



DECISIVE POWER.

Annual report 2021



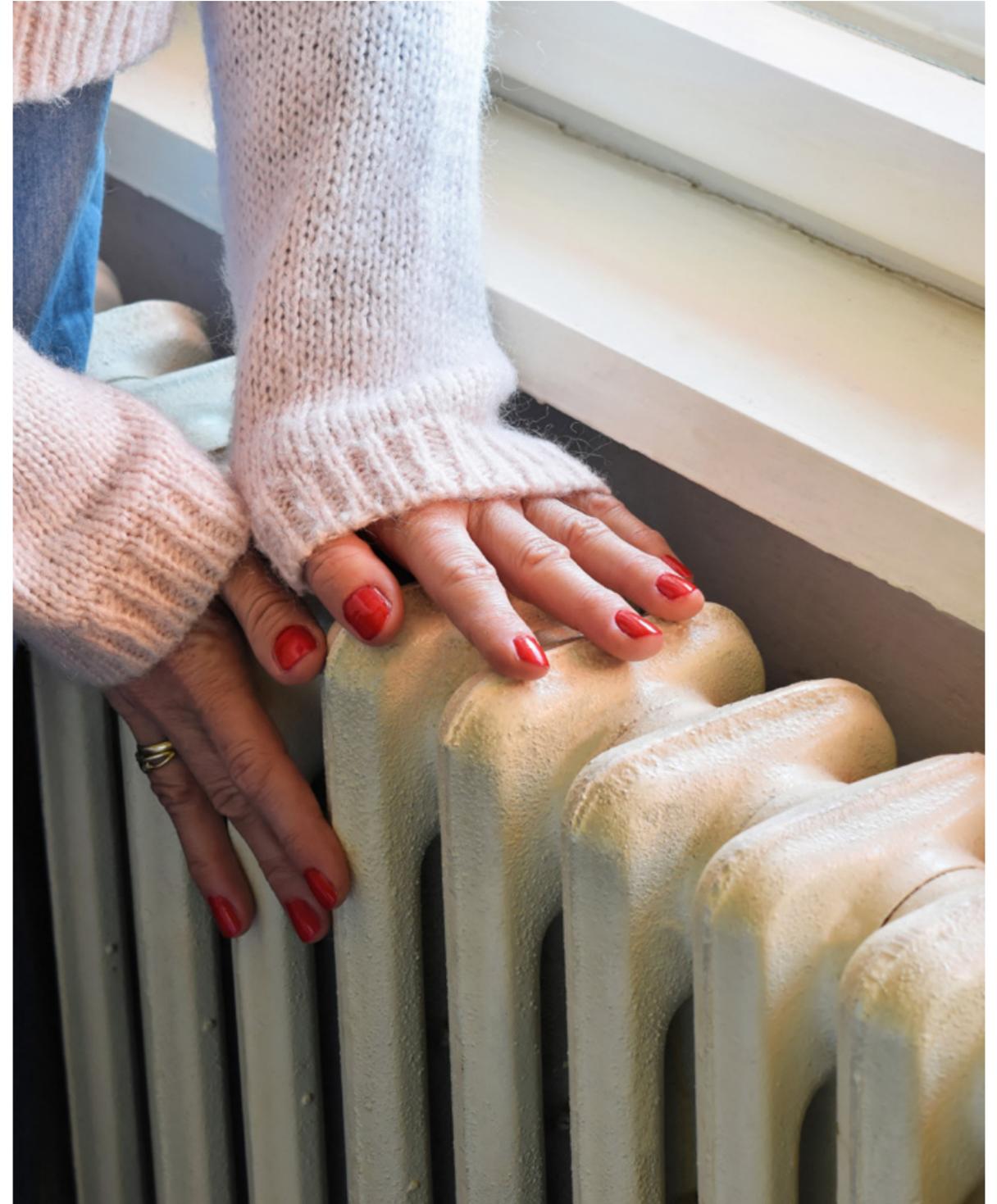


Contents

YEAR 2021	3	RESPONSIBILITY	22	FINANCIAL STATEMENTS	46
CEO's review	3	Corporate responsibility themes	23	Consolidated financial statements	47
Key figures 2021	5	Responsibility means concrete actions	24	Parent company financial statements	99
Highlights of the year	6	Personnel – an energetic attitude	26	Board of directors' dividend proposal and signing of the Board of directors' report and financial statements	113
Changing operating environment	7	Safety starts with observations	29	Auditor's Report	114
		Towards carbon neutrality	30		
		Continuous improvement in environmental issues	32		
STRATEGY	8	CORPORATE GOVERNANCE	35		
Decisive Power	9	Corporate Governance Statement 2021	36		
Scenario work to create paths to the future	10				
Pohjolan Voima's networked operating model	11				
BUSINESS OPERATIONS	12	DIRECTORS' REPORT	39		
Production in 2021	13	Annual report of the board of directors 2021	40		
Hydropower	14	Key figures (IFRS)	45		
Thermal power	16				
Nuclear power	18				
Development projects	20				

Photos:

Aino Huotari, Council of Oulu Region,
Kai Tirkkonen, Pohjolan Voima's archives, Posiva,
Teollisuuden Voima (TVO), Hannu Vallas





99%

“Our goal is for 99% of our electricity production to be carbon neutral by 2025.”

Ilkka Tykkyläinen
President and CEO, Pohjolan Voima Oyj

CEO'S REVIEW

The prolonged COVID-19 pandemic cast a shadow over daily lives in 2021. Our preparations paid off, and the pandemic did not hamper our core mission of providing electricity and heat to our customers. We implemented the themes in line with our Decisive Power strategy: market-based progress towards carbon neutrality, seeking for a competitive edge from the development of balancing power and aiming for top asset management expertise.

Reflecting on the future of large-scale scenario work

The operating environment in the energy industry is experiencing rapid changes. In 2021, we looked at possible future development paths and their potential in our large-scale scenario work. We involved our customers and employees in the process, and we interviewed dozens of experts from outside the industry. The work will continue with a review of our strategy.

Finland's most significant contribution to the climate effort commissioned

We continued our determined work to reduce carbon dioxide emissions. We produce nearly 20% of all the electricity produced in Finland, and already 96% of it is carbon neutral. Our goal is 99% carbon neutral electricity production by 2025.

Finland's most significant contribution to the climate effort, the OL3 plant unit of our joint venture Teollisuuden Voima (TVO), was commissioned in December. When regular electricity production begins



“The climate challenge cannot be resolved without carbon neutral nuclear power and all forms of renewable energy.”

In July 2022, the plant unit will generate some 14% of Finland's electricity. In December, Posiva, the company responsible for the final disposal of TVO and Fortum's spent nuclear fuel, became the first company in the world to apply for an operating licence for a spent fuel encapsulation plant and disposal facility.

Rapid progress made in the reduction of the use of peat

Our combined heat and power plants mainly use wood-based fuels. Our aim is to restrict the use of fossil fuels and peat to market-based backup fuel alone by 2025. We were able to reduce the use of peat by 47% from the level of 2019, which increased the carbon neutrality of our heat production from 65% to 81%. Our target for carbon neutral heat is 85% by 2025.

Finland's first downstream migration route for smolt

Finland's first downstream migration route for migratory fish was completed at the Haapakoski rapids in the Iijoki river. It is part of a more extensive cooperation project to restore the natural migration patterns of migratory fish, to which we are committed. The progress of the Raasakka fishway is awaiting the outcome of complaints lodged by our stakeholders.

Our operations have an impact on biodiversity. We launched a project to improve our understanding of our impact and to set targets for the coming years.

Dozens of development projects underway

We have dozens of development projects underway to reduce emissions, find ways to increase balancing power and manage the lifecycle of our plants. In 2021, we also explored the potential of hydrogen technology and the use of batteries.

In hydropower, we overhauled our Jumisko power plant and introduced modern digital solutions to improve the availability of our plants.

One of Finland's most inspiring workplaces

An energetic attitude is at the heart of our corporate culture. We are an expert organisation committed to excellence, renewal, high performance and corporate responsibility. For the third year in a row, we were listed as one of the most inspiring workplaces in Finland.

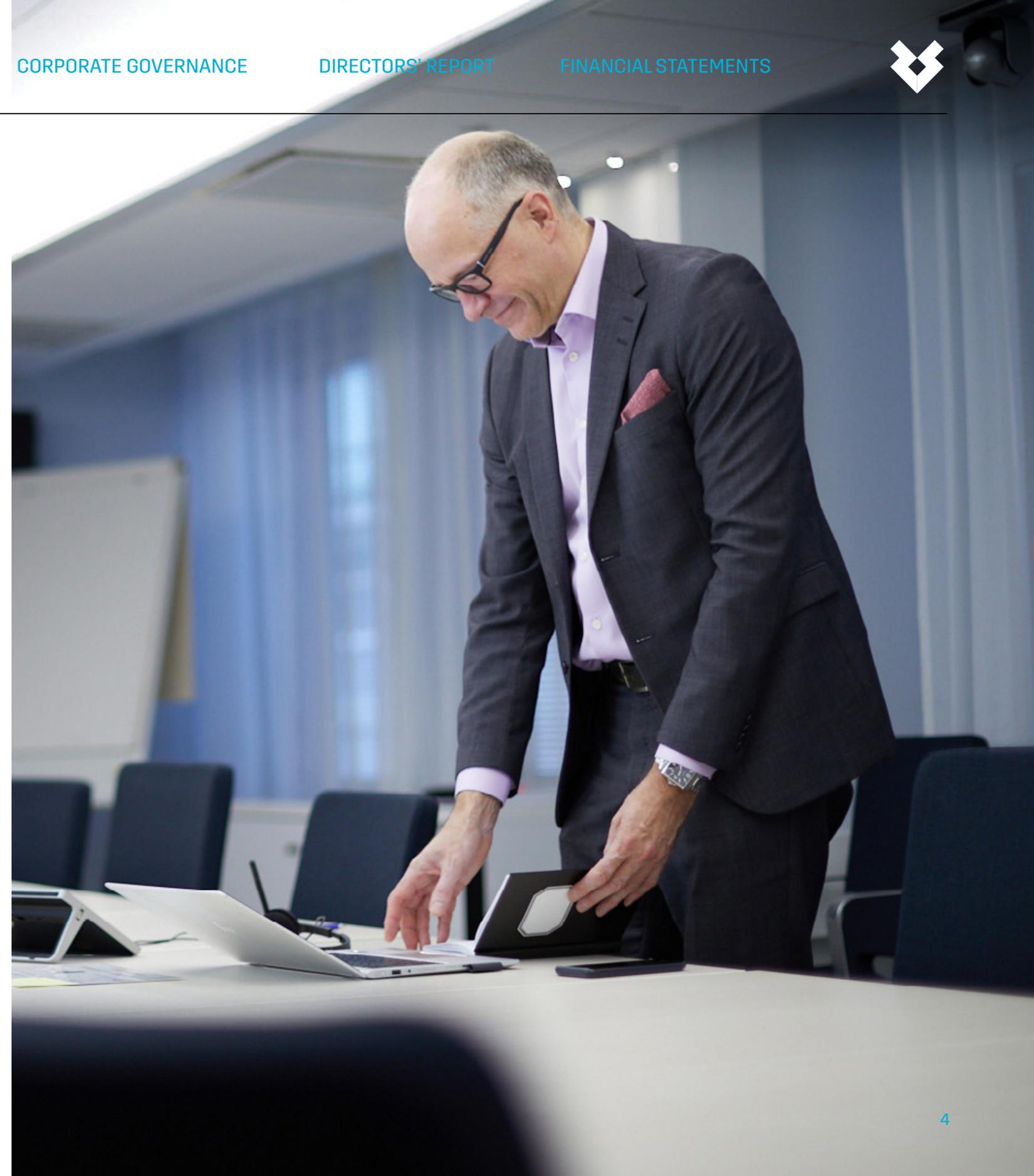
Stakeholder dialogue in the new normal

We discussed climate change and energy in our podcast, at a climate event we arranged and at the Mock COP26 Climate and Nature Summit for Young People, which we sponsored.

My thanks for a successful year go to all Pohjolan Voima's employees, customers and partners. Together, we will continue our meaningful work.

Societies are becoming electrified, industries are integrating and biodiversity is becoming a stronger theme alongside climate change. Electricity and heat produced competitively and sustainably must always be available. The climate challenge cannot be resolved without carbon neutral nuclear power and all forms of renewable energy. Decisions on energy must be guided by the markets and technological neutrality also in the future. The functionality of our energy system requires that the industry and decision-makers can together identify the impact of actions and find effective solutions.

Ilkka Tykkyläinen

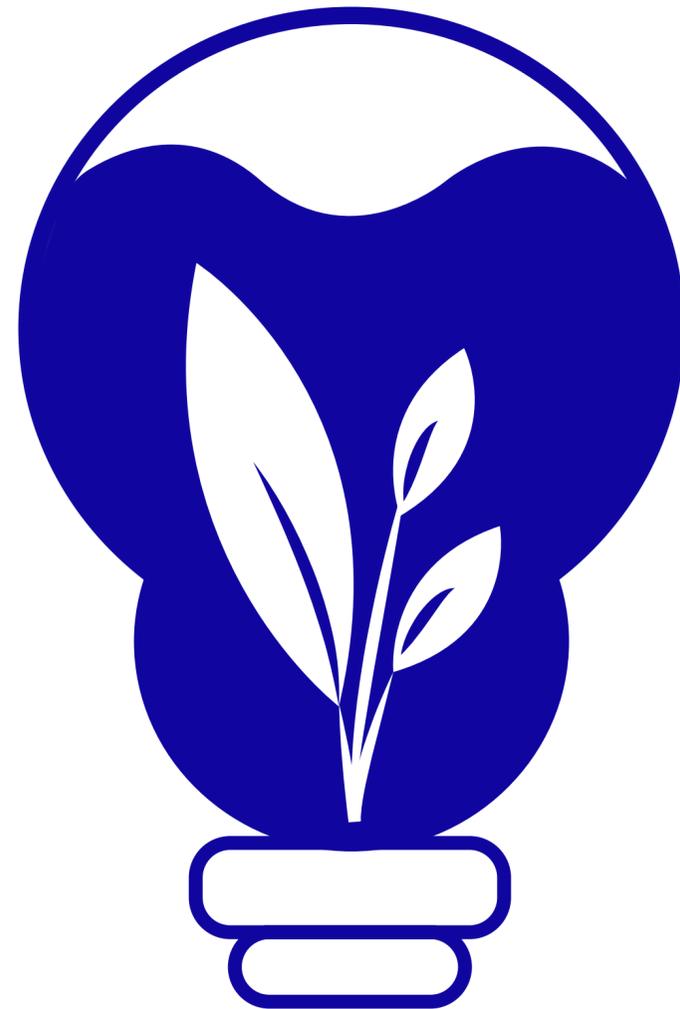


Key figures 2021

We achieved

96%

carbon neutral
electricity production
in 2021

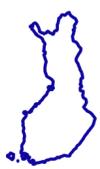


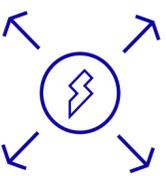
81%

of our heat production
was carbon neutral in 2021


11.7 TWh
of electricity produced in 2021


3.5 TWh
of heat produced in 2021


17%
of the total electricity production in Finland


1,956 MW
electricity production capacity

Highlights of the year



TVO's OL3 nuclear power plant unit was commissioned on 21 Dec 2021. OL3, Finland's most significant contribution to the climate effort, will produce around 14% of Finland's electricity once regular electricity production starts.



We overhauled our Jumisko hydropower plant in Kemijärvi. The overhaul increased the plant's capacity to produce balancing power and increased its power and energy efficiency.



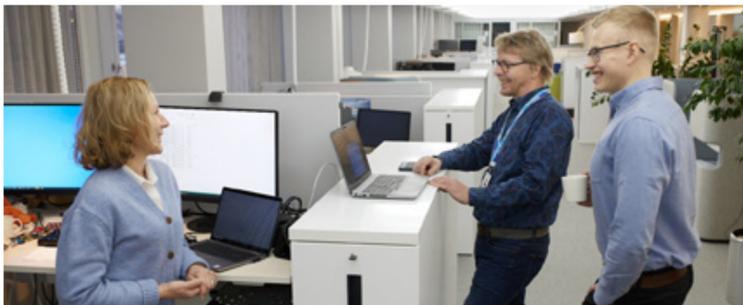
Finland's first downstream migration route for smolt was completed at the Haapakoski plant. It is part of a cooperation project to restore the natural migration patterns of migratory fish, to which we are committed.



Porin Prosessivoima decided to abandon the use of peat by the end of 2023. Peat will be replaced by local wood-based fuel. We also decommissioned a separate coal boiler.



Our energy efficiency efforts are well underway at the midpoint of the agreement period. Savings in fuels and heat production have been higher than expected. We have also reduced emissions.



We were one of Finland's most inspiring workplaces for the third year in a row, and we were awarded a Future Workplaces 2021 certificate. An energetic attitude is at the heart of our corporate culture.



We discussed climate change and energy in our podcast, at a climate event we arranged for young decision-makers and at the Mock COP26 Climate and Nature Summit for Young People, which we sponsored.



At the end of December, Posiva became the first company in the world to submit an application for an operating licence for a spent fuel encapsulation plant and disposal facility to be constructed at Olkiluoto in Eurajoki.

POHJOLAN VOIMA/OPERATING ENVIRONMENT

Changing operating environment

As the share of weather-dependent electricity production increases, fluctuations in electricity production will become quicker and bigger. All means are needed to balance the electrical power system: adjustable production, flexible electricity consumption and storage solutions, as well as interconnections between the energy flows for different activities through hydrogen technology, for example.

Market prices for electricity, which were quite low for some time, have increased. Factors contributing to the increase include challenges involving the supply of gas in Europe and lower-than-normal water reservoirs.

The COVID-19 pandemic, which started in 2020, continued throughout 2021. Despite the progress in vaccination coverage, the number of coronavirus infections increased again at the end of the year. The pandemic's impact on the energy industry has remained limited: work continued with the already familiar safe practices, mostly remotely. Pohjolan Voima's heat and power production continued at the normal level.

New climate decisions

Climate change is one of the megatrends strongly driving the energy industry. The protection of biodiversity is expected to become another megatrend in the coming years.

Finland's climate target is to be carbon neutral by 2035 and carbon negative shortly thereafter. A national energy and climate strategy was prepared under the management of the

Ministry of Economic Affairs and Employment, based on low carbon roadmaps for different industries. The Government is expected to submit a report on this to Parliament in early 2022 and outline any required further measures in April 2022.

The EU tightened its climate target: emissions are to be reduced by at least 55% from the level of 1990 by 2030. In the summer, the Commission presented the "Fit for 55" package, which includes several initiatives affecting the energy industry concerning issues such as emissions trading, renewable energy, energy efficiency, carbon sinks and the use of carbon border adjustment mechanisms. The EU decision-making process for these initiatives has started.

Taxes, water resource management plans and classification of sustainable finance

In Finland, the Government is preparing a long-term plan for energy taxation. The Government increased the taxation of heating

fuels by €105 million at the beginning of 2021. Negotiations on making cost-price nuclear power production exempt from interest expense deduction restrictions continued. The Government continued the preparation of its proposal on the taxation on real estate. The Commission presented its proposal for a "Minimum Tax Directive" which would also cover large Finnish conglomerates.

The Government approved water resource management plans for 2022–2027. The decision recognises the important role of hydropower in the electrical power system. The impact of water resource management plans on the balancing of the electrical power system will be assessed in a separate study.

One of the most significant EU initiatives in 2021 was the sustainable finance taxonomy, which aims to steer funding towards sustainable targets. The taxonomy, which mitigates the impact of climate change and facilitates adaptation, entered into force on 1 January 2022. The initiative on nuclear power was delayed, and the Commission issued it in early 2022. Other new initiatives are also expected in early 2022.



The protection of biodiversity is expected to become another megatrend in addition to climate change in the coming years.



STRATEGY

Decisive Power	9
Scenario work to create paths to the future	10
Pohjolan Voima's networked operating model	11

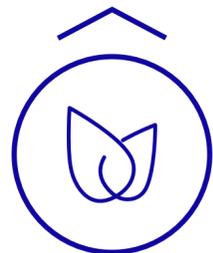




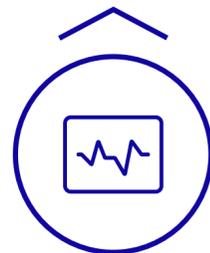
Pohjolan Voima – Decisive Power

Strategy 2020–2025

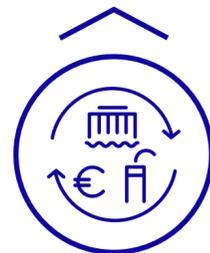
We create decisive power to strengthen competitiveness and contribute to a better tomorrow.



On market terms towards carbon neutrality



Competitive advantage through balancing power capability



Becoming a production asset management top expert

Skilfully – Boldly – Together

We bear responsibility for tomorrow

“We create decisive power to strengthen competitiveness and contribute to a better tomorrow.” This statement describes our purpose. In brief: Pohjolan Voima – Decisive Power. We produce electricity and heat for our customers at cost price. We thus play our part in ensuring that our customers – the industry, other energy companies and municipalities – succeed. Indirectly, we create jobs and wellbeing in Finland.

We produce nearly 20% of all the electricity produced in Finland. We also take responsibility for tomorrow by the fact that 96% of the electricity we produce is carbon neutral. With our carbon neutral production, we also assist our customers in reducing their emissions and play our part in creating a cleaner world.

Our strategic themes are:

Becoming carbon neutral on market terms

Our goal is for 99% of our electricity production and 85% of our heat production to be carbon neutral by 2025. We take part in developing the competitiveness of nuclear power production, only use peat and fossil fuels as startup and backup fuels whenever the market situation allows, and maintain our readiness to introduce new solutions on an industrial scale.

Competitive advantage through balancing power capability

The energy industry is going through a significant change. The share of weather-dependent production is increasing considerably, which challenges the balance of our electrical power system. In future, fluctuations in electricity production are estimated to be even faster and greater than now. Flexibility and the ability to balance production based on demand will become even more valuable capabilities. We develop the regulation capacity of our production with the help of market information. We increase the value of regulation by means of investments.

Becoming a top expert in production asset management

We have large assets in our hands, and we take care of them in the best possible way. By production assets, we refer not only to buildings and equipment, but also the knowledge we accumulate during the lifecycle of our production assets, which we use to manage our operations. We perform effective maintenance actions and carry out timely investments. We make use of intelligent systems, digitalisation and knowledge management. We will continue to strengthen our networks and partnerships, because together we are more.

Scenario work to create paths to the future

We have explored possible future development paths through scenario work with our customers and all the employees of Pohjolan Voima. We also interviewed several dozen experts. The scenario work will continue with an evaluation of our Decisive Power strategy.

The aim of the scenario work was to outline the potential development paths in our operating environment until 2035 and their opportunities and risks to Pohjolan Voima.

This work resulted in these four scenarios, which are comprehensive descriptions of potential and alternative future environments:

- Balancing Finland
- Defeat in the climate battle
- Nuclear renaissance
- European hydrogen integration

The scenarios describe the development of our external operating environment and help us understand changes in the operating environment, the causality of events and the impact of the scenarios. The scenarios are not predictions of the future; instead, future chains of events are often a combination of different scenarios.

The extensive involvement of the employees in the scenario work strengthens our corporate culture and realises our values (skilfully, boldly, together). The scope of the review, which took more than six months to complete, is reflected by the different stages of the process:

- Scenario survey for customers and Pohjolan Voima employees
- Understanding the operating environment through four themes
- Interviewing representatives of our customers and stakeholders on different themes
- Three scenario workshops for all employees
- Several workshops for the Corporate Executive Team and Pohjolan Voima's Board of Directors.

Based on the scenarios, we will assess whether our Decisive Power strategy needs to be updated.

The scenarios are possible paths to the future, not predictions.

Case: Out-of-the-box thinking with stakeholder interviews

We interviewed more than 60 experts to obtain external insights into the different themes of our scenario work:

- Industrial energy requirements, technological development and new opportunities in the industry
- Development of the electricity market
- Responsibility, acceptability and sustainability of energy production
- Energy sector operating models.

The interviewees represented a wide range of actors in society:

- Different industries
- Universities and research institutes
- Electricity market experts and financial institutions
- NGOs
- Central government
- Pohjolan Voima's customers.



Pohjolan Voima's networked operating model

Indirectly, Pohjolan Voima creates jobs and wellbeing in Finland.

We create decisive power to strengthen competitiveness and contribute to a better tomorrow.

- Municipalities behind the shareholding
- The shareholders' industrial locations
- Pohjolan Voima's production locations



Expertise and efficiency from networks

We sell the electricity and heat we produce at cost price to the shareholders of Pohjolan Voima, who are also our customers. In turn, the shareholders pay Pohjolan Voima's costs in proportion to their holdings in the company.

We do not aim to produce a profit or to pay any dividend. Our customers benefit by using the product (electricity, heat) or selling it forward. Our operating model is specified in our articles of association.

The operating model strongly emphasises networking. Our 23 customer companies are at the heart of the network. We can pool their resources, share risks and realise energy projects with competitive production costs. Many representatives of our customer companies are members of the governing bodies of Pohjolan Voima's parent company and subsidiaries. The owners of our customer companies also belong to the network. Energy companies can have several owners, for example. This way, the benefits from our operations are enjoyed by many parties around the whole of Finland.

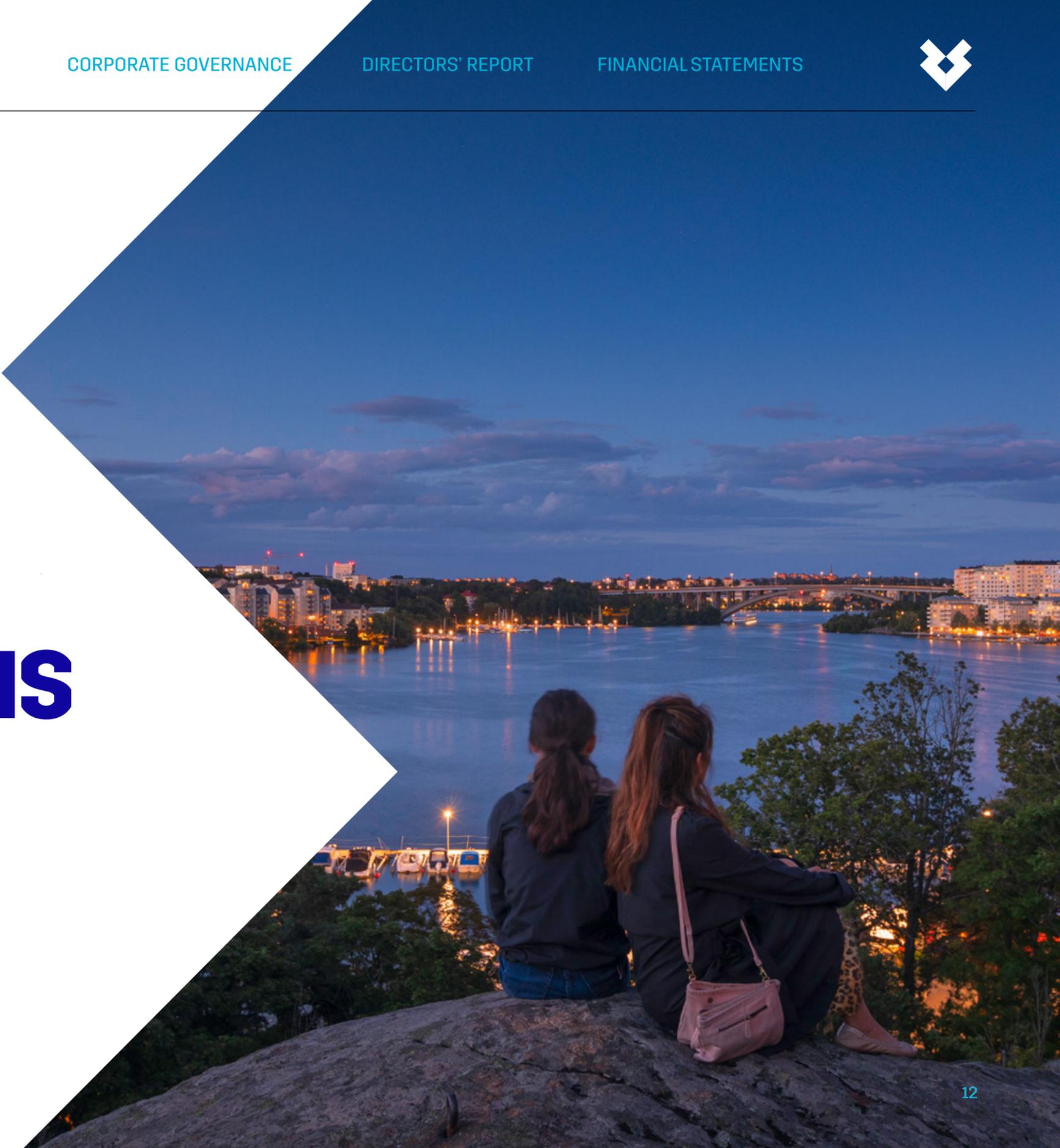
We have several partners who take care of functions that are important to us. This ensures extensive expertise and efficiency. For example, Caverion operates and maintains our hydropower plants, and Power-Deriva provides energy management services, Adner financial administration services and Atea IT services. We work in close cooperation with equipment suppliers and research institutions when developing our operations. Our cooperation partners include Insta, which takes part in our knowledge-based management project, and Valmet, which participates in the power plants' technical projects. We are also actively involved in networks of the energy sector and society.

We can pool the resources of our customer companies and realise competitive energy projects.



BUSINESS OPERATIONS

Production in 2021	13
Hydropower	14
Thermal power	16
Nuclear power	18
Development projects	20



BUSINESS OPERATIONS/PRODUCTION IN 2021

Production in 2021

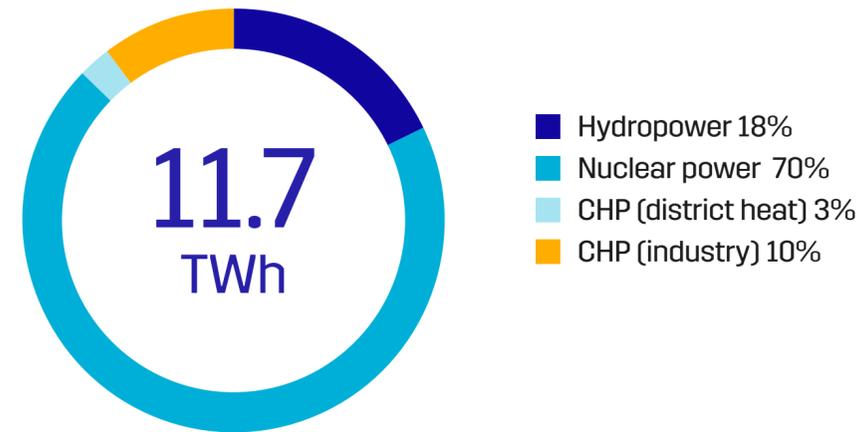
In 2021, Pohjolan Voima produced 11.7 TWh of electricity. Our share of all the electricity produced in Finland was approximately 17.0%. Our heat production totalled 3.5 TWh.

At the end of 2021, Pohjolan Voima's electricity production capacity totalled 1,956 MW, amounting to approximately 17% of the Finnish electricity production capacity. The heat production capacity was 1,327 MW. Our production capacity decreased from 2020 due to the closure of Laanila Voima. The sale of Hämeenkyrön Voima will reduce the capacity from the beginning of 2022.

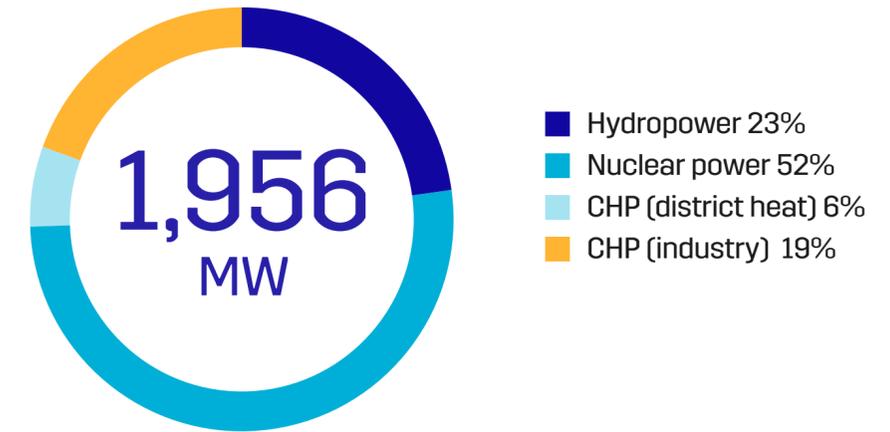
Electricity consumption in Finland in 2021 amounted to 86 TWh. Finnish electricity production totalled 69 TWh, while net imports into Finland amounted to 17 TWh. In 2021, the consumption of electricity in Finland increased by 5% from the previous year, returning to the pre-pandemic level. Industrial electricity consumption increased by 3%, and electricity consumption in other sectors increased by 10%.

[Also see Pohjolan Voima's production capacity on 31 December 2021](#)

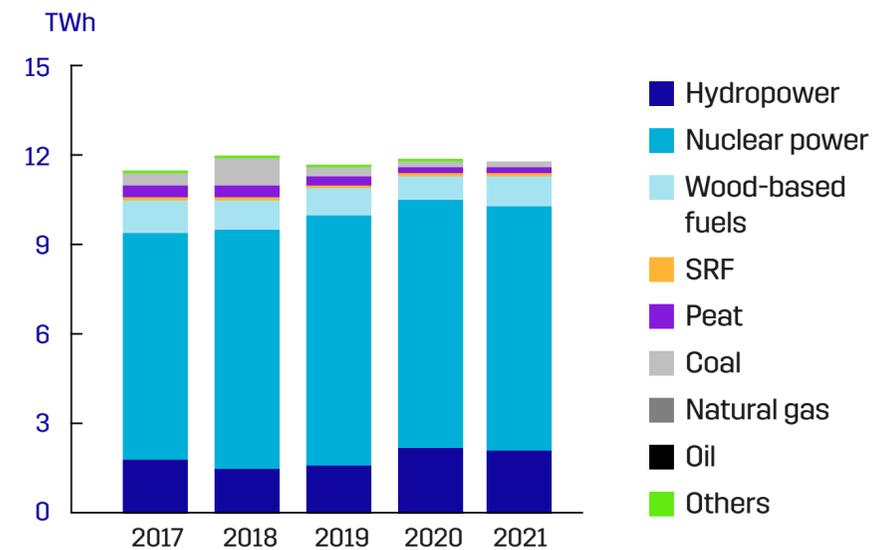
Pohjolan Voima's electricity production in 2021



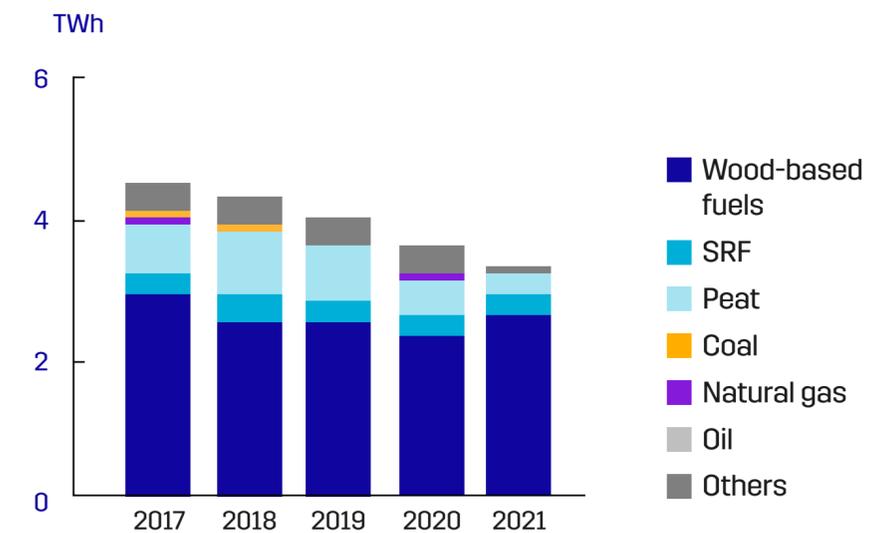
Pohjolan Voima's electricity production capacity on 31 December 2021



Electricity production by energy source in 2017–2021



Heat production by energy source in 2017–2021



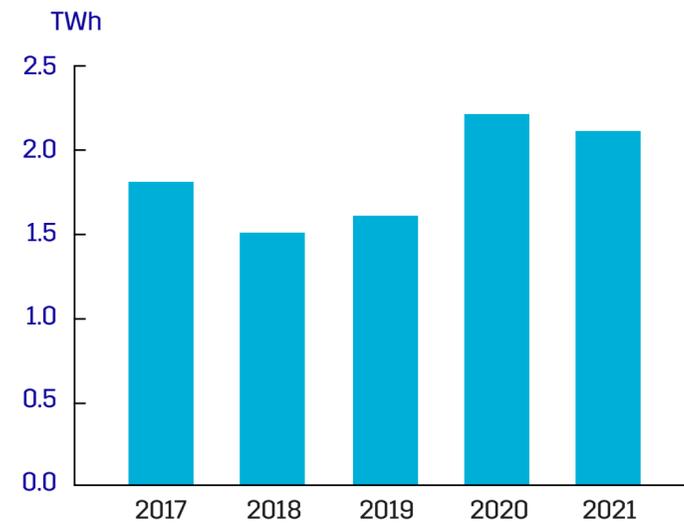
BUSINESS OPERATIONS/HYDROPOWER

Hydropower

Pohjolan Voima has a total of 12 hydropower plants located along the Iijoki, Kemijoki, Kokemäenjoki and Tengeliönjoki rivers. The combined electricity production capacity of these plants is 543 MW, of which our share is 451 MW. The hydropower generation capacity increased by 2 MW compared to 2020, as the overhaul of the Jumisko power plant increased its efficiency.

In 2021, we produced a total of 2.1 TWh of electricity with hydropower. Hydropower production fell slightly compared to 2020, which was a record year for hydropower. Hydropower accounted for 16.6% of the electricity supply.

Hydropower production in 2017–2021



Cooperation to benefit migratory fish and the aquatic environment

We cooperate to develop migratory fish stocks, the environment and related regulation. We are committed to collaboration, based on research and proceeding stage by stage, to promote the restoration of the natural migration patterns of migratory fish. The cooperation is paying off:

- Finland's first downstream migration route for smolt was built at the Haapakoski rapids in the Iijoki river
- A project on the old Raasakka riverbed of the Iijoki river restored rapids, banks and spawning areas, increased the discharge of water for migratory fish and developed recreational activities
- The measures included in an agreement on the Iijoki river will improve water quality, among other things
- In the Jumiskojoki water system, the development of regulation is being studied at the Suolijärvi lakes
- At the Tengeliönjoki river, one of our affiliated companies will apply for a permit to build an organic fishway at the Portimokoski rapids
- Studies provide information about the results and on topics such as the development of stocking practices
- The progress of the Raasakka fishway is awaiting the processing of complaints.

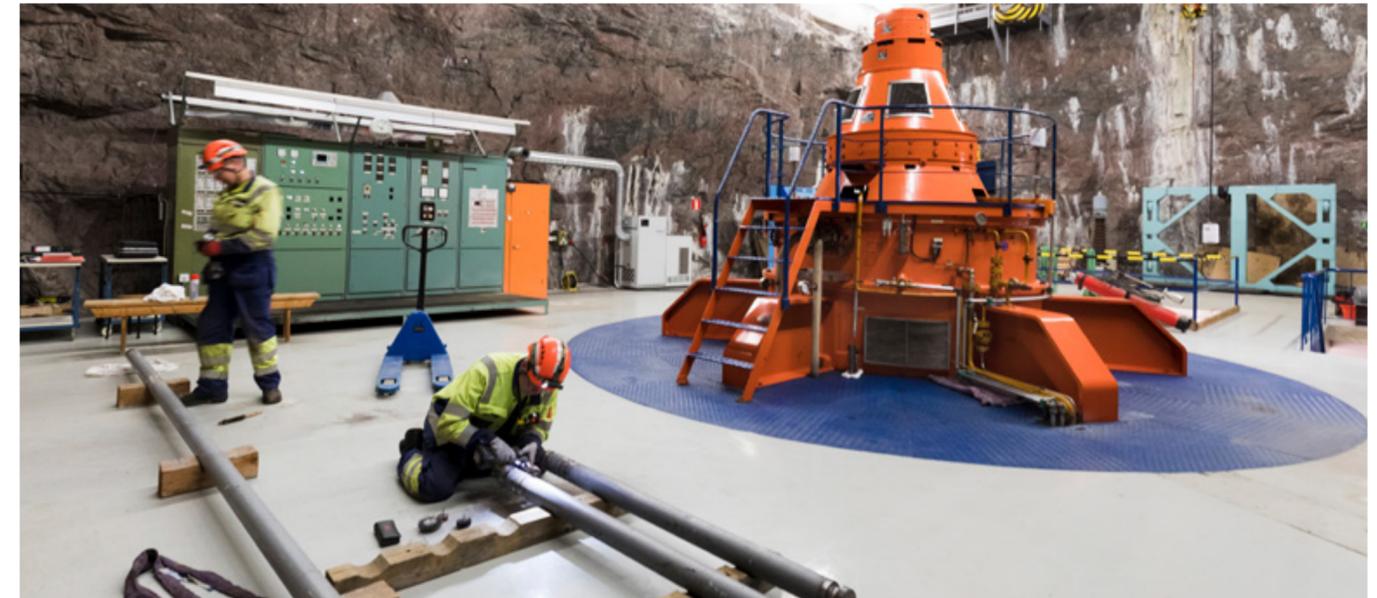
Case: Jumisko hydropower plant overhauled

We have adopted a long-term approach to the development of our hydropower plants. In 2021, we renovated the Jumisko power plant. Located in Kemijärvi, the Jumisko power plant provides more flexible balancing power to even out the fluctuations in the electrical

power system. The modernisation enables more precise regulation of production while taking the environment and recreational use into account.

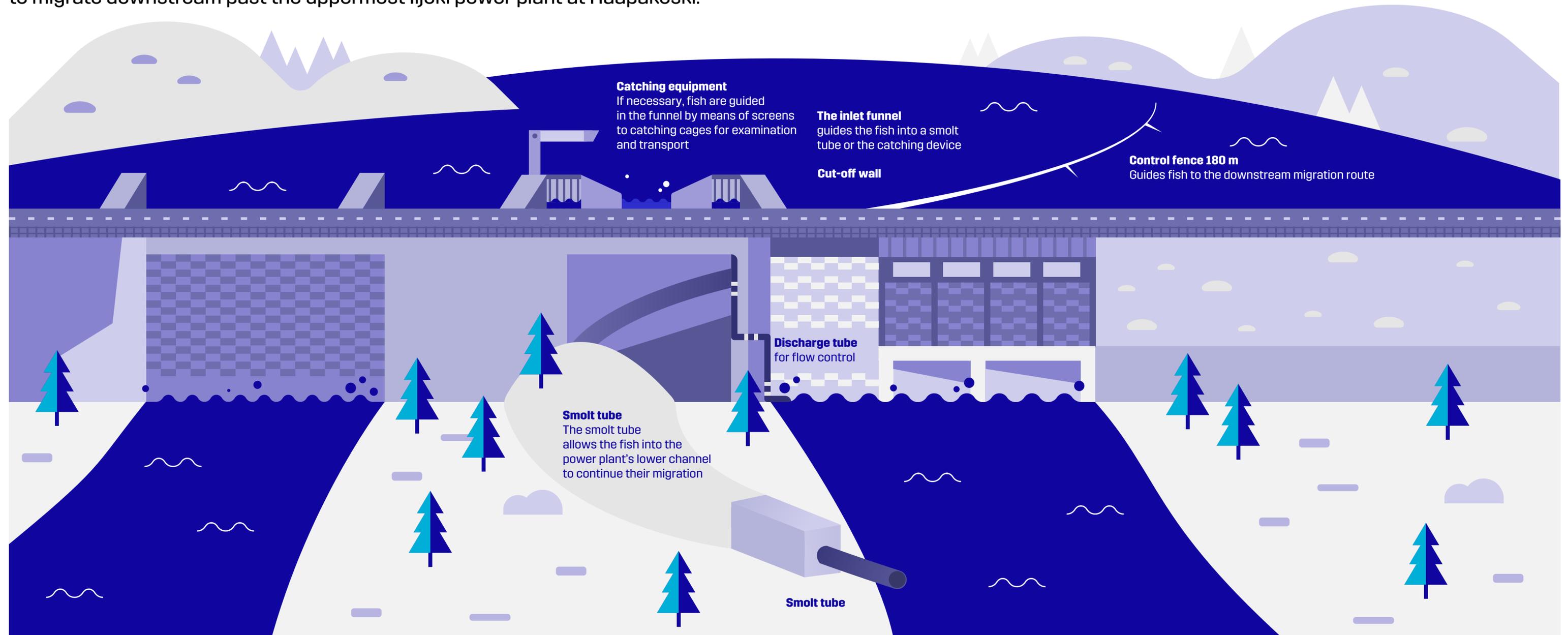
The power plant's turbine, electricity systems and automation systems were renovated, and the generator was overhauled. Jumisko's capacity increased by 2 MW, and energy efficiency improved.

[Read more about the overhaul](#)



Haapakoski downstream migration route

A downstream migration route allows migratory salmon fry, or smolts, to migrate downstream past the uppermost lijoki power plant at Haapakoski.



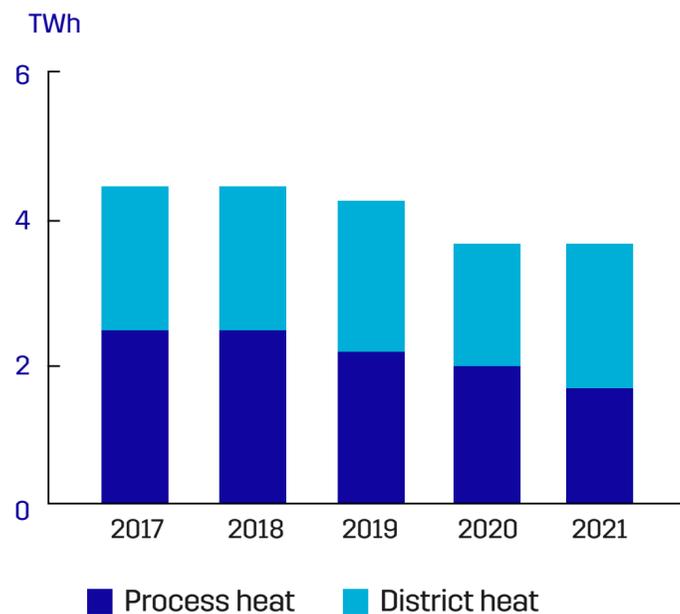
BUSINESS OPERATIONS/THERMAL POWER

Thermal power

In its thermal power production, Pohjolan Voima's heat production capacity was 1,327 MW and electricity generation capacity 494 MW.

The combined heat and power plants produce district heat and process steam for local industry and communities, as well as electricity. In 2021, the heat output of our combined heat and power plants was 3.5 TWh, and the electricity output was 1.5 TWh.

Process heat and district heat production in 2017–2021

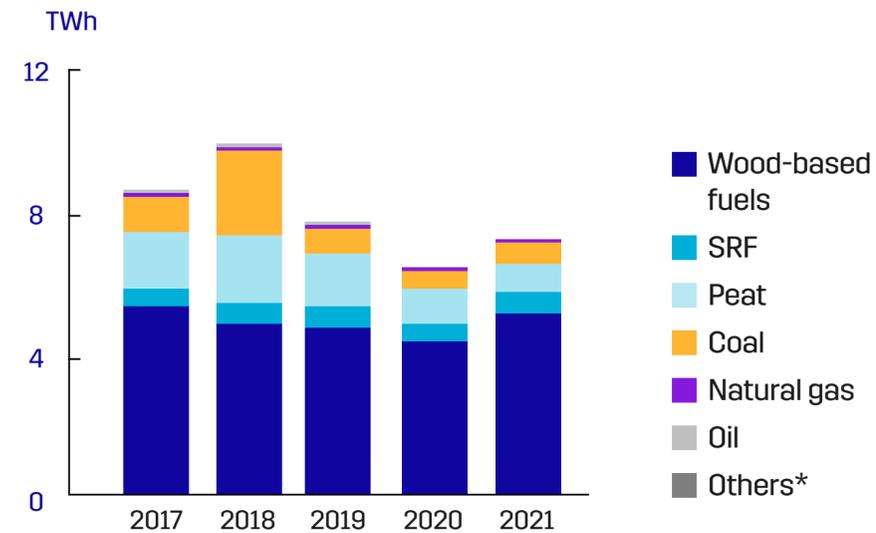


Use of fuels in 2021

Fuel	Volume used in 2021, TWh
Wood-based fuels	5.1
Solid recycled fuels (SRF)	0.6
Peat	0.8
Coal	0.6

Oil and natural gas are used as startup and backup fuels.

Fuels in heat and electricity production 2017–2021



*"Others" in energy resources refers to heat obtained for a power plant from an industrial process.

Case: Porin Prosessivoima to phase out peat

Porin Prosessivoima plans to stop the use of peat at its power plant altogether by the end of 2023. Peat will be replaced by local wood-based fuel.

The power plant has reduced its use of fossil fuels in a determined effort to reduce carbon dioxide emissions. In 2020, peat accounted for 22% of all fuels. The power plant's coal boiler was decommissioned in the summer of 2021.

The combined heat and power plant receives wood-based fuel from by-products, bark and sawdust provided by sawmills in the surrounding area.

[Read more about the plan to abandon peat](#)



We are working to phase out peat

Our combined heat and power plants mainly use wood-based fuels. Our goal is to restrict fossil fuels, including peat, as market-based backup fuels alone by 2025. We have been reducing our use of peat for a long time now, and the process of phasing out peat is progressing rapidly.

We are actively searching for substitutes for fossil fuels

The abandoning of fossil fuels means we need to find suitable renewable fuels and tackle some technical challenges. Meanwhile, we are preparing to manage the increasingly difficult complexities of fuels and their impact, taking power plant availability, maintenance, corporate responsibility and sustainability into account.

Test burning indicates what changes are required in the plants to use the new fuels. We have explored and taken the following measures regarding substitute fuels:

- Management and measuring of corrosion
- Combustion chamber coatings
- Sulphur feeding solutions
- Impact of substitute fuels on the quality and use of ash
- Shelf life and loading method of fuels
- Impact of the changes on the boiler's service life.

We will also exploit the potential offered by the circular economy. At some of our power plants, we will be able to increase the use of solid recycled fuel, which refers to a separately sorted, non-reusable waste fraction.

More balancing power from cogeneration

We are exploring possibilities and ways for our combined heat and power plants to participate in the Finnish energy system in a more flexible and market-based way.

[Read more about our development projects](#)

We used
47%
less peat than in 2019.
The reduction exceeded our target level of 40%.

Case: Rauman Biovoima is experimenting with the combustion of sunflower seed shells

The combustion of sunflower seed shell pellets and bio-based lignin separated from wood is being tested at the Rauman Biovoima power plant. The new fuels are intended to replace coal, which is used as backup and additional fuel.

Rauman Biovoima is a trailblazer in the use of various bio-based fuels. The plant's main fuels include forest industry wood and logging residue. Bio-sludge and separately collected recycled fuel are also used. Coal and oil account for less than 2% of all fuels. Peat has already been phased out.

[Read more about the combustion experiments](#)



BUSINESS OPERATIONS/NUCLEAR POWER

Nuclear power

Teollisuuden Voima Oyj (TVO), a joint venture partially owned by Pohjolan Voima, operates a nuclear power plant at Olkiluoto in Eurajoki. The combined output of the nuclear power plant's two plant units is 1,780 MW.

In 2021, the capacity factor of the OL1 plant unit was 95.1%, and the capacity factor of OL2 was 90.4%. Total production volume of the entire power plant was 14.4 TWh. Pohjolan Voima's share of the production was 8.2 TWh.

OL3 is Finland's most significant contribution to the climate effort

The new OL3 plant unit at the Olkiluoto nuclear power plant is an EPR-type pressurised water reactor that uses modern technology based on proven techniques and advanced new safety features. The plant unit's net electrical capacity is 1,600 MW.

In 2021, Olkiluoto produced about a sixth of all the electricity consumed in Finland. OL3 will produce about 14% of Finland's electricity once regular electricity production starts, and the Olkiluoto nuclear power plant as a whole will produce about a third.

OL3 is Finland's most significant contribution to the climate effort. Nuclear electricity production does not produce any emissions that contribute to climate change. It can be used to avoid annual carbon dioxide emissions of around 11 million metric tons compared to producing the same amount of electricity with coal.

Annual outages keep the nuclear power plant in good condition

The Olkiluoto nuclear power plant is continuously maintained in good production and operational condition by alternating refuelling and maintenance outages. In 2021, the annual outages were carried out with special arrangements to prevent coronavirus infections at the site area. The protection measures that were put in place worked well.

A refuelling outage was carried out at OL1 and a maintenance outage at OL2. The annual outages were successfully completed in cooperation with an extensive network of partners. In addition to TVO's own personnel, some 800 external operators participated in the refuelling outage, and some 1,000 in the maintenance outage. More than 100 specialists arrived from abroad to participate in the annual outages.

With the addition of OL3, the Olkiluoto nuclear power plant will produce approximately a third of all the electricity in Finland.

Case: Olkiluoto 3 nuclear power plant unit commissioned

The loading of fuel into TVO's OL3 EPR unit was completed in April 2021 and the first criticality was achieved on 21 December 2021 after the Radiation and Nuclear Safety Authority issued a commissioning licence for the reactor.

The plant unit will generate electricity at varying power levels during the commissioning test phase. Regular electricity production is expected to start in July 2022.

Once regular electricity production starts, OL3 will produce around 14% of Finland's electricity. It is Finland's most significant contribution to the climate effort.

[Read more at www.tvo.fi/en](http://www.tvo.fi/en)



Decentralised procurement secures fuel supply

TVO procures uranium and enrichment, conversion and fabrication services only from approved responsible suppliers using a decentralised supply chain. Through the proactive and decentralised procurement, TVO ensures that it always has at its disposal reliable fuel that is best suited for the TVO power plants. The fuel supply for OL1 and OL2 has been secured through long-term contracts. In the future, the decentralised procurement will also secure the fuel supply for OL3.

Support for nuclear power at a record level

According to a survey on the energy attitudes of Finns, commissioned by Finnish Energy from IROResearch, support for nuclear power is currently at its highest level ever in the survey's history. Up to half the respondents would want more nuclear power, and a quarter deem the current level appropriate. Opposition to nuclear power is lower than ever before. The first monitoring survey took place in 1983.

Case: Posiva has a solution for the disposal of spent nuclear fuel

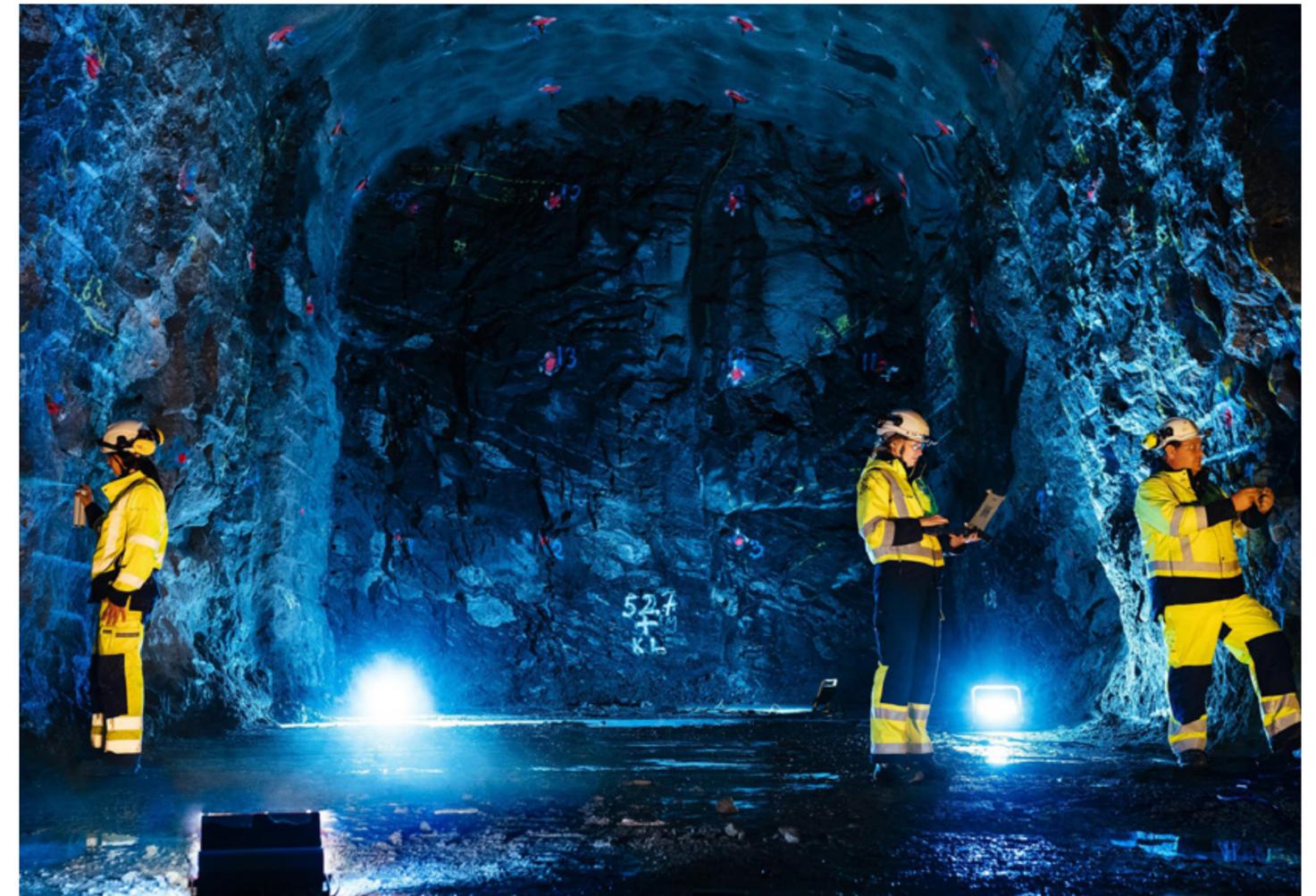
On 30 December 2021, Posiva submitted to the Government an application for an operating licence for a spent fuel encapsulation plant and disposal facility to be constructed at Olkiluoto in Eurajoki. Actual disposal deep in the bedrock is expected to start in the mid-2020s. Posiva will be the first company in the world to do this.

The ONKALO® concept, developed by Posiva to be safe and suitable for the conditions at Olkiluoto, consists of a final disposal concept, an encapsulation plant and disposal facility and a final disposal process.

Excavation of the first actual deposition tunnel at ONKALO at a depth of some 430 metres started in May. The encapsulation plant's topping-out ceremony took place in December 2021.

Posiva's owners are TVO and Fortum Power and Heat.

[Read more at www.posiva.fi/en](http://www.posiva.fi/en)



BUSINESS OPERATIONS/DEVELOPMENT PROJECTS

Development projects

We have dozens of ongoing projects involving carbon neutrality, an increase of our balancing capacity, lifecycle management and utilisation of expertise in all our operations.

With these development projects, we will:

- Increase the competitiveness of energy production
- Increase flexibility
- Improve efficiency
- Improve reliability and safety
- Reduce emissions
- Promote the objectives of the circular economy

We closely monitor developments in the industry. We also want to be actively involved in development and seek new solutions through pilot projects. They help us learn, find new tools and ways of working, and make better use of our networks.

Olkiluoto 3 – our most significant investment

Our most important investment project has been the Olkiluoto 3 EPR project through our joint venture TVO. The OL3 plant unit was commissioned in December. It is expected to start regular electricity production in July 2022.

Increasing the balancing capacity of our power plants

We are searching for means to increase our balancing capacity to balance the consumption and production of electricity. The need for balancing power increases as the share of weather-dependent renewable energy increases.

- We completed a balancing power capability survey to assess the potential of our combined heat and power plants to support the Finnish electrical power system in a more flexible and market-based manner.
- We are also developing the balancing power production capacity of hydropower using a variety of technical solutions.
- In addition, we carry out studies on new opportunities; in 2021, we explored the potential of hydrogen technology.
- We studied a large battery solution that would contribute to electricity storage to safeguard the operation of the electrical power system and increase the flexibility of balancing power.

Improving lifecycle management of our power plants

We are actively developing the lifecycle management of our production assets and the use of existing knowledge. Our goals are:

- Comprehensive risk management
- Focus on lifecycle profit
- Improved efficiency of power plants
- Optimised availability
- Development of technologies.

With our partners, we combine new technology with traditional skills. We aim to identify essential information, enable analysis of the information and use deep understanding and knowledge to draw conclusions and reach solutions.

Case: Digitalisation harnessed to monitor boiler corrosion

With Andritz, we developed a digital Metris BOA measurement and analysis system to extend the lifecycle of power plant boilers, manage maintenance costs and reduce emissions.

The development is based on the phasing out of fossil fuels. The fuels that will replace them and the variation in fuel quality pose new challenges for boiler monitoring. The new system provides operators with a more accurate and faster overview of the boiler status through visualised reports based on extensive data.

[Read more about the system](#)



Case: Knowledge and digitalisation provide added value

In all our development work, we take advantage of new opportunities offered by digitalisation and knowledge-based management. We invest in smart systems and low threshold pilot projects that we implement in cooperation with our partner networks.

In our **Added value through knowledge project**, which spans several years, we develop knowledge-based management with our partners. The project develops and deploys a common data platform that combines and processes data from different systems.

The data will help us create a better situation assessment of our operations for systematic decision-making. With an advanced situation assessment, we can improve the efficiency, reliability, safety and emission management of our power plants.

In 2021:

- We improved the automation and forecasting accuracy of financial reporting
- We centralised reporting in a single application and desktop with visualised overviews and key financial, management, project and customer data reports
- We piloted a common platform for high-quality, relevant production data at two of our production companies
- We piloted projects that utilise process data in new ways and as efficiently as possible; for example, we introduced a measurement and analysis system at one plant that gives operators a visualised and more accurate overview of the boiler's current status.

Digitalisation of hydropower production improves efficiency and provides environmental benefits

We systematically develop the operation and maintenance of our hydropower plants with our partners. We also make use of new digital solutions:

- We introduced a virtualised ERP system that provides a better overview of the weather, flow and market situation, as well as enables collaboration between operators.

[Read more about the new ERP system](#)

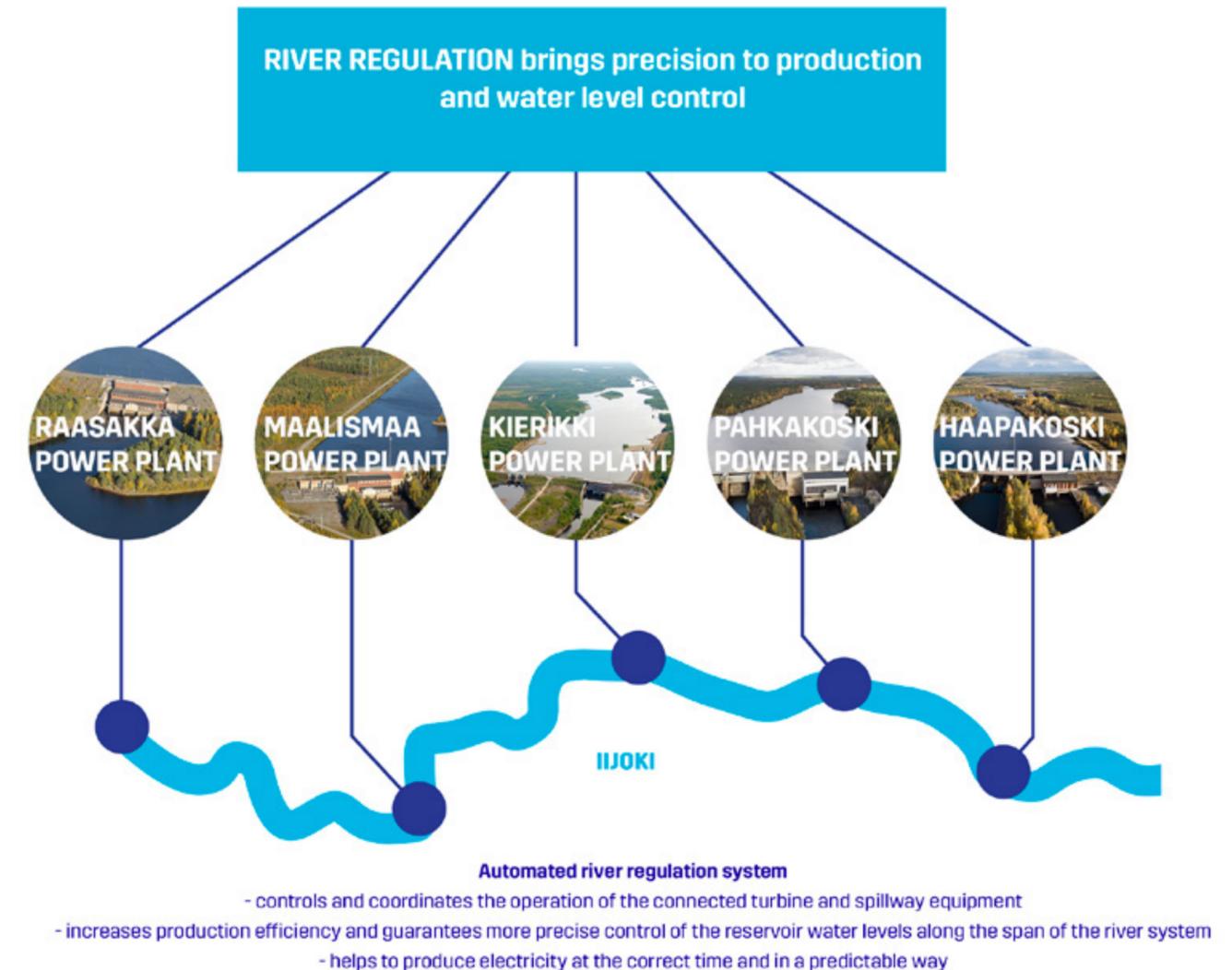
- At Iijoki, we introduced Finland's most advanced and extensive river regulation automation system, which controls the production of all the Iijoki river power plants.

[Read more about river regulation on our website](#)

- We started the transition to an improved turbine governor, developed in collaboration with the University of Oulu using mathematical power plant modelling.

[Read more about the turbine governor](#)

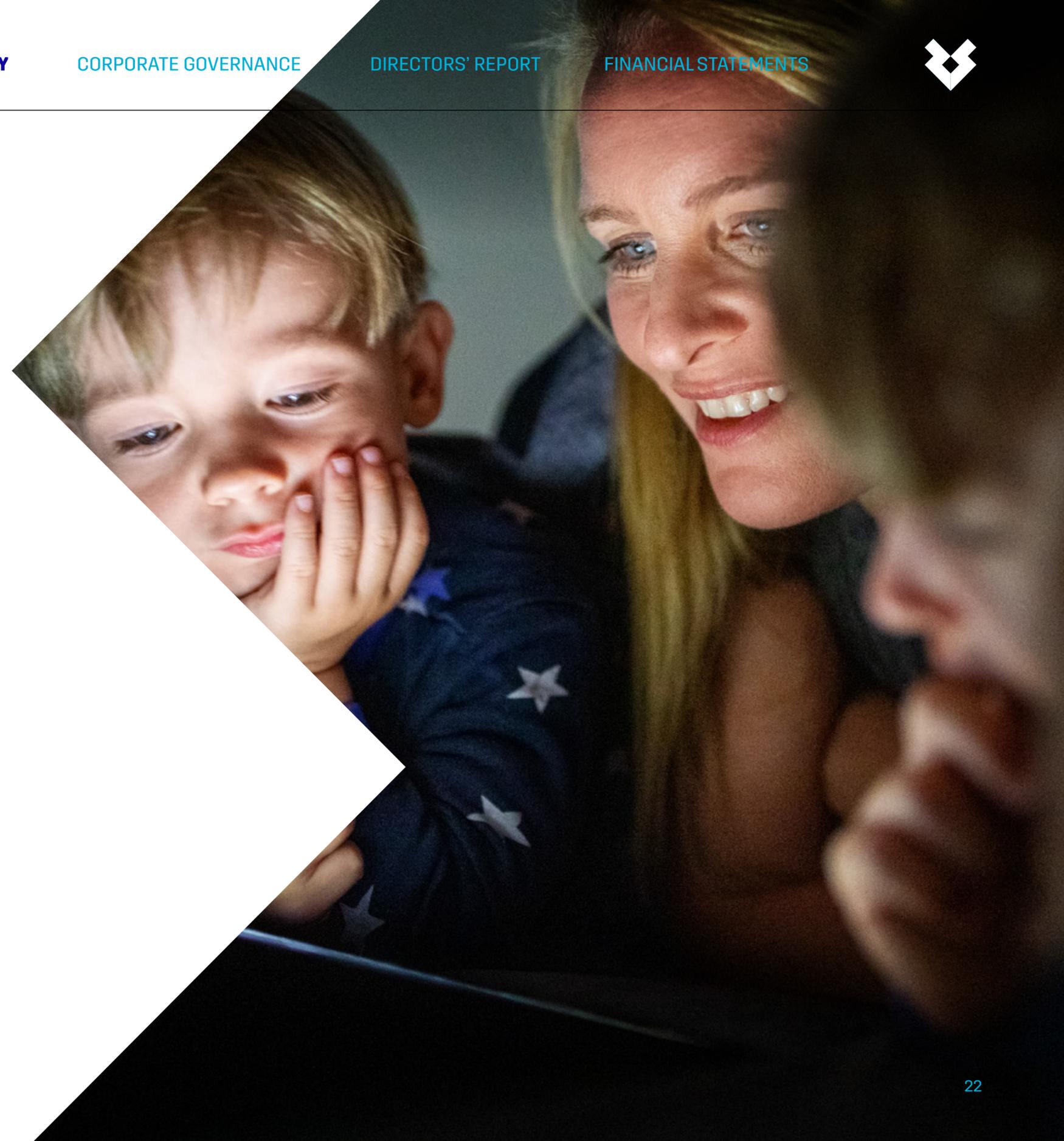
The development enhances the real-time remote control of the power plants and makes it possible to adjust production very rapidly and accurately based on electricity consumption and the needs of the environment. Real-time situation assessments and automatic adjustments also allow more precise control of water levels. In addition, the new systems save the equipment and facilitate maintenance.





RESPONSIBILITY

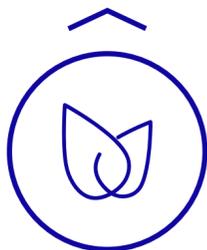
Corporate responsibility themes	23
Responsibility means concrete actions	24
Personnel – an energetic attitude	26
Safety starts with observations	29
Towards carbon neutrality	30
Continuous improvement in environmental issues	32



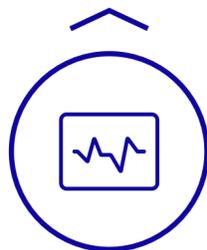
Corporate responsibility themes

Strategy

We create decisive power to strengthen competitiveness and contribute to a better tomorrow.



On market terms towards carbon neutrality



Competitive advantage through balancing power capability



Becoming a production asset management top expert

Skilfully – Boldly – Together

Responsibility themes



Carbon neutral and sustainable energy



Competitive energy



Safe working and wellbeing of employees



Responsibility in networks and stakeholder relations

Key aspects by responsibility themes

- Reducing greenhouse gas emissions
- Promoting biodiversity
- Energy efficient production that supports the circular economy
- Use of water and status of water systems

- Added value to customers
- Reliable production and lifecycle management
- Knowledge-based management

- Proactive safety
- Inspiring workplace for top experts

- Responsibility in the value chain/partnerships
- Transparency
- Interaction with stakeholders
- Responsibility under exceptional situations

Responsibility means concrete actions

Corporate responsibility is part of Pohjolan Voima's strategy. Our ethical principles and responsibility policy set the framework for our corporate responsibility. We also follow the UN Sustainable Development Goals. However, responsibility does not become concrete until it is realised through daily actions. Our strong values – skilfully, boldly, together – are the basis for the work of every Pohjolan Voima employee.

As a major player in the energy industry, we are playing our part in ensuring that electricity and heat are always available, even in exceptional circumstances, and that we are moving towards carbon neutrality. Our strategy slogan "We create decisive power to strengthen competitiveness and contribute to a better tomorrow" also reflects our sense of responsibility.

Pohjolan Voima's cost price operating model is the foundation of our corporate responsibility: our extensive cooperation network ensures that the benefits of Finnish electricity and heat production can be felt throughout Finland. We do our part in enabling the success of our owners, and our operations indirectly create jobs and wellbeing for the whole of Finland.

Becoming carbon neutral

The key elements of carbon neutrality in 2021 were:

- We generated almost 20% of all the electricity produced in Finland

- 96% of our electricity production was carbon neutral hydropower, nuclear power and forest energy
- 81% of our heat production came from carbon neutral forest energy
- We used 47% less peat to produce heat, compared to our target of reducing the use of peat by 40% from the 2019 level in 2021
- We demolished our last coal-fired condensing plant in Kristiinankaupunki.

We are determined to continue working towards our carbon neutrality targets:

- 99% carbon neutral in electricity production by 2025
- 85% carbon neutral heat production by 2025
- We will only use fossil fuels and peat as market-based start-up and backup fuels by 2025
- We will reduce our use of peat by 60% from the level of 2019 by 2022.

The share of carbon neutral production will not increase linearly; instead, emissions will vary to some extent year by year, depending on the weather conditions, availability of fuel and market fluctuation.

[Read more about our carbon neutrality efforts](#)

Our carbon neutral production by 2025: 99% of electricity and 85% of heat.

Case: Finland's first downstream migration solution completed

Years of extensive cooperation to restore the natural migration patterns of migratory fish in the Iijoki river and to implement the water vision progressed:

- Finland's first downstream migration route for migratory fish was completed at Haapakoski, the uppermost power plant in the Iijoki river
- In a project involving the old Raasakka riverbed, we made it easier for fish to migrate upstream and improved spawning grounds and nursery areas
- We also participated in migratory fish cooperation in the Kemijoki river
- A decision was made to apply for a permit to build an organic fishway at Portimokoski rapids in the Tengeliönjoki river
- The fishway at the lowermost power plant of the Iijoki river, Raasakka, is awaiting the outcome of appeals by stakeholders against the construction licence.

[Read more about the Iijoki river cooperation projects](#)



Addressing biodiversity

Our operations have an impact on biodiversity. We have already identified several areas such as the impact of hydropower on migratory fish and the aquatic environment, as well as the impact of forest energy use on forest nature. In 2021, we launched a project to improve our understanding of our impact and set targets for the coming years.

[Read more in the environment section](#)

We use biomass fuel that meets sustainability criteria

The currently valid Renewable Energy Directive (RED II) was published in December 2018. It includes binding EU-level sustainability criteria for biomass used in energy production, among others. The sustainability criteria are designed to ensure the sustainable production and use of bioenergy in a harmonised and consistent manner across the EU. The scope of the Directive was expanded in 2021 to cover solid biomass used in the production of electricity and heat.

The sustainability of biomass fuels can be demonstrated through the approval of the operator's sustainability scheme. Our production companies applied for the Energy Authority's approval for their sustainability schemes in 2021. This allows our companies to demonstrate that the origin and use of the biomass fuel meet the

sustainability criteria. The criteria have also been considered in our fuel contracts.

The application of sustainability criteria to demonstrate the sustainability of zero emission biomass in emissions trading was delayed and postponed to the beginning of 2022.

One of Finland's most inspiring workplaces for the third time in a row

For the third year in a row, we were listed as one of Finland's most inspiring workplaces based on our employee survey.

[Read more in the HR section](#)

Safety culture starts with detection

We exceeded our target of ten safety, environmental and energy efficiency observations per employee. In 2021, each employee made an average of 11.9 observations.

[Read more in the safety section](#)

We launched a study on our impact on biodiversity.

Code of Conduct to guide responsible operations

We conduct our business ethically and in compliance with legislation. Our operating principles include principles of human rights, labour rules and anti-corruption (cf. the UN Global Compact). We act with honesty and integrity in all our stakeholder relations. We require our partners to use corresponding principles, and we use applicable audit and monitoring practices to support the development of responsible operations.

Our corporate responsibility is guided by responsibility policies approved by the Pohjolan Voima Board of Directors: the Code of Conduct, Competition Law Policy, Personnel Policy and Environmental and Energy Efficiency Policy.

We have selected four of the UN Sustainable Development Goals (SDGs) for our corporate responsibility programme, in which we have set targets and indicators. Climate is included in SDG 7, Affordable and clean energy; and fish and aquatic biodiversity in SDG 15, Life on land.

[Read more about our ethical principles, corporate responsibility policies](#)

[Read more about our sustainability targets on our website](#)

Target	Description
	Ensure universal access to affordable, reliable and modern energy services
	Promote inclusive and sustainable economic growth, employment and decent work for all
	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
	Revitalize the global partnership for sustainable development

RESPONSIBILITY/PERSONNEL

Personnel – an energetic attitude

Pohjolan Voima is an expert organisation committed to continuous renewal and high performance. We can anticipate the business environment and proactively provide added value for our customers through our networks. We act as a responsible team. We all contribute to the creation of an energetic atmosphere!

An energetic attitude – our common goal

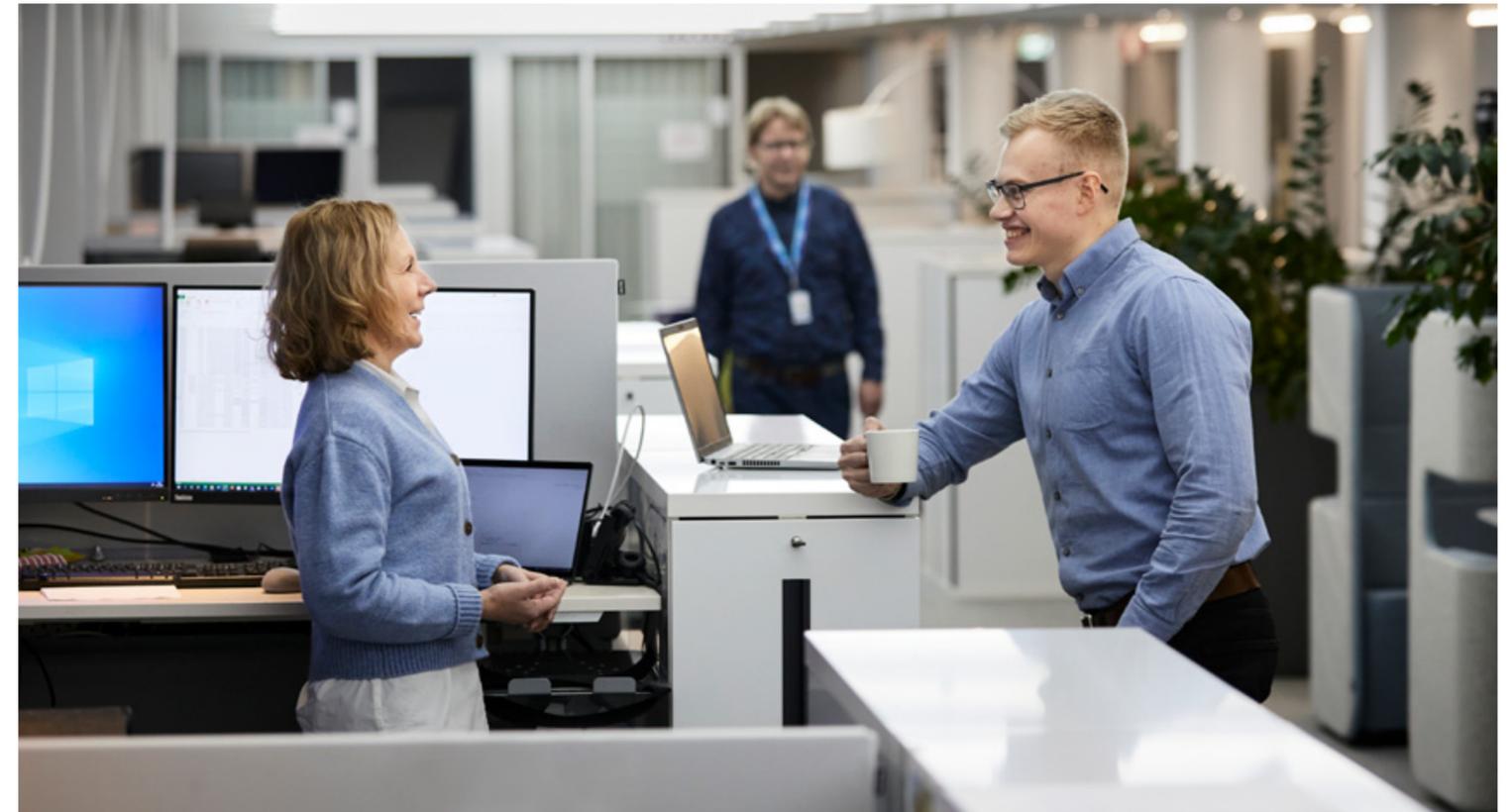
In 2021, the focus areas of our energetic attitude were developing our own skills and work, the We are decisive power training and participation in the development of the operating culture.



We are one of Finland's most inspiring workplaces

For the third time in a row, we won the award for Finland's most inspiring workplace in the small business category. The recognition can be achieved by Finnish organisations achieving optimal results in Eezy Flow's People Power employee experience survey.

According to our employees, our main strengths are that the employees are consulted when decisions affecting them are made, that the company's strategy and outlook are communicated well to the employees and that there are not too many rumours circulating in the company. Wellbeing at work and fair and equal treatment, as well as well-implemented changes, were also praised, as in the previous years. The response rate of the survey was 95.7% of the Group's employees.



Employee understanding assists in the development of our culture

At Pohjolan Voima, we are heavily involved in the development of our business culture.

For the second year in a row, we implemented a Signi survey, which measures the employee experience to provide the organisation with a better understanding of the employees' experiences and views. We feel that from among the issues that are important to us, the following are achieved at the workplace: a strong sense of team spirit, worthwhile work tasks and the freedom to work at a time and place of one's choice.

Our good performance earned us the Future Workplaces certificate, which is awarded when the workplace culture is managed through exceptionally good understanding of the employees.

Key personnel figures in 2021

At the end of 2021, we employed 44 (in 2020: 77) people, of whom 2 (6) had a fixed-term employment relationship. The number of permanent employees decreased by 8 from 2020, including three retirements. The number of permanent employees decreased by 23 from the previous year, mainly due to the closure of Laanilan Voima Oy's business operations.

The prevailing working time arrangement was full-time work. The company employed a total of six fixed-term summer employees in 2021. In 2021, the average age of the permanent employees was 47 (45), and 40.5% (23.9%) of the employees were female. The total turnover of permanent employees in 2021 was 23.9% (10.3%).

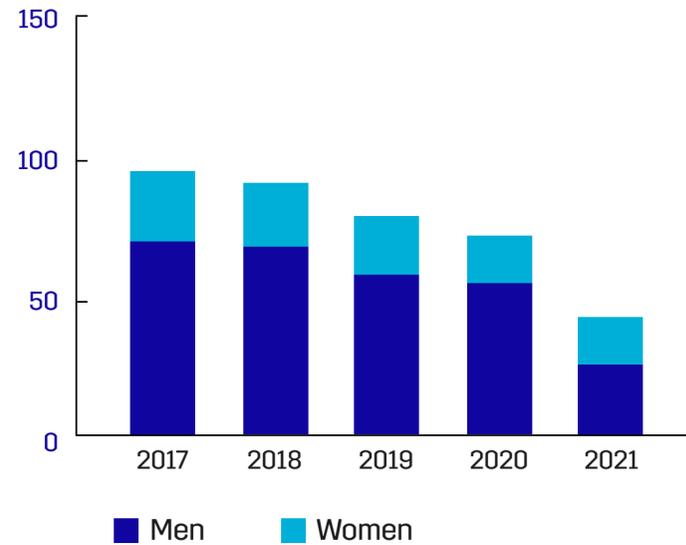
Case: We are decisive power

All employees of Pohjolan Voima Group attended We are decisive power training in 2021. There were five shared training sessions in total, two of which were events for all employees, and three were small group sessions. In addition, supervisors' practical skills in management by coaching were reinforced with a training session only for supervisors.

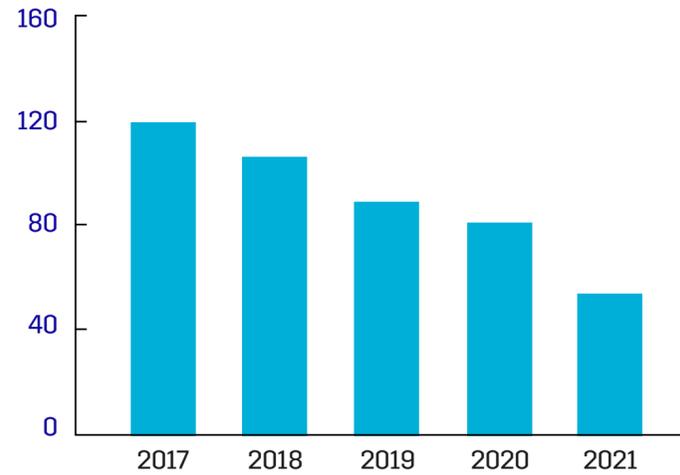
The aim of the training has been to strengthen the self-knowledge of all employees and thus their self-management skills, and to build more effective cooperation within Pohjolan Voima and with our networks. We learned how to strengthen our self-knowledge and obtained useful working life cooperation skills such as the understanding and accommodation of different approaches, considering them during collaboration, as well as constructive feedback and practical coaching. The We are decisive power training for all employees brought us closer together as a team and gave us a common direction and a common way to develop ourselves.



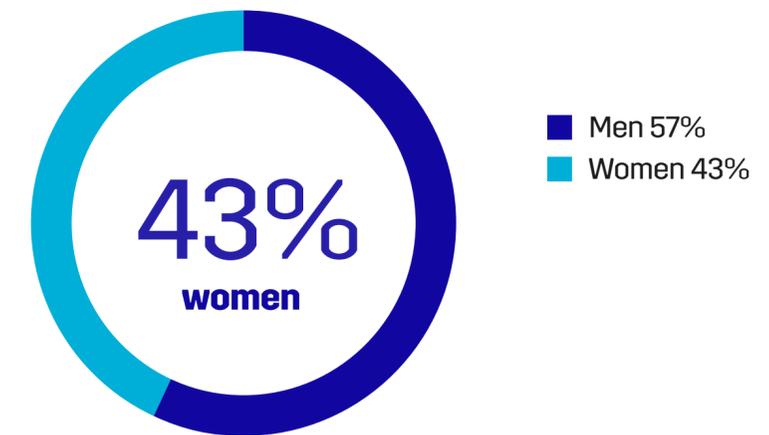
Number of personnel on 31 Dec in 2017–2021, in permanent employment



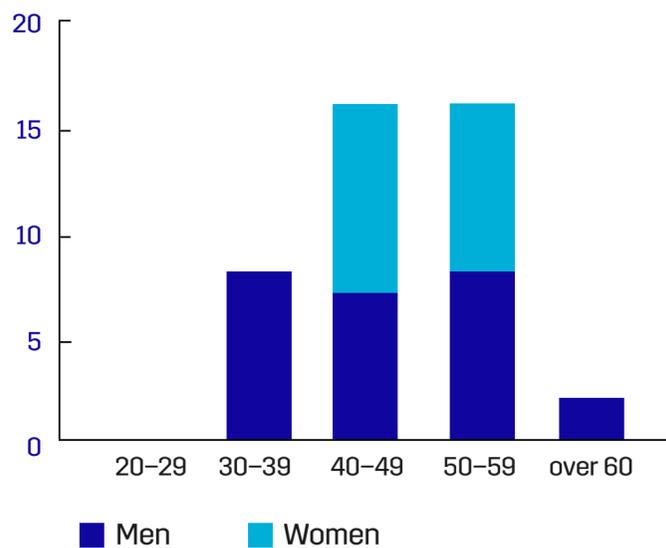
Average number of personnel in 2017–2021, in permanent employment and on fixed-term contracts



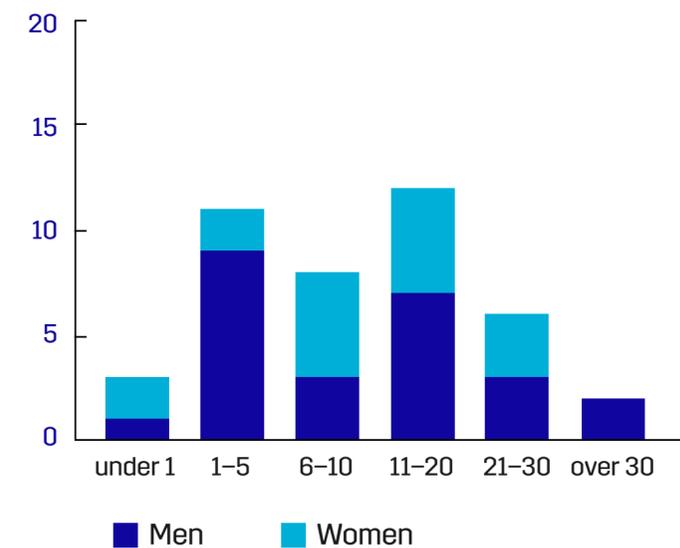
Gender breakdown of Corporate Executive Team



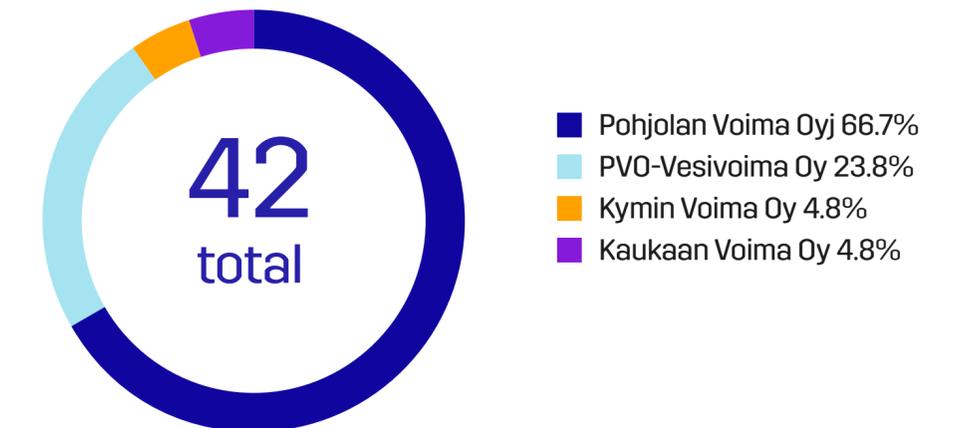
Breakdown of personnel by age on 31 Dec 2021, in permanent employment



Years of employment on 31 Dec 2021, in permanent employment



Number of personnel by Group companies on 31 Dec 2021, in permanent employment



RESPONSIBILITY/SAFETY

Safety starts with observations

Our corporate culture and operating methods are based on the values that have been determined together with the employees: skilfully, boldly, together. The “skilfully” value also covers the fact that we always work safely. In 2021, our goal was to promote the safety culture and improve supplier safety.

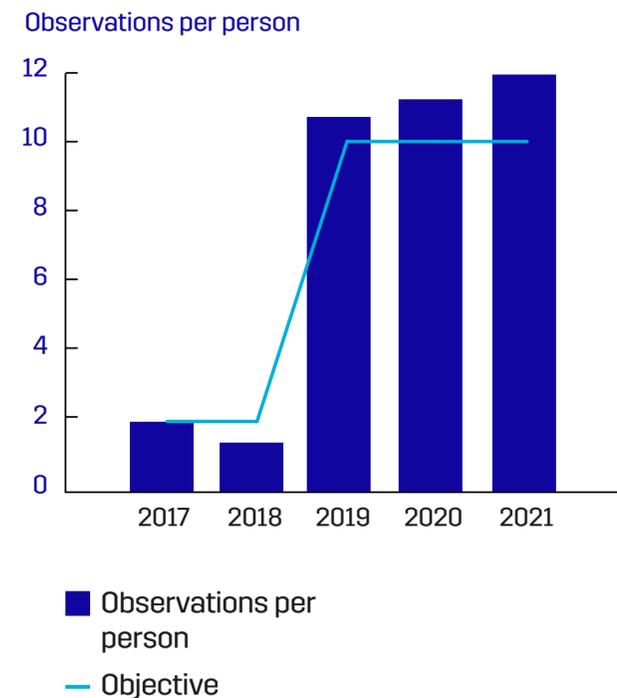
Positive development in the field of safety observations

In the last few years, we have focused on proactive occupational health and safety. Our target for safety, environmental and energy efficiency observations by our employees has been ten observations per person. In 2021, each employee made an average of 11.9 observations. The year was challenging in terms of accidents, and we did not meet our target of zero accidents. There was one accident requiring sick leave involving the personnel of our production companies and seven such accidents involving the personnel of our subcontractors. The increase has been considered in our 2022 action plan which aims to reduce the number of accidents. We will invest in the safety of our subcontractors and audit our own safety practices.

In 2021, we redefined the corporate safety responsibilities of our production companies. We also started an upgrade of our continuity management system.

The COVID-19 pandemic also required us to make extensive preparations to ensure the continuity of our operations in 2021. The situation was actively monitored, and the employees were instructed in accordance with the official recommendations. The preparation efforts paid off, and the pandemic did not cause any significant disadvantages to us.

Safety, environmental and energy efficiency observations per person



Case: We rely on the strength of a cluster in safety, environmental and energy efficiency observations

We have decided to focus on corporate responsibility audits in our supplier network. We are a member of an HSEQ auditing cluster which involves the auditing of suppliers and the sharing of information about suppliers' corporate responsibility with other companies.

Last year, we conducted four supplier audits through the cluster. We also independently audited one of our recycled fuel suppliers.

[Read more about the audit cooperation](#)



RESPONSIBILITY/CARBON NEUTRALITY

Towards carbon neutrality

Our goal is that 99% of our electricity and 85% of our heat will be produced from carbon neutral sources in 2025. In 2021, we made progress towards our targets, with 96% of electricity production and 81% of heat production being carbon neutral.

Increased share of carbon neutral production

Of our production forms, those that are considered carbon neutral include hydropower and nuclear power, as well as electricity produced with carbon neutral wood-based fuels and recycled biofuels (with 60% share recommended by the Statistics Finland) in our thermal power plants.

In 2021, carbon dioxide emissions from the production of electricity and heat amounted to 0.6 million metric tons. In 2021, characteristic CO₂ emissions from our electricity production were 33 g CO₂/kWh.

The share of our carbon neutral electricity production capacity is increasing:

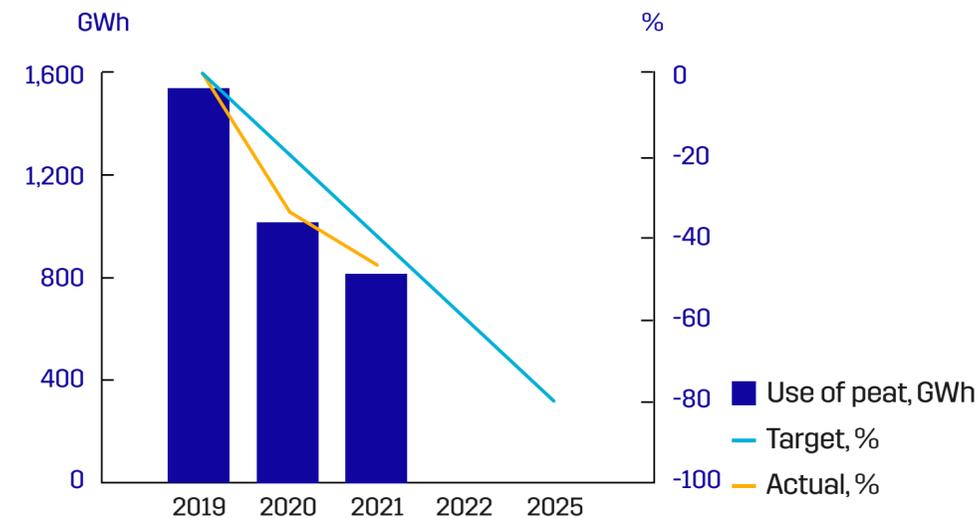
- Capacity increases have increased the share of nuclear power and hydropower among our carbon neutral energy sources
- We have ceased the condensing power production of electricity with coal
- Furthermore, regular electricity production at the OL3 EPR plant unit in Olkiluoto is expected to start in 2022.

The target of carbon neutrality in heat production can be achieved by phasing out coal, reducing the combustion of peat and increasing the use of wood-based fuels.

We reduced the use of peat by 47%

Our target was to reduce the use of peat by 40% from the 2019 level by 2021. The target was clearly achieved: the use of peat decreased by 47%.

Reducing the use of peat



Case: Climate cooperation with young people

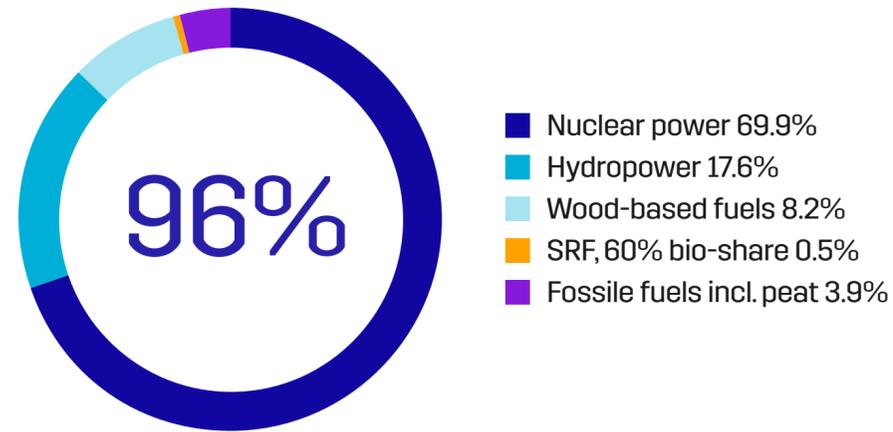
We continued our cooperation and dialogue with young people on climate action. We streamed a live debate between the presidents of five political youth organisations on the role of municipalities in mitigating climate change, and interviewed representatives of other organisations.

The year culminated in our partnership with the Mock COP26 Climate and Nature Summit for Young People. We supported this important message through our channels. Youth climate delegate Maija Kuivalainen visited our Sähkö tulee töpselistä (Electricity comes from the plug) podcast to discuss differences in the attitudes of different generations towards climate change.

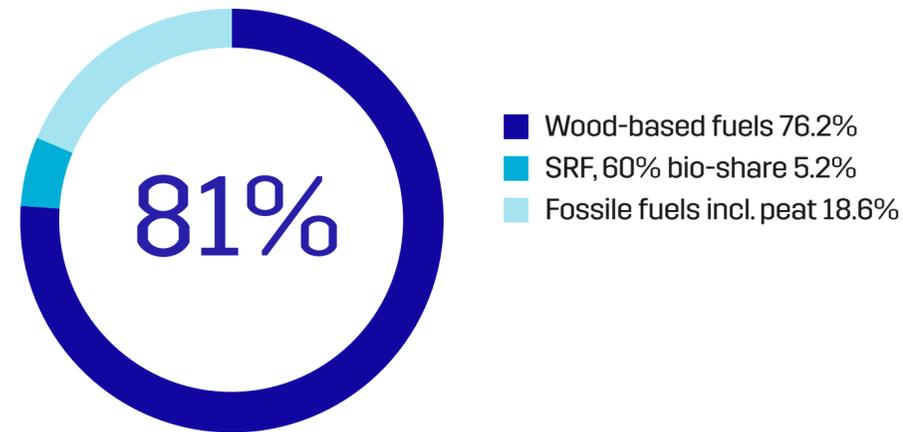




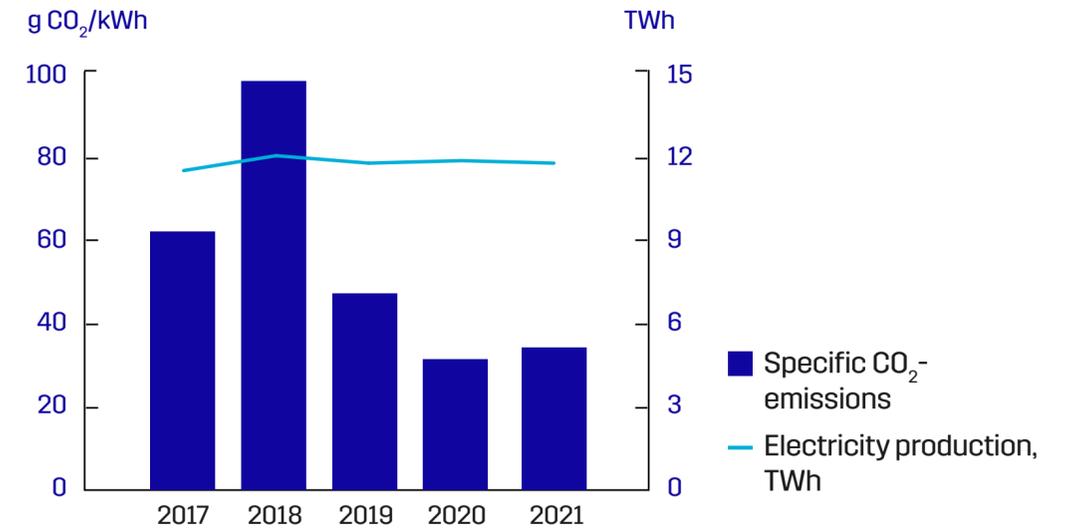
Carbon neutral electricity production in 2021



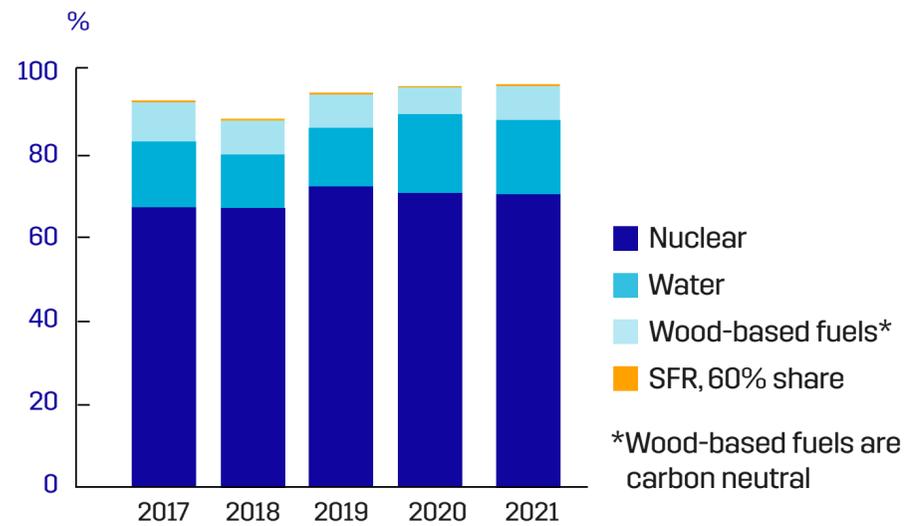
Carbon neutral heat production in 2021



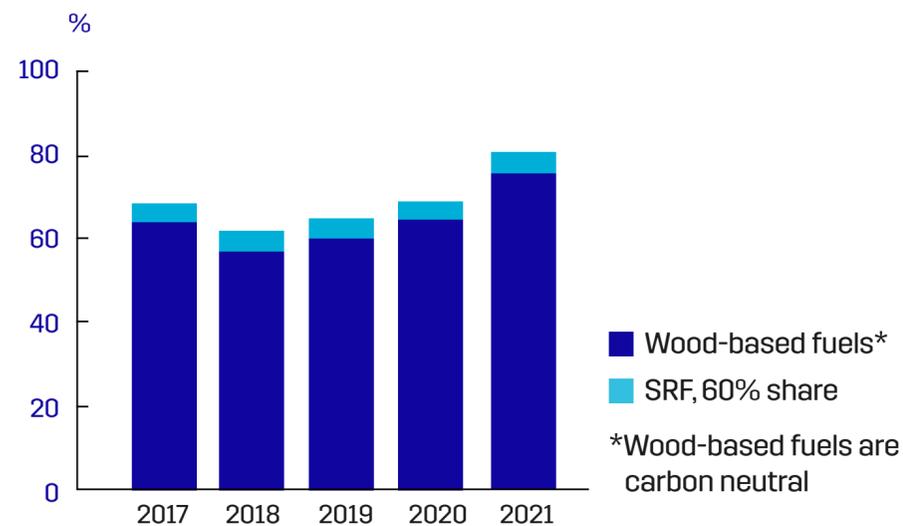
Specific carbon dioxide emissions from electricity production in 2017–2021



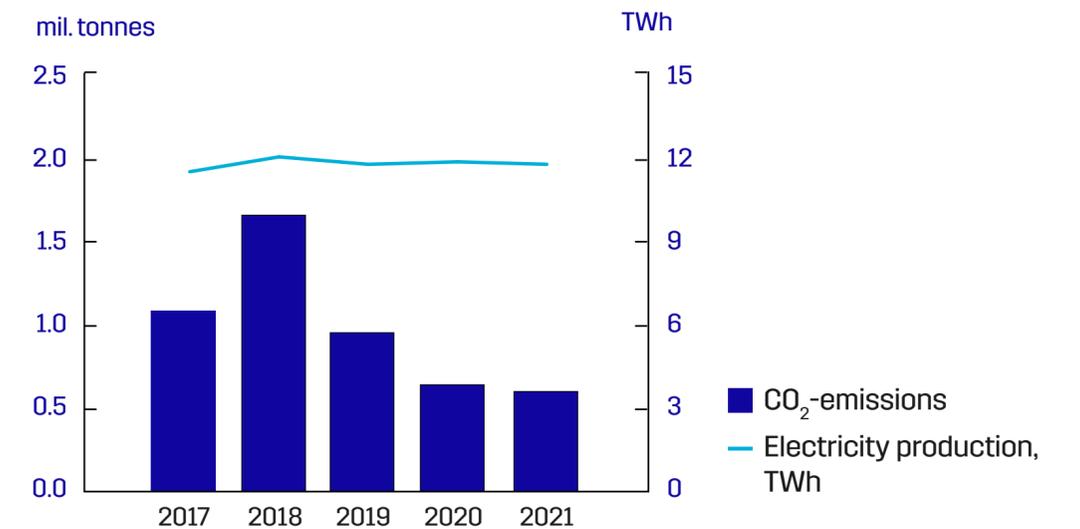
Carbon neutral sources of electricity production in 2017–2021



Carbon neutral sources of heat production in 2017–2021



Carbon dioxide emissions from heat and electricity production in 2017–2021



RESPONSIBILITY/ENVIRONMENT

Continuous improvement in environmental issues

A basic requirement for persistent, long-term energy production is the maintenance of a safe, healthy and diverse environment. The reduction of our environmental impact is guided by our environmental and energy efficiency policy. We identify the environmental impact and risks of our operations, the natural values related to our operations and the opportunities for improving the efficiency of the production and utilisation of energy. In addition to tackling climate change, our goal is to safeguard biodiversity.

Hydropower: we stocked 2.3 million fry

Hydropower production has regional and local effects on water systems and fish stocks. In 2021, water levels were regulated and hydropower plants operated in compliance with the permit conditions. Nearly all stocking plans were fulfilled.

- To meet its obligation to sustain the fish stocks of the Kemijoki and Iijoki water systems and the adjacent sea area, PVO-Vesivoima stocked around 2.3 million fry in 2021.
- Of these, 0.7 million were used to stock the Kemijoki sea and river area. This amounted to 17% of the total of 4.0 million fry stocked with Kemijoki Oy.

Dam safety: regular dam inspections

In 2021, inspections in compliance with the Dam Safety Act, to be held every five years, took place at the dams of the Isohaara power plant. Repairs of a leak detected in 2016 in a retaining earth dam at the Melo power plant were continued by means of injecting. The repair work has not affected the environment or the electricity production operations at the power plant.

Petition of appeal of the authority on stocking and fish stock management obligations

In March 2017, the Centre for Economic Development, Transport and the Environment (ELY Centre) for Lapland filed a petition of appeal 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 ELY Centre filed a similar petition concerning the Iijoki river. PVO-Vesivoima submitted complaints regarding both appeals to the Regional State Administrative Agency. In 2021, PVO-Vesivoima submitted its rejoinder to the appellant's accounts and statements issued by the Finnish Environment Institute.



Reduced emissions from thermal power production

The most significant environmental impact of thermal power production concerns the atmosphere. The greatest flue gas emissions include carbon dioxide, nitrogen oxide, sulphur dioxide and particle emissions. Thermal power plant emissions in metric tons (t) are affected by the production volume of the plants, but the emissions can be reduced through fuel choices, the optimisation of the combustion process and flue gas cleaning technology. We have developed all of them over the years.

Except for nitrogen oxides, emissions into the air decreased compared to the previous year. In 2021, heat and electricity production:

- Carbon dioxide emissions were 0.6 million tonnes
- Sulphur dioxide emissions were 0.5 thousand tonnes
- Nitrogen oxide emissions were 1.8 thousand tonnes
- Particle emissions were 0.1 thousand tonnes.

In October, an equipment failure at the Hämeenkyrö power plant resulted in 20–30 litres of bearing lubrication oil ending up in a nearby river. There were no other significant environmental deviations in our production in 2021.

Stricter emission limits in environmental permits

From a legal perspective, all our thermal power plants are large combustion plants, and their emissions are regulated by the best available techniques (BAT) conclusions for large combustion plants (LCP). These conclusions were published in 2017. Some of our power plants have been obligated to comply with the BAT conclusions starting from 2021, but the transition period is longer for other industrial power plants. However, all our power plants are prepared to operate in accordance with the LCP BAT. The power plants have already renewed or are in the process of renewing their environmental permits. The emission limits of the new environmental permits will be stricter.

Systematic contributions to the environment and energy efficiency

In our environmental impact assessment, we consider the entire lifecycle of a power plant. We are committed to promoting energy efficiency.

Most of our production companies have certified ISO 14001 environmental management systems. All our production companies use the energy efficiency system EES+ or the energy management system ISO 50001. Some of these systems are certified. Nearly all our production companies have also signed energy efficiency agreements for the 2017–2025 period.



Circular economy in action: by-products ash and gypsum harnessed for use

Our goal is to reuse 100% of the by-products of thermal power production as raw materials to replace non-renewable natural resources such as rock and stone. In 2021:

- Our power plants generated a total of 104,000 tonnes of fly ash and gypsum from the combustion gas cleaning processes and bottom ash from boilers
- 75.3% of the by-products were reused in earth construction, as forest fertilisers or in the construction industry

The five-year average for the reuse of by-products was 105%. Any fly ash that is not immediately reused can be put into intermediate storage and reused at a later date. As a result, the reutilisation rate varies on either side of 100%.

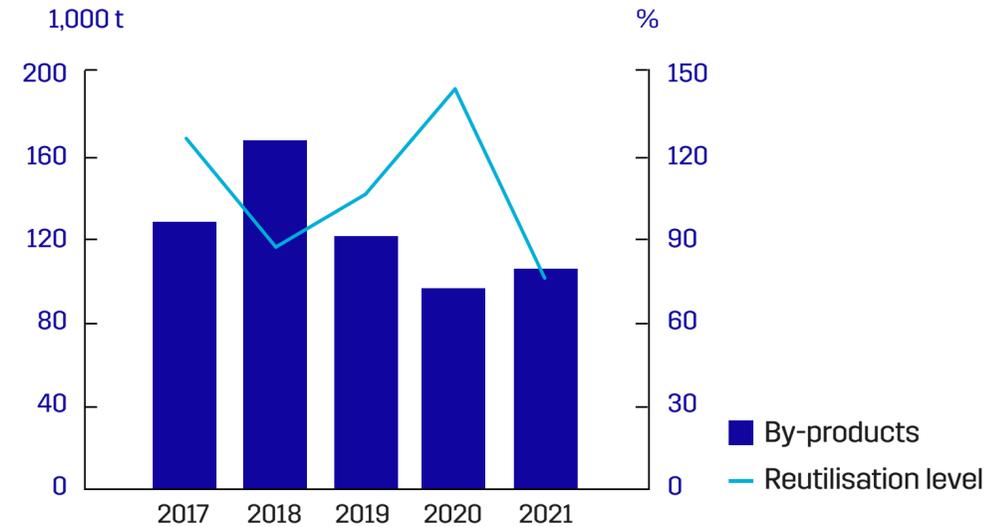
Nuclear production complied with environmental permits

Operations of the Olkiluoto nuclear power plant, which is owned by TVO, a joint venture partially owned by Pohjolan Voima, complied with legislation, environmental permits, the environmental management system and the energy efficiency system in 2021.

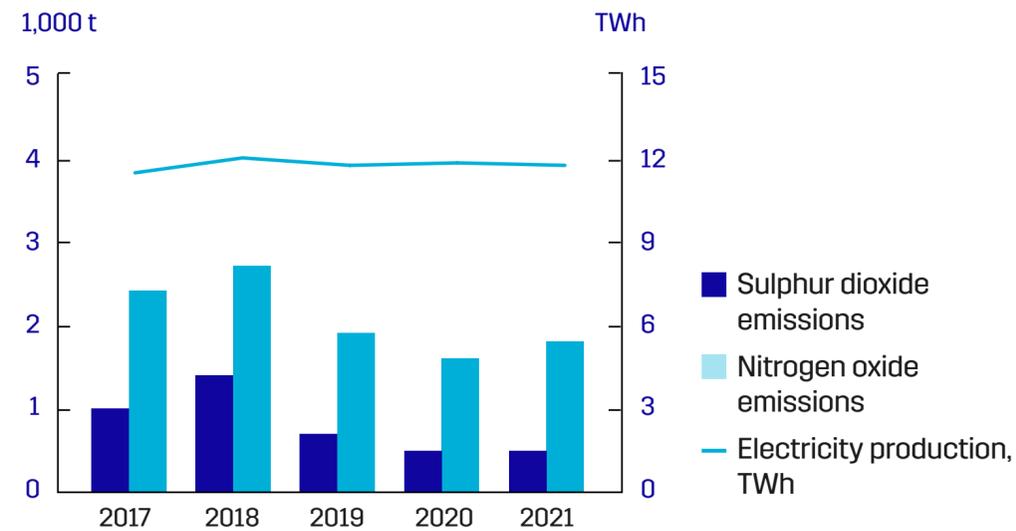
Environmental matters related to the production of nuclear power, environmental indicators and the results of the environmental programme for 2021 are reported in more detail in TVO's responsibility and environmental report. The data has been verified by a third party.

[Read more at www.tvo.fi/en](http://www.tvo.fi/en)

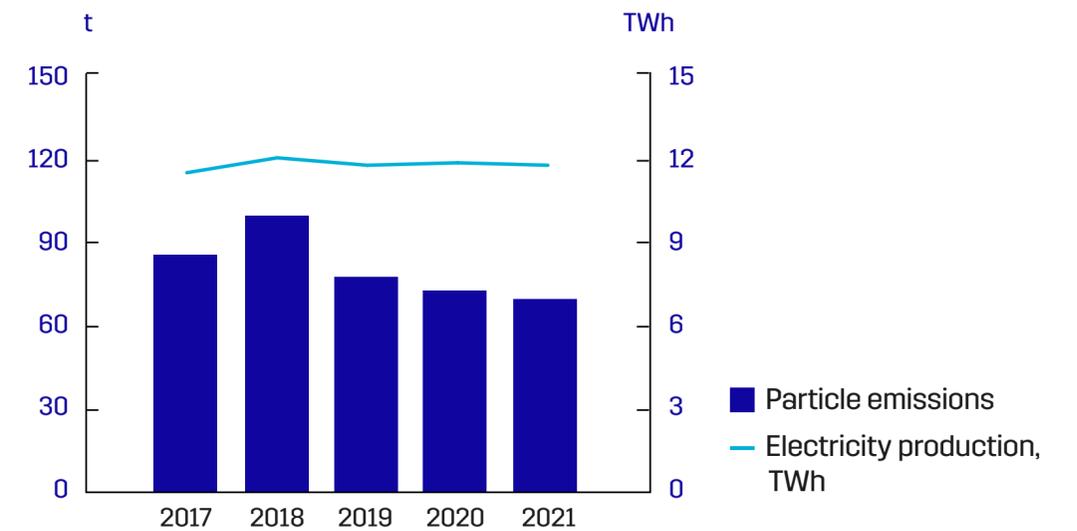
Usage of by-products and reutilisation levels in 2017–2021



Acidifying emissions from heat and electricity production in 2017–2021



Particle emissions from heat and electricity production in 2017–2021





CORPORATE GOVERNANCE

Corporate Governance Statement 2021

36





Corporate Governance Statement 2021

1 Corporate Governance

Pohjolan Voima Oyj and its subsidiaries form the Pohjolan Voima Group. Registered office of the Group's parent company, Pohjolan Voima Oyj, is Helsinki, Finland. Pohjolan Voima Oyj is a public limited liability company. Under its Articles of association, the company acquires energy for its shareholders and engages in other related activities. The company also may own shares and assets as are required or necessary for carrying on its business.

According to the Articles of association, Pohjolan Voima supplies energy to its shareholders at cost price (the Mankala principle), i.e. Pohjolan Voima delivers the energy it has produced or acquired to its shareholders in proportion to their ownership of each series of shares. Each shareholder of the series of shares in question is responsible for the annual variable and fixed costs defined in more detail in the Articles of association. The parent company's administration costs are covered by charging them as part of the fixed annual costs in a manner specified in more detail in the corporate documents.

According to the Articles of association, the liability of each shareholder for the annual costs is always limited to the amount corresponding to the proportion of their shareholdings in all the shares in the series in question, and the failure of any other shareholder to satisfy the responsi-

bilities of the shareholder for costs in proportion to the shareholder's shareholding shall not increase any non-defaulting shareholder's liability. The shareholders are responsible for the costs defined in Clause 4 of the Articles of association.

Pohjolan Voima Oyj's General Meeting issues directives to the Board of Directors on the composition of the Boards of Directors of the subsidiaries and, if necessary, certain decisions by the subsidiaries. The parent company's Board of Directors and the Corporate Executive Team discuss the main principles of the Group's operations. The parent company participates in the management and supervision of its subsidiaries and affiliated companies through its representatives appointed to the governing bodies of these companies. The Group's subsidiaries and affiliated companies have their own governing bodies.

Pohjolan Voima's governance is based on legislation and its corporate documents. As an unlisted public limited liability company, Pohjolan Voima is under no obligation to comply with the Corporate Governance Code. According to the Securities Markets Act the issuer of a security subject to public trading must provide a corporate governance statement in its annual report or separately.

2 Annual General Meeting

The General Meeting is the company's highest decision-making body. The Annual General Meeting of Shareholders decides on statutory matters, elects the members of the Board of Directors, in accordance with the procedure specified in the corporate documents, confirms the fees of Board members and names an auditor. Furthermore, the annual general meeting issues binding directives to the Board of Directors regarding the elections of the ordinary and deputy members of the Boards of the subsidiaries. If necessary, the Annual General Meeting also issues binding directives to the Board on major investments of the subsidiaries and the other matters specified in the Articles of association.

The Annual General Meeting must be held annually by the end of June. An invitation to the annual general meeting will be sent to the shareholders at the earliest four weeks and at latest two weeks before the meeting.

Pohjolan Voima's shareholders approved in the Annual General Meeting on 25 March 2021 the financial statements of Pohjolan Voima Oyj for 2020, discharged the members of the Board of Directors and the President and CEO from liability, as well as elected ordinary and deputy Board members for the new term.

The Extraordinary General Meeting decided on 30 March 2021 to end the production operations of Laanilan Voima Oy.

The Extraordinary General Meeting decided on 27 May 2021 to approve on behalf of Pohjolan Voima the agreements on the amendments to the 2018 Global Settlement Agreement and its ancillary agreements for the Teollisuuden Voima Oyj's OL3 EPR project.

The Extraordinary General Meeting and further the shareholders approved by unanimous decision on 11 August 2021 to reduce Pohjolan Voima's share premium reserve by €2,133,941.69 and to invest the funds in the company's reserve for non-restricted equity. The reduction of the share premium reserve is related to the termination of Laanilan Voima's production operations. In addition, the Board of Directors was authorised to decide on the distribution of funds as return of capital from the reserve for invested non-restricted equity for a maximum of €7,000,000.

The Extraordinary General Meeting decided on 25 October 2021 on the arrangements relating to Hämeenkyrön Voima Oy; the sale of shares of Hämeenkyrön Voima Oy, owned by Pohjolan Voima, to Metsä Board Corporation and the directed acquisition of Pohjolan Voima's G10 series shares from Metsä Board Corporation to Pohjolan Voima. A repayment of capital of Pohjolan Voima's G10 series shares from the reserve for invested unrestricted equity was also decided as part of the total arrangements.

3 Board of Directors

Composition of the Board of Directors

The members of the Board of Directors are elected annually at the General Meeting of Shareholders. According to the Articles of association, the Board consists of a minimum of five and a maximum of 13 ordinary members. Personal deputies for the Board members may be named.

In the Annual General Meeting on 25 March 2021 nine Board members and their personal deputy members were elected. The elected Board members with their consent were CFO Tapio Korpeinen, CFO Seppo Parvi, Group General Counsel Jukka Hakki, Head of Finance & Control and Strategy Tomi Sederholm, Managing Director Anders Renvall, CEO Esa Kaikkonen, President and CEO Rami Vuola, CEO Juha-Pekka Weckström and Financial Director Jouni Lampinen.

From 1 January to 25 March 2021, the Board consisted of Tapio Korpeinen (chair), Seppo Parvi, Jukka Hakki, Tomi Sederholm, Anders Renvall, Esa Kaikkonen, Rami Vuola, Mikko Lepistö and Roger Holm.

In its organising meeting, the Board elected Tapio Korpeinen as the chair and Seppo Parvi as the vice chair. Tiina Nyström, General Counsel, Executive Vice President, was elected as the secretary.

All of the Board members are independent of the company. The Board members do not own any shares of the company.



The procedure for the election and organisation of the Board is specified in detail in the corporate documents. The chair of the Board is named by the company's largest shareholder and the vice chair by the second largest shareholder. The President and CEO is not a member of the Board of Directors.

Duties of the Board of Directors

The Board is responsible for the oversight and control of the company and the appropriate arrangement of the company's administration and operations. Furthermore, the Board must ensure that the company's accounting and financial controls are properly arranged. The Board controls that Pohjolan Voima's affairs are managed according to the Articles of association and the decisions of the General Meeting of Shareholders.

The Board of Directors' Charter defines its main duties and operating principles in more detail.

In order to perform its duties, the Board does the following, for example:

- Appoints the President and CEO, the substitute to the President and CEO and the members of the Executive Group
- Supervises the executive management of Pohjolan Voima
- Decides on the Group's strategy
- Decides on the Group's financing
- Decides on the Group's budget and action plan
- Decides on remuneration system principles and approves the employment contract and other benefits of the President and CEO,

unless it has authorised the Chairman of the Board or the Remuneration and Nomination Committee to make these decisions

- Appoints task force and workgroup members
- Approves policies and other guidelines which create the basis for the management system and internal control, as well as set limits and guide and monitor operations of the subsidiaries
- Approves the charters of committees, and task forces and workgroups that the Articles of association stipulates to be nominated
- Supervises the Group's risk management
- Compiles the Report of the Board of Directors and approves the financial statements
- Approves interim reports
- Supervises the operations of the subsidiaries
- Approves the charge for the fixed costs for each series of shares and other basis for shareholder invoicing
- Summons the general meeting
- Approves investments, acquisitions and property transactions in accordance with the corporate documents, unless the President and CEO has been authorised to make these decisions
- Resolves upon the taking of credits and the giving of guarantees or other securities

The Board compiles an annual assessment of its own performance.

The Annual General Meeting makes decisions on the remuneration of Board and Committee members, as well as on their basis. In 2021, the remuneration paid to ordinary and deputy Board members totalled €461,200.

The Board of Directors convened 19 times in 2021. On average, 98 per cent of the members were present at the meetings.

Committees of the Board of Directors

To ensure that the issues within the responsibility of the Board of Directors are handled as efficiently as possible, the Board has appointed an Audit and Finance Committee and a Remuneration and Nomination Committee, each assisting and reporting to the Board of Directors.

The Board of Directors appoints at least three members to the Committees annually from among its members, appoints the chairs of the committees and approves their charters.

Remuneration and Nomination Committee

The Remuneration and Nomination Committee deals with matters concerning nomination and remuneration in general, the remuneration systems for the Corporate Executive Team and employees, and the committee may deal with proposals to be submitted to the Annual General Meeting regarding the nomination and remuneration of the members of the Board.

After the 2021 Annual General Meeting, the Board nominated Tapio Korpeinen as the chair of the Remuneration and Nomination Committee and Seppo Parvi and Anders Renvall as the other members of the committee. The Remuneration and Nomination Committee convened three times in 2021. The attendance rate at the meetings was 100 per cent.

Audit and Finance Committee

The Audit and Finance Committee provides assistance to the Board in processing and preparing the finance, financial reporting, control, and audit.

In addition, the committee prepares a recommendation for the election of the auditor and monitors the independence of the auditor.

After the 2021 Annual General Meeting, the Board nominated Toni Sederholm as the chair of the Audit and Financing Committee and Rami Vuola and Jukka Hakkila as the other members of the committee.

The committee convened 12 times in 2021. The attendance percentage at the meetings was 100 per cent.

In addition to the Committees of the Board of Directors, the Board can name task forces or workgroups to assist the Board and senior management. The Board confirms the duties and operating principles of task forces and workgroups.

4 President and CEO

The Board nominates the President and CEO. According to the Limited Liability Companies Act, the CEO is responsible for the day-to-day management in accordance with the instructions and regulations issued by the Board of Directors. The CEO is responsible for ensuring that the company's accounting is in compliance with the law and that the financial management is organised in a reliable manner. The CEO gives the Board and its members sufficient information for the performance of the Board's duties and implements the Board's decisions.

Pohjolan Voima Oyj's current President and CEO is Ilkka Tykkyläinen. Tiina Nyström has been appointed as the substitute for the President and CEO.

5 Corporate Executive Team

The Corporate Executive Team assists the President and CEO in operational management. Members of the Corporate Executive Team report directly to the President and CEO. In 2021, the Corporate Executive Team consisted of the President and CEO, Minna Laakso, Riitta Larnimaa, Tiina Nyström, Jani Pulli, Kaj Råttis and Jarmo Tervo.

6 Remuneration

The Remuneration and Nomination Committee approves the company's remuneration systems. Incentive bonuses of the Corporate Executive Team are based on a long-term remuneration system and the criteria determined in it. The incentive scheme does not include shares or any derivatives.

The members of the Board of Directors, the President and CEO or other members of the company's management do not own the company's shares.

7 Related party administration

Pohjolan Voima maintains a list of related parties. The purpose of the list is to help identify transactions with a party that is considered a related party of Pohjolan Voima Oyj. The company monitors annually the related parties and assesses possible changes to its related parties. The company's related party acquirement



process ensures that relevant information is included in the financial statements.

The Board of Directors always decides on the possible transactions with the management of Pohjolan Voima Oyj and its related parties.

8 Internal control

The Board of Directors and the management are responsible for the organisation and adequacy of the company's internal control. The purpose of internal control is to ensure the efficiency and effectivity of the operations, the reliability of information, as well as compliance with the regulations and operating principles. Pohjolan Voima's governance and internal control system are based on the corporate documents as well as company policies approved by the Board of Directors such as the Code of Conduct and other company guidelines.

9 Financial control and reporting

The objective of internal control related to the financial reporting process is to ensure that the management has reliable, up-to-date information to help in decision-making and that the financial statements and interim reports are prepared in compliance with laws and regulations.

Pohjolan Voima Oyj complies with the International Financial Reporting Standards (IFRS) that have been approved for the EU and the requirements set for companies that have listed a bond to public trading.

In accordance with its approved charter, the Audit and Finance Committee is responsible for assisting the Board of Directors in monitoring the financial status of the company, the Group and its

parts, in monitoring and evaluating the financial reporting system, accounting and financial management, in monitoring and evaluating the internal control and risk management system, in monitoring and evaluating the internal audit and the financial audit process, and the implementation of changes in accounting practices.

Group Finance is responsible for reporting interim reports and statutory financial statements for Pohjolan Voima Oyj and its Group companies, as well as monthly reports, profit estimates and analyses. Named business controllers review the companies' financial status and prepare monthly internal company-level reports. The companies' financial reporting is regularly monitored by the Boards of the companies.

In general, shared systems are used for reporting. A service provider handles the financial administration, accounting and ledger processes in compliance with described subprocesses, agreed principles, agreed roles and responsibilities and defined controls. Development of the financial reporting processes and control systems is a continuous activity.

The separate financial statements of the parent company and other Group companies follow Finnish accounting practice. Adjustments to the income statements and balance sheets reported by individual Group companies are made in Group accounting in order to comply with the accounting policies of the Group (IFRS). Consistency is ensured by reconciliation. A quarterly report on the parent company's financial development is submitted to the Board of Directors. The consolidated IFRS financial

statements are reported to the Board twice a year.

The decision-making order for expenses, investments and financial commitments is determined in the corporate documents, and approval rights are determined in stages for the different organisational levels in the policy approved by the Board. Most significant decisions are submitted separately to the Board of the individual Group company and to the Board of the parent company for approval.

10 Risk management

Risk management is a continuous process of analysing and managing threats and opportunities faced by the company in its efforts to achieve its goals, and to ensure the continuity of the business. The key principles of risk management are defined in the Pohjolan Voima Group Risk Management Policy. Subsidiaries and Group functions are responsible for their own risk management and associated reporting. The management reporting on the comprehensive risk circumstances to the Board is linked to the strategy and long-term planning process. The Board of Directors oversees the reporting on risk exposures, risk management activities and results related to the company's strategy and operations.

11 Internal audit

The operating principles of Pohjolan Voima internal audit have been defined in the audit charter approved by the Board of Directors. Internal audit assists the company in achieving its objectives by providing a systematic approach

to evaluate and improve governance processes, risk management and internal control. In addition, internal audit manages the reporting procedure for suspected misconduct according to a specified procedure. Internal audit service is provided by BDO Oy. The CFO acts as the contact person for the external service provider. Internal audit reports functionally under the Audit and Finance Committee and reports summaries of its plans and findings to the Pohjolan Voima's Board of Directors.

12 Insider administration

Pohjolan Voima Oyj follows the EU's Market Abuse Regulation, Finland's Securities Market Act, the guidelines and regulations of authorities and the Guidelines for Insiders of Listed Companies issued by Nasdaq Helsinki Ltd. The Board of Directors has approved of a policy that sets responsible persons for the actions of insider administration and the guidelines for the insider administration, and for persons involved in insider projects as well as management and their closely associated persons.

As an issuer of bonds, Pohjolan Voima Oyj, in accordance with the Market Abuse Regulation, maintains project specific insider lists on persons who work for the company on the basis of an employment contract or other contract and, either regularly or irregularly, receive insider information directly or indirectly related to the issuer. Rules for the processing of insider information have been prepared and Group General Counsel is responsible for maintaining

and updating them. Creating and maintaining the insider lists is the responsibility of the Company's legal affairs department.

13 Disclosure policy for investors

The Board of Directors of the parent company has adopted a Disclosure Policy for Investors. The duty to disclose information consist of a regular and continuous duty to disclose information. The company's communication objective is to provide, without undue delay, correct and relevant information to the investors and other market players on the company's operations, operating environment, strategy, goals, and financial situation. Stock exchange releases issued by Pohjolan Voima Oyj are approved by the company's President and CEO, the Chairman of the Board or persons authorised by them.

14 Auditing and auditor

The principal task of statutory audit is to verify that the financial statements give true and fair view on the Group's results and financial position. The Annual General Meeting annually appoints one auditor. The auditor must be an audit firm approved by the Finnish Chambers of Commerce.

The Annual General Meeting 2021 elected PricewaterhouseCoopers Oy, authorised public accountants, as the Company's auditor. Niina Vilske, Authorised Public Accountant, has acted as a principal auditor.

In 2021, the auditor received €201,295 as auditing fees. In addition, €8,450 were paid for other services.



DIRECTORS' REPORT 2021

Annual report of the board of directors 2021	40
Key figures (IFRS)	45



Annual report of the board of directors 2021

Operating environment

In 2021, electricity consumption in Finland was 86 TWh (82 TWh in 2020). Of this volume, 69 (67) TWh was produced in Finland, while net imports into Finland amounted to 17 (15) TWh. Imported electricity covered 20.1% (18.5%) of Finnish electricity consumption. Most of the imported electricity came from Sweden. In 2021, the consumption of electricity in Finland increased by 5% from the previous year, returning to the pre-pandemic level. Industrial electricity consumption increased by 3%, and electricity consumption in other sectors increased by 10%.

Nord Pool Spot trade amounted to 956 (995) TWh. The annual average system price in 2021 was high, €62.31 (10.93) per MWh, while the annual average of the Finnish area price was €72.34 (28.2) per MWh. The higher prices are the result of several market phenomena such as the increased price of emission allowances, higher fuel prices and worse-than-average water conditions.

The price of the EUA emission allowance experienced strong growth in 2021. The market price was approximately €33 per metric ton at the beginning of the year, compared to approximately €80 per metric ton at the end of the year.

Production, which varies according to the weather, continued to grow. For example, challenges related to the balancing of the electrical power system and the integration of energy flows from different industries by developing hydrogen technology are even more important than before.

Pohjolan Voima's electricity and heat production continued at a normal level despite the ongoing pandemic. Work was carried out using healthy and safe practices; most employees worked remotely.

Climate change is one of the megatrends strongly driving the energy industry. The protection of biodiversity began to emerge as a future megatrend alongside climate change mitigation.

Finland's climate goal is to be carbon neutral by 2035 and carbon negative shortly thereafter. A national energy and climate strategy was prepared under the management of the Ministry of Economic Affairs and Employment, based on low carbon roadmaps for different industries. The Government is expected to submit a report on this to Parliament in early 2022, and any further measures will be outlined in the government discussion on spending limits in April 2022.

The EU tightened its climate target: emissions are to be reduced by at least 55% from the 1990 level by 2030. In the summer, the Commission presented the "Fit for 55" package, which includes several initiatives affecting the energy industry concerning issues such as emissions trading, renewable energy, energy efficiency, carbon sinks and the use of carbon border adjustment mechanisms. Processing of the initiatives by the EU will continue for a couple of years.

In Finland, the Government is preparing a long-term plan for energy taxation. The Government increased the taxation of heating fuels by €105 million at the beginning of 2021. Negotiations on making cost-price nuclear power production exempt from interest expense deduction restrictions continued. The Government continued the preparation of its proposal on the taxation on real estate. The Commission presented its proposal for a directive on ensuring global minimum level taxation which would also cover large domestic groups.

The Government approved water resource management plans for 2022–2027. The decision recognises the important role of hydropower in the electrical power system. The impact of the water resource management plans on the balancing of the electrical power system will be assessed in a separate study.

One of the most significant EU initiatives in 2021 was the sustainable finance taxonomy, which aims to steer funding towards sustainable targets. The taxonomy, which mitigates the impact of climate change and facilitates adaptation, entered into force on 1 January 2022. The Commission published a draft delegated act on nuclear power subsequent to the end of the financial period in early February 2022. Other new initiatives are also expected in early 2022.

Pohjolan Voima's heat and power production

In 2021, Pohjolan Voima's total electricity supply was 12.4 (12.3) TWh. The Group's own electricity production accounted for 11.7 (11.8) TWh, of which the parent company's supplies to its shareholders were 11.3 (11.4) TWh. The subsidiaries supplied 0.5 (0.4) TWh to their other shareholders. Purchases from the Nordic electricity markets were 0.6 (0.5) TWh, and sales amounted to 0.2 (0.4) TWh. Heat deliveries were 3.5 (3.6) TWh.

Nuclear power made up 66.2% (67.3%) of the electricity supply. Teollisuuden Voima's Olkiluoto nuclear power plant generated 14.4 (14.6) TWh of electricity, of which Pohjolan Voima obtained 8.2 (8.3) TWh in accordance with its shareholding. The joint capacity factor of the Olkiluoto plant units was 92.8% (93.5%).

Hydropower accounted for 2.1 (2.2) TWh, or 16.6% (18.0%) of the electricity supply. Hydropower production somewhat decreased compared to the previous record-breaking hydropower year.

A total of 1.5 (1.3) TWh of electricity was generated in combined heat and power (CHP) plants. Their share of the total supply was 11.9% (10.7%).

In 2021, approximately 96% of the electricity and 81% of the heat produced by Pohjolan Voima was carbon neutral.



Electricity supply (GWh)

	2017	2018	2019	2020	2021
Nuclear power	7,602	7,987	8,366	8,279	8,186
Hydropower	1,794	1,524	1,631	2,216	2,056
CHP	1,919	2,065	1,669	1,312	1,471
Condensing power	82	409	0	0	0
Electricity purchases	533	543	423	490	646
Total	11,930	12,528	12,089	12,298	12,360

Key events in 2021

On 26 March 2021, Pohjolan Voima Oyj announced that the Radiation and Nuclear Safety Authority (STUK) had given a fuel loading permit for the Olkiluoto 3 plant unit of the joint venture Teollisuuden Voima Oyj (TVO), and that by granting the permit, STUK had verified TVO's readiness to start the loading of fuel. Fuel loading was completed on 1 April 2021.

On 17 May 2021, Pohjolan Voima Oyj published a stock exchange release reporting that TVO had reached a consensus with the Areva-Siemens Consortium on the terms and conditions of the OL3 EPR project completion. Main principles include replenishment of approximately €600 million to the trust mechanism of the Areva companies agreed in the 2018 Global Settlement Agreement (GSA) as of the beginning of January 2021, covering both parties' own costs from the beginning of July 2021 until the end of February 2022, and an additional compensation from the plant supplier consortium to TVO depending on the time of completion if the OL3 project is not completed until the end of February 2022. Agreements on the amendments to the 2018 Global Settlement Agreement for the OL3 EPR project were signed on 2 June 2021 and entered into force after all the implementation conditions were fulfilled in July 2021.

Pohjolan Voima Oyj published stock exchange releases on 30 July 2021 and 20 August 2021 regarding OL3 EPR time schedule changes received by TVO from the plant supplier Areva-Siemens consortium. The stock exchange release on 20 August 2021 reported that TVO has received information from the plant supplier Areva-Siemens consortium that the regular electricity production of the OL3 EPR plant unit will be further postponed for three months compared to the prior release due to extended turbine overhaul and inspection works. During the turbine inspection works, the plant supplier has decided to extend the overhaul to all three low-pressure turbines in order to perform further inspections on them. According to the received information from the plant supplier, the start-up of the OL3 EPR reactor, i.e. first criticality, will take place in January 2022, first electricity production will take place in February 2022, and the regular electricity production in June 2022.

On 16 December 2021, Pohjolan Voima Oyj announced that TVO had been granted the permission for startup for the OL3 plant unit by the Radiation and Nuclear Safety Authority. The plant unit was started on 21 December 2021.

Pohjolan Voima's shareholders Oulun Energia Oy and Kemira Oyj, which own the G5 series shares entitling them

to the energy produced by Laanilan Voima Oy, announced on 19 January 2021 that they are planning to restructure the energy functions in the Laanila industrial district in Oulu. As part of the restructuring, it was decided to end the production operations of Laanilan Voima on 31 March 2021. Because of the restructuring, statutory labour negotiations were held at the company. As a result of the negotiations, some of the employees of Laanilan Voima were transferred to the service of Oulun Energia Oy in May, while some positions were terminated. In connection with the termination of Laanilan Voima's production operations, the extraordinary general meeting decided on 27 May 2021 to reduce Pohjolan Voima's share premium reserve by €2,133,941.69 and to invest the funds in the company's reserve for non-restricted equity. In addition, the Board of Directors was authorised to decide on the distribution of funds as return of capital from the reserve for invested non-restricted equity for a maximum of €7 million. The capital return was paid in December 2021.

On 25 October 2021, the extraordinary general meeting approved the sale of Hämeenkyrön Voima Oy's shares to the Metsä Board Corporation. The transaction was concluded after the end of the financial period on 1 January 2022. At the same general meeting, it was decided to reduce the share capital by €359,249.42 to acquire the company's G10 series shares. The share capital reduction and the directed acquisition are related to the sales of the shares in Hämeenkyrön Voima.

Pohjolan Voima Oyj started the planning of a battery solution to advance the storage of energy. The 35 MW battery solution is intended to secure the operation of the electrical power system and increase the flexibility of regulating power. The preliminary design of the lithium-ion battery solution was completed at the end of the financial period.

Pohjolan Voima published its long-term carbon neutrality target in March 2021. The target is that 99% of electricity production and 85% of heat production will be carbon neutral by 2025.

Result from operations and financing

Pohjolan Voima operates on a cost price principle. The 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 targets and risks of Pohjolan Voima's financing operations have been defined in a financing policy approved by the parent company's Board of Directors. The financial risks of Pohjolan Voima's business operations are related to liquidity, market and credit risks. Financial risk management is covered in note 3 to the consolidated financial statements.

The Group's liquidity is good. On 31 December 2021, cash and cash equivalents totalled €38 (44) million, and the Group had €329 (350) million of undrawn committed revolving credit facility agreements. The revolving credit facility agreements will mature in June 2023. For short-term funding, the Group had a domestic commercial paper programme of €300 (300) million, of which €100 (99) million was used.

The Group's interest-bearing liabilities amounted to €1,198 (1,234) million. There were no liabilities involving an exchange rate risk, and the Group's loan agreements do not include any financial covenants.

At the end of the year, the Group's equity ratio was 40.6% (40.7%). Consolidated turnover from continuing operations was €470.6 (411.5) million. Operations of PVO-Lämpövoima Oy, the plants of which were closed down in 2015, have been reported in the consolidated financial statements as discon-



tinued operations. The consolidated result for the financial period was €-27.0 (-17.9) million. The loss for the financial period was mainly affected by the profit share from the joint venture TVO.

Investments

Total investments of Pohjolan Voima Group, excluding financial investments and the purchase of emission allowances, amounted to €6.9 (8.1) million.

PVO-Vesivoima Oy invested in an overhaul of the Jumisko hydropower plant, a reform of the operations management system and a downstream migration route for migratory fish constructed at the Haapakoski power plant. PVO-Vesivoima's investments totalled €5.1 million. The Group's remaining investments were made in replacements and renovations.

Between 2004 and 2021, Pohjolan Voima Oyj invested a total of €991.6 (991.6) million in the OL3 nuclear power plant currently under the test production. The investments are based on the financing plan for the OL3 EPR project, according to which the equity required for the investment will be accumulated as the project progresses.

Research and development

Research and development expenditure during the financial period totalled €35 thousand (2020: 78 and 2019: 84).

Personnel

The average number of employees working for the Group was 54 (2020: 82 and 2019: 89), including the discontinued operations. The number of employees decreased due to the closure of Laanilan Voima's operations. The Group's salaries and fees for the financial period, including the discontinued operations, totalled €5.9 million (2020: 7.2 and 2019: 7.6). The average age of permanent employees was 47 (45) years.

The average number of employees working for the parent company was 30 (2020: 35 and 2019: 35). Salaries and fees for the financial period totalled €3.7 million (2020: 3.9 and 2019: 4.0).

Responsibility

Our operations are guided by responsibility policies approved by the Pohjolan Voima Board of Directors: the Code of Conduct, Competition Law Policy, Personnel Policy and Environmental and Energy Efficiency Policy. Pohjolan Voima is committed to compliance with all applicable laws and regulations. The Group's operating principles include principles on human rights, labour rules and anti-corruption. Pohjolan Voima expects its partners to comply with the same principles.

Pohjolan Voima has selected four of the UN Sustainable Development Goals, which we promote through our operations: affordable and clean energy, decent work and economic growth, life on land and partnership for the goals.

Important sustainability achievements in 2021 included 96% of the production being carbon neutral, the completion of Finland's first downstream migration solution at the Haapakoski hydropower plant on the Iijoki river, being awarded the title of Finland's most inspiring workplace for the third time in a row as a result of our personnel survey and starting work to safeguard biodiversity.

More information about Pohjolan Voima's sustainability goals and the related work is available on the company's website at www.pohjolanvoima.fi.

Pohjolan Voima and the EU taxonomy

The EU Taxonomy Regulation was introduced as a common classification system for sustainable economic activities. The aim of the taxonomy is to scale-up sustainable investments and direct capital flows towards technologies and businesses that are considered sustainable. For the 2021 financial period,

large public interest entities only need to provide information on the share of taxonomy-eligible and non-taxonomy-eligible economic activities in their total turnover, investments and operating costs. Pohjolan Voima is not obliged to report according to the Taxonomy Regulation but has assessed its eligibility due to the remarkability of the financial operations.

Pohjolan Voima's different production methods are treated differently regarding eligibility for the taxonomy. In the case of nuclear power, the preparation of the taxonomy criteria remains ongoing, and a decision on the inclusion of nuclear power in the taxonomy from 1 January 2023 will be made during the spring of 2022. The Commission published a draft delegated act on nuclear power in early February 2022. Due to the open situation on the closing date, €0 of Pohjolan Voima's nuclear power related turnover is taxonomy-eligible according to the currently valid Taxonomy Regulation. Pohjolan Voima did not carry out any nuclear related investments in 2021.

Hydropower electricity production is included in the taxonomy's "substantial contribution to climate change mitigation" category, which means that it is business included in the scope of the taxonomy. According to our current interpretation, €16 million of Pohjolan Voima's hydropower-related turnover and €5 million of capital expenditure are taxonomy-eligible under the current Taxonomy Regulation.

Cogeneration of heat/cool and power from bioenergy is included in the taxonomy's category "substantial contribution to climate change mitigation", which means that they are businesses included in the scope of the taxonomy. According to our current interpretation, €135 million of Pohjolan Voima's CHP turnover and €2 million of capital expenditure are taxonomy-eligible under the current Taxonomy Regulation.

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 the production companies are using the ETJ+ energy efficiency system or an ISO 50001 energy management system. Some of these systems are certified. Nearly all our production companies have also signed energy efficiency agreements for the 2017–2025 period. Furthermore, the environmental management system of TVO (a joint venture of Pohjolan Voima) is EMAS-registered.

Water levels were regulated, and hydropower plants operated in compliance with the permit conditions. In line with its obligations, PVO-Vesivoima stocked the Iijoki and Kemijoki waterways and the sea area with around 2.3 (2.6) million fry during the reporting period.

PVO-Vesivoima is participating in the Iijoki project on migratory fish in 2020–2022, which continues the migratory fish spearhead project of 2017–2020. Finland's first downstream migration route for migratory salmon fry, included in the project, was completed in Haapakoski in November 2021. The project also promotes the Raasakka fishway. Three appeals have been lodged with the Vaasa Administrative Court against the water resources management permits granted to the fishways in December 2020.

In March 2017, the Centre for Economic Development, Transport and the Environment (ELY Centre) for Lapland filed a petition of appeal 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 ELY Centre filed a similar petition concerning the Iijoki river. PVO-Vesivoima submitted complaints regarding both appeals to the Regional State Administrative Agency. In 2021, PVO-Vesivoima submitted its response to the appellant's accounts and statements issued by the Finnish Environment Institute.



All the thermal power plants operated by the Group fall within the sphere of the Emissions Trading Act. Carbon dioxide emissions from the production of electricity and heat amounted to 0.6 (0.6) million tonnes. The notes to the financial statements only indicate the carbon dioxide emissions of the subsidiaries, 0.3 (0.4) million tonnes. Emissions into the air declined somewhat from the previous year, except for nitrogen oxides. Sulphur dioxide emissions amounted to 0.5 (0.5) thousand tonnes, nitrogen oxide emissions to 1.8 (1.6) thousand tonnes and particle emissions to 0.1 (0.1) thousand tonnes.

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 whose main field of activity is energy production will have to adjust their operations to the conclusions within four years. The first power plants prepared their applications for the review of their environmental permits in 2018, and the work on permits has continued in 2021. The emission limits will be stricter in the new environmental permits.

Pohjolan Voima and its subsidiaries, associated companies and joint ventures are not aware of any environmental liabilities that have not been covered. Pohjolan Voima's more detailed environmental information is published on the company's 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.

Risk management

Risk management aims to ensure realisation of the strategy and achievement of the business goals, as well as safeguard continuity and disturbance-free operations. Risk management is carried out in line with the Group's risk management policy. The Group applies a decentralised risk management

model: each subsidiary's Board of Directors and the parent company's units are responsible for the risks related to their operations, as well as the identification and analysis of these risks. Risks that may compromise the achievement of the objectives are estimated, and measures for their management are defined. The significance of the risks is estimated as the sum of their likelihood and impact.

Group-level risks and the significance of these risks are presented in a risk matrix in terms of consequences and likelihood. The Group-level risks are reported to the parent company's Executive Group and Board of Directors in accordance with the annual management schedule.

All Pohjolan Voima companies are covered for risks of damage through measures related to maintenance, occupational health and safety, adequate training provided to the personnel and other necessary measures, as well as through insurance in line with the Group's insurance policy.

Key risks and uncertainties

The Group's most significant risks are related to the schedule of TVO's OL3 EPR project, the consortium company Areva's sufficient financial capacity to fulfil its responsibilities until the end of the guarantee period and the profit-yielding capacity of the OL3 project. Under the plant contract, electricity production was scheduled to start at the end of April 2009. The completion of the project, however, has been delayed. Electricity production will start at a 25 percent power output which is approximately 400 MW, in March 2022. OL3's regular electricity production will start in July 2022.

A risk related to planned completion refers to a situation where commercial use cannot be started as planned, which leads to additional costs.

TVO executed several risk management measures related to the OL3 EPR project in 2021 to improve TVO's readiness to commission the plant unit and the operation of three nuclear

Pohjolan Voima Oyj's shareholders

Shareholder	Shareholding, % 31 December 2021	Shareholding, % 31 December 2020
EPV Energy Ltd	5.489	5.489
Helen Ltd	0.619	0.619
Ilmarinen Mutual Pension Insurance Company	1.831	1.831
Kemira Oyj (incl. Neliapila pension fund)	5.060	5.060
Kokkolan Energia Oy	1.803	1.803
Kymppivoima Oy	5.907	5.907
Metsä Group (Metsäliitto Cooperative, Metsä Fibre, Metsä Board Oyj)	3.657	3.657
Myllykoski Oyj*	0.631	0.631
Oulun Energia Ltd	0.906	0.906
Outokumpu Oyj	0.096	0.096
Perhonnjoki Ltd	2.208	2.208
City of Pori	1.366	1.366
Rautaruukki Corporation	0.090	0.090
Stora Enso Oyj	15.608	15.608
Finnish Power Ltd	1.476	1.476
UPM Energy Ltd*	47.727	47.727
UPM Communication Papers Ltd*	3.457	3.457
Vantaa Energy Ltd	0.229	0.229
Yara Suomi Oy (incl. pension fund)	1.840	1.840

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



power plant units. TVO closely monitors the compliance of the conditions set in the settlement agreement in March 2018 and amendments to the agreement in June 2021 and ascertains that the commissioning of OL3 is executed according to the schedule provided by the Plant Supplier and that financial and technical resources are secured.

If the OL3 EPR project fails to reach the projected output level, load factor, or operating cost structure during the warranty period, or if the output level is restricted by the main grid, there is a risk that the production costs will increase in comparison to the objective. This risk has been analysed using various scenarios influencing OL3's profit-yielding capacity.

TVO will ensure that operating experience gained from the Taishan sister plant are utilised during the nuclear commissioning of OL3.

The COVID-19 pandemic has only had minor effects on Pohjolan Voima's business. Pohjolan Voima has taken extensive precautions to safeguard its employees' health and safety and to ensure energy production.

Share capital and share issues

On 31 December 2021, Pohjolan Voima's share capital was €55.3 (55.3) million and the total number of shares was 32,509,113 (32,509,113). In accordance with the decision of the extraordinary general meeting on 25 October 2021, the company initiated a procedure to reduce the share capital by €359,249.42. The reduction procedure was registered on 2 December 2021 and remains ongoing.

In November 2020, Pohjolan Voima raised a total of €90 million of the shareholder loan commitments that it had received from its shareholders in 2018. The shareholder loans received from shareholders are accompanied by rights of option issued by the company, which entitle the holder to convert the shareholder loan receivable into B2 shares. The granted rights of option entitle the holder to a maximum of 1,613,347 new B2 shares. The subscription period for the rights of option began on 1 January 2021. No rights of option were exercised during the financial period. In December 2020, Pohjolan Voima received new shareholder loan commitments totalling €238 million, which remained unused at the end of the financial period. In connection with the shareholder loan commitments, rights of option were also issued. Their share subscription period will begin on 1 January 2023 and give entitlement to up to 7,198,950 pieces of new B2 shares.

No share issues were carried out during the financial year.

Management

The following persons were elected as ordinary members of the Board of Directors by the annual general meeting on 25 March 2021: Tapio Korpeinen, Chief Financial Officer (UPM-Kymmene Corporation); Seppo Parvi Chief Financial Officer (Stora Enso Oy); Jukka Hakkila, Group General Counsel (Kemira Oy); Anders Renvall, Managing Director (Kymmenvoima Oy); Tomi Sederholm, Vice President (UPM-Kymmene Corporation); Esa Kaikkonen, CEO (Metsä Tissue Oy); Rami Vuola, President & CEO (EPV Energy Ltd); Juha-Pekka Weckström, CEO (Helen Oy); and Jouni Lampinen, Director, Corporation Governance Department (City of Pori).

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. The Board of Directors convened 19 (19) times in 2021. The company's CEO was Ilkka Tykkyläinen, M.Sc. (Eng.), eMBA.

Major legal actions pending

On 30 September 2021, PVO-Lämpövoima Oy submitted an application to the Arbitration Institute of the Finland Chamber of Commerce on the commencement of arbitration proceedings in a dispute between PVO-Lämpövoima and Alfa Oil Oy. The dispute concerns a failure of Alfa Oil to meet its obligations under a deed of sale on a rock storage facility signed on 4 July 2018 by PVO-Lämpövoima and Alfa Oil. The matter is still pending.

Events after the end of the financial period

On 25 October 2021, Pohjolan Voima Oy announced a decision of the extraordinary general meeting to approve the sale of shares in Hämeenkyrön Voima Oy to Metsä Board Corporation. The share transaction took place on 1 January 2022. The same meeting also decided on the repayment of capital amounting to €11,602,350.58 from the company's reserve for invested non-restricted equity. The repayment of capital took place on 5 January 2022.

Pohjolan Voima Oy published on 3 February 2022 a stock exchange release stating that Teollisuuden Voima Oy has announced that the OL3 EPR plant unit's electricity production starts at the end of February, and regular electricity production starts in July 2022. The start of electricity production is postponed due to modification needs observed during the test production phase. Teollisuuden Voima Oy specified on 12 February 2022 that the plant unit's electricity production will start in March 2022.

Outlook

During the current financial period, power and heat production is expected to continue as in the preceding year at the plants owned by Pohjolan Voima.

OL3's test production phase will be continued with the aim of starting regular electricity production in July 2022. During the test production phase, the output of the plant unit will be increased in stages from around 400 MW to 1,300 MW. TVO will carefully follow the fulfilment of the conditions according to the 2018 GSA and the amendment agreements signed in June 2021 as well as the commissioning stages of OL3 so that they are carried out according to the Plant Supplier's schedule ensuring financial and technical resources.

Proposal of the Board of Directors regarding the distribution of profit

On 31 December 2021, the parent company's distributable funds totalled €302,067,180.10, of which net profit for the financial period amounted to €-7,103,531.61. The Board of Directors proposes to the annual general meeting that the loss for the financial year be transferred to the retained earnings account and that no dividend be distributed.



Key figures (IFRS)

IFRS	2021	2020	2019	2018	2017
Turnover, € million	471	411	417	515	455
Operating result, € million	-20	-3	45	-7	10
Net interest-bearing liabilities, € million	600	629	738	753	788
As percentage of turnover, %	127	153	175	146	173
Equity ratio, %	41	41	39	39	40
Total assets, € million	2,174	2,189	2,106	2,103	2,089
Investments, € million	7	8	4	5	7
Average number of personnel	54	82	89	106	119



FINANCIAL STATEMENTS 2021

Consolidated financial statements (IFRS)	47
Consolidated statement of comprehensive income	47
Consolidated balance sheet	48
Consolidated statement of cash flows	49
Consolidated statement of changes in equity	50
Notes to the consolidated financial statements	52
Parent company financial statements (FAS)	99
Income statement	99
Balance sheet	100
Basis of preparation	102
Notes to the income statement	103
Notes to the balance sheet	105
Board of Directors' dividend proposal	113
Auditor's Report	114



Consolidated financial statements (IFRS)

Consolidated statement of comprehensive income

1,000 €	Note	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Continuing operations			
Sales	7	470,550	411,492
Other operating income	8	2,512	1,134
Materials and services	9	-370,729	-313,338
Personnel expenses	10	-7,105	-8,385
Depreciation, amortisation and impairment	11	-51,883	-39,050
Other operating expenses	12,13	-47,584	-48,948
Share of (loss)/profit of associates and joint ventures	19	-15,735	-6,138
Operating profit or loss		-19,974	-3,233
Finance income	14	8,408	2,958
Finance costs	14	-14,826	-14,960
Finance costs - net		-6,418	-12,002
Profit before income tax		-26,392	-15,235
Income tax expense	15	-1	1
Profit for the year from continuing operations		-26,393	-15,234
Discontinued operations			
Profit/loss from discontinued operations		-557	-2,692
Profit for the year		-26,950	-17,926

Other comprehensive income:

1,000 €	Note	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Items, that may be reclassified later to profit or loss			
Share of other comprehensive income of associates			
Cash flow hedging	19	25,952	-12,866
Other comprehensive income for the year		25,952	-12,866
Total comprehensive income for the year		-998	-30,792
Profit attributable to:			
Owners of the parent		-26,731	-18,312
Non-controlling interest		-219	386
		-26,950	-17,926
Total comprehensive income attributable to:			
Owners of the parent		-779	-31,178
Non-controlling interest		-219	386
		-998	-30,792



Consolidated balance sheet

1,000 €	Note	31 Dec 2021	31 Dec 2020
ASSETS			
Non-current assets			
Intangible assets	16	284,091	283,569
Property, plant and equipment	17,18	368,611	442,889
Investments in associated companies and joint ventures	19	744,981	734,764
Other financial assets	20	471	484
Loans and other receivables	21	596,530	596,530
Non-current assets total		1,994,684	2,058,236
Current assets			
Inventories	23	6,131	9,210
Trade and other receivables	21	103,371	75,159
Cash and cash equivalents	22	38,430	44,312
Current assets total		147,932	128,681
Assets held for sale	24	31,475	2,556
Total assets		2,174,091	2,189,473

1,000 €	Note	31 Dec 2021	31 Dec 2020
Equity			
Equity attributable to owners of the parent			
Share capital	25	55,321	55,321
Share premium		203,865	205,999
Reserve for invested non-restricted equity		322,778	327,644
Revaluation reserve		10,205	-15,747
Subordinated shareholders loans (hybrid equity)		90,347	90,347
Retained earnings		158,910	186,132
Total		841,426	849,696
Non-controlling interests			
Total equity		882,279	890,768
LIABILITIES			
Non-current liabilities			
Provisions	26	6,076	5,064
Borrowings	27	1,082,398	1,050,743
Other non-current liabilities	27,29	4,662	10,549
Non-current liabilities total		1,093,136	1,066,356
Current liabilities			
Borrowings	27	116,087	182,836
Trade and other payables	28	61,486	49,513
Current liabilities total		177,573	232,349
Liabilities related to assets held for sale	24	21,103	0
Total liabilities		1,291,812	1,298,705
Total equity and liabilities		2,174,091	2,189,473



Consolidated statement of cash flows

1,000 €		Note	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Cash flows from operating activities				
Profit for the year			-26,950	-17,926
Adjustments to the profit for the year	6		76,227	56,653
Change in net working capital	6		-12,040	-3,309
Interest paid and other financial expenses			-14,788	-12,342
Interest received			2,829	2,933
Income tax paid			-1	12
Net cash generated from operating activities			25,277	26,021
Cash flows from investing activities				
Purchases of intangible assets and property, plant and equipment (PPE)	16,17		-7,216	-7,515
Proceeds from sales of intangible assets and PPE	16,17		971	569
Loans granted	21,27		0	-150,580
Net cash used in investing activities			-6,245	-157,526
Cash flows from financing activities				
Equity refunds paid	25		-7,000	0
Withdrawals of subordinated shareholders loans (hybrid equity)	25		0	90,347
Interest paid of subordinated shareholders loans (hybrid equity)	25		-491	0
Proceeds from borrowings	24,27		144,728	205,514
Repayments of borrowings	24,27		-146,000	-160,347
Principal elements of lease payments	24,27		-16,112	-12,556
Proceeds (+) or repayments (-) of current liabilities	24,27		-39	-9,508
Net cash used in financing activities			-24,914	113,450
Net (decrease)/increase in cash and cash equivalents			-5,882	-18,055
Cash and cash equivalents at the beginning of year			44,312	62,367
Change in cash and cash equivalents			-5,882	-18,055
Cash and cash equivalents at the end of year	22		38,430	44,312

Cash flow from discontinued operations is disclosed in note 24.



Consolidated statement of changes in equity

1,000 €	Note	Share capital	Share premium	Fair value reserve	Reserve for invested non-restricted equity	Subordinated shareholders loans (hybrid equity)	Retained earnings	Equity attributable to owners of the parent	Equity attributable to non-controlling interest	Total equity
Balance at 1 Jan 2020		55,321	205,999	-2,881	327,644	0	204,444	790,527	40,686	831,213
Comprehensive income										
Profit or loss							-18,312	-18,312	386	-17,926
Other comprehensive income:										
Cash flow hedges				-12,866				-12,866		-12,866
Total other comprehensive income for the year		0	0	-12,866	0	0	0	-12,866	0	-12,866
Total comprehensive income for the year		0	0	-12,866	0	0	-18,312	-31,178	386	-30,792
Transactions with owners										
Change in subordinated shareholders loans (hybrid equity)	25					90,347		90,347		90,347
Transactions with owners total		0	0	0	0	90,347	0	90,347	0	90,347
Balance at 31 Dec 2020		55,321	205,999	-15,747	327,644	90,347	186,132	849,696	41,072	890,768



Consolidated statement of changes in equity

1,000 €	Note	Share capital	Share premium	Fair value reserve	Reserve for invested non-restricted equity	Subordinated shareholders loans (hybrid equity)	Retained earnings	Equity attributable to owners of the parent	Equity attributable to non-controlling interest	Total equity
Balance at 1 Jan 2021		55,321	205,999	-15,747	327,644	90,347	186,132	849,696	41,072	890,768
Comprehensive income										
Profit or loss							-26,731	-26,731	-219	-26,950
Other comprehensive income:										
Cash flow hedges				25,952				25,952		25,952
Total other comprehensive income for the year		0	0	25,952	0	0	0	25,952	0	25,952
Total comprehensive income for the year		0	0	25,952	0	0	-26,731	-779	-219	-998
Transactions with owners										
Interest paid of subordinated shareholders loans (hybrid equity)	25						-491	-491		-491
Refund of reserves	25				-7,000			-7,000		-7,000
Transfer to reserve for invested non-restricted equity	25		-2,134		2,134			0		0
Transactions with owners total		0	-2,134	0	-4,866	0	-491	-7,491	0	-7,491
Balance at 31 Dec 2021		55,321	203,865	10,205	322,778	90,347	158,910	841,426	40,853	882,279



Notes to the consolidated financial statements

1 NOTES TO THE FINANCIAL STATEMENTS

General information

Pohjolan Voima Oyj (PVO) is a Finnish public limited liability company with domicile in Helsinki, Finland. Pohjolan Voima Oyj and its subsidiaries form together the Pohjolan Voima Group.

Pohjolan Voima Group is a privately owned energy group. The production capacity of the Group consists of 20 power plants in 16 different locations. Energy is generated by hydropower, nuclear power and thermal power.

Copies of the consolidated financial statements can be obtained from www.pohjolanvoima.fi or from PVO's head offices, Töölönkatu 4, 00100 Helsinki, Finland.

These consolidated financial statements were approved for issue by PVO's Board of Directors on 21 February 2022, however, according to Finnish Limited Liability Companies Act the shareholders can edit or reject these financial statements at the annual general meeting.

Basis of preparation

The consolidated financial statements of Pohjola Voima Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. The IAS and IFRS standards as well as and IFRIC and SIC Interpretations valid as at 31 December 2021 have been used in preparation of the financial statements. The consolidated financial statements also comply with the Finnish Accounting Act and Limited Liability Companies Act.

All amounts in the consolidated financial statements are presented in thousands of euros.

The preparation of 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. The areas involving higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in section "Critical judgements in applying the entity's accounting policies and critical estimations and assumptions".

Impact of COVID-19 on the financial statements

The impact of COVID-19 on Pohjolan Voima's financial statements has been minor. The Group has assessed the impact of COVID-19 to the balance sheet by considering indicators of impairment of the right to produce hydropower as well as the water area permanent usage right included in the intangible assets, recoverable amount of tangible assets as well as valuation of inventories and receivables. The expectations of future cash flows, discount rate and other significant valuation inputs were revised to reflect

changed economic environment. Based on the assessment and revised valuation input no adjustment to the carrying values of the said assets were made. The Group expects that it will continue to operate and meet its liabilities as they fall due. COVID-19 has so far had no material impact on Group's financing.

Cost-price principle

According to the Articles of Association of PVO, the Group supplies electricity and heat at cost price to the shareholders which means that it delivers the electricity it has produces or procured to its shareholders in proportion to their shareholdings in each series. The operating model of PVO is also called the "Mankala principle". Each of the shareholders of each series bears their share of the variable and fixed annual costs as specified in the company's legal documents. Parent company administrative costs are covered by a fixed yearly fee as defined by the company's legal documents.

In accordance with PVO's Articles of Association, each shareholder's share of the liability for the annual costs will always be limited to the amount corresponding to the proportion of its shareholding to all shares belonging to the same series, and another shareholder's failure will not increase the shareholder's liability based on shareholding. The shareholders are liable for costs specified in the Articles of Association paragraph 4.

Consolidation

Subsidiaries

The consolidated financial statements include Pohjolan Voima Oyj and all its subsidiaries. Subsidiaries are those entities over which the Group has control. The Group has control over an entity if it has power over the entity; it is exposed or has rights to variable returns from its involvement with the entity and has the ability to use its power to affect the amount of its returns from the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

The Group uses the acquisition method of accounting to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabil-



ities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Group recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets. The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition date fair value of any previous equity interest in the acquiree over the fair value of the Group's share of the identifiable net assets acquired, is recorded as goodwill. If this is less than the fair value of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in the statement of comprehensive income.

Inter-company transactions, balances, distributions of profit and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless they relate to an impairment.

Associated companies and joint arrangements

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Joint arrangements are either joint operations or joint ventures. A joint venture is a contractual joint arrangement whereby the Group together with one or more parties has undertaken an economic activity that is subject to joint control and whereby The Group with other parties has rights to the net assets of the joint arrangement. All joint arrangements in the Group are joint ventures.

Investments in associates and joint ventures are accounted for using the equity method of accounting and are initially recognised at cost. The Group's share of its associates' and joint ventures' post-acquisition profits or losses is recognised in the statement of comprehensive income, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. The Group's investment in associates and joint ventures includes goodwill identified at acquisition, net of any accumulated impairment losses. When the Group's share of losses in an associate or joint venture equals or exceeds its interest in the associate or joint venture, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate or joint venture. Unrealised gains on transactions between the Group and its associates or joint ventures are eliminated to the extent of the Group's interest in the associates or joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates and joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interests

The profit or loss for the period attributable to owners of the parent and non-controlling interest is disclosed in the statement of comprehensive income. Non-controlling interests are identified separately from the equity of the owners of the parent company in the statement of changes in equity.

The Group treats transactions with non-controlling interests as transactions with equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

When the Group ceases to have control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This means that any amounts previously recognised in other comprehensive income are recognized as part of the gain or loss on sale.

Foreign currency translation

The functional and presentation currency of the parent company and all of the subsidiaries, associates and joint ventures is the euro. The consolidated financial statements are presented in euros.

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Assets and liabilities denominated in foreign currencies are translated at the closing rate at the date of that balance sheet. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of comprehensive income, except when deferred in other comprehensive income as qualifying cash flow hedges and qualifying net investment hedges. Foreign exchange gains and losses relating to operations are included on the relevant line items above operating income. Foreign exchange gains and losses that relate to borrowings and cash and cash equivalents are presented in the statement of comprehensive income within 'finance income or cost'. Translation differences on non-monetary financial assets and liabilities held at cost are translated using the exchange rates prevailing at the dates of the transactions. There are no non-monetary financial assets or liabilities held at fair value denominated in foreign currencies.

Revenue recognition

The Group's energy operations are based on cost price. Sales of expert services relating to energy operations are not based on cost price. Revenues are based on the consideration received for delivered energy or provided services. All revenues are presented net of value-added taxes. Revenues are recognised, as follows:

Energy revenues and other revenues

Revenue on sales of energy is divided into variable and fixed charge. Revenue on sales of energy concerning variable charge is recognised at the time of delivery. Revenue is recognised based on the delivered quantities. Both the variable and fixed charge is invoiced and recognized in turnover monthly and are paid retrospectively on the 24th of next month. Service revenue mainly consists of administration service revenues. Revenue for services is recognised in the financial period when services have been rendered and when the control of the service transfers to a customer.

Other income

Revenue from activities outside the normal operations is reported in Other income. This includes recurring items such as rental



income and non-recurring items such as gains on sale of property, plant and equipment. Rental income is recognised on a straight-line basis over the period of the lease agreement. The gain on sale of property, plant and equipment is recognised when the significant risks and rewards of ownership have been transferred to the buyer.

Research and development costs

Research and development costs are expensed as incurred and included in other operating expenses, except when the development costs are expected to generate probable future economic benefits. In this case the costs are recorded as intangible assets and amortised over their useful lives. There are no development costs currently in the consolidated financial statements that fulfil the criteria for recognition as an intangible asset.

Interest income and dividends

Interest income is recognised using the effective interest method. Dividends are recorded when the right to receive payment is established.

Borrowing costs

Borrowing costs are recognised as an expense in the period in which they are incurred, unless they are directly attributable to construction of a power plant, in which case they are capitalized as a part of the cost of the asset.

Income taxes

PVO delivers electricity and heating to its shareholders at cost price. The shareholders are delivered a proportionate share of the energy generated or procured by PVO according to their proportionate ownership in the various series of shares. Based on the cost-based pricing the Group does not pay any taxes on its energy related operations, therefore the Group does not recognise any deferred tax assets or liabilities on these operations. Income taxes and deferred taxes are recognised, on the other hand, on the services provided by the Group.

The tax expense for the period comprises current tax, relating to the current period and any adjustments made to taxes for the previous financial period, and deferred taxes. The current income tax charge is calculated on the basis of the tax laws enacted. The taxes for the current period are adjusted if necessary by the taxes related to the previous period.

Deferred income tax is recognised, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill or from the undistributed profits of the subsidiaries if it is not probable that the

temporary difference will reverse in the foreseeable future. The most significant temporary differences for the Group arise from the depreciation of property, plant and equipment, losses carried forward and the fair valuation of assets at acquisition.

Deferred income tax is determined using tax rates (and laws) that have been enacted by the balance sheet date. Deferred income tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Intangible assets

Intangible assets are carried at historical cost, less government grants received, accumulated amortisation and impairment. Historical cost includes all costs directly attributable to the acquisition of the intangible asset. Intangible assets with a finite useful life are amortised using the straight-line method over the following estimated useful lives:

Computer software	3–10 years
Other intangible assets	5–10 years

No amortisation is recorded for goodwill and other intangible assets with infinite useful lives, instead these assets are tested annually for impairment. Intangible assets having infinite useful lives are water rights that have an infinite useful life based on *the Water Act* and certain utilisation rights for transmission roads and land based on *the Act on the Redemption of Immoveable Property and Special Rights*.

Emission allowances

Carbon dioxide (CO₂) emission allowances are included in the intangible assets. Emission allowances are recognised at cost, whether received free of charge or acquired from a third party. Emission allowances received free of charge are, in other words, recorded at zero. A short-term liability is recognised to cover the obligation to return emission allowances. To the extent that Group already holds allowances to meet the obligation the liability is measured at the carrying amount of those allowances. Any shortfall of allowances held over the obligation is valued at the current market value of allowances. Emission right and the related liability are derecognised when they are returned to cover the obligation or when they are sold. Emission allowances are not amortised. The cost of the provision is recognised in the statement of comprehensive income within materials and services. Gains from sales of emission rights are presented in Other income.

Property, plant and equipment

Property, plant and equipment is stated at historical cost less government grants received, less accumulated depreciation and



any accumulated impairment. Historical cost includes expenditure that is directly attributable to the acquisition of the assets. Borrowing costs directly attributable to the acquisition or construction of assets that necessarily take a substantial amount of time to get ready for their intended use are capitalised as part of the cost of the related asset. Additionally, the cost of an item of property, plant and equipment includes the discounted estimated cost of its dismantlement, removal or restoration.

Land and water areas are not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate their cost or revalued amounts to their residual values over their estimated useful lives. The costs for dismantling a power plant are depreciated over the estimated useful life of the specific power plant.

Depreciation is calculated using the straight-line method based on the estimated useful lives, as follows:

Hydro power plant buildings, structures and machinery	40–80	years
Co-generation (electricity and heating) power plant buildings, structures and machinery	4–35	years
Transmission network	10–45	years
Other buildings and structures	10–25	years
Other machinery and equipment	3–20	years
Other tangible assets	3–40	years

The assets' residual values and useful lives are reviewed and adjusted if appropriate to reflect the changes in estimated future economic benefits associated with the assets.

If the asset consists of different components, which have different estimated useful lives, each component is recognised as a separate asset. Replaced components are capitalized and any possible remaining carrying value of the replaced component is derecognised. In other cases, subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the asset will flow to the Group and the cost of the item can be measured reliably.

Annual repairs and maintenance are charged to the statement of comprehensive income during the financial period in which they are incurred. Power plant modernization and improvements are recognised in the asset's carrying amount or recognised as a separate asset, as appropriate.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within other operating income or other operating expenses in the statement of comprehensive income.

Depreciation on assets classified as held for sale, according to IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations", is ceased.

Government Grants

Grants from the government, are recognised at their fair value where there is a reasonable assurance that the grant will be

received, and the Group will comply with all attached conditions. Government grants relating to the purchase of property, plant and equipment are deducted from the acquisition cost of the asset and are recognised as income by reducing the depreciation charge of the asset they relate to. Government grants relating to costs are deferred and recognised in the statement of comprehensive income over the period necessary to match them with the costs that they are intended to compensate. These grants are presented in other operating income.

Inventories

Inventories are stated at cost. Cost is determined using the first-in, first-out (FIFO) method. The cost of inventory comprises raw materials and other direct costs. Inventories are always stated at cost as the energy generation operations are conducted based on cost price and therefore the cost of inventory is always equal to its' net realizable value.

Leases – Group as lessee

The Group leases various offices, warehouses, retail stores, equipment and vehicles. Rental contracts are typically made for fixed periods of less than 12 months to 50 years. Leases are recognized as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Further, some agreements include asset retirement obligation which is recorded in property, plant and equipment as well as in provisions.

Lease liabilities are measured at the present value of the remaining lease payments, discounted at the Group's incremental borrowing rate, which is a rate the lessee would pay by borrowing the corresponding balance for equal period and with equal collaterals. 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. Asset retirement obligations included in the leasing agreements have been considered in the implementation.



Payments associated with short-term leases of equipment and vehicles and all leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT equipment and small items of office furniture.

Impairment of non-financial assets

The individual assets' carrying values are reviewed at each closing date to determine whether there is any indication of impairment. If there is an indication of impairment the asset is tested for impairment. Goodwill, assets that have an indefinite useful life and intangible assets in progress are not subject to amortisation and are tested annually for impairment regardless of there is indication of impairment or not. Impairment for assets excluding goodwill is assessed at the cash-generating unit (CGU) level, which is the smallest identifiable Group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or Groups of assets. Goodwill is tested for impairment at the level at which it is monitored by management which may be an individual CGU or Groups of CGUs but is not tested at a level higher than an operating segment.

An asset's recoverable amount is the higher of a cash-generating unit's fair value less costs to sell and its value in use. Value in use is the estimated discounted future cash flows expected to be provided by the asset or Group of assets. The discount rates used are pre-tax and reflect current market assessments of the time value of money and specific risks relating to the relevant asset or Group of assets.

Where the carrying value of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. Impairment is recognised immediately in the statement of comprehensive income. Impairment arising from a goodwill impairment test is allocated first to goodwill and any excess thereafter rateably over the other assets in the CGU. Assets other than goodwill that suffered an impairment charge are reviewed for possible reversal of the impairment if the estimates used in the calculation of the recoverable amount have changed. A reversal of an impairment loss shall not exceed the carrying amount (net of amortisation or depreciation) that would have been determined had no impairment loss been recognised for the asset in prior years. Impairment losses on goodwill are never reversed.

Financial assets and financial liabilities

Purchases and sales of financial assets and liabilities are recognised on the trade-date at fair value. Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership.

The Group classifies its financial assets in the following categories according to IFRS 9: assets measured at fair value through profit or loss, at fair value through other comprehensive income and at amortised cost. The classification is determined at initial recognition based on the objective of the Group's business model. The Group does not currently have any financial assets measured at fair value through other comprehensive income.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are financial assets held for trading or initially designated in this category. Derivatives are categorised as held for trading unless they are designated as hedges. All derivatives held by the Group are classified as financial assets at fair value through profit or loss, as hedge accounting is not applied by the Group. Derivatives in this category are classified as current assets if expected to be settled within 12 months; otherwise, they are classified as non-current. When the derivatives have a negative value, they are classified as financial liabilities held for trading. Liabilities in this category are classified as current liabilities if expected to be settled within 12 months; otherwise, they are classified as non-current. Gains or losses arising from changes in the fair value of the 'financial assets at fair value through profit or loss' category are presented in the statement of comprehensive income in the period in which they arise.

Amortised cost

Amortised cost included non-current loan and other receivable as well as current trade and other receivables. Loans and receivables are subsequently carried at amortised cost using the effective interest method and included in current assets and non-current assets; in the latter for maturities greater than 12 months after the end of the reporting period. Trade receivables are recorded at cost which corresponds to their fair value. Loans granted, which have a maturity date, are measured at amortised cost using the effective interest method.

Cash and cash equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks and other short-term highly liquid investments with original maturities of three months or less.

Impairment of financial assets

According to the impairment model, the impairment of financial assets must be determined using a model based on expected credit losses. From the Group's perspective, the impairment model applies to trade receivables and the earlier recognition of their credit losses.

According to the IFRS 9 standard, the Group applies a simplified provision matrix to recognize the credit risks in trade receivables on the basis of which a deductible item is recognized for all trade receivables based on the expected credit losses over the entire period of validity.

The Group's annual credit losses have been very minor and the expected credit losses according to the model do not have a significant impact. Regarding financial instruments measured at amortised cost the Group performs active monitoring and recognizes impairment in profit or loss in accordance with the criteria.

The Group estimates on each closing date whether objective evidence exists of the impairment of an individual financial asset or a group thereof. If the fair value of the financial assets has fallen substantially below their acquisition cost on the closing date, this is considered as evidence of impairment of the financial assets. Evidence of impairment may include, for example, the counterparty's substantial financial difficulties, failure to pay interest or instalments, probability of bankruptcy or other financial reorganization, or observable information indicating determinable reduction of the estimated deferred cash flows, such as changes



in the delay of payments and the counterparty's deteriorated financial situation correlating with the failure to pay.

The Group has shareholder loan receivables from Teollisuuden Voima Oyj, a joint venture of the Group. The management has assessed the impairment risk regarding the loans on the basis of the possible financial difficulties or outstanding interest payments from the counterparty and considered that such does not exist. On the basis of these findings the management considers that no impairment risk exists.

Financial liabilities

Financial liabilities are classified into the following categories in accordance with the IFRS 9 standard: liabilities measured at fair value through profit or loss, at fair value through other comprehensive income as at amortised cost.

Financial liabilities are recognised initially at fair value, net of transaction costs incurred. Financial liabilities are subsequently carried at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the statement of comprehensive income over the period of the borrowings using the effective interest method.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some of or all the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent there is no evidence that it is probable that some of or all the facility will be drawn down, the fee is capitalised as a pre-payment for liquidity services and amortised over the period of the facility to which it relates.

Derivative instruments are recognised as financial liabilities at fair value through profit or loss. These are recognised similarly as financial assets at fair value through profit or loss. They are included in non-current liabilities unless the liability is settled within 12 months of the end of the reporting period.

Derivative instruments

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is hedge accounted as determined in IFRS 9. Group has not applied for hedge accounting and has recognized the gains and losses resulted from fair value measurement through income statement in finance income or cost.

Teollisuuden Voima Oyj (TVO), a joint venture of the Group, is consolidated using the equity method, see *Associates companies and joint arrangements* under the Notes to the Financial statements. TVO uses derivative instruments to hedge the foreign currency exchange rate risk in fuel purchases as well as the foreign currency risk and interest rate risk in borrowings denominated in foreign currencies. Items covered by hedge accounting in accordance with the IFRS 9 standard include instruments used for hedging against the currency risk of uranium supply contracts of TVO (forwards exchange contracts, currency swaps) and some of the interest rate swaps used for hedging against the fluctuation of interest cash flows in the loan agreements of TVO. TVO shall document both at the beginning of and after the hedging its estimate of whether the derivative financial instruments used for hedging transactions are efficient. Derivative financial instruments included in hedge accounting are divided into non-current and current assets and liabilities based on the maturity of the hedged instrument. TVO applies both cash flow and fair value hedge

accounting.

With the adoption of the IFRS 9 standard the assessment of hedge effectiveness is based on future orientation. The ineffectiveness of TVO's hedging relationship is expected to continue being very minor.

IFRS 9 defines three hedge effectiveness requirements for the application of hedge accounting. The first requirement requires a financial connection between the hedged item and hedging instrument. It must be expectable that the changes in the value of the hedging instrument and hedged item are opposite due to the instrument or risk used as the shared basis. Secondly, the standard requires that changes in value due to the financial relationship are not dominated by the impact of credit risk. Thirdly, the hedging rate of the hedging relationship must equal the hedging rate resulting from the amount of the hedging instrument that the organization actually uses for hedging that amount of the hedged item. IFRS 9 requires the same hedging rate that is actually used in risk management.

Other companies in the Group have derivative instruments that do not fulfil the hedge accounting criteria according to IFRS. Examples of these instruments are interest rate swap agreements which have been used to exchange floating rate borrowings into fixed rate borrowings. Derivatives are recorded at fair value in the assets or liabilities. Changes in the fair values of foreign currency forwards and interest rate derivative instruments are recorded through profit and loss within finance income and costs. Derivatives are classified as current or non-current assets or liabilities depending on their maturity date.

Employee benefits

Pensions for the personnel in the Group have been arranged through an external pension insurance company. The Finnish (TyEL) pension system as well as the voluntary pension insurances are recognised as defined contribution plans. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Payments made to the defined contribution plans are recognised as expenses in the period in which they were incurred. Defined benefit plans are plans that are not defined contribution plans. The Group does not have any defined benefit plans.

Provisions and contingent liabilities

Provisions for environmental restoration, asset retirement obligations and legal claims are recognised when: the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense. Where some of or all the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement is recognised when, and only when, it is virtually certain that reimbursement will be received. Provisions are not recognised for operating costs.



A contingent liability is disclosed when there is a possible obligation that arises from external events and whose existence is only confirmed by one or more doubtful future events or when there is an obligation that is not recognised as a liability or provision because it is not probable that an outflow of resources will be required or the amount of the obligation cannot be reliably estimated. Contingent liabilities are disclosed in the notes to the financial statements.

Environmental provisions

Environmental provisions are recognised, based on current interpretation of environmental laws and regulations, when it is probable that a present obligation has arisen, and the amount of such liability can be reliably estimated. Environmental expenditures resulting from the remediation of an existing condition caused by past operations, and which do contribute to current or future revenues, are expensed as incurred.

Accrued expenses related to the handling of ashes

Group companies may have, in temporary storage, ashes generated from the power plant operations, which are subject to waste tax. These ashes may have an alternative utilisation, an alternative utilisation is being sought or there is no alternative utilisation which will result in the ashes being transported to a waste disposal site. Financial statements include an accrued expense, representing the best estimate for the costs of the handling of the ashes held in temporary storage at the end of the reporting period.

Asset retirement obligations

An asset retirement obligation is recognised either when there is a contractual or a legal obligation and the obligation amount and timing can be reliably estimated. The asset retirement obligation is recognised as part of the cost of an item of property and plant when the asset is put in service or when contamination occurs. The costs are depreciated over the remainder of the asset's useful life.

Assets and liabilities relating to nuclear waste management

The treatment of the nuclear waste management liability has a material effect on the profit and loss of Teollisuuden Voima Oyj. The nuclear waste management liability based on the Nuclear Energy Act is covered by a contribution to the Finnish State Nuclear Waste Management Fund. The liability covers all the future expenditure for the handling of the existing nuclear waste, including the decommissioning of the nuclear power plants, the disposal of the spent fuel and a risk marginal. The amount of payments is determined by assuming that the decommissioning would start at the beginning of the year following the assessment year. The research relating to the disposal, as well as the actual disposal of TVO's spent fuel, are carried out by Posiva Oy, which charges from TVO the costs arising from these activities including the acquisition cost of property, plant and equipment.

In the consolidated financial statements of TVO the share of the funds in the Finnish State Nuclear Waste Management Fund, is presented as part of non-current assets according to IFRIC 5. The nuclear waste management liability is presented in provisions, within non-current liabilities. The fair value of the nuclear waste management liability is calculated by discounting the cash flows

based on the planned estimated future activity and the estimated expenditure relating to it taking into account actions already taken.

The initial present value of the provision for decommissioning of the nuclear power plant is included in the capitalized investment cost of the power plant. The initial present value is adjusted according to subsequent planned future changes. The amount recognized relating to decommissioning of the plant is depreciated over the estimated useful life of the power plant.

The provision for spent nuclear fuel covers the future disposal cost of fuel used by the end of each reporting period. The costs for the disposal of the spent nuclear fuel is recognised during the operating time of the plant based on fuel usage. The impact of any changes to the plan will be recognized immediately in the income statement based on fuel used by the end of reporting period.

The timing factor when discounting the nuclear waste management liability is recognised by recording the interest expense in the statement of comprehensive income.

Share Capital

PVO has 14 different series of shares. Each series of shares entitle their owner to the energy generated by a specific subsidiary, associate or joint venture. Each shareholder is entitled to the proportionate share of the energy according to their proportionate ownership of a specific series of shares.

Proceeds received at the inception of the Company and subsequent issue of share capital have been recorded in the share capital, share premium account and after 1 September 2006 also in the reserve for invested non-restricted equity.

Subordinated shareholder loans (hybrid equity)

Subordinated shareholder loans (hybrid equity) are treated as equity. Subordinated shareholder loans (hybrid equity) are initially recognized at fair value including related transaction costs. There is no maturity date for the subordinated shareholder loans (hybrid equity), but the borrower is entitled to repay the loan in one or several instalments. The Board of Directors of the borrower has the right to decide not to pay interest during any current interest period. Unpaid interest does not accumulate to the following interest periods.

The interest of the subordinated shareholder loans (hybrid equity) is recognized in liabilities when the obligation to pay interest is incurred. Interest expenses are recognized in the retained earnings and are not recognized in profit or loss.

Option rights

In connection with the subordinated shareholder loans raised in November 2020 option rights have been also issued, which entitle to convert the shareholder loan receivable into series B2 shares. The option rights issued entitle to maximum of 1,613,347 new B2 shares. The subscription price of a new B2 share is 56 euros and the subscription price can only be paid by setting of the total principal of the shareholder loan receivable that the shareholder has from the Company against the total subscription price of all new B2 shares. The share subscription period started on 1 January 2021 and will last until the repayment of the subordinated shareholder loans.



Pohjolan Voima received new subordinated shareholder loan commitments in total of 238 million euros in December 2020 which were unused at the end of the financial year. In connection of the shareholder loan commitments two separate series of option rights were also subscribed. Option rights 2020 1A entitle to maximum of 3,599,472 new B2 shares with the subscription price of 0.01 euro. The subscription period of new series B2 shares will be from 1 January 2023 to 1 June 2026. Option rights 2020 1B entitle to maximum of 7,198,950 new B2 shares with the subscription price of 33 euros. The subscription price can only be paid by setting of the total principal of the shareholder loan receivable that the shareholder has from the Company against the total subscription price of all new B2 shares. The subscription period of new series B2 shares will start 1 January 2023 and will last until the repayment of the subordinated shareholder loans. If the subordinated shareholder loan commitments received in December 2020 will be raised totally or partly, the number of option rights 2020 1A that base on the loan commitments given will decrease accordingly.

According to IAS 32 the Company has not recorded any entries in the equity as no subscriptions to shares have been made.

Earnings per share

Earnings per share are not presented as the Group operates at cost price. The ordinary shares of Pohjolan Voima Oyj are not traded in a public market.

Assets held for sale and discontinued operations

Assets are classified as assets held for sale and stated at the lower of carrying amount and fair value less costs to sell, if their carrying amount is recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. Assets are not depreciated.

A discontinued operation is a component of an entity that either has been disposed of or is classified as held for sale and:

1. Represents either a separate major line of business or a geographical area of operations
2. Is a part of a single co-ordinated plans to dispose of a separate major line of business or geographical area of operations, or
3. Is a subsidiary acquired exclusively with a view to resale and the disposal involves loss of control.

Profit of discontinued operations is presented as a single amount on the face of the statement of comprehensive income.

Assets held for sale, disposal groups, any cumulative income or expense recognized in the other comprehensive income relating to

a non-current asset classified as held for sale as well liabilities relating to disposal groups are presented separately in the face of the consolidated balance sheet.

Segment reporting

The Group has four reportable segments: hydro power, thermal power, nuclear power and other operations. The chief operation decision maker is the Board of Directors.

Implementation of interpretations and amendments to new and revised IFRS standards

In preparing these financial statements, the group has followed the same accounting policies as in the annual financial statements for 2020.

The Group adopts the following published standards, interpretations and changes to existing standards and interpretations in its 2022 financial statements or later. Based on initial assessment, Group estimates that these have no impact on the consolidated financial statements, unless separately below stated.

- IAS 1 Presentation of Financial Statements (amendment) – classification of liabilities as current or non-current. The amendments clarify that liabilities are classified as either current or non-current, depending on the rights that exist at the end of the reporting period.
- IAS 16 Tangible assets (amendment) – proceeds before intended use. The amendment prohibits an entity from deduction from the cost of an item of PP&E any proceeds received from selling items produced while the entity is preparing the asset for its intended use.
- IFRS 3 Business Combinations (amendment) – reference to the conceptual framework
- IAS 37 Provisions, Contingent Liabilities and Contingent Assets (amendment) – onerous contracts, cost of fulfilling a contract
- Annual Improvements to IFRS Standards 2018–2020
- IAS 1 Presentation of Financial Statements, IAS 8 Disclosure of Accounting Policies (amendments) – accounting policy disclosures and definition of accounting estimates*

*Standard, interpretation or amendment is not yet endorsed by EU.



2 CRITICAL JUDGEMENTS IN APPLYING THE ENTITY'S ACCOUNTING POLICIES AND CRITICAL ESTIMATIONS AND ASSUMPTIONS

The Group management makes judgements in the preparation of the financial statements relating to the selection and application of the accounting principles. These decisions relate specifically to those areas where the effective IFRS-standards allow alternative methods of recording, valuation or presentation.

The estimates and assumptions made by management in the preparation of the consolidated financial statements are based on the best knowledge at hand at year end. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results and the detailed background information are followed by management together with the business units using both internal and external sources of information. Changes to the estimates and assumptions are recognised in the financial period in which changes occur and all the future financial periods.

Teollisuuden Voima Oyj's OL3 EPR power plant unit under the test production phase

Teollisuuden Voima Oyj is accounted for in Pohjolan Voima's consolidated financial statements by using equity method. TVO has OL3 EPR power plant unit under the test production phase that has been ordered under a turnkey principle. According to an announcement of the OL3 turnkey supplier, the delivery will be delayed from the original schedule according to which the power plant unit should have been in production as of 30 April 2009.

During the financial period TVO obtained the permit for fuel loading and loaded the fuel. The first criticality was achieved on 21 December 2021 and electricity production is to start in March 2022 once the plant unit is connected to the national grid. Regular electricity production starts in July 2022.

Pohjolan Voima is not aware of any technical or other issues that would prevent the completion of OL3 EPR project from the test production phase to electricity production. All the ongoing actions in OL3 project will aim to prepare the asset for its intended use.

Legal obligations

Management judgement is required to estimate timing and valuation of the legal obligations. A provision is recorded when: the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Due to inherent uncertain nature of litigation, the actual losses may differ significantly from the originally estimated provision.

The Group has not recorded any provisions on litigations. The Group did not have any ongoing or expectable litigation that would have required judgement on provision recording.

Impairment testing

Impairment testing is carried out annually for goodwill and for intangible assets with indefinite useful lives. Impairment testing for other assets is performed when there is an indication that the asset might be impaired. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations. These calculations are based on estimated future cash flows received from the use of the asset or the sale of the asset.

Pohjola Voima operations are based on the cost-price method ('Mankala principle'). According to the company's legal documents the shareholders of the Company are invoiced a price for the energy received which covers fixed and variable expenses of the operations. When testing if the assets are impaired based on the value-in-use, the discounted cash flows, correspond, except for a few exceptions, to the recoverable amount and therefore usually there is no impairment recorded.

Environmental provision

Operations of the Group are regulated by a number of laws and regulations. The Group is in compliance with all existing environmental regulations. The Group has recorded, for the industry customary, provisions for environment protection expenses to cover its legal obligations.

Environmental provisions base on management's best estimate of landscaping costs. Environmental provisions consist of Asset Retirement Obligations of landfills which relate to ash storage in thermal power business. The Group recognizes a provision on estimated landscaping costs. The cost estimate is annually reviewed.



3 FINANCIAL RISK MANAGEMENT

The financial risk management in Pohjolan Voima Group is carried out centrally by the parent company treasury department under policies approved by the Board of Directors. The Group's activities expose it to a variety of financial risks: liquidity risk, market risk and credit risk.

The objective of the financing function is to ensure the existence of sufficient funds for operative decision making and to promote the low cost of electricity through its decisions.

Derivatives are entered into only for hedging purposes. Pohjolan Voima does not apply hedge accounting under IFRS.

Liquidity and refinancing risks

Liquidity and refinancing risks relate to the impact on the company's profit and loss and cash flows, if the company is unable to secure sufficient funding for its operations. In addition to sufficient liquid funds and committed credit facilities Pohjolan Voima Group seeks to reduce refinancing risk by diversifying the maturity of its loans as well as sources for its funding.

In accordance with Pohjolan Voima Group's financing policy, the maturity of long-term debt and refinancing is agreed so that a maximum of 25% of the outstanding debt will fall due within the next 12 months. This principle is not applied on the loans granted by the State Nuclear Waste Management Fund.

Liquidity risk is significantly reduced by the fact that Pohjolan Voima Group invoices shareholders in accordance with the Articles of Association, the monthly fixed and variable costs.

Free liquidity is invested prudently and productively in instruments with a duration of up to 12 months. The objective is to diversify investments and these are chosen so that a secondary market liquidity is also ensured in adverse conditions and so that most of the investments can be realized at a low cost.

Pohjolan Voima Group mainly uses the domestic commercial paper programs amounting to 300 million euros in order to ensure short-term financing. As at 31 December 2021 100 (99) million euros out of the commercial paper program was in use.

In addition to liquid assets Pohjolan Voima Group's liquidity is secured by 329 million euros (350) revolving credit facilities as well as by shareholder loan commitments of 238 (238) million euros. The revolving credit facility will mature in June 2023. The loan facility was fully undrawn as at 31 December 2021 (as well as per 31 December 2020). The shareholder loan commitments were also undrawn as at 31 December 2021 (as well as per 31 December 2020).

Pohjolan Voima Group's financial arrangements do not include any covenants.

The following table presents a maturity analysis on loan agreements. The figures are cash based and interest flows are based on the interest rates prevailing at the closing date. Differences between the balance sheet items and the debt amounts below arise from the transaction costs that have been accrued according to the effective interest method in the balance sheet. Transaction costs for loan arrangements are not included in the cash flows as these have been paid at the time of the signing of the agreements.



Undiscounted cash flows of financial liabilities

2021

1,000 €	2022	2023	2024	2025	2026–	Total	Balance sheet
Loans from financial institutions ¹	-5,735	-126,500	-140,650		-70,000	-342,885	-342,885
Finance costs ²	-1,900	-1,483	-470	-159	-161	-4,173	
Bonds		-125,000		-150,000		-275,000	-274,429
Finance costs	-4,063	-4,063	-1,875	-1,875		-11,876	
Loan from the State Nuclear Waste Management Fund (TVO) ³					-350,000	-350,000	-350,000
Finance costs	-1,774	-1,774	-1,774	-1,774	-1,774	-1,774	
Lease liabilities ⁴	-10,577	-10,274	-10,002	-15,293	-86,764	-132,910	-131,283
Finance costs	-742	-685	-628	-573	-2,597	-5,225	
Commercial papers	-99,888					-99,888	-99,888
Finance costs	-112					-112	
Interest rate derivatives	-2,775	-2,445	-2,120	-402	-359	-8,101	-4,927
Total	-127,566	-272,224	-157,519	-170,076	-511,655	-1,231,944	

¹ Repayments to be made in 2022 are included in current liabilities.

² In addition to interest expenses, finance costs also include a commitment fee.

³ The loan from the State Nuclear Waste Management Fund does not have an actual date of maturity, and therefore it is presented as a loan with a loan term of over 5 years. According to the section 52 of the Nuclear Energy Act Teollisuuden Voima Oyj is entitled to borrow from State Nuclear Waste Management Fund against securing guarantees the amount which can be a maximum of 75 per cent of the latest confirmed TVO's share in the Fund. TVO has borrowed this amount from the Fund and has granted a loan with the corresponding amount to Pohjolan Voima. The loan is annually renewed and the State Nuclear Waste Management Fund is entitled to ask securing collateral for the loan.

⁴ Lease liabilities according to IFRS 16 included



Undiscounted cash flows of financial liabilities

2020

1,000 €	2021	2022	2023	2024	2025–	Total	Balance sheet
Loans from financial institutions ¹	-71,000	-231,000	-39,050	-2,835		-343,885	-343,885
Finance costs ²	-3,448	-1,732	-201	-10		-5,391	
Bonds			-125,000		-150,000	-275,000	-274,157
Finance costs	-4,386	-4,063	-4,063	-1,875	-1,875	-16,262	
Loan from the State Nuclear Waste Management Fund (TVO) ³					-350,000	-350,000	-350,000
Finance costs	-1,584	-1,584	-1,584	-1,584	-1,584	-1,584	
Lease liabilities ⁴	-13,073	-40,979	-12,596	-9,783	-92,382	-168,813	-166,623
Finance costs	-1,141	-925	-724	-647	-2,960	-6,397	
Commercial papers	-98,914					-98,914	-98,914
Finance costs	-86					-86	
Interest rate derivatives	-3,017	-2,862	-2,538	-2,114	-305	-10,836	-10,549
Total	-196,649	-283,145	-185,756	-18,848	-599,106	-1,277,168	

¹ Repayments to be made in 2021 are included in current liabilities.

² In addition to interest expenses, finance costs also include a commitment fee.

³ The loan from the State Nuclear Waste Management Fund does not have an actual date of maturity, and therefore it is presented as a loan with a loan term of over 5 years. According to the section 52 of the Nuclear Energy Act Teollisuuden Voima Oyj is entitled to borrow from State Nuclear Waste Management Fund against securing guarantees the amount which can be a maximum of 75 per cent of the latest confirmed TVO's share in the Fund. TVO has borrowed this amount from the Fund and has granted a loan with the corresponding amount to Pohjolan Voima. The loan is annually renewed and the State Nuclear Waste Management Fund is entitled to ask securing collateral for the loan.

⁴ Lease liabilities according to IFRS 16 included.



Market risk

Interest Rate Risk

Changes in interest rates and margins on the interest-bearing receivables and liabilities create an interest rate risk. The objective of the interest rate risk management in Pohjolan Voima, is to protect the Group against the increase of interest expenses caused by the increase in the reference interest rates. In accordance with the financing policy of the Group, the interest rate risk is monitored by means of duration of the loan portfolio for each series of shares. The duration of the loan portfolios of the parent company and subsidiaries are set at the level where the electricity price sensitivity to changes in interest rates is on an acceptable level considering the individual risk-bearing capacity of each series of shares. Interest derivatives are used in the management of the duration.

Variable rate borrowings amounted to 77% (78%) of the Group's total borrowings. Interest rate swaps currently in place cover approximately 28% (26%) of the variable loan principal outstanding. The fixed interest rates of the interest rate swaps range between 0.16% and 1.25% (0.16% and 1.25%).

As per 31 December 2021 the increase or decrease of one percentage point in the interest rate would affect the result of the year by approximately +7.5/-8.3 (+7.6/-10.8) million euros. The impact includes in addition to the change of interest expense and income the change in the fair value of interest hedging instruments. The simulation calculates the effect of one percentage point change for all liabilities with variable interest rates as well as for interest income and expenses of receivables from the next interest fixing date until the end of the financial year. The financing structure is assumed to be unchanged and the short-term loans maturing during the financial year are assumed to be prolonged until the end of the year by using the new interest rate.

Currency Risk

Both short-term and long-term loans are mainly denominated in euros. Other than the euro-denominated borrowings are hedged latest at the time when the loan is drawn. All Pohjolan Voima Group's loans were euro-denominated in 2021 and 2020.

Credit risk

Credit or counterparty risk arises from the possibility that a customer or a financial counterparty does not fulfil its commitments. Commercial trade receivables, investments and receivables based on derivative financial instruments expose the company to credit risk. When counterparty banks are selected, only banks with high credit ratings qualify. Derivative financial agreements are entered into only with leading banks and financial institutions. All counterparties are monitored for their payment behaviour and credit worthiness. Pohjolan Voima recognised impairment of 12 thousand euros (2020: not recognised) on trade receivables during the reporting period. Pohjolan Voima sells electricity and heat to its shareholders. Pohjolan Voima operates based on cost

price according to its Articles of Association (Mankala principle), which decreases the credit risk related to the trade receivables significantly. There are no significant trade receivables past due in the Group.

Pohjolan Voima supplies electricity and heat only to its shareholders who according to the Articles of Association are obliged to pay variable and fixed costs of the energy delivered. Accounts receivable relating to energy delivery has not faced any credit losses in the past and no impairment is expected. Other accounts receivable are immaterial and credit losses on them extraordinary. Loan receivables are shareholder loan granted to Teollisuuden Voima Oyj, the joint venture and on the basis of the assessment made by the Group do not carry any impairment risk.

Capital risk management

Capital is defined as the equity attributable to the owners of the parent company consisting of share capital, share premium, reserve for invested non-restricted equity, revaluation reserve, retained earnings and equity loans, as well as the equity attributable to the non-controlling interest. There are no external capital requirements it needs to adhere to. Sufficient equity-based financing in the Group enables use of diversified financing types from different sources. There is a moderate variation of the equity to assets ratio of the Group depending on the investment cycles. Shareholders of each series of shares according to their proportionate ownership are responsible for the equity share of the investments.

Pohjolan Voima follows the equity on assets ratio, which is presented below:

	2021	2020
Equity on assets ratio (%) (IFRS, Group)*	41	41

*Equity on assets ratio%

$$= 100 \times \frac{\text{Shareholders' equity}}{\text{Balance sheet total}}$$



4 SEGMENT INFORMATION

The Group has four reportable segments: hydropower, thermal power, nuclear power and other operations.

The electricity of the hydropower segment is produced at eight hydro power plants owned by PVO-Vesivoima Oy. In addition, the shareholdings in Torniolaakson Voima Oy, Länsi-Suomen Voima Oy and Voimalohi Oy belong to the hydropower segment.

The electricity and heat of the thermal power segment is produced at the power plants of Hämeenkyrön Voima Oy, Kaukaan Voima Oy, Kymin Voima Oy, Laanilan Voima Oy, Porin Prosessivoima Oy and Rauman Biovoima Oy. In addition, the shareholdings in joint venture Vaskiluodon Voima Oy and associate Oy Alholmens Kraft Ab belong to the thermal power segment. Tahkoluodon Polttoöljy Oy is a dormant company.

The nuclear power segment includes the share in the joint venture Teollisuuden Voima Oyj which produces electricity at two nuclear power plant units, Olkiluoto 1 and Olkiluoto 2. Nuclear power plant unit Olkiluoto 3 is under test production phase.

The other operations cover the group functions of the parent company Pohjolan Voima Oyj, the service companies PVO Power Management Oy, PVO Power Services Oy and the dormant company Rouhialan Voimansiirto Oy.

The operations of PVO-Lämpövoima Oy are presented as discontinued operations.

The Group discloses sales, depreciation, amortisation and impairment, finance income and costs, the profit or loss for the year, and assets and liabilities by business segments, which the chief operation decision maker follows. Group's liabilities are allocated to segments based on the usage of segment's assets in order to allocate financial costs to various production types. The group company that has withdrawn the liability bears the legal responsibility on the liabilities.

2021

Income statement	Hydropower	Thermal power	Nuclear power	Other	Total	Discontinued operations
Sales, external	16,143	225,835	169,552	61,586	473,115	151
Sales, inter-segment	13,382	100,314		30,163	143,859	2,565
Elimination					-146,424	
Sales total	29,525	326,149	169,552	91,748	470,550	2,716
Depreciation, amortisation and impairment	-4,759	-46,293		-831	-51,883	
Share of (loss)/profit of associates and joint ventures	19	-1,568	-14,186		-15,735	
Operating profit or loss	-1,298	-4,654	-14,186	165	-19,974	-556
Finance income and costs	-2,030	-3,278	-7,092	5,981	-6,418	-1
Income taxes				-1	-1	
Profit/loss for the year from continuing and discontinued operations	-3,329	-7,931	-21,278	6,145	-26,393	-557

**2021**

Assets	Hydropower	Thermal power	Nuclear power	Other	Total
Non-current assets	431,394	279,394	1,245,756	38,140	1,994,684
Current assets	16,293	75,847	0	75,177	167,317
Elimination					-19,384
Current assets total					147,932
Assets held for sale		31,475			31,475
Total assets	447,687	386,716	1,245,756	113,316	2,174,091
Liabilities					
Non-current liabilities					
Non-current liabilities	153,693	149,866	782,581	2,334	1,088,474
Other non-current liabilities					4,662
Non-current liabilities total					1,093,136
Current liabilities					
Current liabilities	5,502	43,258	0	151,136	199,895
Elimination					-22,322
Current liabilities total					177,573
Liabilities related to assets held for sale		21,103			21,103
Total liabilities	159,195	214,226	782,581	153,470	1,291,812

**2020**

Income statement	Hydropower	Thermal power	Nuclear power	Other	Total	Discontinued operations
Sales, external	9,883	209,729	158,797	33,083	411,492	244
Sales, inter-segment	13,986	114,636		23,314	151,936	
Elimination					-151,936	
Sales total	23,869	324,365	158,797	56,397	411,492	244
Depreciation, amortisation and impairment	-4,736	-33,659		-655	-39,050	
Share of (loss)/profit of associates and joint ventures	67	-1,677	-4,528		-6,138	
Operating profit or loss	-1,748	1,993	-4,528	1,050	-3,233	-2,717
Finance income and costs	-2,016	-2,558	-6,380	-1,048	-12,002	25
Income taxes				1	1	
Profit/loss for the year from continuing and discontinued operations	-3,764	-565	-10,908	3	-15,234	-2,692

**2020**

Assets	Hydropower	Thermal power	Nuclear power	Other	Total
Non-current assets	430,872	355,149	1,233,990	38,225	2,058,236
Current assets	-1,701	72,304	0	78,303	148,906
Elimination					-20,225
Current assets total					128,681
Assets held for sale		2,556			2,556
Total assets	429,171	430,009	1,233,990	116,528	2,189,473
Liabilities					
Non-current liabilities					
Non-current liabilities	69,942	201,210	784,655	0	1,055,807
Other non-current liabilities					10,549
Non-current liabilities total					1,066,356
Current liabilities					
Current liabilities	67,410	44,881	27,594	112,690	252,574
Elimination					-20,225
Current liabilities total					232,349
Total liabilities	137,351	246,091	812,249	112,690	1,298,705

5 SOLD NON-CURRENT ASSETS AND BUSINESS COMBINATIONS

Sold non-current assets

There were no sold non-current assets in 2021 or in 2020.

Business combinations

There were no business combinations in 2021 or in 2020.

6 NOTES TO THE STATEMENT OF CASH FLOWS

Adjustments to profit or loss for the year (1 000 €)	2021	2020
Depreciation, amortisation and impairment	51,883	39,050
Increase/decrease in fair value of derivatives	-5,625	438
Income taxes	1	-1
Gains (+) or losses (-) from disposal of non-current assets	-956	-511
Finance costs - net	12,004	11,539
Share of (loss)/profit of associates and joint ventures	15,735	6,138
Other adjustments	3,185	0
Total	76,227	56,653

Change in net working capital	2021	2020
Increase (-) or decrease (+) in non-interest-bearing receivables	-27,882	-2,527
Increase (-) or decrease (+) in inventories	3,079	133
Increase (+) or decrease (-) in current non-interest-bearing liabilities	12,571	-959
Change in provisions	192	44
Total	-12,040	-3,309

7 SALES

1,000 €	2021	2020
Sales of electricity produced	279,937	261,843
Sales of heat produced	138,731	130,451
Sales of purchased electricity	42,215	10,412
Other sales	9,667	8,786
Total	470,550	411,492

Electricity delivered to shareholders (GWh)

Electricity produced	11,713	11,807
Heat produced	3,374	3,054
Purchased electricity	645	486

PVO's electricity purchases are determined by the electricity required by the shareholders. In 2021, Pohjolan Voima Group's total electricity purchases from continuing operations were 12.4 (12.3) TWh. The Group's electricity generation accounted for 11.7 (11.8) TWh, of which the parent company delivered to its shareholders 11.3 (11.4) TWh. Subsidiaries supplied 0.5 (0.4) TWh to other owners. Purchases from continuing operations from the Nordic electricity market, were 0.6 (0.5) TWh and sales were 0.2 (0.4) TWh. Heat deliveries were 3.5 (3.6) TWh.

Other sales consist primarily of sales of emission allowances as well as management services.



8 OTHER OPERATING INCOME

1,000 €	2021	2020
Rental income	515	491
Gain on sale of property, plant and equipment	251	357
Other income	1,746	286
Total	2,512	1,134

9 MATERIALS AND SERVICES

1,000 €	2021	2020
Fuels	85,482	83,384
Change in inventories	2,626	-472
Materials and services	2,066	1,846
Emissions allowances - carbon dioxide	4,216	1,702
Energy purchased; Nordic electricity market	42,064	19,250
Energy purchased; Associates and Joint ventures	222,792	197,318
Energy purchased; other	6,278	5,188
External services	5,205	5,121
Total	370,729	313,338

Purchases of fuel consist of peat and biofuel purchases, which are used for electricity and heat production.

Energy purchases from associates and joint ventures include purchases according to the ownership share in Teollisuuden Voima Oyj, Oy Alholmens Kraft Ab and Vaskiluodon Voima Oy.

10 PERSONNEL EXPENSES

Personnel-related expenses

1,000 €	2021	2020
Wages and salaries	5,896	7,075
Pension expenses - defined contribution	1,024	1,075
Other personnel expenses	185	235
Total	7,105	8,385

Average number of personnel

	2021	2020
Salaried employees	45	55
Wage-earners	9	27
Total	54	82

Above average number of personnel includes personnel of continued operations only in 2021 (2020 discontinued operations included 2 salaried employees).



11 DEPRECIATION, AMORTISATION AND IMPAIRMENT

1,000 €	2021	2020
Amortisation of intangible assets		
Intangible rights	122	72
Other intangible assets	491	598
Total	613	670
Depreciation of property, plant and equipment		
Land and water areas	319	312
Buildings and constructions	5,329	5,546
Machinery and equipment	28,188	30,275
Other tangible assets	1,988	2,071
Total	35,824	38,204
Impairments		
Other intangible assets	214	0
Land and water areas	130	0
Buildings and constructions	422	0
Machinery and equipment	14,489	176
Prepayments	191	0
Total	15,446	176
Depreciation, amortisation and impairment total	51,883	39,050

Depreciation include the effect of IFRS 16 implementation on asset retirement obligations.

12 OTHER OPERATING EXPENSES

1,000 €	2021	2020
Repair, servicing and maintenance services	10,684	12,689
Real estate taxes	5,934	6,064
Rents	217	190
Operation services	15,140	15,741
Other expenses	15,609	14,264
Total	47,584	48,948

Auditor's fees

1,000 €	2021	2020
Audit fees	201	156
Other services	8	16
Total	209	172

13 RESEARCH & DEVELOPMENT

Research and development recognised as an expense during the period totalled 35 (78) thousand euros in 2021.



14 FINANCE INCOME AND COSTS

1,000 €	2021	2020
Interest income on loans and receivables	2,783	2,958
Derivative financial instruments (hedge accounting is not applied)		
Fair value gains	5,625	0
Finance income total	8,408	2,958
Interest expense on liabilities at amortised costs	12,986	12,837
Derivative financial instruments (hedge accounting is not applied)		
Fair value losses	0	438
Other finance cost	1,840	1,685
Finance costs total	14,826	14,960
Total finance income and costs	-6,418	-12,002

15 INCOME TAX

PVO delivers electricity and heating to its shareholders at cost price. According to the cost-based pricing the Group does not pay any taxes on its energy related operations, therefore the Group does not recognise any deferred tax assets or liabilities on these operations. Income taxes and deferred taxes are recognised, on the other hand, on the services provided by the Group.

Change in deferred tax:

Differences between income taxes recognised in the consolidated income statement and the tax rate in Finland as presented in the following table:

1,000 €	2021	2020
Result before income tax	-26,392	-15,235
Tax based on Finnish tax rate 20%	5,278	3,047
Share of profits and losses of associates and joint ventures	-3,140	-1,228
Non-deductible expenses	0	-89
Unrecognised deferred taxes due to cost price principle	-2,139	-1,730
Income taxes recognised in consolidated income statement	-1	1

16 INTANGIBLE ASSETS

1,000 €	Emission allowances - carbon dioxide	Intangible rights	Other intangible assets	Total
Cost or valuation at 1 Jan 2021	1,590	281,413	17,956	300,959
Additions	4,117			4,117
Disposals	-1,606		-10,681	-12,287
Reclassifications		152		152
Transferred to assets held for sale	-1,315		-1,244	-2,559
At 31 Dec 2021	2,786	281,565	6,031	290,382
Accumulated amortisation and impairment 1 Jan 2021	0	1,475	15,915	17,390
Disposals			-10,681	-10,681
Amortisation and impairment, for the period		122	705	827
Transferred to assets held for sale			-1,244	-1,244
Accumulated amortisation and impairment 31 Dec 2021	0	1,597	4,695	6,292
Net book amount 31 Dec 2021	2,786	279,968	1,337	284,091
Net book amount 31 Dec 2020	1,590	279,938	2,041	283,569

The intangible assets include the right to produce hydro power totalling 265 million euros and the compensation amounting to 14.4 million euros paid in 2013, 2014 and 2015 for the water area usage permanent right. The right to produce hydro power and the water area usage permanent right are intangible assets, with indefinite useful lives. Impairment testing for these assets is performed annually.

Impairment testing

In impairment testing discounted cash flows are analysed and the analysis is supplemented by comparing the valuation calculations to other market data. The testing has been done by using value in use method. Testing unit is hydropower segment. The calculation model includes estimate of 50 years and the terminal value. The price of electricity is obtained from quotations of

1,000 €	Emission allowances - carbon dioxide	Intangible rights	Other intangible assets	Total
Cost or valuation at 1 Jan 2020	3,388	281,158	17,833	302,379
Additions	2,239	130	5	2,374
Disposals	-4,037			-4,037
Reclassifications		125	118	243
At 31 Dec 2020	1,590	281,413	17,956	300,959
Accumulated amortisation and impairment 1 Jan 2020	0	1,403	15,317	16,720
Disposals				0
Amortisation for the period		72	598	670
Accumulated amortisation and impairment 31 Dec 2020	0	1,475	15,915	17,390
Net book amount 31 Dec 2020	1,590	279,938	2,041	283,569
Net book amount 31 Dec 2019	3,388	279,755	2,516	285,659

derivatives for the first four years and after that the estimate is based on the market forecasts of various service providers. The discount rate applied is 3.2% and weighted average capital cost has been used in the discount rate calculation. Impairment test has not resulted in any need for impairment, because the future generated cash flows exceed the carrying value of the right to produce hydro power and the water area usage permanent right.

In the sensitivity analysis the electricity market price change of +/- 5% would change the value of the tested business by approximately +/- 240 million euros. The change of the weighted average capital cost of +/- 0.5 percentage point would accordingly affect approximately +/- 615 million euros. None of the presented negative change would result in impairment of the tested assets.

There is no goodwill included within intangible rights and other intangible assets.



17 PROPERTY, PLANT AND EQUIPMENT

1,000 €	Land and water areas	Buildings and constructions	Machinery and equipment	Other tangible assets	Prepayments	Total
Cost or valuation at 1 Jan 2021	41,468	130,922	729,430	85,494	7,521	994,836
Additions	2	694	217		6,919	7,832
Disposals	-939	1,510	-705	-4,909		-5,043
Reclassifications			1,359		-1,511	-152
Transferred to assets held for sale	-273	-11,134	-41,185	-482	-83	-53,157
Cost or valuation 31 Dec 2021	40,258	121,992	689,116	80,103	12,846	944,316
Accumulated depreciation and impairment 1 Jan 2021	621	65,637	431,697	53,992	0	551,947
Disposals and reclassifications		1,643	-572	-4,909		-3,838
Depreciation and impairment for the period	449	5,751	42,677	1,988	191	51,056
Transferred to assets held for sale	-25	-4,629	-18,594	-212		-23,460
Accumulated depreciation and impairment 31 Dec 2021	1,045	68,402	455,208	50,859	191	575,705
Net book amount 31 Dec 2021	39,213	53,590	233,909	29,243	12,655	368,611
Net book amount 31 Dec 2020	40,847	65,285	297,734	31,501	7,521	442,889



1,000 €	Land and water areas	Buildings and constructions	Machinery and equipment	Other tangible assets	Prepayments	Total
Cost or valuation at 1 Jan 2020	41,329	130,902	725,657	85,500	3,606	986,995
Additions	142	22	180		7,956	8,300
Disposals	-3	-2	-205	-6		-216
Reclassifications			3,798		-4,041	-243
Cost or valuation 31 Dec 2020	41,468	130,922	729,430	85,494	7,521	994,836
Accumulated depreciation and impairment 1 Jan 2020	309	60,093	401,398	51,921	0	513,721
Disposals and reclassifications		-2	-152			-154
Depreciation and impairment for the period	312	5,546	30,451	2,071		38,380
Accumulated depreciation and impairment 31 Dec 2020	621	65,637	431,697	53,992	0	551,947
Net book amount 31 Dec 2020	40,847	65,285	297,734	31,501	7,521	442,889
Net book amount 31 Dec 2019	41,020	70,809	324,260	33,578	3,606	473,274

In 2021 the cost estimate as well as the lifetime of one landfill were revised. In 2020 the lifetime of one landfill was revised.

Management has assessed that no indications of impairment exists.

Borrowing costs included in the cost of property, plant and equipment

1,000 €	Buildings and constructions	Machinery and equipment	Other tangible assets	Total
Cost or valuation at 1 Jan 2021	460	15,642	111	16,213
Transferred to assets held for sale		-717		-717
Cost or valuation at 31 Dec 2021	460	14,925	111	15,496
Accumulated depreciation and impairment 1.1.2021	326	8,764	81	9,172
Depreciation and impairment for the period	18	644	4	666
Transferred to assets held for sale		-263		-263
Accumulated depreciation and impairment 31 Dec 2021	344	9,145	85	9,575
Net book amount 31 Dec 2021	116	5,779	26	5,921
Net book amount 31 Dec 2020	134	6,877	30	7,041

The borrowing costs related to the construction of power plants are capitalized as part of the acquisition cost of the asset and depreciated over the useful life of the asset.

Borrowing costs included in the cost of property, plant and equipment

1,000 €	Buildings and constructions	Machinery and equipment	Other tangible assets	Total
Cost or valuation at 1 Jan 2020	460	15,642	111	16,213
Cost or valuation at 31 Dec 2020	460	15,642	111	16,213
Accumulated depreciation and impairment 1 Jan 2020	308	8,149	76	8,534
Depreciation for the period	18	615	5	638
Accumulated depreciation and impairment 31 Dec 2020	326	8,764	81	9,172
Net book amount 31 Dec 2020	134	6,877	30	7,041
Net book amount 31 Dec 2019	152	7,492	35	7,679



18 LEASES

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 guidance to leases with a terms less than twelve months or to leases for which the underlying asset value is of low value.

Amounts recognised in the statement of profit or loss

The statement of profit or loss shows the following amounts relating to leases:

Depreciation charge of right-of-use assets

1,000 €	2021	2020
Land and water areas	319	313
Buildings and constructions	549	553
Machinery and equipment	12,946	12,780
Other tangible assets	224	168
Total	14,038	13,814
Interest expense (included in finance cost)	1,303	1,260
Expense relating to short-term leases	79	25
Expense relating to leases of low-value assets that are not shown above as short-term leases	69	73

The total cash outflow of leases in 2021 was 5,868 (8,781) thousand euros.

Amounts recognised in the balance sheet

This note provides information for leases where the group is a lessee. The balance sheet shows the following amounts relating to leases:

Right-of-use assets

1 000 €	2021	2020
Land and water areas	5,509	7,141
Buildings and constructions	927	914
Machinery and equipment	108,833	142,795
Other tangible assets	1,153	1,631
Total	116,422	152,481
Assets held for sale	18,129	0
Provisions	2,000	2,059
Lease liabilities		
Current	10,464	12,922
Non-current	120,818	153,701
Total	131,282	166,623
Liabilities related to assets held for sale	18,507	0

Additions to the right-of-use assets during the 2021 were 912 (337) thousand euros, disposals were 1,201 (4) thousand euros and impairment were 1,096 (2020: not recorded) thousand euros.

19 ASSOCIATES AND JOINT VENTURES

Share of (loss)/profit of associates and joint ventures

1 000 €	2021	2020
Länsi-Suomen Voima Oy	66	71
Oy Alholmens Kraft Ab	386	-43
Tahkoluodon Polttoöljy Oy	0	-1
Teollisuuden Voima Oyj	-14,186	-4,528
Torniolaakson Voima Oy	-54	-19
Vaskiluodon Voima Oy	-1,954	-1,633
Voimalohi Oy	7	15
Total	-15,735	-6,138

Investments in associates and joint ventures

1 000 €	2021	2020
At 1 January	734,764	753,768
Share of profit	-15,735	-6,138
Other comprehensive income	25,952	-12,866
At 31 December	744,981	734,764



Associates and Joint Ventures

Company, domicile	Interest held %		Book value 1 000€	
	2021	2020	2021	2020
Associates				
Oy Alholmens Kraft Ab, Pietarsaari	49.90%	49.90%	18,356	17,971
Länsi-Suomen Voima Oy, Harjavalta	19.90%	19.90%	33,736	33,669
Tahkoluodon Polttoöljy Oy, Pori	32.00%	32.00%	0	0
Torniolaakson Voima Oy, Ylitornio	50.00%	50.00%	1,830	1,884
			53,922	53,524
Joint Ventures				
Teollisuuden Voima Oyj, Helsinki	58.50%	58.50%	686,024	674,258
Vaskiluodon Voima Oy, Vaasa	50.00%	50.00%	4,811	6,765
Voimalohi Oy, Kemi	50.00%	50.00%	224	217
			691,059	681,240
Associates and joint ventures total			744,981	734,764

Pohjolan Voima accounts for Teollisuuden Voima Oyj as a joint venture in the IFRS consolidated financial statements. Pohjolan Voima Oyj owns 58.50% of the share capital of Teollisuuden Voima Oyj at 31 December 2021 (58.50%). Based on the Articles of Association and other company records which dictate the basis for the decision making and governance of the company, as well as Pohjolan Voima Oyj's right to appoint board members, the Group has assessed that Teollisuuden Voima Oyj should be accounted for as a joint venture.

Teollisuuden Voima Oyj has investment commitments totalling 486 (523) million euros.

Goodwill on acquisition of Länsi-Suomen Voima Oy is included in the investments in the associates totalling 28 million euros at 31 December 2021 (28 million euros). Impairment testing of the goodwill is performed annually. Länsi-Suomen Voima Oy owns the hydropower plant located in Harjavalta at Kokemäenjoki. Pohjolan Voima has assessed that the fair value of the investment in the associate exceeds its carrying value at 31 December 2021.

Information on the associated companies and joint ventures of the Group, and their aggregate assets and liabilities, revenues and profit or loss for the year is presented below. All associates and joint ventures are unlisted companies.



1 000 €	Assets	Liabilities	Revenue	Profit/ loss (-)
2021				
Oy Alholmens Kraft Ab	78,598	41,356	66,061	533
Länsi-Suomen Voima Oy	39,313	11,588	4,527	54
Tahkoluodon Polttoöljy Oy	5	0	0	0
Teollisuuden Voima Oyj	8,662,263	6,599,202	298,713	-19,653
Torniolaakson Voima Oy	6,391	2,730	1,406	-20
Vaskiluodon Voima Oy	52,262	40,195	75,421	-782
Voimalohi Oy	1,980	1,529	4,400	0
Total	8,840,813	6,696,601	450,529	-19,869

1 000 €	Assets	Liabilities	Revenue	Profit/ loss (-)
2020				
Oy Alholmens Kraft Ab	97,696	61,271	51,950	-582
Länsi-Suomen Voima Oy	39,628	12,229	4,143	76
Tahkoluodon Polttoöljy Oy	6	0	0	-2
Teollisuuden Voima Oyj	8,181,057	6,138,109	275,120	454
Torniolaakson Voima Oy	6,534	2,763	1,482	-6
Vaskiluodon Voima Oy	62,033	45,277	52,260	-654
Voimalohi Oy	1,437	1,001	4,318	3
Total	8,388,390	6,260,651	389,272	-712

Related-party transactions - transactions with associates and joint ventures

1 000 €	2021	2020
Sales to associates and joint ventures	24,427	745
Purchases from associates and joint ventures	205,866	191,088
Receivables from associates and joint ventures	628,331	610,148
Liabilities to associates and joint ventures	361,821	361,669
	2021	2020
Personnel employed by associates and joint ventures in average	1,084	1,065

Summary of the financial information on joint ventures

Teollisuuden Voima Oyj is the most significant joint venture of Pohjolan Voima. Teollisuuden Voima Oyj is a public limited company, the shares of which do not have a quoted market price. Teollisuuden Voima is consolidated in the Group's financial statements using the equity method.

	TVO Group	
Summary of the balance sheet	2021	2020
Current		
Cash and cash equivalents	172,318	161,363
Other current assets	544,132	328,961
Current assets in total	716,450	490,324
Financial liabilities (excl. trade payables)	-445,619	-427,211
Other current liabilities (incl. trade payables)	-186,094	-112,247
Current liabilities in total	-631,713	-539,458
Non-current		
Assets	7,945,813	7,690,733
Financial liabilities	-5,967,489	-5,598,651
Non-current liabilities in total	-5,967,489	-5,598,651
Net assets	2,063,061	2,042,948



Summary of the statement of comprehensive income	TVO Group	
	2021	2020
Sales	298,713	275,120
Depreciation	-43,996	-45,461
Finance income	4,681	11,616
Finance costs	-41,887	-39,517
Profit/loss from continuing operations before income tax	-19,653	454
Income tax expense	0	0
Profit/loss from continuing operations after income tax	-19,653	454
Other comprehensive income	44,363	-21,994
Profit/loss from continuing operations	24,710	-21,540

Summary of the financial information	2021	2020
Net assets at 1 January	2,042,948	1,819,397
Profit/loss for the year	24,710	-21,540
The change and interest of subordinated shareholder loans	-4,597	245,094
Refund of reserves	0	-3
Net assets at the end of the period	2,063,061	2,042,948
Group ownership %	58.50%	58.50%
Group ownership share	1,206,891	1,195,124
Subordinated shareholder loans	-543,641	-543,641
IFRS-entries relating to the valuation	22,774	22,774
Book value	686,024	674,258

20 OTHER FINANCIAL ASSETS

1 000 €	2021	2020
Investments in non-listed securities	471	484
Total	471	484

Other financial assets consist mainly of vacation cottage and golf shares used by personnel totalling 0.5 (0.5) million euros.

21 LOANS AND OTHER RECEIVABLES

Non-current loans and other receivables

1 000 €	2021	2020
Loans to associates and joint ventures	559,733	559,733
Other non-current receivables	36,797	36,797
Total	596,530	596,530

Loans to associates and joint ventures include a loan receivable from Teollisuuden Voima Oyj of 559.7 (559.7) million euros. There is no material credit risk related to the non-current loans and other receivables.



Trade and other receivables

1 000 €	2021	2020
Trade receivables	70,841	50,695
Pledged cash deposits	335	150
Prepayments and accrued income	27,748	22,542
Other current receivables	4,447	1,772
Total	103,371	75,159

Carrying values of trade receivables and other receivables approximates their fair value.

Prepayments and accrued income:

1 000 €	2021	2020
Prepayments, energy purchases	12,321	11,222
Indirect taxes	5,595	6,390
Other	9,832	4,930
Total	27,748	22,542

The Group recorded credit losses of 12 thousand euros in 2021 (2020: not recorded) on trade receivables or other receivables.

The Group had no material outstanding receivables as per 31 December 2021. Therefore, the aging of trade receivables is not presented.

22 SHORT-TERM DEPOSITS, CASH AND CASH EQUIVALENTS

CASH AND CASH EQUIVALENTS

1 000 €	2021	2020
Cash at bank and on hand	38,430	44,312
Total	38,430	44,312

Cash and cash equivalents comprise of cash on hand, bank deposits and other short-term (up to three months), liquid investments.

23 INVENTORIES

1 000 €	2021	2020
Fuels		
Coal	467	1,996
Other fuels	5,664	6,761
Prepayments	0	453
Total	6,131	9,210

No inventory impairment was recorded from continued nor discontinued operations (2020: not recorded) in 2021.

24 DISCONTINUED OPERATIONS AND ASSETS HELD FOR SALE

Discontinued operations

1,000 €	2021	2020
Income	3,810	677
Costs	-4,367	-3,369
Profit before income tax	-557	-2,692
Profit from discontinued operations	-557	-2,692

Cash flow from discontinued operations

1,000 €	2021	2020
Cash flows from operating activities	-1,773	1,712
Cash flows from investing activities	907	853
Cash flows total	-866	2,565

The extraordinary shareholders' meeting of Pohjolan Voima 25 October 2021 approved the decision to sell the shares of Hämeenkyrön Voima Oy to Metsä Board Oyj. The sale came into force 1 January 2022 subsequent to the end of the financial year. The intangible and tangible assets as well as receivables of Hämeenkyrön Voima Oy are presented as assets held for sales and liabilities accordingly as liabilities related to assets held for sale.

Board of Directors of PVO-Lämpövoima Oy decided 27 October 2015 to propose, that the electricity production of condensing power plants in Kristiinankaupunki and Pori Tahkoluoto will be terminated. Pohjolan Voima's extraordinary shareholders' meeting approved the decision 13 November 2015. PVO-Lämpövoima's operations are presented in the financial statement 2015–2021 as discontinued operations. PVO-Lämpövoima's tangible assets are presented as assets held for sale in 2021 and 2020.

Assets held for sale

1,000 €	2021	2020
Intangible assets	1,315	0
Tangible assets	29,877	2,556
Trade and other receivables	283	0
Total	31,475	2,556

Liabilities related to assets held for sale

1,000 €	2021	2020
Provisions	291	0
Borrowings	18,216	0
Trade and other payables	2,596	0
Total	21,103	0



25 EQUITY

According to the articles of association, PVO supplies energy to its shareholders at cost, i.e., delivers energy it has produced or acquired to each shareholder according to their proportionate ownership in each series of shares. Shareholders are according to their proportionate ownership in each series of shares responsible for the fixed costs for the underlying shares, regardless of whether the power or energy share is used or not. Variable costs, on the other hand, are invoiced to the shareholders based on the share of the energy delivered.

Reconciliation of the number of shares:

1,000 €	Number of shares	Share capital	Share premium	Revaluation reserve	Reserve for invested non-restricted equity	Subordinated shareholders loans (hybrid equity)	Retained earnings	Total
1 Jan 2020	32,509,113	55,321	205,999	-2,881	327,644	0	204,444	790,527
Withdrawals of subordinated shareholders loans (hybrid equity)						90,347		90,347
Other comprehensive income				-12,866			-18,312	-31,178
31 Dec 2020	32,509,113	55,321	205,999	-15,747	327,644	90,347	186,132	849,696
Interest paid of subordinated shareholders loans (hybrid equity)							-491	-491
Refund of reserves					-7,000			-7,000
Transfer to reserve for invested non-restricted equity			-2,134		2,134			0
Other comprehensive income				25,952			-26,731	-779
31 Dec 2021	32,509,113	55,321	203,865	10,205	322,778	90,347	158,910	841,426

Shares

The number of shares at 31 December 2021 was 32,509,113. The shares have no nominal value. All issued shares are fully paid.



The company has 14 registered series of shares

Share capital by share category	Number	1,000 €	Share capital by share category	Number	1,000 €
Series A: - entitling the holder to obtain energy produced or purchased by PVO-Vesivoima Oy	13,350,077	22,453	Series G5: - entitling the holder to obtain energy produced by Laanilan Voima Oy	155,272	261
Series B: - entitling the holder to obtain 56.8% of the energy produced or purchased by Teollisuuden Voima Oyj's - Olkiluoto plant 1 and 2	7,124,507	11,983	Series G6: - entitling the holder to obtain energy produced by Porin Prosessivoima Oy	646,217	1,087
Series B2: - entitling the holder to obtain 60.2% of the energy produced by Teollisuuden Voima Oyj's Olkiluoto plant 3 once its construction is completed.	5,603,151	9,424	Series G9: - entitling the holder to obtain 54.0% of the energy produced by Kaukaan Voima Oy	589,071	991
Series C: - entitling the holder to obtain energy produced or purchased by PVO-Lämpövoima Oy	2,224,498	1,983	G10-sarja - entitling the holder to obtain 84.0 % of the energy produced by Hämeenkyrön Voima Oy	213,600	359
Series C2: - entitling the holder to obtain 56.8% of the energy produced or purchased by Teollisuuden Voima Oyj's Meri-Pori coal power plant	359,198	604	Series M: - entitling the holder to obtain 100.0% of the energy produced by Mussalon Voima Oy	307,707	2,921
Series G: - entitling the holder to obtain 49.9% of the energy produced by Oy Alholmens Kraft Ab	354,290	596	Series V: - entitling the holder to obtain 50.0% of the energy produced by Vaskiluodon Voima Oy	1,046,823	1,761
Series G2: - entitling the holder to obtain 76.0% of the energy produced by Kymin Voima Oy	238,216	401			
Series G4: - entitling the holder to obtain 72.0% of the energy produced by Rauman Biovoima Oy	296,486	499			
				32,509,113	55,321

The following shares were issued during the financial year:

There were no share issues subscribed in 2021.

Other changes in shareholders' equity:

Pohjolan Voima Oyj's Extraordinary General Meeting held 26 May 2021 decided to reduce company's share premium by 2,133,941.69 euros and to transfer the balance to the reserve for invested non-restricted equity. Further, the Board of Directors was authorised to decide on the fund distribution as capital refund from the reserve for invested non-restricted equity to the maximum amount of 7,000,000 euros. The refund was paid in December 2021. The reduction of the share premium as well as the refund from the reserve for invested non-restricted equity relates to the decision to discontinue the business operations of Laanilan Voima Oy. According to the resolution of the Extraordinary General Meeting 25 October 2021 Pohjolan Voima initiated the procedure to decrease the share capital by 359,249.42 euros. The procedure was registered 2 December 2021 and is still pending.

Pohjolan Voima raised 27 November 2020 a total of 90,347 thousand euros of the shareholder loan commitments.



Share premium

Share premium is recorded under the old Limited Liability Companies Act (29.9.1978/734), and was calculated as the difference between the nominal value of the shares and the subscription price. Share premium is restricted equity under the Limited Liability Companies Act. Share premium may be reduced to cover losses or it can be returned to owners under certain conditions.

Revaluation reserve

Derivative instruments used in cash flow hedging and fair value gains or losses on investments available-for-sale are recorded in the revaluation reserve. Fair value changes are transferred to the profit for the year when hedged cash flows realize. Fair value changes in investments available-for-sale are transferred to the profit for the year when the investment is disposed of or when its value has been impaired.

Invested non-restricted equity

Subscription prices for shares are recorded in invested non-restricted equity to the extent that they are not, based on an explicit decision, to be recorded as share capital. Further the reserve includes the portion of the C-series restricted equity decrease.

Subordinated shareholders loans and option rights

The Company raised subordinated shareholder loans in total of 90,347 thousand euros as at 27 November 2020. There is no maturity date for the subordinated shareholder loans, but the borrower is entitled to repay the loan in one or several instalments. The Board of Directors of the borrower has the right to decide not to pay interest during any current interest period. Unpaid interest does not accumulate to the following interest periods.

Subordinated shareholder loans are unsecured and in a weaker preference position than promissory notes. Holders of a subordinated loan have no shareholder rights, nor does the bond dilute the ownership of the Company's shareholders.

In connection with the shareholder loan commitments, option rights have been also issued, which entitle to convert the shareholder loan receivable into series B2 shares. The option rights issued entitle to maximum 1,613,347 new B2 shares. The subscription price of a new B2 share is 56 euros and the subscription price can only be paid by setting of the total principal of the shareholder loan receivable that the shareholder has from the Company against the total subscription price of all new B2 shares. The share subscription period started on 1 January 2021 and will last until the repayment of the subordinated shareholder loans. New B2 shares can be subscribed once a year by informing the Company 31 January at the latest. Further share subscription right can be used in connection of the loan repayment. Option rights can be sold or otherwise transfer only to a transferee that is a holder of the Company's B2 series shares and a party to the Shareholders' Agreement.

In December 2020, Pohjolan Voima received new shareholder loan commitments totalling 238 million euros, which remained unused at the end of the financial period. In connection with the shareholder loan commitments, option rights were also issued. The share subscription period will begin on 1 January 2023 and give entitlement to up to 7,198,950 pieces of new B2 shares.

Option rights consist of two separate series. In the first option series the subscription price of a new B2 share is 33 euros and the subscription is possible only if the shareholder loan commitment is raised. In another option right series the subscription price is 0.01 euros and the subscription is not subject to the loan raising. New B2 shares can be subscribed by informing the Company. Further share subscription right can be used in connection of the loan repayment. Option rights can be sold or otherwise transfer only to a transferee that is a holder of the Company's B2 series shares and a party to the Shareholders' Agreement.

26 PROVISIONS

1,000 €

	Environmental provisions
At 1 January 2021	5,064
Additions	700
Change in accounting estimates	412
Effect of discounting	191
Liabilities related to assets held for sale	-291
At 31 December 2021	6,076

1,000 €

	2021	2020
Non-current provisions	6,076	5,064
Total	6,076	5,064

Environmental provisions

The environmental provisions include provision for the landscaping of power plant landfills. The present value of the landscaping is capitalized as part of the other tangible assets and recorded as a provision. The environmental provision totalled 3.4 million euros at 31 December 2021, and it is estimated that it will be fully utilised by 2030.

In 2021 the cost estimate as well as the lifetime of one landfill were revised.

The discount rate used to determine present value was 0.95%.



27 BORROWINGS

1,000 €	2021	2020
Non-current:		
Borrowings from associates and joint ventures	350,000	350,000
Borrowings from financial institutions	337,150	272,885
Bonds	274,429	274,157
Leases	120,819	153,701
Total	1,082,398	1,050,743
Current:		
Borrowings from financial institutions	5,735	71,000
Other interest-bearing current liabilities	99,888	98,914
Leases	10,464	12,922
Total	116,087	182,836
Total borrowings	1,198,485	1,233,579

Fair values of non-current and current borrowings are presented in note 30.

Teollisuuden Voima Oyj is obliged to nuclear waste management. The obligation entitles Teollisuuden Voima Oyj to borrow 75% of its holdings in the State Nuclear Waste Management Fund. Teollisuuden Voima Oyj has granted corresponding loans to its shareholders. Pohjolan Voima's share is 350 (350) million euros.

OTHER NON-CURRENT LIABILITIES

1,000 €	2021	2020
Other non-current liabilities		
Derivative financial liabilities		
Interest rate swaps	4,662	10,549
Total	4,662	10,549

Fair values of derivatives are disclosed in note 29.

INTEREST-BEARING NET LIABILITIES

1,000 €	2021	2020
Interest-bearing liabilities total	1,198,485	1,233,579
Interest-bearing financial assets		
Non-current		
Loan receivables	559,733	559,733
Total	559,733	559,733
Current		
Pledged cash deposits	335	150
Cash and cash equivalents	38,430	44,312
Total	38,765	44,462
Interest-bearing financial assets total	598,498	604,195
Interest-bearing liabilities net	599,987	629,384



THE CHANGES OF NET LIABILITIES IN THE CASH FLOW

1,000 €	Other assets		Liabilities arising from financial activities					Total
	Financial assets, non-current	Financial assets, current	Finance lease, non-current	Finance lease, current	Borrowings, non-current	Borrowings, current	Other liabilities, current	
Net liabilities								
1 Jan 2020	409,153	62,521	-166,312	-21,408	-815,553	-107,050	-99,849	-738,498
Cash flows	150,580	-18,059	12,004	8,518	-81,489	36,050	935	108,539
Changes in leases			607	-32				575
Net liabilities								
31 Dec 2020	559,733	44,462	-153,701	-12,922	-897,042	-71,000	-98,914	-629,384
Cash flows		-5,697	14,609	1,243	-64,537	65,265	-974	9,909
Changes in leases			1,304	-32				1,272
Liabilities related to assets held for sale			16,969	1,247				18,216
Net liabilities								
31 Dec 2021	559,733	38,765	-120,819	-10,464	-961,579	-5,735	-99,888	-599,987



28 TRADE PAYABLES AND OTHER CURRENT LIABILITIES

1,000 €	2021	2020
Trade payables	12,924	8,966
Liabilities to associates and joint ventures	11,821	7,310
Accrued expenses	26,327	27,788
Other current liabilities	7,362	3,859
Held emission allowances, Energy Authority	2,787	1,590
Derivative financial instruments	265	0
Total	61,486	49,513

Emission allowances are recorded at cost and are presented separately on the balance sheet. The obligation relating to emission allowances are recorded at book value of the held allowances to short-term debt. Allowances and the related obligations are derecognised when they are reported or sold.

Accrued expenses

1,000 €	2021	2020
Accrued personnel expenses	1,738	2,319
Accrued expenses for fuel purchases	5,653	8,730
Accrued expenses for energy purchases	2,099	1,471
Accrued rents	721	1,070
Interest liabilities	3,948	4,586
Other	12,168	9,612
Total	26,327	27,788

29 DERIVATIVE FINANCIAL INSTRUMENTS

Fair value of derivative financial instruments

1,000 €	2021	2021	Total
	Positive fair values	Negative fair values	
Interest rate swaps	535	-5,462	-4,927
Total	535	-5,462	-4,927

1,000 €	2020	2020	Total
	Positive fair values	Negative fair values	
Interest rate swaps	32	-10,581	-10,549
Total	32	-10,581	-10,549

Nominal value of derivative financial instruments

1,000 €	2021	2020
Interest rate swaps	263,000	247,000



30 FINANCIAL ASSETS AND LIABILITIES BY CATEGORY AND FAIR VALUE HIERARCHY

1,000 €	31 Dec 2021	Fair value through profit and loss	Financial liabilities carried at amortised cost	Carrying value	Fair value, if deviates from carrying value	Note	Level 1	Level 2	Level 3
Non-current financial assets									
Other financial assets		471		471		20			471
Loan receivables			559,733	559,733		21			
Other receivables			36,797	36,797		21			
		471	596,530	597,001					
Current financial assets									
Cash and cash equivalents			38,430	38,430		22			
Loan receivables			335	335		21			
Trade and other receivables			75,288	75,288		21			
Prepayments and accrued income			27,748	27,748		21			
		0	141,801	141,801					
Total		471	738,331	738,802					
Non-current financial liabilities									
Borrowings from associates and joint ventures			350,000	350,000		27			
Borrowings			337,150	337,150		27			
Bonds			274,429	274,429	278,450	27	278,450		
Lease liabilities			120,819	120,819		27			
Derivative financial instruments		4,662		4,662		27		4,662	
		4,662	1,082,398	1,087,060					



1,000 €	31 Dec 2021	Fair value through profit and loss	Financial liabilities carried at amortised cost	Carrying value	Fair value, if deviates from carrying value	Note	Level 1	Level 2	Level 3
Current financial liabilities									
Loans and commercial papers			105,623	105,623		27			
Trade payables			12,924	12,924		28			
Other current liabilities			21,970	21,970		28			
Accrued expenses			26,327	26,327		28			
Lease liabilities			10,464	10,464		27			
Derivative financial instruments		265		265		28		265	
		265	177,308	177,573					
Total		4,927	1,259,706	1,264,633			278,450	4,927	471

The fair values of financial assets and liabilities approximate carrying values except for bonds that are listed at Nasdaq Helsinki.

As at 31 December 2021 the amount of offsetting derivative instruments included in the financial assets and financial liabilities in the Group was -4,9 (-10.5) million euros.

	Gross amounts recognised in the balance sheet	Net amount
Derivative contracts 2021	-4,927	-4,927
Derivative contracts 2020	-10,549	-10,549



1,000 €	31 Dec 2020	Fair value through profit and loss	Financial liabilities carried at amortised cost	Carrying value	Fair value, if deviates from carrying value	Note	Level 1	Level 2	Level 3
Non-current financial assets									
Other financial assets		484		484		20			484
Loan receivables			559,733	559,733		21			
Other receivables			36,797	36,797		21			
		484	596,530	597,014					
Current financial assets									
Cash and cash equivalents			44,312	44,312		22			
Loan receivables			150	150		21			
Trade and other receivables			52,467	52,467		21			
Prepayments and accrued income			22,542	22,542		21			
		0	119,471	119,471					
Total		484	716,001	716,485					
Non-current financial liabilities									
Borrowings from associates and joint ventures			350,000	350,000		27			
Borrowings			272,885	272,885		27			
Bonds			274,157	274,157	272,740	27	272,740		
Lease liabilities			153,701	153,701		27			
Derivative financial instruments		10,549		10,549		27		10,549	
		10,549	1,050,743	1,061,292					



1,000 €	31 Dec 2020	Fair value through profit and loss	Financial liabilities carried at amortised cost	Carrying value	Fair value, if deviates from carrying value	Note	Level 1	Level 2	Level 3
Current financial liabilities									
Loans and commercial papers			169,914	169,914		27			
Trade payables			8,966	8,966		28			
Other current liabilities			12,759	12,759		28			
Accrued expenses			27,788	27,788		28			
Lease liabilities			12,922	12,922		27			
		0	232,349	232,349					
Total		10,549	1,283,092	1,293,641			272,740	10,549	484

Financial assets and liabilities by measurement categories

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 of liabilities. The bond with the nominal value of 125 million euros issued by Pohjolan Voima Oyj in 2018, was listed to Nasdaq Helsinki in June 2019. Accordingly, the bond with the nominal value of 150 million euros issued in November 2019 was listed to Nasdaq Helsinki. Both bonds were classified at level 1 as at 31 December 2021. The fair value corresponds the quotations.

Level 2: inputs other than quoted price included within level 1 that are observable for the assets or liability, either directly or indirectly.

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

Derivative financial instruments are initially recognized at fair value and subsequently measured at fair value at the closing date. The fair values reflect the prices, which the Group would have to pay or would receive, if it called a derivatives contract. Fair value of interest rate swaps is determined using a discounted cash flow method using market rates prevailing at the closing date as the discount rate, which were -0,56% (-0,53%) (level 2). Fair values of forward foreign exchange contracts and swaps are determined using quoted forward rates from contracts with similar duration. The Group does not apply hedge accounting according to IFRS 9, so the changes in fair values for derivative instruments are recorded in the statement of comprehensive income.

The Group owns unlisted shares the market value of which is not reliably available. The fair value is determined by methods based on management's judgement (level 3).

31 CONTINGENT LIABILITIES AND ASSETS AND PURCHASE COMMITMENTS

1,000 €	2021	2020
On behalf of own loans		
Pledged deposits	34	38
Other contingent liabilities	18,792	8,469
On behalf of associated companies and joint ventures		
Guarantees	30	30
Guarantee according to Nuclear Energy Act	286,664	54,457
Total	305,520	62,994

The pledged deposits relate mainly to margin accounts for the electricity trading, emission allowance trading and environmental permits.

Other liabilities consist mainly of the parent company's loan guarantees.

Guarantee under the Nuclear Energy Act

According to the Finnish Nuclear Energy Act, Teollisuuden Voima, a joint venture of which Pohjolan Voima owns 58.5%, 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 guarantee is valid for five years and it is annually renewed at the end of March. The directly enforceable guarantee given by Pohjolan Voima is 286.7 (54.5) million euros. The amount of the guarantee increased during to financial year as Olkiluoto 3 unit was included in the guarantee.



INVESTMENT COMMITMENTS

Joint ventures

Pohjolan Voima Oyj has committed to an investment into the nuclear power plant Olkiluoto 3 EPR built by Teollisuuden Voiman Oyj during 2004 to 2021. The commitment consists of a 432 million euros investment, a shareholder loan of 108 million and an additional shareholder loan of a maximum of 693 million euros. As at 31 December 2021 Pohjolan Voima Oyj has fulfilled 992 (992) 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.

LEGAL PROCEEDINGS

On 30 September 2021, PVO-Lämpövoima Oy submitted an application to the Arbitration Institute of the Finland Chamber of Commerce on the commencement of arbitration proceedings in a dispute between PVO-Lämpövoima and Alfa Oil Oy. The dispute concerns a failure of Alfa Oil to meet its obligations under a deed of sale on a rock storage facility signed on 4 July 2018 by PVO-Lämpövoima and Alfa Oil. The matter is still pending.

32 EMISSION ALLOWANCES

Carbon Dioxide Emission

Generally, the Group holds emission allowances covering the annual CO₂ emissions. If the actual emissions exceed allowances held, the company has recognised an expense for emission rights at market price for each ton of emission exceeding its allowances. PVO-Lämpövoima's, which is classified as discontinued operations, emission information is not included the below listed information.

	2021	
	tCO ₂	1,000 €
Allowances received free of charge	30,260	
Combined annual emissions of the plants'	258,897	
Emission allowances held	1,254,802	
External sales of emission allowances*	300,000	17,271
External purchases of emission allowances**	73,147	4,216
	2020	
	tCO ₂	1,000 €
Allowances received free of charge	230,832	
Combined annual emissions of the plants'	368,267	
Emission allowances held	1,819,662	
External sales of emission allowances*	0	0
External purchases of emission allowances**	289,159	1,702

* Emission sales are included in revenue.

** The cost of purchased emission rights are included in materials and services and remaining emission allowances held at the closing date are included in the balance sheet as intangible assets.



33 GROUP COMPANIES

Parent company and subsidiaries	Production	Country	Ownership (%)	Voting right (%)
Hämeenkyrön Voima Oy	Thermal Power	Finland	84.00	84.00
Kaukaan Voima Oy	Thermal Power	Finland	54.00	54.00
Kymin Voima Oy	Thermal Power	Finland	76.00	76.00
Laanilan Voima Oy	Thermal Power	Finland	100.00	100.00
Porin Prosessivoima Oy	Thermal Power	Finland	100.00	100.00
PVO-Lämpövoima Oy	Thermal Power	Finland	100.00	100.00
PVO Power Management Oy	Services company	Finland	100.00	100.00
PVO Power Services Oy	Services company	Finland	100.00	100.00
PVO-Vesivoima Oy	Hydropower	Finland	100.00	100.00
Rauman Biovoima Oy	Thermal Power	Finland	71.95	71.95
Rouhialan Voimansiirto Oy	Services company	Finland	100.00	100.00

List of associated companies and joint ventures

Associated companies

Registered Office

Oy Alholmens Kraft Ab	Pietarsaari
Länsi-Suomen Voima Oy	Harjavalta
Tahkoluodon Polttoöljy Oy	Pori
Torniolaakson Voima Oy	Ylitornio

Joint ventures

Teollisuuden Voima Oyj	Helsinki
Vaskiluodon Voima Oy	Vaasa
Voimalohi Oy	Kemi



34 RELATED-PARTY TRANSACTIONS

The Group's related parties include the parent company, associates and joint ventures as well as the largest shareholder, UPM-Kymmene Group. Related parties also include the Board of Directors and the Corporate Executive Team members including the CEO and companies, in which they or their family members has control.

Transactions with related parties, 1000 €

Related party transactions relate to normal business operations of Pohjolan Voima. Pohjolan Voima has granted to Teollisuuden Voima Oyj, a joint venture, shareholder loans of 560 (560) million euros. The management has assessed that the loan receivables do not include impairment risk. Teollisuuden Voima has used its right to borrow from State Nuclear Waste Management Fund and further granted a loan of 350 (350) million euros to Pohjolan Voima. There is no security given for the loan.

2021	Sales	Purchases	Receivables	Liabilities
Associates and joint ventures	24,427	205,866	628,331	361,821
UPM-Kymmene Group	188,971	74,915	24,062	7,653

2020	Sales	Purchases	Receivables	Liabilities
Associates and joint ventures	745	191,088	610,148	361,669
UPM-Kymmene Oyj	171,022	64,736	19,292	6,487

The Board of Directors and the Executive team

Senior management of Pohjolan Voima consists of the board members and the executive management team members, including the President and CEO. The Group has not granted any loans to senior management, and has no business transactions with management as at 31 December 2021 nor 31 December 2020.

Salaries and benefits of the Board of Directors and the Executive team

1,000 €	2021	2020
Salaries and other short-term employee benefits - board members	461	501
Salaries and other short-term employee benefits - executive team	1,376	1,422
Total	1,837	1,923

No pension benefits were paid to the Board of Directors in 2021 and 2020.

Salaries and benefits of the CEO

1,000 €	2021	2020
Salaries and other short-term employee benefits	404	376
Statutory pension scheme	65	57
Voluntary pension plan	48	47
Total	517	480



35 BREAKDOWN OF SHARE OWNERSHIP AND SHAREHOLDER INFORMATION

Shareholder	2021 % of shares	2020 % of shares
EPV Energia Oy	5.49%	5.49%
Helen Oy	0.62%	0.62%
Kemira Oyj (incl. Neliapila pension fund)	5.06%	5.06%
Ilmarinen Mutual Pension Insurance Company	1.83%	1.83%
Kokkolan Energia Oy	1.80%	1.80%
Kymppivoima Oy	5.91%	5.91%
Metsä Group (Metsäliitto, Metsä Fibre, Metsä Board Oy)	3.66%	3.66%
Myllykoski Oyj*	0.63%	0.63%
Oulun Energia Oy	0.91%	0.91%
Outokumpu Oyj	0.10%	0.10%
Oy Perhonjoki Ab	2.21%	2.21%
City of Pori	1.37%	1.37%
Rautaruukki Oyj	0.09%	0.09%
Stora Enso Oyj	15.61%	15.61%
Suomen Voima Oy	1.48%	1.48%
UPM Energy Oy	47.73%	47.73%
UPM Communication Papers Oy	3.46%	3.46%
Vantaan Energia Oy	0.23%	0.23%
Yara Suomi Oy (incl. pension fund)	1.84%	1.84%
Total	100.00%	100.00%

*Myllykoski Oyj is a part UPM-Kymmene Group.

Shareholders by sector	2021 % of shares	2020 % of shares
Forest industry	71.08%	71.08%
Energy companies	18.64%	18.64%
Chemical industry	6.90%	6.90%
Metal industry	0.19%	0.19%
Other	3.20%	3.20%
Total	100.00%	100.00%

36 EVENTS AFTER THE REPORTING PERIOD

On 25 October 2021, Pohjolan Voima Oyj announced a decision of the extraordinary general meeting to approve the sale of shares in Hämeenkyrön Voima Oy to Metsä Board Corporation. The share transaction took place on 1 January 2022. The same meeting also decided on the repayment of capital amounting to €11,602,350.58 from the company's reserve for invested non-restricted equity. The repayment of capital took place on 5 January 2022.

Pohjolan Voima Oyj published on 3 February 2022 a stock exchange release stating that Teollisuuden Voima Oyj has announced that the OL3 EPR plant unit's electricity production starts at the end of February, and regular electricity production starts in July 2022. The start of electricity production is postponed due to modification needs observed during the test production phase. Teollisuuden Voima Oyj specified on 12 February 2022 that the plant unit's electricity production will start in March 2022.



Parent company financial statements (FAS)

Income statement

1,000 €	Note	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Revenue	2	363,298	350,499
Other operating income	3	379	129
Materials and services	4	-130,547	-140,492
Personnel expenses	5	-4,493	-4,664
Depreciation, amortisation and impairment	6	-224	-752
Other operating expenses	7	-228,315	-204,418
Operating profit or loss		98	302
Finance income and costs	8	-7,201	-6,999
Profit or loss before appropriations and taxes		-7,104	-6,697
Profit or loss for the year		-7,104	-6,697



Balance sheet

1,000 €	Note	31 Dec 2021	31 Dec 2020	1,000 €	Note	31 Dec 2021	31 Dec 2020
ASSETS				EQUITY AND LIABILITIES			
Non-current assets				Equity			
Intangible assets	9	211	341	Share capital	14	55,321	55,321
Property, plant and equipment	10	432	393	Share issue		203,865	205,999
Investments	11			Share premium		218,644	218,644
Holdings in Group undertakings		402,610	402,610	Revaluation reserve		322,778	327,644
Other investments		1,289,881	1,289,894	Reserve for invested non-restricted equity		-13,607	-6,911
Total non-current assets		1,693,134	1,693,238	Retained earnings		-7,104	-6,697
Current assets				Total equity		779,897	794,001
Non-current receivables	12	36,797	36,797	Liabilities			
Current receivables	13	69,471	58,873	Non-current liabilities	15	875,347	875,347
Cash and cash equivalents		48,205	52,676	Current liabilities	16	192,362	172,236
Total current assets		154,473	148,346	Total liabilities		1,067,709	1,047,583
Total assets		1,847,607	1,841,584	Total equity and liabilities		1,847,607	1,841,584



Cash flow statement

1,000 €	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020	1,000 €	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Operating activities			Financing		
Operating profit or loss	98	302	Equity refunds paid	-7,000	0
Adjustments (+/-):			Proceeds (+) or repayments (-) of current interest-bearing liabilities	16,424	755
Depreciation, amortisation and impairment	224	752	Proceeds from borrowings	0	245,362
Losses(+) or gains (-) of sales of non-current assets	-195	-6	Repayments of borrowings (-)	0	-100,447
Cash flow from operating activities	127	1 048	Cash flow from financing activities	9,424	145,669
Change in net working capital:			Change in cash and cash equivalents, increase (+) / decrease (-)	-4,471	-10,141
Increase (-) or decrease (+) of non-interest-bearing receivables	-10,663	-2,232	Cash and cash equivalents at 1 Jan	52,676	62,817
Increase (+) or decrease (-) of current non-interest-bearing liabilities	3,955	1,067	Cash and cash equivalents at 31 Dec	48,205	52,676
Cash flow from operating activities before financial items and taxes	-6,581	-117			
Interest paid and payments of financial items	-12,283	-9,387			
Dividends received from operating activities	0	0			
Interest received and payments of financial income	4,897	4,516			
Cash flow from operating activities	-13,967	-4,988			
Investments					
Purchases of property, plant and equipment and intangible assets	-136	-255			
Proceeds from sales of property, plant and equipment and intangible assets	208	12			
Loans granted (-)	0	-150,579			
Cash flow from investing activities	72	-150,822			



1 BASIS OF PREPARATION

Pohjolan Voima Oyj's financial statements have been prepared in accordance with Finnish Accounting Standards (FAS) and other laws and regulations governing the preparation of the financial statements in Finland.

Pohjolan Voima Oyj (0210161-4, Helsinki, Finland) is the parent company of Pohjolan Voima Group.

Revenue

Revenue is recognised net of value-added taxes and discounts. Revenue is recognised at the time of delivery.

Other operating income

Revenue from activities outside the normal operations is reported in other operating income. This includes items such as rental income and gains on sale of assets

Research and development costs

Research and development costs are expensed as incurred.

Pension costs

Statutory pension liabilities are covered through pension insurance arrangements.

Foreign currencies and derivative contracts

In accordance with the financing policy, Pohjolan Voima Oyj enters into derivative contracts only for managing the interest rate risk and for hedging purposes. The interest rate risk is monitored by means of duration, which is set at the level where the electricity price sensitivity to changes in interest rates is on an acceptable level considering the individual risk bearing capacity of each series of shares. Derivative contracts are not fair valued but considered as off-balance sheet items. Derivatives used to manage interest rate risk are accrued for the contract period and they are recognised against the interest expenses of the hedged loans. Derivative contracts can be terminated at fair value. The key figures of foreign exchange rate and interest rate derivatives are disclosed in the notes.

Transactions denominated in foreign currencies have been valued using the exchange rate at the date of the transaction. Receivables and liabilities denominated in foreign currencies outstanding on the balance sheet date have been valued using the exchange rate quoted on the balance sheet date. Exchange rate differences are presented within finance income and cost in the income statement.

Income taxes and deferred taxes

The tax expense for the period comprises current tax, relating to the current period and any adjustments made to taxes for the previous financial period. Pohjolan Voima Oyj operations are based on cost price and the company does not pay any taxes on its energy related operations. No deferred tax assets on the operating losses from previous periods have been recognized.

Non-current assets

The intangible assets and property, plant and equipment is stated at historical cost less accumulated amortisation and depreciation according to plan. Historical cost includes the variable costs of the investment. Received government grants have been deducted from acquisition cost. Depreciation is calculated using the straight-line method based on the estimated useful lives. Depreciation and amortisation is started when the asset is taken into use.

The estimated useful lives have been defined as follows:

Other capitalised long-term expenditure	3–10 years
Machinery and equipment	3–20 years
Buildings and constructions	8–30 years



NOTES TO THE INCOME STATEMENT

2 REVENUE

1,000 €	2021	2020
Sales of electricity	256,797	248,490
Sales of heat	103,590	99,154
Other sales	2,911	2,855
Total	363,298	350,499

3 OTHER OPERATING INCOME

1,000 €	2021	2020
Gains on sale and dissolution of fixed assets	206	4
Rental income	171	122
Other income	2	3
Total	379	129

4 MATERIALS AND SERVICES

1,000 €	2021	2020
Energy purchases	130,547	140,492
Total	130,547	140,492

5 PERSONNEL EXPENSES AND AVERAGE NUMBER OF PERSONNEL

Average number of personnel

	2021	2020
Salaried employees	29	34
Workers	1	1
Total	30	35

Wages, salaries and pension expenses

1,000 €	2021	2020
Wages and salaries		
Board members and CEO	866	877
Other wages and salaries	2,815	3,035
Pension expenses	682	604
Other personnel expenses	130	148
Total	4,493	4,664



6 DEPRECIATION, AMORTISATION AND IMPAIRMENT

1,000 €	2021	2020
Depreciation according to plan		
Other capitalised long-term expenditure	79	175
Intangible assets	51	30
Buildings and constructions	42	43
Machinery and equipment	52	57
Investments	0	447
Total	224	752

7 OTHER OPERATING EXPENSES

1,000 €	2021	2020
Energy purchases	222,693	198,713
Repair, servicing and maintenance services	33	56
Rents	708	723
Real estate taxes	19	19
Fees to experts	2,696	2,704
Other expenses	2,166	2,202
Total	228,315	204,418

Auditor's fees

1,000 €	2021	2020
PricewaterhouseCoopers Oy:		
Audit fees	144	94
Other services	8	16
Total	153	110

8 FINANCE INCOME AND COSTS

1,000 €	2021	2020
Dividend income		
from others	0	0
Interest income from investments		
in participating interests	2,769	2,954
Other interest and finance income		
in participating interests	2,434	1,637
from others	3	1
Total finance income	5,206	4,592
Interest costs and other financial costs		
to participating interests	-1,774	-1,584
to others	-10,633	-10,007
Total finance costs	-12,407	-11,591
Total finance income and costs	-7,201	-6,999



NOTES TO THE BALANCE SHEET

9 INTANGIBLE ASSETS

1,000 €	Intangible rights	Other capitalised long-term expenditure	Total
Cost or valuation at 1 Jan	317	4,270	4,586
Additions	0	0	0
Disposals	0	-5	-5
Reclassifications	0	0	0
Cost or valuation at 31 Dec	317	4,265	4,581
Accumulated amortisation 1 Jan	-92	-4,154	-4,245
Accumulated amortisation of disposals and reclassifications	0	5	5
Amortisation of the period	-51	-79	-130
Impairment	0	0	0
Accumulated amortisation 31 Dec	-143	-4,228	-4,371
Net book value 31 Dec 2021	174	37	211
Net book value 31 Dec 2020	225	116	341



10 PROPERTY, PLANT AND EQUIPMENT

1,000 €	Land and water areas	Buildings and constructions	Machinery and equipment	Other tangible assets	Prepayments	Total
Cost or valuation at 1 Jan	99	868	1,075	40	0	2,082
Additions	0	0	0	0	136	136
Disposals	-2	-313	-69	0	0	-385
Reclassifications	0	0	0	0	0	0
Cost or valuation at 31 Dec	96	555	1,005	40	136	1,832
Accumulated amortisation 1 Jan	0	-705	-984	0	0	-1,689
Accumulated amortisation of disposals and reclassifications	0	313	69	0	0	383
Amortisation of the period	0	-42	-52	0	0	-94
Impairment	0	0	0	0	0	0
Accumulated amortisation 31 Dec	0	-433	-967	0	0	-1,400
Net book value 31 Dec 2021	96	122	38	40	136	432
Net book value 31 Dec 2020	99	163	91	40	0	393

Production machinery and equipment at 31 Dec 2021 0



11 INVESTMENTS

1,000 €	Holdings in Group undertakings	Participating interests	Receivables from participating interests	Other shares and similar rights of ownership	Total
Cost or valuation at 1 Jan	408,831	740,554	559,732	483	1,709,601
Additions	0	0	0	0	0
Disposals	0	0	0	-13	-13
Reclassifications	0	0	0	0	0
Cost or valuation at 31 Dec	408,831	740,554	559,732	471	1,709,588
Accumulated impairment 1 Jan	-6,222	-10,875	0	0	-17,097
Impairment	0	0	0	0	0
Accumulated impairment 31 Dec	-6,222	-10,875	0	0	-17,097
Net book value 31 Dec 2021	402,610	729,678	559,732	471	1,692,491
Net book value 31 Dec 2020	402,610	729,678	559,732	483	1,692,504
Revaluations included in the cost at 31 Dec 2021	265,145				

Participating interests include shares of Teollisuuden Voima Oyj amounting to 708,893 (708,893) thousand euros and Receivables from participating interests loan receivables from Teollisuuden Voima Oyj amounting to 559,732 (559,732) thousand euros.



12 NON-CURRENT RECEIVABLES

1,000 €	2021	2020
Capital loan receivables	1	1
Other non-current receivables	36,796	36,796
Total	36,797	36,797
Receivables from Group undertakings		
Capital loan receivables	1	1
Total receivables from Group undertakings	1	1
Receivables from participating interests		
Other non-current receivables	36,796	36,796
Total receivables from participating interests	36,796	36,796

13 CURRENT RECEIVABLES

1,000 €	2021	2020
Trade receivables	46,043	38,865
Other receivables	2	424
Prepayments and accrued income	23,425	19,584
Total	69,471	58,873
Receivables from Group undertakings		
Trade receivables	1,250	453
Prepayments and accrued income	1,265	942
Total receivables from Group undertakings	2,515	1,395
Receivables from participating interests		
Trade receivables	1,714	819
Prepayments and accrued income	16,218	12,635
Total receivables from participating interests	17,933	13,454
Prepayments and accrued income:		
Accrued financial expenses	2,042	2,237
Accrued personnel expenses	8	10
Accrued interest income	798	865
Accrued sales of emission rights	3,786	953
Accrued VAT on prepayments	3,294	3,679
Accrued energy purchases, credit	875	496
Accrued energy purchases	12,031	11,222
Others	593	122
Total	23,425	19,584
Interest-bearing receivables		
Non-current assets	559,732	559,732
Current assets	48,205	52,676
Total	607,937	612,408



14 EQUITY

1,000 €	2021	2020
Share capital 1 Jan	55,321	55,321
Share capital 31 Dec	55,321	55,321
Share premium 1 Jan	205,999	205,999
Transfer to reserve for invested non-restricted equity	-2,134	0
Share premium 31 Dec	203,865	205,999
Revaluation reserve 1 Jan	218,644	218,644
Revaluation reserve 31 Dec	218,644	218,644
Reserve for invested non-restricted equity 1 Jan	327,644	327,644
Transfer from share premium	2,134	0
Refund of reserves	-7,000	0
Reserve for invested non-restricted equity 31 Dec	322,778	327,644
Retained earnings 1 Jan	-13,607	-6,911
Retained earnings 31 Dec	-13,607	-6,911
Profit or loss for the year	-7,104	-6,697
Total	779,897	794,001

Distributable earnings 31 Dec

	2021	2020
Retained earnings	-13,607	-6,911
Profit or loss for the year	-7,104	-6,697
Reserve for invested non-restricted equity	322,778	327,644
Total	302,067	314,037

Share capital by share category

See note 25 in the consolidated financial statements.



15 NON-CURRENT LIABILITIES

1,000 €	2021	2020
Shareholder loans*	90,347	90,347
Bonds	275,000	275,000
Loans from financial institutions	160,000	160,000
Other non-current liabilities	350,000	350,000
Total	875,347	875,347
Liabilities to participating interests		
Other non-current liabilities	350,000	350,000
Total	350,000	350,000
Liabilities due in more than five years		
Shareholder loans	90,347	90,347
Total	90,347	90,347
Non-interest-bearing and interest-bearing non-current liabilities		
Interest-bearing	875,347	875,347
Total	875,347	875,347

*Subordinated loans

16 CURRENT LIABILITIES

1,000 €	2021	2020
Other interest-bearing liabilities	149,938	133,515
Trade payables	27,141	23,416
Other current liabilities	260	973
Accrued expenses	15,023	14,332
Total	192,362	172,236
To Group undertakings		
Trade payables	19,541	19,148
Other current liabilities	50,050	34,601
Accrued expenses	1,438	860
Total	71,029	54,609
To participating interests		
Trade payables	7,273	4,139
Accrued expenses	2,099	6,589
Total	9,372	10,728
Accrued expenses, material items		
Accrued personnel expenses	1,330	1,255
Accrued interest costs	5,681	5,934
Accrued energy sales, credit	875	28
Accrued energy purchases	2,409	5,474
Accrued emission right purchases	729	364
Other items	3,998	1,278
Accrued expenses, total	15,023	14,332
Non-interest-bearing and interest-bearing current liabilities		
Non-interest-bearing	42,424	38,721
Interest-bearing	149,938	133,515
Total	192,362	172,236



17 GUARANTEES AND CONTINGENT LIABILITIES

1,000 €	2021	2020
Guarantees		
Guarantees for loans		
On behalf of participating interests	16	16
Other guarantees		
As security for own liabilities	325	120
Total guarantees	341	136
Leasing liabilities		
Payments during the following year	84	103
Payments in subsequent years	51	87
Total leasing liabilities	135	190
Rental liabilities		
Payments during the following year	357	652
Payments in subsequent years	137	396
Total leasing liabilities	494	1,048
Other contingent liabilities		
Guarantee according to Nuclear Energy Act	286,664	54,457
As security for own liabilities	0	0
Total other contingent liabilities	286,664	54,457

According to the Finnish Nuclear Energy Act, Teollisuuden Voima, a joint venture of which Pohjolan Voima owns 58.5%, is obliged to fund the decommissioning of nuclear power plants and final disposal of spent nuclear fuel through the Finnish National 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 given by the shareholders of Teollisuuden Voima Oyj cover the uncovered portion of the Nuclear Waste Management obligation 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 286.7 (54.5) million euros. The amount of the guarantee increased during to financial year as Olkiluoto 3 unit was included in the guarantee.

Pohjolan Voima Oyj has committed to an investment into the nuclear power plant Olkiluoto 3 EPR built by Teollisuuden Voima Oyj during 2004 to 2021. The commitment consists of a 432 million euros investment, a shareholder loan of 108 million and an additional shareholder loan of a maximum of 693 million euros. As at 31 December 2021 Pohjolan Voima Oyj has fulfilled 992 (992) 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.



18 DERIVATIVE FINANCIAL INSTRUMENTS

1,000 €	2021	2020
Interest rate swap contracts		
Nominal value	263,000	247,000
Market value (including retained interests)	-1,972	-3,424
Average maturity (years)	3.2	3
Floating reference rate (company receives)	6 mo. Euribor/	6 mo. Euribor/
Fixed rate (on average, company pays)	0.66%	0.74%
The interest rate swap contracts cover the following financial agreements with floating interest rates:		
Bank credit	160,000	160,000
Amounts owed to participating interests	350,000	350,000

Financing risks

Board of Directors approve a financing policy for the company, which determines the purpose and risk levels for the financing operations. The refinancing risk is managed through diversified sources of financing, sufficiently long maturity of loans and a balanced schedule of maturity. The primary loan currency is the euro. If loans are taken out in other currencies, the currency risk is eliminated by means of derivative contracts. The interest rate risk is monitored by means of duration, which indicates the sensitivity of the loan portfolio to changes in the interest rates. The duration of the loan portfolio is managed using derivative contracts if necessary. The duration is set considering the electricity price sensitivity to interest rate changes and the acceptable risk carrying capacity of each series of shares.

The Group maintains a certain amount of liquid assets, credit limit arrangements and commercial paper programmes to reduce the liquidity risk. The Group's liquidity is secured by the 329 (350) million euros revolving credit facility, which matures in 2023. The loan facilities were fully undrawn as per 31 December 2021. For its short-term financing, the company uses mainly its domestic 300 million euros commercial paper program.

The excess liquidity is invested in secure and profitable instruments with a duration of up to 12 months. Investments are diversified to various instruments and the investment instruments which are chosen based on guaranteed liquidity in the secondary market even under unfavourable circumstances.



SIGNING OF THE BOARD OF DIRECTORS' REPORT AND FINANCIAL STATEMENTS

Board of Directors' dividend proposal:

The parent company Pohjolan Voima's profit and loss account indicates a loss of € 7.103.531,61. The Board of Directors proposes to the Annual General Meeting that the loss be transferred to the retained earnings account, and that no dividends be distributed.

Helsinki 21 February 2022

Tapio Korpeinen
Chairman

Seppo Parvi
Deputy Chairman

Jukka Hakila

Anders Renvall

Tomi Sederholm

Esa Kaikkonen

Rami Vuola

Jouni Lampinen

Juha-Pekka Weckström

Ilkka Tykkyläinen
President and CEO

THE AUDITOR'S NOTE

Our auditor's report has been issued today.

Helsinki 2 March 2022

PricewaterhouseCoopers Oy
Authorised Public Accountants

Niina Vilske
Authorised Public Accountant



Auditor's Report

To the Annual General Meeting of Pohjolan Voima Oyj

Report on the Audit of the Financial Statements

Opinion

In our opinion

- the consolidated financial statements give a true and fair view of the group's financial position and financial performance and cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of the financial statements in Finland and comply with statutory requirements.

Our opinion is consistent with the additional report to the Audit Committee.

What we have audited

We have audited the financial statements of Pohjolan Voima Oyj (business identity code 0210161-4) for the year ended 31 December 2021. The financial statements comprise:

- the consolidated balance sheet, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies
- the parent company's balance sheet, income statement, statement of cash flows and notes.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, the non-audit services that we have provided to the parent company and to the group companies are in accordance with the applicable law and regulations in Finland and we have not provided non-audit services that are prohibited under Article 5(1) of Regulation (EU) No 537/2014. The non-audit services that we have provided are disclosed in note 12 to the consolidated Financial Statements.

Our Audit Approach

Overview



- Overall group materiality is € 10 million, which represents 0,5% of balance sheet total

- The group audit scope encompassed all group companies

- Valuations of joint venture Teollisuuden Voima Oyj
- Intangible assets with indefinite useful lives

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain.



Materiality

The scope of our audit was influenced by our application of materiality. An audit is designed to obtain reasonable assurance whether the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall group materiality for the consolidated financial statements as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements on the financial statements as a whole.

Overall group materiality	€ 10 million (2020: € 10 million)
How we determined it	0,5% of balance sheet total
Rationale for the materiality benchmark applied	We chose balance sheet total as the benchmark because the company's operations are very capital intensive and because, in our view, this is the benchmark against which the performance of the group is commonly measured by users.

How we tailored our group audit scope

We tailored the scope of our audit, taking into account the structure of the Pohjolan Voima group, the accounting processes and controls, and the industry in which the group operates. The group audit scope encompassed the parent company and all the subsidiaries of the group.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Key audit matter

How our audit addressed the key audit matter

Valuations of joint venture Teollisuuden Voima Oyj

Accounting policies and notes 2, 19, 21 and 30 of the consolidated financial statements. Note 11 in the financial statements of the parent company.

On the consolidated balance sheet Investments in associated companies and joint ventures include the group's share of Teollisuuden Voima Oyj's net assets. Investments in joint ventures are accounted for using the equity method. Loans and other receivables include an equity loan receivable from Teollisuuden Voima Oyj. On the parent company's balance sheet Other investments include the shares of Teollisuuden Voima Oyj and the loan receivable from Teollisuuden Voima Oyj.

Teollisuuden Voima Oyj has the Olkiluoto 3 EPR plant unit in the test production phase (OL3 project). Delivery of the plant has been significantly delayed from the original schedule. The plant unit's reactor criticality was achieved for the first time in December 2021, but the plant investment is still incomplete.

Valuations of joint venture Teollisuuden Voima Oyj is a key audit matter in the audit of the consolidated and the parent company's financial statements due to the significant value on the balance sheet and due to the incomplete OL3 project.

We tested the consolidation of the joint venture in Pohjolan Voima Group's income statement and balance sheet.

We analysed management's assessment of the credit risk relating to the loan receivable from Teollisuuden Voima Oyj and the valuation of the Teollisuuden Voima Oyj's shares.

We reviewed management's risk assessment regarding progress of the OL3 project.

In our audit of the amounts recognised on the balance sheet we considered the provisions regarding shareholder responsibilities incorporated in the Articles of Association.

We also assessed the adequacy of related disclosures in the accounting policies and notes to the financial statements.



Intangible assets with indefinite useful lives

Accounting policies and notes 2 and 16 of the consolidated financial statements.

Intangible assets with indefinite useful lives on the consolidated balance sheet include the right to produce hydro power and the compensation paid for the permanent right of the water area usage.

Impairment testing for intangible assets with indefinite useful lives is performed annually.

Impairment tests, in particularly estimated future cash flows and discount rates are subject to significant management judgement.

Valuation of intangible assets with indefinite useful lives is a key audit matter in the audit of the consolidated financial statements due to the significant value on the balance sheet and the high level of management judgement involved in impairment tests.

We obtained an understanding of the impairment test performed by the management and compared the methodology applied in the impairment test to the requirements of IAS 36, Impairment of assets.

We tested the mathematical accuracy of the calculations prepared by management.

We tested management's future cash flow forecasts including comparison to the available market data of the electricity price.

We assessed together with PwC's valuation experts the discount rate used.

We also assessed the adequacy of related disclosures in the accounting policies and notes to the consolidated financial statements.

There are no significant risks of material misstatement referred to in Article 10(2c) of Regulation (EU) No 537/2014 with respect to the consolidated financial statements or the parent company financial statements.

Responsibilities of the Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the parent company's and the group's ability to continue as a going concern, disclosing, as applicable, matters relating to going

concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or to cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.



- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Reporting Requirements

Appointment

Pohjolan Voima Oyj became a public interest entity in May 2019. We have been the auditors of Pohjolan Voima Oyj all that time it has been a public interest entity.

Other Information

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises the report of the Board of Directors and the information included in the Annual Report, but does not include the financial statements and our auditor's report thereon. We have obtained the report of the Board of Directors prior to the date of this auditor's report and the Annual Report is expected to be made available to us after that date.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to the report of the Board of Directors, our

responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion

- the information in the report of the Board of Directors is consistent with the information in the financial statements
- the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Other Information

We support that the Members of the Board of Directors of the parent company and the Managing Director of the parent company should be discharged from liability for the financial period audited by us.

Helsinki 2 March 2022

PricewaterhouseCoopers Oy

Authorised Public Accountants

Niina Vilske

Authorised Public Accountant (KHT)



Pohjolan Voima Oyj
Töölönkatu 4
P.O. Box 40
FI-00101 Helsinki, Finland
Business ID 0210161-4
tel. 010 478 5000
www.pohjolanvoima.fi/en/

