

January-June

2019

Interim Report



**POHJOLAN
VOIMA**

POHJOLAN VOIMA OYJ INTERIM REPORT 1 JANUARY – 30 JUNE 2019

Pohjolan Voima's heat and power production continued at the normal level.

Pohjolan Voima's bond was listed on Nasdaq Helsinki.

After the end of the reporting period, Teollisuuden Voima received from the plant supplier consortium an updated schedule for the commissioning of the OL3 EPR plant unit. According to the information provided, regular electricity generation at OL3 will start in July 2020.

Operating environment

Finland's power consumption in January–June 2019 was 45.8 TWh (45.3 TWh between 1 January and 30 June 2018), which means an increase of 1.1 per cent year-on-year. Finnish electricity production totalled 36.2 (35.2) TWh, while net imports into Finland amounted to 9.6 (10.0) TWh.

The average system price in January–June 2019 was EUR 41.2 (38.8) per MWh, while the average Finnish area price was EUR 42.4 (42.0) per MWh. The low water levels in the Nordic countries early in the year and increased fuel prices resulted in higher prices of electricity.

The price of the EU emission allowance experienced strong fluctuation between January and June. The market price was approximately EUR 25 per metric ton at the beginning of the year, compared to approximately EUR 26 per metric ton at the end of the second quarter.

The Government of Prime Minister Rinne aims to make Finland carbon neutral by 2035 and carbon negative shortly thereafter. During Finland's Presidency of the EU the Government will promote tightening of EU's climate policy. The Government's attitude towards new licences for the currently operating nuclear power plants is positive. The amount of peat used as a source of energy will be halved by 2030. An act that prohibits the use of coal in energy production has already entered into force.

According to the Government Programme, the Government will amend the Water Act in a manner that will include "zero obligation" plants in the scope of fish stock management obligations. The Government will introduce a national programme to revive migratory fish stocks. Based on the national fishway strategy, the programme will continue the restoration of the natural cycle in built waterways and implement migratory fish projects through extensive cooperation.

The Government Programme includes several tax policies that will influence the energy industry. The Government will realise a comprehensive reform of energy taxation by the 2020 budget session. Focus of the energy subsidy system will be switched from production subsidies to subsidies for new energy technology investments and demonstrations. The Government will reduce the tax subsidy of combined heat and power production and increase the tax rate of heating fuels. Real estate tax will be renewed to better reflect the current market values.

An EU directive to combat aggressive international tax planning has, for the most part, been executed. However, the Ministry of Finance is still investigating the possibility to completely exempt nuclear power produced using the Mankala principle from interest expense deduction limitations.

Pohjolan Voima's heat and power production

Pohjolan Voima's electricity deliveries in January–June 2019 totalled 5.7 (6.2) TWh, of which the Group's own electricity production accounted for 5.5 (5.9) TWh. Purchases from the Nordic electricity markets amounted to 0.2 (0.3) TWh and sales to 0.1 (0.2) TWh. The parent company's deliveries to its shareholders totalled 5.3 (5.6) TWh, and subsidiaries' deliveries to their other shareholders 0.2 (0.3) TWh. Pohjolan Voima Group's heat deliveries totalled 1.8 (2.6) TWh. The electricity and heat deliveries decreased from the previous year, mainly due to the divestments of power plants and capacity in 2018.

Pohjolan Voima's electricity deliveries by mode of production:

	1 Jan – 30 Jun 2019	1 Jan – 30 Jun 2018	1 Jan – 31 Dec 2018
Nuclear power.....	3.9	3.7	8.0
Hydropower.....	0.9	0.9	1.5
Combined heat and power.....	0.7	1.1	2.1
Condensing power.....	0.0	0.2	0.4
Purchases.....	0.2	0.3	0.5
Total.....	5.7	6.2	12.5
Heat deliveries.....	1.8	2.6	4.4

Key events during the reporting period

On 8 June 2018, Pohjolan Voima Oyj concluded an asset transaction with Power-Deriva Oy where Pohjolan Voima's energy management operations in Harjavalta were transferred to Power-Deriva Oy. The transaction took effect on 1 January 2019.

On 7 March 2019, Teollisuuden Voima Oyj (TVO) announced that it received an operating license for its OL3 nuclear power plant unit from the Government.

On 15 March 2019, Pohjolan Voima Oyj paid its C series shareholders a total of EUR 14 million as return on capital from the reserve for invested non-restricted equity where a reduction of the restricted equity, EUR 20.8 million, was transferred in January 2019.

On 4 April 2019, Pohjolan Voima Oyj signed an agreement with EPV Energia Oy on an asset transaction regarding Vaskiluodon Voima Oy's business. The transaction will take effect on 1 January 2023.

A senior unsecured bond of EUR 125 million issued by Pohjolan Voima Oyj in June 2018 was listed, according to the terms of the bond, on Nasdaq Helsinki in May 2019.

On 19 June 2019, Pohjolan Voima Oyj announced that TVO would receive an updated project schedule regarding the OL3 EPR plant unit from the Areva-Siemens Consortium by the end of July. After the end of the reporting period, on 17 July 2019, Pohjolan Voima Oyj announced that TVO had received the plant supplier's updated project schedule. According to the plant supplier, nuclear fuel will be loaded into the reactor in January 2020, the plant unit will be connected to the national grid for the first time in April 2020 and regular electricity production will start in July 2020.

Posiva Oy, which has been preparing final disposal of spent nuclear fuel from TVO and Fortum, its owners, decided to construct a production unit for the processing of spent nuclear fuel, consisting of an encapsulation plant and a final disposal facility.

Result from operations and financing

Pohjolan Voima operates on a cost price principle. Shareholders pay the fixed costs in accordance with their ownership share, irrespective of whether they have used their capacity or energy share, as well as variable costs according to the energy supplied. As a result of this operating principle, presenting any financial key indicators is not necessary to understand the company's business, financial status or result.

The Group's equity ratio at the end of the reporting period was 38.3% (38.4%). The consolidated sales of continuing operations at the end of the reporting period was EUR 237.1 (254.8) million. The operations of PVO-Lämpövoima Oy, the plants of which were closed down in 2015, have been reported in the Group's financial statements as discontinued operations. The consolidated profit for the period was EUR 1.2 (loss -16.9) million. The profit of the reporting period was influenced by the result of the associated companies, which was better than in the previous year due to TVO's updated nuclear waste management cost estimate and a subsequent amendment of the related nuclear waste management liability. The update of nuclear waste management's total cost estimate is done every three years.

At the end of June 2019, the Group's interest-bearing debts totalled EUR 1,225 (1,253) million and cash and cash equivalents totalled EUR 63 (137.6) million. Furthermore, the Group had EUR 300 (300) million of unused committed credit facility agreements and EUR 90 (90) million of unused shareholder loan commitments.

A senior unsecured bond of EUR 125 million issued by Pohjolan Voima Oyj in June 2018 was listed, according to the loan terms, on Nasdaq Helsinki in May 2019.

The Group companies' financing agreements do not include any financing covenants.

Investments

Pohjolan Voima's total investments, excluding financial investments and the purchase of emission allowances, amounted to EUR 1.7 (3.1) million. The largest investments involved PVO-Vesivoima Oy, where a modernisation of the electricity and automation systems at the Raasakka hydropower plant was completed. Injecting of the Melo dam also continued.

Between 2004 and 2019, Pohjolan Voima Oyj has invested a total of EUR 841.1 (780.8) million in the Olkiluoto 3 nuclear power plant that is currently under construction. The investments are based on the Olkiluoto 3 financing plan, according to which the equity required for the investment is accumulated along with the progress of the project.

Personnel

The number of personnel at the end of the reporting period was 89 (109) people, including discontinued operations. The number of employees within the Group decreased due to the asset transaction with Power-Deriva Oy.

Environment

Environmental management systems certified in accordance with ISO 14001 are in use in the majority of Pohjolan Voima's production companies. This helps to ensure the achievement of environmental objectives and continuous improvement of operations. In addition, all of the production companies use the energy efficiency system EES+ or the energy management system ISO 50001. Some of these systems are certified. Furthermore, the environmental management system of TVO (a joint venture of Pohjolan Voima) is EMAS registered.

In 2015–2018, PVO-Vesivoima participated in a waterway vision project called Iijoen otva in cooperation with the Iijoki region municipalities and other regional operators. The project was coordinated by the Council of Oulu Region. The main goals of the project included a shared vision for waterways, promotion of the restoration of migrating fish, protection of the Baltic Sea salmon population and promotion of smaller development measures that increased the river's value. A new agreement on implementation of the Iijoki waterway vision and action plan, the Iijoki Agreement for the years 2019–2023, was signed.

PVO-Vesivoima also participates in Finland's largest project on migratory fish, the Iijoki river migratory fish spearhead project, which was started in 2017. The budget of the spearhead project is more than EUR 4 million, and the Finnish Government is committed to providing EUR 2 million of funding for the project as part of its Luontopolitiikka luottamuksella ja reiluin keinoin ("Nature policy based on trust and fairness") spearhead project. In March 2017, PVO-Vesivoima and Metsähallitus filed a joint application with the Regional State Administrative Agency for Northern Finland for a water management permit to build fishways in Raasakka. Replies to statements and complaints regarding the application were submitted in August 2018. The Regional State Administrative Agency has not given its decision yet.

In March 2017, the Centre for Economic Development, Transport and the Environment for Lapland filed a change application with the Regional State Administrative Agency for Northern Finland concerning stocking and fish stock management obligations with regard to the Kemijoki river. In October 2017, the centre filed a similar application concerning the Iijoki river. In addition to entirely new requirements, this involves additions to current obligations. The Regional State Administrative Agency has not yet announced the applications.

The new limits for emissions into the air, set out in the Industrial Emissions (IE) Directive, came into effect in Finland at the beginning of 2016. Some of Pohjolan Voima's facilities are included in the national IE Directive transition plan adopted by the European Commission on 10 March 2014. The transition plan provides some flexibility for the adoption of the stricter emission limits. The transition planning period is from 1 January 2016 to 30 June 2020.

BAT conclusions related to the reference document on best available techniques for large combustion plants (LCP-BREF) were published on 17 August 2017. Power plants the main field of activity of which is energy production will be allowed four years to adjust their operations to the conclusions. In the case of other power plants, the four-year adjustment period will start at the publication of the BAT conclusions for their main field of activity. The environmental permit procedure regarding the LCP BAT conclusions of Pohjolan Voima's power plants has proceeded according to plan. One of the power plants received its new environmental permit decision based on the LCP BAT last year, and two power plants have submitted their environmental permit applications in 2019. The emission limits will be stricter for new environmental permits.

Pohjolan Voima Oyj or its subsidiaries, associated companies and joint ventures are not aware of any environmental liabilities that have not been covered. The Group's more detailed environmental information is published on its website at www.pohjolanvoima.fi. TVO provides information on the environmental issues related to nuclear power generation on its website at www.tvo.fi and in a separate corporate social responsibility report

Key risks and uncertainties

The key risks and uncertainty factors involved in Pohjolan Voima's operations are presented in the 2018 report of the Board of Directors.

No major new risks associated with Pohjolan Voima's operations were identified during the reporting period.

Shares and shareholding

Shareholder	Shareholding (%) 30 June 2019
EPV Energia Ltd	5.489
Etelä-Suomen Voima Oy	1.482
Helen Ltd	0.619
Ilmarinen Mutual Pension Insurance Company	1.831
Kemira Oyj (incl. Neliapila pension fund)	5.060
Kokkolan Energia Oy	1.845
Kymmivoima Oy	5.907
Metsä Group (Metsäliitto Cooperative, Metsä Fibre, Metsä Board Oyj)	3.657
Myllykoski Oyj*	0.631
Oulun Energia Ltd	0.906
Outokumpu Oyj	0.096
Perhonjoki Ltd	2.167
Town of Pori	1.401
Rautaruukki Corporation	0.090
Stora Enso Oyj	15.608
UPM Energy Oy*	47.686
UPM Communication Papers Ltd*)	3.457
Vantaa Energy Ltd	0.229
Yara Suomi Oy (incl. pension fund)	1.840

* The company is part of the UPM-Kymmene Group.

Annual general meeting

The annual general meeting held on 21 March 2019 adopted the 2018 financial statements, adopted the profit and loss statement and the balance sheet, and discharged the members of the Board of Directors and the President and CEO from liability.

The following ordinary members to the Board of Directors were elected: Tapio Korpeinen, Executive Vice President (UPM-Kymmene Corporation); Seppo Parvi, Chief Financial Officer (Stora Enso Oyj); Jukka Hakki, Group General Counsel (Kemira Oyj); Anders Renvall, Managing Director (Kymmene Oyj); Tomi Sederholm, Director, Finance & Control and Strategy (UPM Energy Ltd); Esa Kaikkonen, CEO (Metsä Group/Metsä Tissue); Rami Vuola, President & CEO (EPV Energia Oyj); Mikko Rintamäki, Managing Director (Kokkolan Energia Oyj); and Mikael Surakka, Manager - Energy (Outokumpu Oyj). At its inaugural meeting, the Board of Directors elected Tapio Korpeinen as the chair and Seppo Parvi as the vice chair. The Board also elected committee members from among its members.

Extraordinary general meeting

On 13 May 2019, the extraordinary general meeting decided to authorise the Board of Directors of Pohjolan Voima Oyj to issue instructions needed to the representative of Pohjolan Voima who would be attending TVO's extraordinary general meeting on 17 May 2019, so that TVO's extraordinary general meeting could make a decision regarding an authorisation to the Board of Directors of Posiva Oy, to be issued by Posiva's annual general meeting, to implement the spent nuclear fuel handling facilities (the final disposal facility and the encapsulation plant) according to the production plan.

Major legal actions pending

No major legal actions were pending during the reporting period.

Events after the reporting period

After the end of the reporting period, on 17 July 2019, Pohjolan Voima Oyj announced that TVO had received an updated rebaseline schedule for the final phases of the OL3 EPR plant unit from the plant supplier, Areva-Siemens Consortium. According to the plant supplier, fuel will be loaded into the reactor in January 2020, the plant unit will be connected to the national grid for the first time in April 2020 and regular electricity production will start in July 2020.

Outlook

During the current financial period, power and heat production is expected to continue as in the preceding years.

TVO will continue the realization of the Olkiluoto 3 EPR nuclear power plant unit and the preparations for production operation. TVO will still require a separate permission from the Radiation and Nuclear Safety Authority (STUK) for the loading of the nuclear fuel. TVO will continue to support the plant supplier to complete the project.

Construction of Posiva's spent nuclear fuel handling facility will continue.

Helsinki, 21 August 2019

Pohjolan Voima Oyj
Board of Directors

FINANCIAL STATEMENT SUMMARY AND NOTES TO THE FINANCIAL STATEMENT

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

1 000 €	Note	1.1. - 30.6.2019	1.1. - 30.6.2018	1.1. - 31.12.2018
Continuing operations				
Sales	2	237 073	254 757	514 096
Other operating income		1 044	13 136	2 968
Materials and services		-187 467	-204 026	-402 536
Personnel expenses		-4 473	-5 050	-9 959
Depreciation, amortisation and impairment	3	-19 848	-19 601	-39 048
Other operating expenses		-24 583	-24 780	-53 437
Share of (loss)/profit of associates and joint ventures		12 194	-13 106	-19 535
Operating profit or loss		13 940	1 330	-7 451
Finance income		1 553	1 285	2 728
Finance costs		-12 391	-18 605	-27 637
Finance costs - net		-10 838	-17 320	-24 909
Profit/loss before income tax		3 102	-15 990	-32 360
Income tax expense		-1	0	0
Profit/loss for the period from continuing operations		3 101	-15 990	-32 360
Discontinued operations				
Profit/loss from discontinued operations		-1 915	-922	2 611
Profit/loss for the period		1 186	-16 912	-29 749
Other comprehensive income:				
Items, that may be reclassified later to profit or loss				
Share of other comprehensive income of associates				
Cash flow hedging		-8 317	1 067	4 166
Other comprehensive income for the period		-8 317	1 067	4 166
Total comprehensive income for the period		-7 131	-15 845	-25 583
Profit attributable to:				
Owners of the parent		856	-17 192	-29 098
Non-controlling interest		330	280	-651
		1 186	-16 912	-29 749
Total comprehensive income attributable to:				
Owners of the parent		-7 461	-16 125	-24 932
Non-controlling interest		330	280	-651
		-7 131	-15 845	-25 583

CONSOLIDATED BALANCE SHEET

1 000 €	Note	30.6.2019	30.6.2018	31.12.2018
ASSETS				
Non-current assets				
Intangible assets	3	282 946	283 104	284 173
Property, plant and equipment	3	490 330	514 639	497 440
Investments in associated companies and joint ventures		718 503	721 247	714 625
Other financial assets		484	496	486
Loans and other receivables		446 002	385 740	446 034
Non-current assets total		1 938 265	1 905 226	1 942 758
Current assets				
Inventories		5 204	4 254	12 038
Trade and other receivables		70 106	101 702	84 399
Cash and cash equivalents		63 457	137 602	59 598
Current assets total		138 767	243 558	156 035
Assets held for sale		2 906	5 972	4 653
Total assets		2 079 938	2 154 756	2 103 446
EQUITY				
Equity attributable to owners of the parent				
Share capital		55 321	65 293	65 293
Share premium		205 999	216 822	216 822
Reserve for invested non-restricted equity		327 644	326 683	326 683
Revaluation reserve		-6 617	-1 399	1 700
Retained earnings		172 569	177 786	165 879
Total		754 916	785 185	776 377
Non-controlling interests		40 845	42 477	40 515
Total equity		795 761	827 662	816 892
LIABILITIES				
Non-current liabilities				
Provisions		5 076	4 454	3 345
Borrowings	4	956 583	1 107 836	1 107 672
Other non-current liabilities		11 811	4 373	6 293
Non-current liabilities total		973 470	1 116 663	1 117 310
Current liabilities				
Borrowings	4	267 926	145 500	114 533
Trade and other payables		42 781	64 931	54 711
Current liabilities total		310 707	210 431	169 244
Total liabilities		1 284 177	1 327 094	1 286 554
Total equity and liabilities		2 079 938	2 154 756	2 103 446

CONDENSED CONSOLIDATED CASH FLOW STATEMENT

1 000 €	1.1. - 30.6.2019	1.1. - 30.6.2018	1.1. - 31.12.2018
Cash flow from operating activities			
Profit before income taxes	3 102	-15 990	-32 360
Adjustments, total	18 482	49 739	83 058
Change in working capital	23 980	-4 273	-8 949
Cash generated from operations	45 564	29 476	41 749
Finance cost, net	-6 934	-5 620	-10 067
Income taxes paid	-1	-4	-4
Net cash generated from operating activities	38 629	23 851	31 678
Cash flow from investing activities			
Proceeds from sales of shares in participating interests	0	0	2
Capital expenditure	-1 705	-3 086	-5 538
Proceeds from sales of fixed assets	157	319	265
Equity refunds received	0	0	3 310
Changes in non-current receivables and other financial assets	0	15	-60 210
Net cash used in investing activities	-1 548	-2 752	-62 171
Cash flow before financing activities	37 081	21 099	-30 493
Cash flow from financing activities			
Equity refunds paid	-14 000	0	0
Net charge in loans and other financing activities	-6 241	72 601	41 466
Dividends paid to non-controlling interests	0	0	-311
Net cash used in financing activities	-20 241	72 601	41 155
Net increase (+)/decrease (-) in cash and cash equivalents	16 840	93 700	10 662
Cash and cash equivalents at beginning of year	44 547	33 885	33 885
Cash and cash equivalents at end of year, continuing operations	61 387	127 585	44 547
Cash and cash equivalents, discontinued operations	2 070	10 017	15 051
Cash and cash equivalents at end of year	63 457	137 602	59 598

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

1 000 €	Share capital	Share premium	Fair value reserve	Reserve for invested non-restricted equity	Retained earnings	Equity attributable to owners of the parent	Equity attributable to non-controlling interest	Total equity
Balance at 1.1.2018	65 293	216 822	-2 466	328 869	192 792	801 310	42 197	843 507
Comprehensive income								
Profit or loss					-17 192	-17 192	280	-16 912
Other comprehensive income:								
Cash flow hedges			1 067			1 067		1 067
Total comprehensive income for the period	0	0	1 067	0	-17 192	-16 125	280	-15 845
Transactions with owners								
Transfer to retained earnings				-2 186	2 186	0		0
Transactions with owners total	0	0	0	-2 186	2 186	0	0	0
Balance at 30.6.2018	65 293	216 822	-1 399	326 683	177 786	785 185	42 477	827 662
Balance at 1.1.2018	65 293	216 822	-2 466	328 869	192 792	801 310	42 197	843 507
Comprehensive income								
Profit or loss for the period					-29 098	-29 098	-651	-29 749
Other comprehensive income:								
Cash flow hedges			4 166			4 166		4 166
Total comprehensive income for the period	0	0	4 166	0	-29 098	-24 932	-651	-25 583
Transactions with owners								
Transfer to retained earnings				-2 186	2 186	0		0
Non-controlling interest of a liquidated and sold group companies						0	-720	-720
Transactions with owners total	0	0	0	-2 186	2 186	0	-720	-720
Dividends to non-controlling interest						0	-311	-311
Balance at 31.12.2018	65 293	216 822	1 700	326 683	165 879	776 377	40 515	816 892
Balance at 1.1.2019	65 293	216 822	1 700	326 683	165 879	776 377	40 515	816 892
Comprehensive income								
Profit or loss for the period					856	856	330	1 186
Other comprehensive income:								
Cash flow hedges			-8 317			-8 317		-8 317
Total comprehensive income for the period	0	0	-8 317	0	856	-7 461	330	-7 131
Transactions with owners								
Transfer to retained earnings and reserve for invested non-restricted equity	-9 972	-10 823		14 961	5 834	0		0
Refund of reserves				-14 000		-14 000		-14 000
Transactions with owners total	-9 972	-10 823	0	961	5 834	-14 000	0	-14 000
Balance at 30.6.2019	55 321	205 999	-6 617	327 644	172 569	754 916	40 845	795 761

NOTES TO THE INTERIM REPORT

BASIS OF PREPARATION AND ACCOUNTING POLICIES

The interim report has been prepared in accordance with IAS 34 Interim Financial Reporting. The condensed interim report should be read in conjunction with the consolidated financial statements for the year ended 31 December 2018. The accounting policies where they are different to those applied in prior periods are presented below and in Note Changes in accounting policies. Otherwise accounting policies adopted are consistent with those of the Group's annual financial statements for the year ended 31 December 2018.

The preparation of interim financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting principles. Although these estimates and assumptions are based on the management's best knowledge of today, the final outcome may differ from the estimated values presented in the financial statements. The figures in the tables are exact figures and consequently the sum of individual figures may deviate from the sum presented.

CHANGES IN ACCOUNTING POLICIES

The Group started to apply IFRS 16 from 1 January 2019 with the modified retrospective approach and does not restate previous periods. IFRS 16 Leases, issued in January 2016, sets out the principles for the recognition, measurement, presentation and disclosure of leases. The objective is to ensure that lessees and lessors provide relevant information in a manner that faithfully represents those transactions. This information gives a basis for users of financial statements to assess the effect that leases have on the financial position, financial performance and cash flows of the entity. IFRS 16 has been endorsed by EU in November 2017 and is effective for annual periods beginning on or after 1 January 2019.

IFRS 16 supersedes IAS 17 Leases and IFRIC 4 Determining whether an Arrangement contains a Lease. The standard introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases. At transition, lease liabilities are measured at the present value of the remaining lease payments, discounted at the Group's incremental borrowing rate. Right-of-use assets are measured an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments. The Group allocates the consideration in the contract to each lease component and will separate non-lease components if these are identifiable.

Right-of-use assets are initially measured at cost, which comprises the initial amount of the lease liability adjusted mainly for lease payments made at or before the commencement date. The right-of-use assets are subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the lease term or the end of the useful life of the right-of-use asset.

Lease liabilities are initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the Group's incremental borrowing rate. The lease term applied corresponds to the non-cancellable period except in case where the Group is reasonably certain to exercise renewal option of prolonging the contract. The lease liabilities are measured at amortised cost.

The Group has decided to use the exemption not to apply the new guidance to leases with a terms less than twelve months or to leases for which the underlying asset value is of low value. A lessee is required to recognize a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. The Group reviewed its leasing, service and utility purchase contracts to calculate the effects of IFRS 16. Its balance sheet impact is considered insignificant proportional to the Group's total assets. Contracts consist mainly of leases related to land areas and facilities. Asset retirement obligations included in the leasing agreements have been considered in the implementation.

The effect of application of IFRS 16 is presented in the tables below.

1 000 €	31.12.2018	IFRS 16 adjustm.	1.1.2019
ASSETS			
Non-current assets			
Property, plant and equipment	497 440	10 926	508 366
LIABILITIES			
Non-current liabilities			
Provisions	3 345	1 747	5 092
Borrowings	1 107 672	8 370	1 116 042
Current liabilities			
Borrowings	114 533	809	115 342

The below reconciliation to opening balance for the lease liabilities as of 1 January 2019 is based upon the operating lease commitments as of 31 December 2018:

Operating lease commitments 31.12.2018	2 298
Reasonably certain extension options	9 910
Gross lease liabilities at 1.1.2019	12 208
Discounting*	-3 029
Lease liability 1.1.2019	9 179

*The lease liabilities were discounted at incremental borrowing rate as at 1.1.2019. The incremental borrowing rate was 1,97%.

1 SEMIANNUAL SEGMENT INFORMATION

TURNOVER BY SEGMENTS

1 000 €	1.1. - 30.6.2019	1.1. - 30.6.2018	1.1. - 31.12.2018
Hydropower	11 301	12 780	23 109
Thermal power	110 145	113 249	210 835
Nuclear power	90 311	87 811	182 810
Other	110 183	131 460	270 674
Internal sales	-84 867	-90 543	-173 332
Total	237 073	254 757	514 096
Discontinued operations	154	467	638

PROFIT/LOSS FOR THE PERIOD BY SEGMENTS

1 000 €	1.1. - 30.6.2019	1.1. - 30.6.2018	1.1. - 31.12.2018
Hydropower	-1 057	-683	-3 272
Thermal power	-415	-2 879	-16 197
Nuclear power	9 911	-11 763	-22 381
Other	-5 337	-665	9 490
Total	3 102	-15 990	-32 360
Discontinued operations	-1 915	-922	2 611

ASSETS BY SEGMENTS

1 000 €	1.1. - 30.6.2019	1.1. - 30.6.2018	1.1. - 31.12.2018
Hydropower	442 075	447 813	441 150
Thermal power	466 370	498 936	496 886
Nuclear power	1 065 418	1 007 070	1 060 422
Other	121 372	213 735	122 654
Elimination	-15 297	-12 798	-17 666
Total	2 079 938	2 154 756	2 103 446

LIABILITIES BY SEGMENTS

1 000 €	1.1. - 30.6.2019	1.1. - 30.6.2018	1.1. - 31.12.2018
Hydropower	143 647	145 738	141 668
Thermal power	283 560	311 062	307 741
Nuclear power	722 796	662 991	723 222
Other	137 660	215 728	125 296
Other non-current liabilities	11 811	4 373	6 293
Elimination	-15 297	-12 798	-17 666
Total	1 284 177	1 327 094	1 286 554

2 REVENUE

1 000 €	1.1. - 30.6.2019	1.1. - 30.6.2018	1.1. - 31.12.2018
Sales of electricity produced	150 780	157 781	339 355
Sales of heat produced	76 117	75 331	138 304
Sales of purchased electricity	6 137	17 759	28 230
Other sales	4 039	3 886	8 208
Total	237 073	254 757	514 096

Electricity delivered to shareholders (GWh)

Electricity produced	5 534	5 876	11 985
Heat produced	1 844	2 562	3 958
Purchased electricity	149	342	532

3 CHANGES IN INTANGIBLES ASSETS AND PROPERTY, PLANT AND EQUIPMENT

1 000 €	30.6.2019	30.6.2018	31.12.2018
Opening balance	781 613	814 441	814 441
Depreciation, amortization and impairment	-19 848	-19 601	-39 048
Depreciation, amortization and impairment, discontinued operations	-181	-181	-362
Additions	3 206	3 851	7 465
Disposals	-2 440	-767	-883
Additions, IFRS 16	10 926	0	0
Closing balance	773 276	797 743	781 613

4 INTEREST-BEARING NET DEBT AND LIQUIDITY

1 000 €	30.6.2019	30.6.2018	31.12.2018
Current interest bearing liabilities	267 926	145 500	114 533
Non-current interest bearing liabilities	956 583	1 107 836	1 107 672
Interest bearing liabilities	1 224 509	1 253 336	1 222 205
Cash and equivalents	63 457	137 602	59 598
Interest bearing net debt	1 161 052	1 115 734	1 162 607
Liquidity, unused committed credit facilities and debt programs	30.6.2019	30.6.2018	31.12.2018
Cash and cash equivalents	63 457	137 602	59 598
Unused committed credit facilities	300 000	300 000	
Total	363 457	437 602	59 598
In addition:			
Unused commercial paper program	200 000	220 000	215 000

5 FINANCIAL INSTRUMENTS

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

1 000 €	30.6.2019		30.6.2018		31.12.2018	
	Net fair value	Nominal value	Net fair value	Nominal value	Net fair value	Nominal value
Interest rate swaps, non-hedge accounting	-11 811	247 000	-4 511	262 000	-6 304	262 000

Financial assets and liabilities by measurement categories and fair value hierarchy as of 30 June 2019

1 000 €	Fair value through		Book value	Fair value	Level 1	Level 2	Level 3
	profit and loss	Amortised cost					
Non-current financial assets							
Other financial assets	484		484	484			484
Loan receivables		409 153	409 153				
Other receivables		36 849	36 849				
	484	446 002	446 486				
Current financial assets							
Cash and cash equivalents		63 457	63 457				
Trade and other receivables		48 485	48 485				
Prepayments and accrued income		21 621	21 621				
		133 563	133 563				
Total	484	579 565	580 049				
Non-current financial liabilities							
Borrowings from associates and joint ventures		195 433	195 433				
Borrowings		536 636	536 636				
Bond		124 366	124 366		128 038		
Secured financial liabilities		100 148	100 148				
Derivative financial instruments	11 811		11 811	11 811		11 811	
	11 811	956 583	968 394				
Current financial liabilities							
Loans and commercial papers		174 407	174 407				
Trade payables and other current liabilities		42 781	42 781				
Secured financial liabilities		93 519	93 519				
		310 707	310 707				
Total	11 811	1 267 290	1 279 101	12 295	128 038	11 811	484

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

Level 1: quoted prices in active markets for identical assets or liabilities

Level 2: inputs other than quoted price included within Level 1 that are observable for the assets or liability, either directly (i.e. prices)

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

Borrowings at level 1 consist of a listed bond. The fair value of financial instruments are not materially different from their carrying amount.

Other financial assets in Fair value through profit or loss -category include unlisted shares of 0.5 million Euros for which the fair value cannot be reliably determined.

During the reporting period the listed bond was transferred to level 1 as the bond was listed.

6 RECONCILIATION OF KEY FIGURES

Equity-to-assets ratio, %	30.6.2019	30.6.2018	31.12.2018
Total equity	795 761	827 662	816 892
Total assets	2 079 938	2 154 756	2 103 446
EQUITY-TO-ASSETS RATIO, %	38 %	38 %	39 %

7 RELATED PARTY TRANSACTIONS

Transactions with related parties, 1000 €

Related party transactions relate to normal business operations of Pohjolan Voima.

	30.6.2019			
	Sales	Purchases	Receivables	Liabilities
Associates and joint ventures	2 892	111 418	462 222	202 284
UPM-Kymmene Group	95 569	32 435	19 055	6 152

	30.6.2018			
	Sales	Purchases	Receivables	Liabilities
Associates and joint ventures	6 489	125 886	413 148	228 081
UPM-Kymmene Group	99 977	34 890	17 468	8 638

	31.12.2018			
	Sales	Purchases	Receivables	Liabilities
Associates and joint ventures	8 999	260 210	461 126	210 855
UPM-Kymmene Group	206 800	68 792	20 946	10 002

8 CONTINGENT LIABILITIES AND ASSETS AND PURCHASE COMMITMENTS

1 000 €	30.6.2019	30.6.2018	31.12.2018
On behalf of own loans			
Pledged deposits	55	70	70
Other contingent liabilities	5 918	202 198	203 705
On behalf of associated companies and joint ventures			
Guarantees	32	33	32
Guarantee according to Nuclear Energy Act	44 290	77 227	77 227
Total	50 295	279 528	281 034

Guarantee under the Nuclear Energy Act

According to the Finnish Nuclear Energy Act, Teollisuuden Voima, a joint venture of which Pohjolan Voima owns 57.06%, is obliged to fund the decommissioning of nuclear power plants and final disposal of spent nuclear fuel through the Finnish State Nuclear Waste Management Fund.

The amount of the contingent liability is determined by the administrative authority (Ministry of Employment and Economy) based on the Nuclear Energy Act. The directly enforceable guarantees relating to Nuclear waste management given by the shareholders of Teollisuuden Voima Oyj cover the uncovered portion of nuclear waste management liability as well as a liability for any unforeseen expenses of nuclear waste management in accordance with the Nuclear Energy Act. The directly enforceable guarantee given by Pohjolan Voima is 44.3 million Euros (30 June 2018: 77.2, 2018: 77.2 million Euros).

Investment commitments

Joint ventures

Pohjolan Voima Oyj has committed to an investment into the nuclear power plant Olkiluoto 3 EPR built by Teollisuuden Voima Oyj during 2004 to 2019. The commitment consists of a 432 million Euros investment, a shareholder loan of 108 million and an additional shareholder loan of a maximum of 451.4 million Euros. As at 30 June 2019 Pohjolan Voima Oyj has fulfilled 841 (30 June 2018: 780.6, 31 December 2018: 841) million Euros of its commitments. Investments are based on the financial plan of Olkiluoto 3 EPR, according to which capital is raised in accordance with the progress of the project.

9 EVENTS AFTER THE REPORTING PERIOD

After the end of the reporting period, on 17 July 2019, Pohjolan Voima Oyj announced that TVO had received an updated rebaseline schedule for the final phases of the OL3 EPR plant unit from the plant supplier, Areva-Siemens Consortium. According to the plant supplier, fuel will be loaded into the reactor in January 2020, the plant unit will be connected to the national grid for the first time in April 2020 and regular electricity production will start in July 2020.