**99**	**104**	**-32**	**-24**	**408**	**405**
Impairment charges		-3	0	0	0	0	0	0	0	0	0	-3	0
Capital gains and other	6	3	0	0	0	0	0	0	0	0	26	3	26
Changes in fair values of derivatives hedging future cash-flow		-16	63	2	1	-32	-1	0	0	0	-8	-46	54
Nuclear fund adjustment	14	-5	-4	0	0	0	0	0	0	0	0	-5	-4
Items affecting comparability		-20	59	2	1	-32	-1	0	0	0	18	-50	77
Operating profit		**204**	**279**	**94**	**88**	**-6**	**16**	**99**	**104**	**-32**	**-5**	**358**	**482**
Share of profit/loss of associates and joint ventures	11	14	-2	39	44	0	0	9	5	49	0	111	47
Finance costs - net												-46	-36
Income taxes	7											-65	-94
Profit for the period												**359**	**400**
Gross investments / divestments by segment													
Gross investments in shares	6	0	0	4	2	0	0	0	6	2	9	6	17
Capital expenditure	9, 10	38	47	68	27	13	10	5	10	5	9	129	103
of which capitalised borrowing costs		1	0	2	1	0	0	0	0	0	0	3	1
Gross divestments of shares	6	4	0	0	0	0	0	0	0	4	0	8	0

1) Sales, both internal and external, include effects from realised hedging contracts. Effect on sales can be negative or positive depending on the difference between average contract price and realised spot price.
2) Power sales contains realised result from commodity derivatives, which have not had hedge accounting status under IFRS 9, but have been considered operatively as hedges.
3) Sales and purchases with Nord Pool Spot are netted on Group level on an hourly basis and posted either as revenue or cost depending on if Fortum is a net seller or net buyer during any particular hour.

4. Segment information

Last twelve months		Generation[1]		City Solutions[1]		Consumer Solutions		Russia		Other Operations		Total	
EUR million	Note	LTM	2018	LTM	2018	LTM	2018	LTM	2018	LTM	2018	LTM	2018
Income statement data by segment													
Power sales [2]		1,835	1,771	149	134	1,664	1,547	872	872	0	0	4,520	4,324
Heat sales		0	0	592	604	0	0	154	193	0	0	745	797
Waste treatment sales		0	0	223	211	0	0	0	0	0	0	223	211
Other sales		109	71	170	161	217	212	5	4	106	103	606	550
Sales		**1,945**	**1,842**	**1,134**	**1,110**	**1,881**	**1,759**	**1,031**	**1,069**	**106**	**103**	**6,096**	**5,883**
Internal eliminations		-102	2	-38	-37	19	-11	0	0	-81	-79	-203	-125
Netting of Nord Pool transactions [3]												-547	-516
External sales		1,842	1,844	1,096	1,073	1,900	1,748	1,031	1,069	25	24	5,347	5,242
Comparable EBITDA		**769**	**763**	**316**	**310**	**120**	**110**	**410**	**417**	**-84**	**-78**	**1,530**	**1,523**
Depreciation and amortisation		-136	-135	-177	-175	-58	-57	-146	-147	-23	-22	-540	-536
Comparable operating profit		**631**	**628**	**139**	**135**	**62**	**53**	**266**	**271**	**-107**	**-99**	**990**	**987**
Impairment charges		-7	-4	0	0	0	0	0	0	0	0	-7	-4
Capital gains and other	6	80	77	-1	-1	0	0	2	2	-3	23	79	102
Changes in fair values of derivatives hedging future cash flow		0	79	-3	-4	-9	22	0	0	8	0	-2	98
Nuclear fund adjustment	14	-46	-45	0	0	0	0	0	0	0	0	-46	-45
Items affecting comparability		29	108	-4	-5	-9	22	2	2	5	23	24	151
Operating profit		**661**	**736**	**136**	**130**	**53**	**75**	**268**	**273**	**-103**	**-76**	**1,014**	**1,138**
Share of profit/loss of associates and joint ventures	11	-56	-72	69	74	0	0	40	36	49	0	102	38
Finance costs - net												-146	-136
Income taxes	7											-152	-181
Profit for the period												**817**	**858**
Gross investments / divestments by segment													
Gross investments in shares	6	14	14	35	33	0	0	57	63	3,970	3,977	4,077	4,088
Capital expenditure	9, 10	239	248	250	209	50	47	49	54	22	26	610	584
of which capitalised borrowing costs		7	6	5	4	0	0	0	0	0	0	12	10
Gross divestments of shares	6	164	160	147	147	0	0	0	0	4	0	314	306

1) Sales, both internal and external, include effects from realised hedging contracts. Effect on sales can be negative or positive depending on the difference between average contract price and realised spot price.
2) Power sales contains realised result from commodity derivatives, which have not had hedge accounting status under IFRS 9, but have been considered operatively as hedges.
3) Sales and purchases with Nord Pool Spot are netted on Group level on an hourly basis and posted either as revenue or cost depending on if Fortum is a net seller or net buyer during any particular hour.

4. Segment information

Segment assets and liabilities

		Generation		City Solutions		Consumer Solutions		Russia		Other Operations		Total	
EUR million	Note	Mar 31 2019	Dec 31 2018	Mar 31 2019	Dec 31 2018	Mar 31 2019	Dec 31 2018	Mar 31 2019	Dec 31 2018	Mar 31 2019	Dec 31 2018	Mar 31 2019	Dec 31 2018
Non-interest bearing assets		**6,540**	**6,861**	**3,600**	**3,582**	**1,095**	**1,044**	**2,583**	**2,408**	**156**	**173**	**13,974**	**14,069**
Participations in associated companies and joint ventures	11	855	854	677	641	0	0	551	495	3,948	3,988	6,032	5,978
Eliminations												-173	-114
Total segment assets		**7,395**	**7,715**	**4,278**	**4,223**	**1,095**	**1,044**	**3,135**	**2,903**	**4,104**	**4,161**	**19,834**	**19,933**
Interest-bearing receivables	12											1,091	1,092
Deferred tax assets												80	70
Other assets												667	731
Liquid funds												1,692	584
Total assets												**23,363**	**22,409**
Segment liabilities		**1,166**	**1,230**	**432**	**429**	**449**	**396**	**104**	**114**	**125**	**138**	**2,276**	**2,308**
Eliminations												-173	-114
Total segment liabilities												**2,104**	**2,194**
Deferred tax liabilities												855	720
Other liabilities												1,777	1,325
Total liabilities included in capital employed												**4,736**	**4,239**
Interest-bearing liabilities	13											6,687	6,093
Total equity												11,941	12,077
Total equity and liabilities												**23,363**	**22,409**
Number of employees		1,091	1,091	2,016	2,017	1,455	1,399	2,910	2,941	804	838	8,276	8,286
Average number of employees [1)		1,090	1,107	1,993	1,994	1,413	1,473	2,926	3,378	802	814	8,224	8,767

1) Average number of employees is based on a monthly average for the period in review.

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

		Generation		City Solutions		Consumer Solutions		Russia		Other Operations	
EUR million	Note	LTM	Dec 31 2018	LTM	Dec 31 2018	LTM	Dec 31 2018	LTM	Dec 31 2018	LTM	Dec 31 2018
Comparable operating profit		**631**	**628**	**139**	**135**	**62**	**53**	**266**	**271**	**-107**	**-99**
Share of profit of associated companies and joint ventures	11	-56	-72	69	74	0	0	40	36	49	0
Adjustment for Share of profit of associated companies and joint ventures		95	94	0	0	0	0	0	0	-25	-38
Comparable operating profit including share of profits from associates and joint ventures		**671**	**650**	**208**	**209**	**62**	**53**	**306**	**307**	**-83**	**-137**
Segment assets at the end of the period		7,395	7,715	4,278	4,223	1,095	1,044	3,135	2,903	4,104	4,161
Segment liabilities at the end of the period		1,166	1,230	432	429	449	396	104	114	125	138
Comparable net assets		**6,228**	**6,485**	**3,845**	**3,794**	**647**	**648**	**3,030**	**2,789**	**3,979**	**4,023**
Comparable net assets average [1)		**6,106**	**6,019**	**3,801**	**3,808**	**672**	**671**	**2,950**	**2,976**	**3,157**	**2,361**
Comparable return on net assets, %		**11.0**	**10.8**	**5.5**	**5.5**	**9.1**	**7.8**	**10.4**	**10.3**	**-2.6**	**-5.8**

1) Average net assets are calculated using the opening balance and end of each quarter values.

5. Financial risk management

The Group has not made any significant changes in policies regarding risk management during the period. Aspects of the Group's financial risk management objectives and policies are consistent with those disclosed in the consolidated financial statements for the year ended 31 December 2018.

Fair value hierarchy information

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

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

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

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

See also accounting policies in the consolidated financial statements 2018, in Note 16 Financial assets and liabilities by fair value hierarchy.

Financial assets

	Level 1			Level 2			Level 3			Netting [1]			Total		
EUR million	**Mar 31 2019**	**Mar 31 2018**	**Dec 31 2018**	**Mar 31 2019**	**Mar 31 2018**	**Dec 31 2018**	**Mar 31 2019**	**Mar 31 2018**	**Dec 31 2018**	**Mar 31 2019**	**Mar 31 2018**	**Dec 31 2018**	**Mar 31 2019**	**Mar 31 2018**	**Dec 31 2018**
In non-current assets															
Other investments [2]	0	0	0				52	48	49				52	48	49
Derivative financial instruments															
Electricity derivatives															
Hedge accounting				26	15	23				-22	-14	-22	4	2	1
Non-hedge accounting				104	74	146				-71	-37	-94	32	38	52
Interest rate and currency derivatives															
Hedge accounting				147	168	149							147	168	149
Non-hedge accounting				3	31	4							3	31	4
Other commodity future and forward contracts															
Non-hedge accounting	58	33	29							-42	-24	-5	16	9	24
Interest-bearing receivables							34	67	41				34	67	41
Total in non-current assets	**58**	**33**	**29**	**280**	**288**	**322**	**86**	**115**	**90**	**-135**	**-75**	**-121**	**288**	**362**	**319**
In current assets															
Derivative financial instruments															
Electricity derivatives															
Hedge accounting				65	51	93				-50	-42	-83	14	10	10
Non-hedge accounting	1	12	2	226	182	585				-169	-136	-502	58	58	84
Interest rate and currency derivatives															
Hedge accounting				27	94	19							27	94	19
Non-hedge accounting				42	60	97							42	60	97
Other commodity future and forward contracts															
Non-hedge accounting	228	119	203							-139	-67	-87	89	53	116
Interest-bearing receivables	309						32	31	30				341	31	30
Total in current assets	**538**	**131**	**205**	**360**	**387**	**794**	**32**	**31**	**30**	**-358**	**-245**	**-672**	**571**	**306**	**356**
Total	**596**	**164**	**234**	**640**	**675**	**1,116**	**118**	**146**	**120**	**-493**	**-320**	**-793**	**859**	**669**	**675**

1) Receivables to and liabilities from electricity and other commodity exchanges arising from standard derivative contracts with same delivery period are netted.

2) Other investments i.e. shares which are not classified as associated companies or joint ventures, consist mainly of shares in unlisted companies of EUR 52 million (Dec 31 2018: 49). This includes Fortum's indirect shareholding in Fennovoima of EUR 33 million (Dec 31 2018: 33). Fair value gains and losses of other investments are booked through profit and loss.

Financial liabilities

	Level 1			Level 2			Level 3			Netting [1]			Total		
EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018	Mar 31 2019	Mar 31 2018	Dec 31 2018	Mar 31 2019	Mar 31 2018	Dec 31 2018	Mar 31 2019	Mar 31 2018	Dec 31 2018	Mar 31 2019	Mar 31 2018	Dec 31 2018
In non-current liabilities															
Interest-bearing liabilities [2]				2,477	1,065	930							2,477	1,065	930
Derivative financial instruments															
Electricity derivatives															
Hedge accounting				130	122	257				-22	-14	-22	108	109	235
Non-hedge accounting				123	57	163				-71	-37	-94	52	20	70
Interest rate and currency derivatives															
Hedge accounting				58	48	42							58	48	42
Non-hedge accounting				2	2	2							2	2	2
Other commodity future and forward contracts															
Non-hedge accounting	55	32	18	0	0	0				-42	-24	-5	13	9	13
Total in non-current liabilities	**55**	**32**	**18**	**2,790**	**1,294**	**1,394**	**0**	**0**	**0**	**-135**	**-75**	**-121**	**2,710**	**1,253**	**1,292**
In current liabilities															
Interest-bearing liabilities				309									309		
Derivative financial instruments															
Electricity derivatives															
Hedge accounting				315	245	724				-50	-42	-83	265	204	641
Non-hedge accounting	1	1	1	225	182	566				-169	-136	-502	57	48	65
Interest rate and currency derivatives															
Hedge accounting				6	3	1							6	3	1
Non-hedge accounting				38	27	45							38	27	45
Other commodity future and forward contracts															
Non-hedge accounting	211	92	158	1	4	7				-139	-67	-87	73	28	77
Total in current liabilities	**212**	**93**	**159**	**894**	**461**	**1,343**	**0**	**0**	**0**	**-358**	**-245**	**-672**	**748**	**309**	**829**
Total	**267**	**125**	**177**	**3,684**	**1,755**	**2,737**	**0**	**0**	**0**	**-493**	**-320**	**-793**	**3,458**	**1,562**	**2,121**

1) Receivables to and liabilities from electricity and other commodity exchanges arising from standard derivative contracts with same delivery period are netted.

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

Net fair value amount of interest rate and currency derivatives is EUR 219 million, including assets EUR 104 million and liabilities EUR 115 million. Fortum has cash collaterals based on Credit Support Annex agreements with some counterparties. At the end of March 2019 Fortum had received EUR 67 million from Credit Support Annex agreements. The received cash has been booked as short-term liability.

Regarding the interest-bearing receivables and liabilities, see Note 12 Interest-bearing receivables, Note 13 Interest-bearing net debt and Note 17 Pledged assets and contingent liabilities.

6. Acquisitions and disposals

6.1 Acquisitions

EUR million	Q1 2019	Q1 2018	2018	Last twelve months
Gross investments in shares in subsidiary companies	0	7	36	29
Gross investments in shares in associated companies and joint ventures	4	8	4,041	4,037
Gross investments in other shares	3	3	11	11
Gross investments in shares	**6**	**17**	**4,088**	**4,077**

Acquisitions during 2019

There were no material acquisitions during Q1 2019.

Acquisitions during 2018

In September 2017, Fortum 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 2017, Fortum launched a voluntary public takeover offer ("offer") to all Uniper shareholders. On 8 January 2018, E.ON decided to tender its shares to Fortum's offer. In February 2018, Fortum announced that shareholders representing 47.12% of the shares in Uniper had accepted the offer. The completion of Fortum's offer was subject to several competition and regulatory approvals. The final regulatory decisions were received 15 June 2018. In line with the Russian regulatory approvals, Fortum is allowed to purchase additional shares up to 50% of shares and voting rights in Uniper. The final settlement of the offer took place on 26 June 2018.

The shareholders who tendered their shares to Fortum's offer were paid EUR 21.31 per share. The shareholders also benefitted from Uniper's dividend that was paid following the Annual General Meeting in early June. Fortum paid a total consideration of EUR 3.7 billion for all shares tendered. The total consideration was financed with existing cash resources of EUR 1.95 billion and bridge loan financing from committed credit facilities of EUR 1.75 billion. On 26 June 2018, Fortum closed the Uniper offer and became the company's largest shareholder with 47.35% of the shares. Since then Fortum acquired additional shares in Uniper and held 49.99% of the shares as of 31 December 2018. There has been no change in the ownership during 2019.

Uniper is an international energy company with activities in Europe, Russia and other markets worldwide. Uniper's businesses are well aligned with Fortum's core competencies. The company operates power plants in Europe and Russia, with a total installed generation capacity of around 36 gigawatts, and it runs extensive energy trading operations as well as maintains gas storage facilities in Germany, Austria and the UK.

In 2018, Uniper's sales totaled EUR 78.2 billion and adjusted EBITDA was EUR 1.5 billion. Uniper employs around 12,000 people and had total assets of EUR 51 billion at the end of 2018. Uniper is listed on the Frankfurt stock exchange.

Fortum consolidates Uniper as an associated company from 30 June 2018. The total acquisition cost including direct costs relating to the acquisition, approximately EUR 4.0 billion, is reported in the 'Participations in associated companies and joint ventures'.

Fortum uses Uniper's balance sheet as of 30 June 2018 (published 7 August 2018) as the starting point for the purchase price allocation. Purchase price allocation is on-going and Fortum is evaluating potential fair value adjustments for the acquired assets and liabilities and identifying potential differences in order to align the accounting principles. The purchase price allocation will take time due to the size of transaction and will be completed within the one-year window from the acquisition date according to IFRS.

As Uniper publishes its interim reports later than Fortum, Fortum's share of Uniper's results will be accounted for with a time-lag of one quarter with potential adjustments. The share of profits of associates in Fortum's fourth quarter interim report 2018 included Fortum's share of Uniper's third quarter results amounting to EUR -2 million. The share of profits of associates in Fortum's first quarter interim report 2019 includes Fortum's share of Uniper's fourth quarter results amounting to EUR 49 million.

In August 2018 Fortum acquired all shares of three independent Latvian heat producers SIA BK Enerģija, SIA Energy & Communication and SIA Sprino as well as the shares of SIA Lake Development. The acquired production companies will continue to deliver heat to Daugavpil's municipal district heating company PAS Daugavpils Siltumtikli.

In October 2018 Fortum acquired the metal recycling business in Fincumet Group. In the transaction Fortum acquired shares in three companies: Fincumet Oy, Niemen Romukauppa Oy and NJS-Patentti Oy.

During 2018 Fortum invested EUR 61 million to the wind investment fund 50/50 owned by Fortum and RUSNANO in Russia.

There were no other material acquisitions during 2018.

6.2 Disposals

EUR million	Q1 2019	Q1 2018	2018	Last twelve months
Gross divestments of shares in subsidiary companies	4	0	147	151
Gross divestments of shares in associated companies and joint ventures	0	0	160	160
Gross divestments of other investments	4	0	0	4
Gross divestments of shares	**8**	**0**	**306**	**314**

Disposals during 2019

There were no material disposals during Q1 2019.

Disposals during 2018

In June 2018 Fortum sold its 10% ownership in Hafslund Produksjon Holding AS to Svartisen Holding AS, a Norwegian company owned by the Finnish energy companies Vantaan Energia Oy, Oy Turku Energia – Åbo Energi Ab and Oulun Seudun Sähkö. As part of the restructuring of the Hafslund ownership in 2017, Fortum acquired the ownership in Hafslund Produksjon. The sales price for the shares was EUR 160 million and Fortum booked a sales gain of EUR 77 million in the Generation segment in the second quarter 2018 results.

On 31 August 2018, Fortum sold a 54% share of its solar power company operating four solar power plants in India to UK Climate Investments (40%) and Elite Alfred Berg (14%). In line with Fortum's 'capital recycling' business model, the result from the transaction, EUR 26 million, was recognized in Other operations' Comparable operating profit. The total consideration from the divestment on a debt- and cash-free basis, including the effect of deconsolidating Fortum's minority part of the net debt, was EUR 147 million. In addition, Elite Alfred Berg has an option to buy up to an additional 16% from Fortum. In April 2019, Elite Alfred Berg used their option to buy an additional 2% from Fortum.

7. Income taxes

Taxes for Q1 2019 totalled EUR 65 (Q1 2018: 94) million. The effective income tax rate according to the income statement was 15.2% (Q1 2018: 19.0%). The comparable effective income tax rate, excluding the impact of the share of profit from associated companies, joint ventures as well as non-taxable capital gains, tax rate changes and other major one time income tax effects, was 20.9% (Q1 2018: 21.0%).

Fortum has paid taxes in previous years regarding ongoing tax disputes. The appeal processes are ongoing and based on legal analysis and legal opinions the payments are booked as a receivable, EUR 114 (Dec 31 2018: 114) million, included in Income tax receivables. For additional information see Note 18 Legal actions and official proceedings.

8. Dividend per share

A dividend for 2018 of EUR 1.10 per share, amounting to a total of EUR 977 million, was decided in the Annual General Meeting on 26 March 2019 and the dividend was paid on 4 April 2019. Dividend is booked in these financial statements as a liability in Trade and other payables in the balance sheet.

A dividend for 2017 of EUR 1.10 per share, amounting to a total of EUR 977 million, was decided in the Annual General Meeting on 28 March 2018 and the dividend was paid on 10 April 2018.

9. Changes in intangible assets

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Closing balance 31 Dec	**1,087**	**1,064**	**1,064**
Impact from change in accounting principle (IFRS 15) 1)	-	20	20
Opening balance 1 Jan	**1,087**	**1,083**	**1,083**
Acquisitions	0	9	22
Capital expenditures	14	11	53
Changes in emission rights	1	2	16
Depreciation and amortisation	-20	-19	-81
Divestments	0	0	-6
Reclassifications	4	5	37
Translation differences and other adjustments	33	2	-37
Closing balance	**1,119**	**1,094**	**1,087**

1) See additional information in Financial Statements 2018 Note 1 Accounting policies.

Goodwill included in the intangible assets

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Goodwill included in opening balance	**588**	**613**	**613**
Translation differences and other adjustments	22	2	-25
Goodwill included in closing balance	**611**	**614**	**588**

10. Changes in property, plant and equipment, and right-of-use assets

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Closing balance 31 Dec	**9,981**	**10,510**	**10,510**
Impact from change in accounting principle (IFRS 16) 1)	96	-	-
Opening balance 1 Jan	**10,077**	**10,510**	**10,510**
Acquisitions	0	0	14
Capital expenditures	115	91	532
Additions and decreases in right-of-use assets	1	-	-
Changes of nuclear asset retirement cost	0	-16	16
Disposals	0	0	-2
Depreciation and amortisation	-117	-114	-455
Divestments	0	0	-136
Reclassifications	-4	-5	-37
Translation differences and other adjustments	159	-221	-459
Closing balance	**10,231**	**10,245**	**9,981**

1) See additional information in note 2 Accounting policies.

11. Changes in participations in associates and joint ventures

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Closing balance 31 Dec	**5,978**	**1,900**	**1,900**
Impact from change in accounting principle (IFRS 9)[1]	-	165	165
Opening balance 1 Jan	**5,978**	**2,066**	**2,066**
Investments	4	8	4,066
Share of profits from associates and joint ventures	111	47	38
Dividend income received	0	0	-61
Divestments and capital returns	0	0	-95
Reclassifications	-10	0	58
OCI items associated companies	-88	-3	6
Translation differences and other adjustments	37	-43	-99
Closing balance	**6,032**	**2,074**	**5,978**

1) See additional information in Financial Statements 2018 note 1 Accounting policies.

There were no material acquisitions during Q1 2019.

During 2018 Fortum acquired 49.99% of the shares in Uniper. On 31 August 2018, Fortum sold a 54% share of its solar power company and as a consequence the subsidiary was reclassified as a joint venture.

For more information about acquisitions and disposals, see note 6 Acquisitions and disposals.

Share of profits from associates and joint ventures

EUR million	Q1 2019	Q1 2018	2018	Last twelve months
Principal associates				
OKG AB	10	2	-58	-50
Forsmarks Kraftgrupp AB	6	-1	-7	0
Kemijoki Oy	-1	-2	-9	-8
Uniper	49	0	-2	47
TGC-1	8	5	40	43
Principal associates, total	**72**	**4**	**-35**	**33**
Principal joint ventures				
Stockholm Exergi AB	35	40	61	56
TVO Oyj	0	-1	1	2
Principal joint ventures, total	**35**	**40**	**62**	**57**
Other associates	0	1	3	2
Other joint ventures	4	2	9	11
Total	**111**	**47**	**38**	**102**

The share of profit from associates and joint ventures during Q1 2019 increased to EUR 111 (47) million, mainly due to share of profit from Uniper.

The share of profit from associates and joint ventures in 2018 EUR 38 million included nuclear-related adjustments of EUR -37 million and other items relating to nuclear decommissioning of EUR -33 million, mainly from OKG. For more information, see Note 19 Participations in associated companies and joint ventures in FInancial Statements 2018.

According to Fortum Group accounting policies the share of profits from associates and joint ventures are included in Fortum Group figures based on the latest available information. As Uniper is a listed company and publishes its interim reports later than Fortum, Fortum's share of Uniper's results will be accounted for with a time-lag of one quarter with potential adjustments. This means that the Q1 2019 interim report includes Fortum's share of Uniper's fourth quarter 2018 results. The share of profit of TGC-1 is also accounted for based on previous quarter information since updated interim information is normally not available.

12. Interest-bearing receivables

EUR million	Carrying amount Mar 31 2019	Fair value Mar 31 2019	Carrying amount Dec 31 2018	Fair value Dec 31 2018
Long-term loan receivables from associated companies	580	597	581	601
Long-term loan receivables from joint ventures	64	72	60	68
Other long-term interest-bearing receivables	36	37	43	43
Total long-term interest-bearing receivables	**679**	**706**	**683**	**712**
Collateral arrangement securities	309	309	-	-
Other short-term interest-bearing receivables	102	102	409	409
Total short-term interest-bearing receivables	**411**	**411**	**409**	**409**
Total interest-bearing receivables	**1,091**	**1,117**	**1,092**	**1,121**

Long-term interest-bearing receivables include receivables from associated companies and joint ventures EUR 644 million (Dec 31 2018: 641). These receivables include EUR 573 million (Dec 31 2018: 575) from Swedish nuclear companies, OKG AB and Forsmarks Kraftgrupp AB, which are mainly funded with shareholder loans, pro rata each shareholder's ownership.

Interest-bearing receivables include also EUR 66 million (Dec 31 2018: 70) receivable from SIBUR, a Russian gas processing and petrochemicals company regarding divested shares of OOO Tobolsk CHP.

Other short-term interest-bearing receivables include EUR 60 million (Dec 31 2018: 379) restricted cash.

During Q1 2019 Fortum entered into a non-cash collateral arrangement to release pledged cash from Nordic power exchange. Fortum has borrowed securities which have replaced pledged cash. As a result Fortum booked a short term interest bearing receivable of EUR 309 million and a corresponding short-term liability. See Note 13 Interest-bearing net debt and Note 17 Pledged assets and contingent liabilities.

13. Interest-bearing net debt

Net debt

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Interest-bearing liabilities	6,687	4,403	6,093
Liquid funds	1,692	3,504	584
Net debt	**4,995**	**899**	**5,509**

Net debt is calculated as interest-bearing liabilities less liquid funds without deducting interest-bearing receivables amounting to EUR 1,091 million (Dec 31 2018: 1,092). Interest-bearing receivables mainly consist of shareholder loans to partly owned nuclear companies regarded as long-term financing. For more information see Note 12 Interest-bearing receivables.

Loans and borrowings

EUR million	Carrying amount Mar 31 2019	Fair value Mar 31 2019	Carrying amount Dec 31 2018	Fair value Dec 31 2018
Bonds	4,235	4,371	2,496	2,629
Loans from financial institutions	107	117	1,847	1,901
Reborrowing from the Finnish State Nuclear Waste Management Fund 1)	1,185	1,248	1,158	1,218
Other long-term interest-bearing debt 2)	313	357	309	351
Total long-term interest-bearing debt 3)	**5,840**	**6,093**	**5,810**	**6,099**
Collateral arrangement liability	309	309	-	-
Other short-term interest-bearing debt	441	441	283	284
Total short-term interest-bearing debt	**750**	**750**	**283**	**284**
Total	**6,591**	**6,843**	**6,093**	**6,383**

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

2) Including loans from Finnish pension institutions EUR 38 million (Dec 31 2018: 38) and other loans EUR 275 million (Dec 31 2018: 270).

3) Including current portion of long-term debt EUR 53 million (Dec 31 2018: 803).

Interest-bearing liabilities

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Loans and borrowings	6,591	4,403	6,093
Lease liabilities [1)]	96	-	-
Total interest-bearing liabilities	**6,687**	**4,403**	**6,093**

1) See additional information in Note 2 Accounting policies.

During the first quarter of 2019 Fortum issued new bonds under its Euro Medium Term Note (EMTN) programme with a total nominal amount of EUR 2.5 billion: EUR 1.0 billion, four-year bond with 0.875% fixed coupon and two EUR 750 million bonds for seven- and ten-years with 1.625%/ 2.125% fixed coupons respectively.

In March 2019 Fortum repaid maturing bond of EUR 750 million and prepaid the bridge loan of EUR 1.75 billion drawn in June 2018 for the financing of the shares in Uniper.

The amount of reborrowing from the Finnish State Nuclear Waste Management Fund and TVO was also increased by EUR 27 million to EUR 1,185 million. Further Fortum signed a five-year EUR 300 million bilateral financial loan agreement which was drawn at the beginning of April 2019.

Fortum also entered into a non-cash collateral arrangement to release pledged cash from Nordic power exchange. As a result Fortum booked a short term interest bearing debt of EUR 309 million to the lender of the securities, which are included in interest-bearing receivables. See Note 12 Interest-bearing receivables and Note 17 Pledged assets and contingent liabilities.

At the end of March 2019, the amount of short-term financing included EUR 67 million (Dec 31 2018: 75) from Credit Support Annex agreements. The interest-bearing debt increased during the first quarter by EUR 594 million from EUR 6,093 million to EUR 6,687 million.

The average interest rate for the portfolio consisting mainly of EUR and SEK loans was 1.4% at the balance sheet date (Dec 31 2018: 1.7%). Part of the external loans, EUR 750 million (Dec 31 2018: 686) have been swapped to RUB and the average interest cost for these loans including cost for hedging the RUB was 8.5% at the balance sheet date (Dec 31 2018: 8.3%). The average interest rate on total loans and derivatives at the balance sheet date was 2.2% (Dec 31 2018: 2.4%).

Maturity of loans and borrowings

EUR million	Mar 31 2019
2019 [1)]	800
2020	33
2021	530
2022	1,043
2023	1,093
2024 and later	3,092
Total	**6,591**

1) The cash received as collateral based on Credit Support Annex agreements, amounting to EUR 67 million, has been booked as short-term liability.

Maturity of undiscounted lease liabilities

EUR million	Mar 31 2019
Due within a year	19
Due after one year and within five years	45
Due after five years	60
Total	**124**

In addition, Fortum has a EUR 41 million commitment to leases that have not yet commenced.

Liquid funds

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Deposits and securities with maturity more than 3 months	37	84	29
Cash and cash equivalents	1,655	3,420	556
Total	**1,692**	**3,504**	**584**

Total liquid funds increased by EUR 1,108 million from EUR 584 million to EUR 1,692 million during Q1 2019.

Liquid funds consist of deposits and cash in bank accounts amounting to EUR 1,519 million and commercial papers EUR 173 million. Deposits and securities include fixed term deposits and commercial papers with maturity more than three months but less than twelve months. The average interest rate on deposits and securities excluding Russian deposits on 31 March 2019 was -0.29% (Dec 31 2018: -0.11%). Liquid funds held by PAO Fortum amounted to EUR 463 million (Dec 31 2018: 317), of which EUR 461 million (Dec 31 2018: 316) was held as bank deposits. The average interest rate for this portfolio was 5.8% at the balance sheet date.

Liquid funds totaling EUR 1,309 million (Dec 31 2018: 168) are placed with counterparties that have an investment grade credit rating. In addition, EUR 383 million (Dec 31 2018: 416) have been placed with counterparties separately reviewed and approved by the Group's credit control department.

At the end of March 2019, the committed and undrawn credit facilities amounted to EUR 1.8 billion (Dec 31 2018: 1.8).

14. Nuclear related assets and liabilities

Fortum owns Loviisa nuclear power plant in Finland. In Fortum's consolidated balance sheet, Share in the State Nuclear Waste Management Fund and the Nuclear provisions relate to Loviisa nuclear power plant.

Fortum also has minority interests in nuclear power companies, i.e. Teollisuuden Voima Oyj (TVO) in Finland and OKG Aktiebolag (OKG) and Forsmarks Kraftgrupp AB (Forsmark) in Sweden. The minority shareholdings are classified as associated companies and joint ventures and are consolidated with equity method. Both the Finnish and the Swedish companies are non-profit making, i.e. electricity production is invoiced to the owners at cost including depreciations, interest costs and production taxes accounted for according to local GAAP.

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

14.1 Nuclear related assets and liabilities for 100% owned nuclear power plant, Loviisa

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Carrying values in the balance sheet			
Nuclear provisions	903	838	899
Fortum's share of the State Nuclear Waste Management Fund	903	838	899
Legal liability and actual share of the State Nuclear Waste Management Fund			
Liability for nuclear waste management according to the Nuclear Energy Act	1,180	1,161	1,180
Funding obligation target	1,180	1,153	1,180
Fortum's share of the State Nuclear Waste Management Fund	1,180	1,153	1,153
Share of the fund not recognised in the balance sheet	277	315	254

Legal liability for Loviisa nuclear power plant

The legal liability on 31 March 2019, decided by the Ministry of Economic Affairs and Employment in November 2018, was EUR 1,180 million.

The legal liability is based on a cost estimate, which is done every year, and a technical plan, which is made every third year. The current technical plan was updated in 2016. The legal liability is determined by assuming that the decommissioning would start at the beginning of the year following the assessment year.

Fortum's share in the State Nuclear Waste Management Fund

According to Nuclear Energy Act, Fortum is obligated to contribute funds in full to the State Nuclear Waste Management Fund to cover the legal liability. Fortum contributes funds to the Finnish State Nuclear Waste Management Fund based on the yearly funding obligation target decided by the governmental authorities in connection with the decision of size of the legal liability. The current funding obligation target decided in November 2018 is EUR 1,180 million.

Nuclear provision and fund accounted for according to IFRS

Nuclear provisions include the provision for decommissioning and the provision for disposal of spent fuel. The provisions are based on the same cash flows for future costs as the legal liability, but the legal liability is not discounted to net present value. The carrying value of the nuclear provisions, calculated according to IAS 37, increased by EUR 4 million compared to 31 December 2018, totaling EUR 903 million on 31 March 2019.

Fortum's share of the Finnish Nuclear Waste Management Fund is from an IFRS perspective overfunded with EUR 277 million, since Fortum's share of the Fund on 31 March 2019 was EUR 1,180 million and the carrying value in the balance sheet was EUR 903 million. The Fund in Fortum's balance sheet can at maximum be equal to the amount of the provisions according to IFRS. As long as the Fund is overfunded from an IFRS perspective, the operating profit is adjusted positively if the provisions increase more than the Fund and negatively if actual value of the fund increases more than the provisions. This accounting effect is not included in Comparable operating profit in Fortum financial reporting, see Note 4 Segment information.

Borrowing from the State Nuclear Waste Management Fund

Participants in the Finnish State Nuclear Waste Management Fund are allowed to borrow from the fund according to certain rules. Fortum uses the right to borrow back and has pledged shares in Kemijoki Oy as security for the loans. The loans are renewed yearly. See Note 13 Interest-bearing net debt and Note 17 Pledged assets and contingent liabilities.

14.2 Nuclear power plants in associated companies and joint ventures

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

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

TVO's total nuclear related assets and liabilities (100%)

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Carrying values in TVO's balance sheet			
Nuclear provisions	1,021	960	1,016
Share of the State Nuclear Waste Management Fund	1,021	960	1,016
of which Fortum's net share consolidated with equity method	**0**	**0**	**0**
TVO's legal liability and actual share of the State Nuclear Waste Management Fund			
Liability for nuclear waste management according to the Nuclear Energy Act	1,506	1,482	1,506
Share of the State Nuclear Waste Management Fund	1,506	1,471	1,471
Share of the fund not recognised in the balance sheet	485	511	455

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

TVO's share of the Finnish State Nuclear Waste Management Fund is from an IFRS perspective overfunded with EUR 485 million (of which Fortum's share EUR 129 million), since TVO's share of the Fund on 31 March 2019 was EUR 1,506 million and the carrying value in the balance sheet was EUR 1,021 million.

Participants in the Finnish State Nuclear Waste Management Fund are allowed to borrow from the fund according to certain rules. Fortum is using the right to reborrow funds through TVO based on its ownership. See more information in Note 13 Interest-bearing net debt.

OKG's and Forsmark's total nuclear related assets and liabilities (100%)

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
OKG's and Forsmark's nuclear related assets and liabilities [1)]			
Nuclear provisions	3,890	3,274	3,930
Share in the State Nuclear Waste Management Fund	3,271	3,041	3,230
Net amount	**-619**	**-233**	**-701**
of which Fortum's net share consolidated with equity method	**-216**	**-94**	**-242**

1) Accounted for according to Fortum's accounting principles. The companies' statutory financial statements are not prepared according to IFRS.

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

Nuclear waste fees and guarantees are updated every third year by governmental decision after a proposal from Swedish Radiation Safety Authority (SSM). From September 2018 onwards the proposal is prepared by the National Debt Office. The proposal is based on cost estimates done by SKB. The latest technical plan for nuclear waste management was decided by SKB during 2016. In 2017 SKB submitted the cost estimates based on the revised technical plan to SSM. In December 2017 the Swedish government decided the waste fees and guarantees for years 2018-2020. Nuclear waste fees are currently based on future costs with the assumed lifetime of 50 years (40 years in previous decision) for each unit of a nuclear power plant.

In addition to nuclear waste fees nuclear power companies provide guarantees for any uncovered liability and unexpected events. Fortum's guarantees given on behalf of nuclear associated companies are presented in Note 17 Pledged assets and contingent liabilities.

15. Other provisions

EUR million	Environmental provisions Mar 31 2019	Environmental provisions Mar 31 2018	Environmental provisions Dec 31 2018	Other provisions Mar 31 2019	Other provisions Mar 31 2018	Other provisions Dec 31 2018
Opening balance	**41**	**43**	**43**	**65**	**79**	**79**
Increase in the provisions	1	0	0	3	1	25
Provisions used	0	0	0	-5	-12	-33
Unused provisions reversed	0	0	0	0	-1	-4
Unwinding of discount	0	0	0	0	0	0
Exchange rate differences and other changes	0	-1	-1	-2	-3	-3
Closing balance	**41**	**42**	**41**	**60**	**65**	**65**
Current provisions [1)]	**0**	**0**	**0**	**13**	**17**	**14**
Non-current provisions	**41**	**42**	**41**	**47**	**48**	**50**

1) Included in trade and other payables in the balance sheet.

Environmental provisions include mainly provisions for obligations to cover and monitor landfills as well as to clean contaminated land areas. Main part of the provisions are estimated to be used within 10-15 years.

Dismantling provisions for the Finnish coal fired power plants are included in Other provisions.

16. Capital commitments

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Property, plant and equipment	352	359	322

Other commitments

Fortum has committed to provide a maximum of EUR 85 million to Voimaosakeyhtiö SF, for its participation in the Fennovoima nuclear power project in Finland. Furthermore, Fortum's remaining direct commitment regarding the construction of a waste-to-energy combined heat and power plant (CHP) in Kaunas, Lithuania is EUR 7 million at maximum. The investment is made through Kauno Kogeneracinė Jėgainė (KKJ), a joint venture owned together with Lietuvos Energija.

Fortum has also commited to provide a maximum of EUR 8 million to a joint venture with Numaligarh Refinery Limited (NRL) and Chempolis to build and operate a biorefinery in Assam, India.

Teollisuuden Voima Oyj (TVO) is building Olkiluoto 3, the nuclear power plant, which is funded through external loans, share issues and shareholder loans according to shareholders' agreement between the owners of TVO. At end of March 2019 Fortum had EUR 170 million (Dec 31 2018: 170) outstanding receivables regarding Olkiluoto 3 and is additionally committed to provide at maximum EUR 63 million. TVO shareholder loan is classified as participation in joint ventures.

In June 2018 the Swedish Government approved the legislation regarding Sweden’s national strategy for implementation of the EU’s Water Framework Directive. The largest hydro industry companies will create a common hydro-power fund to finance large parts of the environmental actions needed. The fund will have a total financial cap of SEK 10 billion to be paid over a 20-year period, and the largest operators will contribute to the fund proportionately based on their respective market share of hydro-power production. Fortum's share is expected to be 20-25% of the funds' total financing.

17. Pledged assets and contingent liabilities

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Pledged assets on own behalf			
For debt			
Pledges	288	288	288
Real estate mortgages	137	137	137
For other commitments			
Pledges	340	413	346
Real estate mortgages	21	141	21
Pledged assets on behalf of others			
Pledges	29	12	31
Contingent liabilities on own behalf			
Other contingent liabilities	40	162	167
Contingent liabilities on behalf of associated companies and joint ventures			
Guarantees	929	574	622

Pledged assets for debt

Participants in the Finnish State Nuclear Waste Management Fund are allowed to borrow from the Fund. Fortum has pledged shares in Kemijoki Oy as a security. As of 31 March 2019 the value of the pledged shares amounted to EUR 269 million (Dec 31 2018: 269).

Fortum Tartu in Estonia (60% owned by Fortum) has given real estate mortgages for a value of EUR 96 million (Dec 31 2018: 96) as a security for an external loan. Real estate mortgages have also been given for loan from Fortum's pension fund for EUR 41 million (Dec 31 2018: 41).

Regarding the relevant interest-bearing liabilities, see Note 13 Interest-bearing net debt.

Pledged assets for other commitments

Pledges also include restricted cash of EUR 31 million (Dec 31 2018: 346) and securities of EUR 309 million (Dec 31 2018: 0) for trading of electricity, gas and CO_2 emission allowances in Nasdaq Commodities, Intercontinental Exchange (ICE), European Energy Exchange (EEX) and Polish Power Exchange (TGE). See also Note 12 Interest-bearing receivables.

Fortum has given real estate mortgages in power plants in Finland, total value of EUR 21 million as of 31 March 2019 (Dec 31 2018: 21), as a security to the Finnish State Nuclear Waste Management Fund for the uncovered part of the legal liability and unexpected events relating to future costs for decomissioning and disposal of spent fuel in Loviisa nuclear power plant. According to the Nuclear Energy Act, Fortum is obligated to contribute the funds in full to the State Nuclear Waste Management Fund to cover the legal liability. Any uncovered legal liability relates to periodising of the payments to the fund. The size of the securities given is updated yearly in Q2 based on the decisions regarding the legal liabilities and the funding target which are determined at the end of the previous year.

See additional information in Note 14 Nuclear related assets and liabilities.

Pledged assets on behalf of others

Pledged assets on behalf of others consist of restricted cash EUR 29 million (Dec 31 2018: 31) posted as collateral toward Nasdaq Clearing AB covering Fortum's required contribution to the Commodity Market Default Fund (default fund). The default fund is a mutualized fund whereby all participants on the Nordic power exchange (OMX Nasdaq Commodities) post collateral in relation to their exposure on the market in order to cover potential defaults by members which may cause losses exceeding the members' own collateral. See also Note 12 Interest-bearing receivables.

Contingent liabilities on own behalf

Fortum owns the coal condensing power plant Meri-Pori in Finland. Teollisuuden Voima Oyj (TVO) has the contractual right to participate in the plant with 45.45%. Based on the participation agreement Fortum had to give a guarantee to TVO against breach in contract. On 1 January 2019, Fortum acquired all remaining C-shares of TVO entitling to the power production of the Meri-Pori coal condensing power plant. Fortum is now entitled to 100% of the power production of the plant. The amount of the guarantee amounted to EUR 125 million in December 2018 until the guarantee was released on 1 January 2019. The Meri-Pori power plant is mainly used in Fingrid's capacity reserve and as back-up capacity.

Contingent liabilities on behalf of associated companies

Guarantees on behalf of associated companies and joint ventures mainly consist of guarantees relating to Fortum's associated nuclear companies (Teollisuuden Voima Oyj, Forsmarks Kraftgrupp AB and OKG AB). Guarantees have been given on behalf of Forsmarks Kraftgrupp AB and OKG AB amounting to SEK 8,239 million (EUR 792 million) as of 31 March 2019 (Dec 31 2018: EUR 526 million). There are two types of guarantees given. The Financing Amount is given to cover Fortum's share of the uncovered part in the Nuclear Waste Fund, assuming no further production and that no further nuclear waste fees are paid in. The uncovered amount is calculated by the authorities and is based on the difference between the expected costs and the funds to cover these costs at the time of the calculation. The Supplementary Amount constitutes a guarantee for deficits that can arise as a result of unplanned events. The amounts for the guarantees are updated every third year by governmental decision. The Financing Amount given by Fortum on behalf of Forsmarks Kraftgrupp AB and OKG AB was SEK 5,695 million (EUR 548 million) and the Supplementary Amount was SEK 2,544 million (EUR 245 million) as of 31 March 2019.

The guarantee given on behalf of Teollisuuden Voima Oyj to the Finnish State Nuclear Waste Management Fund amounted to EUR 36 million as of 31 March 2019 (Dec 31 2018: 36). The guarantee covers the unpaid legal liability due to periodisation as well as risks for unexpected future costs.

Fortum has minority shares in legal companies owning nuclear power plants in Finland and Sweden. Fortum consolidates these companies according to the equity method meaning that Fortum's share of the assets and liabilities are netted to the balance sheet. For information regarding nuclear related assets and liabilities of Loviisa nuclear power plant as well as Swedish and Finnish nuclear production companies where Fortum has a minority shareholding see Note 14 Nuclear related assets and liabilities.

Fortum has given guarantees to secure bank loans obtained by WEDF Second Wind Farm LLC and WEDF Third Wind Farm LLC, which are subsidiaries of the 50-50 Wind fund with Rusnano. The guarantees given on pro rata basis are security for loans relating to the wind farms' development and amount to RUB 5,843 million (EUR 80 million) as of 31 March 2019 (Dec 31 2018: EUR 48 million).

Other contingent liabilities

Fortum's 100% owned subsidiary Fortum Heat and Gas Oy has a collective contingent liability with Neste Oyj of the in 2004 demerged Fortum Oil and Gas Oy's liabilities based on the Finnish Companies Act's (734/1978) Chapter 14a Paragraph 6.

18. Legal actions and official proceedings

Tax cases in Finland

No tax cases with material impact in Finland.

Tax cases in Sweden

Cases relating to Swedish interest deductions

In March 2018 the Swedish Supreme Administrative Court decided not to grant leave to appeal to Fortum with respect to the interest deduction cases relating to the years 2009-2012. The unfavourable decision of the Administrative Court of Appeal from June 2017 therefore remains in force. The additional tax and interest claimed, in total SEK 1,175 million (EUR 122 million), was paid in 2016 and booked as a cost in 2017. There are strong grounds to argue that the aforementioned decisions of the Administrative Court of Appeal and the Supreme Administrative Court violate EU law and fundamental rights under EU law. On these grounds Fortum has in December 2018 filed a summons application to the District Court of Stockholm in which damages are claimed from the Swedish state in these cases. Moreover, Fortum has filed a request to initiate a mutual agreement procedure between Sweden and the Netherlands for the year 2012.

Fortum’s court processes relating to interest deductions in Sweden for the years 2013, 2014 and 2015 have been closed. The final court decisions in these cases were favourable to Fortum.

Cases relating to the Swedish hydro real estate tax

Fortum Sverige AB has through an appeal process in Swedish courts claimed that the property tax rate for hydropower plants shall be lowered to the normal 0.5 percent of the tax assessment value. The case concerns the years 2009-2014 and includes several legal arguments for the claim including state aid arguments. Fortum Sverige AB did not receive a permission to appeal from the Supreme Administrative Court in this matter. As the Administrative Court, the Administrative Court of Appeal in Stockholm and the Supreme Administrative Court have handled only the arguments concerning state aid, the case has nowbeen transferred back to the Administrative Court concerning the other legal arguments. The disputed amount, excluding interest for the time period, totals approximately SEK 510 million (approximately EUR 49 million).

Moreover, Swedish Fortum companies have appeals for 2011-2016 pending before the Administrative Court relating to the property tax rate for their hydropower plants referring to the same legal grounds. Fortum has paid the real estate tax in accordance with the legislation. If the final court decision would be unfavorable to Fortum, this would not have any result impact for Fortum.

Fortum Sverige AB has in December 2018 filed a complaint to the EU commission regarding the Swedish property tax for hydropower plants regarding 2017 and prior years. Fortum has asked the commission to investigate whether the Swedish legislation regarding the property tax for hydropower plants and the Swedish court decisions are in line with EU state aid rules.

Tax cases in Belgium

Fortum has received income tax assessments in Belgium for the years 2008, 2009, 2010 and 2011. The tax authorities disagree with the tax treatment of Fortum EIF NV. Fortum finds the tax authorities interpretation not to be based on the local regulation and has appealed the decisions. The court of First instance in Antwerpen rejected Fortum's appeal for the years 2008 and 2009 in June 2014. Fortum found the decision unjustifiable and appealed to the Court of Appeal.

In January 2016 Fortum received a favourable decision from the Court of Appeal in which the Court disagreed with the tax authorities' interpretation and the tax assessment for 2008 was nullified. The tax authorities disagreed with the decision and filed an appeal to Hof van Cassatie (Supreme Court) in March 2016. Fortum's appeals concerning 2009-2011 are still pending and Fortum expects the remaining years to follow the final decision for 2008. Based on legal analysis and a supporting legal opinion, no provision has been accounted for. The amount of additional tax claimed is approximately EUR 36 million for the year 2008, approximately EUR 27 million for the year 2009, approximately EUR 15 million for the year 2010 and approximately EUR 21 million for the year 2011. The tax has already been paid.

In November 2015 Fortum received an income tax assessment from the Belgian tax authorities for the year 2012. The tax authorities disagree with the tax treatment of Fortum Project Finance NV. Fortum finds the tax authorities' interpretation not to be based on the local regulation and has filed an objection against the tax adjustment. In line with treatment of the cases concerning 2008-2011, no provision has been accounted for. The amount of additional tax claimed is approximately EUR 15 million for the year 2012. The tax has already been paid.

Other legal actions and official proceedings

In addition to the litigations described above, some Group companies are involved in other routine tax and other disputes incidental to their normal conduct of business. Based on the information currently available, management does not consider the liabilities arising out of such litigations likely to be material to the Group's financial position.

Litigations in associated companies

In Finland, Fortum is participating in the country's fifth nuclear power plant unit, Olkiluoto 3 (OL3), through the shareholding in Teollisuuden Voima Oyj (TVO) with an approximately 25% share representing some 400 MW in capacity.
OL3 was procured as a fixed-price turnkey project from a consortium (Supplier) formed by AREVA GmbH, AREVA NP SAS and Siemens AG.

A comprehensive settlement agreement between TVO and the Supplier was signed and it came into force in March 2018. The settlement agreement concerns the completion of the OL3 EPR project and related disputes.

The settlement agreement stipulated that in the event that the Supplier fails to complete the OL3 project by the end of 2019, they will pay a penalty to TVO for such delay in an amount which will depend on the actual time of completion of the OL3 project and may not exceed EUR 400 million.

The modification outage work during the first quarter of the year at Olkiluoto 3 has not been progressing according to the schedule issued by the Supplier. According to the Supplier’s schedule, nuclear fuel was planned to be loaded into the reactor in June 2019, the first connection to the grid was planned to take place in October 2019, and the start of regular electricity production of the OL3 EPR nuclear power plant unit was planned to take place in January 2020. In April 2019, TVO informed that the Supplier will update the time plan during June 2019.

More information on the settlement agreement, see Note 37 Legal actions and official proceedings of the consolidated financial statements 2018.

19. Related party transactions

Related parties are described in the consolidated financial statements for the year ended 31 December 2018. There has been no material changes during 2019.

At year-end 2018 the Finnish State owned 50.76% of the shares in Fortum. There has been no change in the number of shares the Finnish State owns in Fortum during 2019.

Transactions with associated companies and joint ventures

EUR million	Q1 2019	Q1 2018	2018
Sales	8	7	39
Purchases	102	98	379
Interest income on loan receivables	3	3	13

Balances with associated companies and joint ventures

EUR million	Mar 31 2019	Mar 31 2018	Dec 31 2018
Long-term interest-bearing loan receivables	643	689	641
Finance lease receivable from joint ventures	0	48	0
Trade receivables	32	18	54
Other receivables	18	20	18
Long-term loan payables	300	293	294
Trade payables	12	1	33
Other payables	6	6	14

20. Events after the balance sheet date

There have been no material events after the balance sheet date.

21. Definitions of key figures

Alternative performance measures

Business performance	Definition	Reason to use the measure	Reference to reconciliation
Comparable EBITDA	Operating profit + depreciations and amortisations - items affecting comparablity	Comparable EBITDA is representing the underlying cash flow generated by the total Group and segments. Used as a component in the capital structure target of Comparable net debt /EBITDA.	Capital structure and key ratios after cash flow statement
Comparable operating profit	Operating profit - items affecting comparability	Comparable operating profit is used in financial target setting and forecasting, management's follow up of financial performance and allocation of resources in the group's performance management process.	Income statement
Items affecting comparability	Impairment charges + capital gains and other + changes in fair values of derivatives hedging future cash flow + nuclear fund adjustment	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Impairment charges	Impairment charges and related provisions (mainly dismantling), which are adjusted from depreciation and amortisation.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Capital gains and other	Capital gains and transaction costs from acquisitions, which are adjusted from other income and other expenses respectively. Profits from the capital recycling business model are presented in comparable operating profit because the business results are realised through divesting the shareholding, either partially or totally.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Changes in fair values of derivatives hedging future cash flow	Effects from financial derivatives hedging future cash-flows where hedge accounting is not applied according to IFRS 9, which are adjusted from other income.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement

21. Definitions of key figures

Business performance	Definition		Reason to use the measure	Reference to reconciliation
Nuclear fund adjustment	Effects from the accounting of Fortum´s part of the Finnish Nuclear Waste Fund where the asset in the balance sheet cannot exceed the related liabilities according to IFRIC interpretation 5, which is adjusted from materials and services. In addition adjustments are made for accounting effects from valuation according to IFRS.		Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Comparable return on net assets, %	Comparable operating profit + share of profit (loss) in associated companies and joint ventures + adjustment for share of profit of associated companies and joint ventures Comparable net assets average	x 100	Comparable return on net assets is used in financial target setting and forecasting, management's follow up of financial performance and allocation of resources in the group's performance management process.	Note 4 Segment information
Adjustment for Share of profit of associated companies and joint ventures	Adjustment for material items affecting comparability.		Share of profit of associates and joint ventures is included in profit component in the comparable return on net assets calculation and the adjustments are done based on similar components as in Items affecting comparability.	Note 4 Segment information
Comparable net assets	Non-interest bearing assets + interest-bearing assets related to the Nuclear Waste Fund - non-interest bearing liabilities - provisions (non-interest bearing assets and liabilities do not include finance related items, tax and deferred tax and assets and liabilities from fair valuations of derivatives used for hedging future cash flows).		Comparable net assets is a component in Comparable return on net assets calculation where return on capital allocated directly to the businesses is measured.	Note 4 Segment information

21. Definitions of key figures

Capital structure	Definition		Reason to use the measure	Reconciliation
Comparable net debt / EBITDA	Interest-bearing net debt / Comparable EBITDA		Financial targets give guidance on Fortum's view of the company's long-term value creation potential, its growth strategy and business activities. Comparable net debt to EBITDA is one of the Fortum's long-term over-the-cycle financial targets measuring the capital structure of the Group.	Capital structure and key ratios after cash flow statement
Interest-bearing net debt	Interest-bearing liabilities - liquid funds		Interest-bearing net debt is used in the follow-up of the indebtedness of the group i.e. capital structure especially as a component in the long-term over-the-cycle financial target of Comparable net debt / EBITDA in the Group.	Note 13 Interest-bearing net debt
Return on capital employed (ROCE), %	Profit before taxes + interest and other financial expenses / Capital employed average	x 100	Return on capital employed (ROCE) is a long-term over the cycle financial ratio measuring the profitability and how efficiently invested capital is used. It gives guidance on company's long-term value creation potential, its growth strategy and business activities.	Capital structure and key ratios after cash flow statement
Capital employed	Total assets - total non-interest bearing liabilities		Capital employed is the book value of the invested capital and it is used as a component when calculating the Return of capital employed in the group.	Capital structure and key ratios after cash flow statement

Other key figures

Share based key figures

Earnings per share (EPS)	Profit for the period - non-controlling interests / Average number of shares during the period
Equity per share	Shareholder's equity / Number of shares at the end of the period

21. Definitions of key figures

Other key figures

FFO/Net debt, %	Funds from operations (FFO) / Interest-bearing net debt	x 100
Funds from operations (FFO)	Net cash from operating activities before change in working capital and change in settlements for futures	
Capital expenditure	Capitalised investments in property, plant and equipment and intangible assets including maintenance, productivity, growth and investments required by legislation including borrowing costs capitalised during the construction period. Maintenance investments expand the lifetime of an existing asset, maintain useage/availability and/or maintains reliability. Productivity investments improve productivity in an existing asset. Growth investments' purpose is to build new assets and/or to increase customer base within existing businesses. Legislation investments are done at certain point of time due to legal requirements.	
Gross investments in shares	Investments in subsidiary shares, shares in associated companies and joint ventures and other investments. Investments in subsidiary shares are net of cash and grossed with interest-bearing liabilities in the acquired company.	
Return on shareholders' equity (ROE), %	Profit for the year / Total equity average	x 100
Gearing, %	Interest-bearing net debt / Total equity	x 100
Equity-to-assets ratio, %	Total equity including non-controlling interest / Total assets	x 100
Interest coverage	Operating profit / Net interest expenses	
Interest coverage including capitalised borrowing costs	Operating profit / Net interest expenses - capitalised borrowing costs	

Definitions for tax figures

Effective income tax rate,%	Income tax expense / Profit before income tax	x 100
Comparable effective income tax rate,%	Income tax expense - effects from tax rate changes and major one time tax effects / Profit before income tax decreased by profits from associated companies and joint ventures as well as tax exempt capital gains or losses	x 100
Last twelve months (LTM)	Twelve months preceding the reporting date	

Market conditions and achieved power prices

Power consumption

TWh	Q1 2019	Q1 2018	2018	Last twelve months
Nordic countries	116	121	399	394
Russia	289	289	1,055	1,055
Tyumen	24	24	92	92
Chelyabinsk	9	9	35	35
Russia Urals area	70	70	260	260

Average prices

	Q1 2019	Q1 2018	2018	Last twelve months
Spot price for power in Nord Pool power exchange, EUR/MWh	46.9	38.6	44.0	44.0
Spot price for power in Finland, EUR/MWh	47.5	42.0	46.8	46.8
Spot price for power in Sweden, SE3, Stockholm EUR/MWh	46.5	39.0	44.5	44.5
Spot price for power in Sweden, SE2, Sundsvall EUR/MWh	46.0	38.9	44.2	44.2
Spot price for power in the First Price Zone of Russia, RUB/MWh 1)	1,309	1,187	1,247	1,278
Average capacity price, tRUB/MW/month	678	661	609	614
Spot price for power in Germany, EUR/MWh	40.9	35.5	44.5	45.8
Average regulated gas price in Urals region, RUB/1000 m^3	3,883	3,755	3,801	3,833
Average capacity price for CCS, tRUB/MW/month 2)	162	158	148	149
Average capacity price for CSA, tRUB/MW/month 2)	1,196	1,147	1,075	1,087
Spot price for power (market price), Urals hub, RUB/MWh 1)	1,128	1,011	1,043	1,072
CO_2, (ETS EUA), EUR/tonne CO_2	22	10	16	19
Coal (ICE Rotterdam), USD/tonne	76	87	92	89
Oil (Brent Crude), USD/bbl	64	67	72	71

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

Water reservoirs

TWh	Mar 31 2019	Mar 31 2018	Dec 31 2018
Nordic water reservoirs level	39	34	74
Nordic water reservoirs level, long-term average	42	42	83

Export/import

TWh (+ = import to, - = export from Nordic area)	Q1 2019	Q1 2018	2018	Last twelve months
Export / import between Nordic area and Continental Europe + Baltics	0	-3	-10	-7
Export / import between Nordic area and Russia	2	2	8	8
Export / import Nordic area, Total	2	-1	-2	1

Power market liberalisation in Russia

%	Q1 2019	Q1 2018	2018	Last twelve months
Share of power sold at the liberalised price	80%	81%	80%	80%

Achieved power prices

	Q1 2019	Q1 2018	2018	Last twelve months
Generation segment's Nordic power price, EUR/MWh	38.4	33.6	34.6	36.0
Russia segment's power price, RUB/MWh	2,002	1,872	1,888	1,924
Russia segment's power price, EUR/MWh 1)	26.4	26.8	25.6	25.5

1) Translated using average exchange rate.

Fortum's production and sales volumes

Power generation

TWh	Q1 2019	Q1 2018	2018	Last twelve months
Power generation in Europe	12.4	13.7	44.4	43.1
Power generation in Russia	8.3	8.3	29.6	29.6
Power generation in other countries	0.0	0.1	0.4	0.3
Total	**20.6**	**22.1**	**74.6**	**73.1**

Heat production

TWh	Q1 2019	Q1 2018	2018	Last twelve months
Heat production in Europe	3.3	3.7	9.4	9.0
Heat production in Russia	6.9	8.8	20.4	18.5
Total	**10.2**	**12.4**	**29.8**	**27.6**

Power generation capacity by segment

MW	Mar 31 2019	Mar 31 2018	Dec 31 2018
Generation [1)]	8,218	7,969	8,024
City Solutions	766	953	788
Russia	4,913	4,816	4,912
Other	0	0	0
Total	**13,896**	**13,738**	**13,724**

1) Including 308 MW of Meri-Pori power plant, which will be under reserve capacity agreement during period July 2017 - June 2020. Capacity decreases due to closure of unit 1 (205 MW) in Oskarshamn in end of June 2017.

Heat production capacity by segment

MW	Mar 31 2019	Mar 31 2018	Dec 31 2018
City Solutions	4,671	4,768	4,780
Russia	8,583	10,075	10,229
Total	**13,254**	**14,843**	**15,009**

Power generation by source in the Nordic area

TWh	Q1 2019	Q1 2018	2018	Last twelve months
Hydro and wind power	4.9	6.4	19.4	17.9
Nuclear power	6.3	6.3	22.8	22.8
Thermal power	0.7	0.5	1.3	1.5
Total	**12.0**	**13.3**	**43.5**	**42.2**

Power generation by source in the Nordic area

%	Q1 2019	Q1 2018	2018	Last twelve months
Hydro and wind power	41	48	45	42
Nuclear power	53	48	52	54
Thermal power	6	4	3	4
Total	**100**	**100**	**100**	**100**

Power sales

EUR million	Q1 2019	Q1 2018	2018	Last twelve months
Power sales in Europe	959	828	2,922	3,053
Power sales in Russia	248	248	872	872
Power sales in other countries	0	6	15	9
Total	**1,207**	**1,082**	**3,810**	**3,935**

Fortum's production and sales volumes

Heat sales

EUR million	Q1 2019	Q1 2018	2018	Last twelve months
Heat sales in Europe	254	265	615	604
Heat sales in Russia	49	88	193	154
Total	**302**	**353**	**808**	**757**

Power sales by area

TWh	Q1 2019	Q1 2018	2018	Last twelve months
Finland	7.4	6.6	23.1	23.9
Sweden	8.3	9.2	29.7	28.8
Russia	9.4	9.3	34.1	34.2
Norway	5.1	5.4	15.3	15.0
Other countries	0.6	1.2	1.8	1.2
Total	**30.8**	**31.7**	**104.0**	**103.1**

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

Heat sales by area

TWh	Q1 2019	Q1 2018	2018	Last twelve months
Russia	6.6	8.4	20.7	18.9
Finland	1.4	1.6	3.8	3.6
Poland	1.5	1.7	3.5	3.3
Other countries	1.4	1.5	3.5	3.4
Total	**10.9**	**13.2**	**31.5**	**29.2**