



DECISIVE POWER.

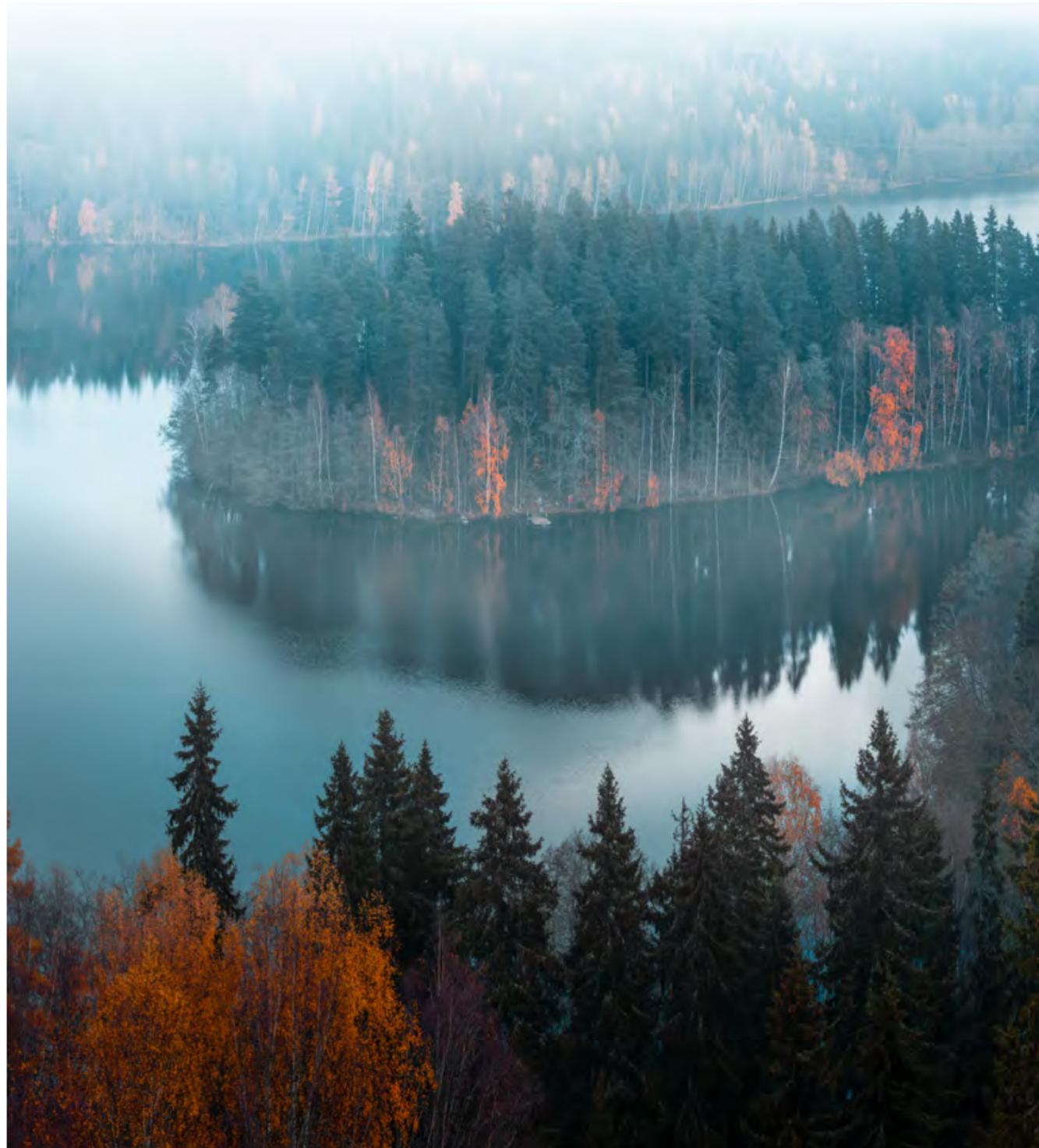
Annual report 2022



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CEO'S REVIEW

Russia's invasion of Ukraine shocked Europe and triggered an energy crisis in which security of supply is emphasised, and decision-makers have made swift decisions to help consumers.

The energy crisis has highlighted Pohjolan Voima's basic mission: to reliably supply electricity and heat to its owners. We produce almost 20% of all the electricity in Finland, of which already 97% is carbon neutral.

Adding biodiversity to our strategy

We updated our Decisive Power strategy, and the three strategic themes are now "sustainable production on market terms", "competitive advantage through balancing power capability and timeliness" and "top asset management expert". In our strategy, we further emphasised sustainability and highlighted biodiversity. We set our biodiversity targets and prepared an action plan. We want to develop the indicators for this complex theme with our stakeholders.

We continued with the years of cooperation to restore the natural migration patterns of migratory fish in the Iijoki river. Finland's first downstream migration route for migratory fish was completed, and the project on the old Raasakka riverbed progressed.



99%

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

Ilkka Tykkyläinen
President and CEO, Pohjolan Voima Oyj

“Decision-makers need to ensure that Finland will also be an attractive investment target in the future.”

Finland's most significant contribution to the climate effort connected to the grid

The OL1 and OL2 plant units of our joint venture Teollisuuden Voima (TVO) continued their reliable production. Finland's most significant contribution to the climate effort, the OL3 plant unit, was connected to the national grid in March. During its commissioning in 2022, it produced 1.9 TWh of electricity.

Asset management and something new

We are responsible for significant assets of which we must take good care. Power plant lifecycle management also promotes resource efficiency.

At the hydropower plants on the Iijoki river, we implemented Finland's most advanced river regulation solution. A completely new version of the turbine controller that we have developed with the University of Oulu was also introduced.

We realised several projects in our thermal power plants, such as a reduction of the minimum output of the Kaukaan Voima plant in Lappeenranta. In Porin Prosessivoima, we prepared a feasibility study on a plant that would produce green hydrogen and renewable methane in cooperation with Nordic Ren-Gas.

With TVO, we investigated small modular reactors (SMRs).

Valuable meetings

After the long period of restrictions due to the pandemic, it has been rewarding to be able to meet our stakeholders and continue the dialogue at various events and via our Sähkö tulee töpselistä (Electricity comes from the plug) podcast. We also continued to work with young people, and the youth representatives sparred with us in our biodiversity work.

We need well thought-out decisions

The energy crisis has highlighted that electricity and heat produced competitively with low emissions must always be available. The root cause of the exceptionally high prices is the intermittent scarcity of electricity. Decision-makers need to ensure that Finland will also be an attractive investment target in the future. There is no room for short-sighted decisions domestically or at the EU level. Political interventions like the tax on profits from electricity production must not become permanent.

Pohjolan Voima will celebrate its 80th anniversary in 2023. We are an expert organisation committed to continuous renewal and high performance. Together, we create an energetic atmosphere in line with our values, skilfully, reliably, together. For the fourth year in a row, we were listed as one of Finland's most inspiring workplaces.

We are in a good position to continue our relevant work and indirectly create jobs and wellbeing everywhere in Finland.

My thanks for a successful year go to all Pohjolan Voima's employees, our customers, our partners and our stakeholders.

Ilkka Tykkyläinen

President and CEO
Pohjolan Voima Oyj



Key figures 2022

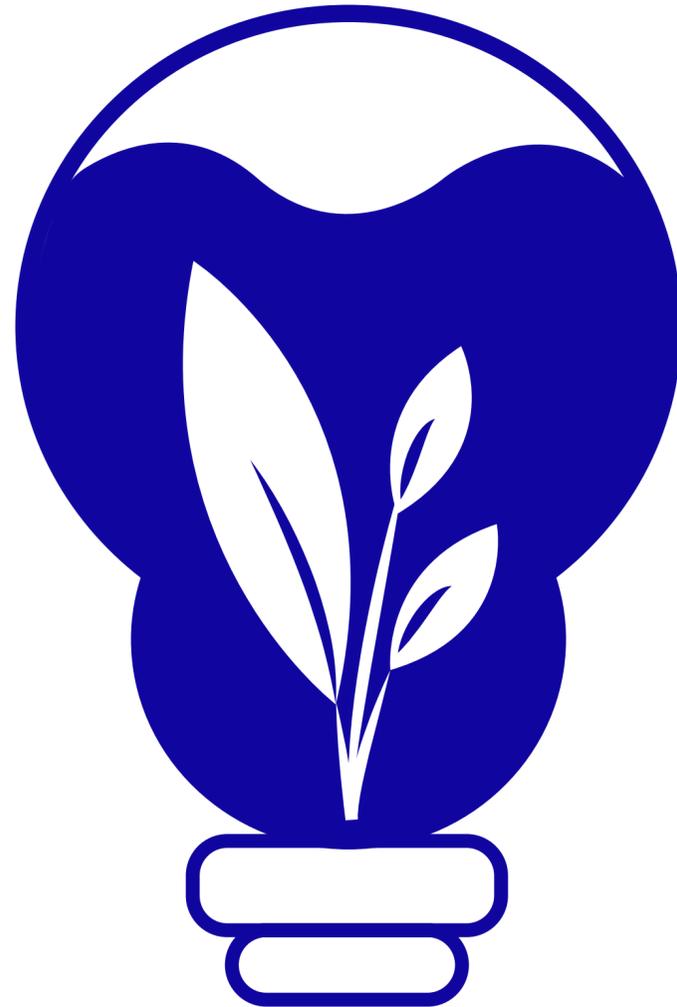
We achieved

97%

in carbon neutral
electricity
production
in 2022

80%

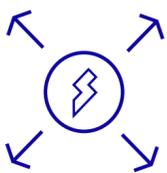
of our heat production was
carbon neutral in 2022




12.2 TWh
of electricity produced in 2022


18%
of the total electricity production in Finland


3.1 TWh
of heat produced in 2022


2,041 MW
electricity production capacity

Highlights of the year

The year 2022 included a momentous occasion for Pohjolan Voima Group and the whole of Finland: the connection of the OL3 EPR plant unit to the national grid. In our strategy, we further emphasised sustainability and added biodiversity. Finland's first downstream migration route for salmon fry was opened on the Iijoki river.



OL3 EPR



Haapakoski migration route

Teollisuuden Voima's Olkiluoto 3 EPR nuclear power plant unit was synchronised with the national grid on 12 March 2022. During its test production in 2022, Olkiluoto 3 produced 1.9 TWh of electricity.

We updated our Group strategy based on extensive scenario work, further emphasising sustainability and adding biodiversity.

We discussed the sustainable future of energy in our *Sähkö tulee töpselistä* (Electricity comes from the plug) podcast, at an event called *Energiapolitiikan korkeajännitys* (High tension in energy policy) as part of our MustRead collaboration, as well as with young activists.

We built Finland's first bored pile wall in an earth dam at the Melo hydropower plant to ensure the leak tightness of the dam. Realised with partners, the ground-breaking dam repair project includes the deepest bored pile wall in Finland.

In cooperation with Nordic Ren-Gas Ltd, we realised a feasibility study concerning the design of a plant that would produce green hydrogen and renewable methane. The power-to-gas plant would produce gas fuel for heavy transport.

Finland's first downstream migration route for salmon fry, including catching equipment, was introduced at Haapakoski rapids on the Iijoki river. The migration route was implemented as part of extensive cooperation on migratory fish in the Iijoki river.

We are one of Finland's most inspiring workplaces for the fourth year in a row. We work as a responsible team, and together we create an energetic spirit in line with our values, "skilfully, reliably, together".

We implemented a biodiversity project in which we assessed the impact of our activities, set our biodiversity targets and prepared an action plan for the coming years.



POHJOLAN VOIMA/OPERATING ENVIRONMENT

Changing operating environment

Russia's offensive warfare in Ukraine triggered a pan-European energy crisis, and Europe is moving quickly to break its dependence on Russian energy. Energy prices have been high at times, and concerns about security of supply have become a key energy policy issue. In Finland, the situation was affected by the end of electricity and wood fuel imports from Russia and a strong increase in weather-dependent production, among other factors. Challenges related to the balancing of the electrical power system and the integration of energy flows from different industries by developing hydrogen technology, among other measures, are even more important than before.

Swift decisions to help consumers

Decision-makers in the EU and Finland have proposed and introduced several measures aimed specifically at assisting consumers in coping with their large electricity bills. The EU adopted a Council Regulation requiring Member States to impose a revenue cap of €180/MWh on electricity producers and to allocate the collected revenue to consumers. In Finland, the plan is to implement the regulation through a temporary tax for which the Government submitted a proposal to Parliament in December 2022. According to the proposal, electricity producers participating in the electricity market will have to pay an

additional 30% of corporation tax on any revenue from electricity business exceeding the 10% revenue calculated from the equity committed to electricity operations.

Climate change and nature restoration

Climate change remains one of the megatrends driving the energy industry. The end of natural gas imports from Russia to Europe will contribute to an acceleration of the transition to carbon neutral production. Protection of biodiversity has begun to emerge as a future megatrend alongside climate change mitigation.

Finland's climate target is to be carbon neutral by 2035 and carbon negative shortly thereafter. The Government submitted a report on the national climate and energy strategy to Parliament in the summer of 2022, and the debate in Parliament will continue in 2023. The strategy outlines measures to help Finland achieve carbon neutrality by 2035. The strategy recognises the importance of all forms of carbon neutral production. The acceptability of nuclear power is very high. Hydropower is seen as an essential balancer of the electrical power system as the volume of wind power production, which varies according to the weather, continues to grow rapidly. According to the strategy, combustion-based forms of production will be necessary for decades to come, and peat has become

increasingly acceptable as a fuel to ensure the security of supply. At the end of 2022, the debate on meeting the climate target intensified when estimates by Natural Resources Institute Finland showed that forest carbon sinks are lower than previously estimated.

In Finland, the energy crisis has contributed to the fact that several legislative projects in the Government Programme have not progressed. Proposals that the current Government will not make during its term include exempting cost-price nuclear power production from interest expense deduction restrictions, a proposal on value creation in real estate taxation, amending the Water Act in relation to "zero obligation" power plants, as well as a long-term overall reform of energy taxation. However, preparation of these projects will continue.

The EU continues to work on the Fit for 55 package, which includes several initiatives to meet the EU's climate target of reducing emissions by at least 55% from the level of 1990 by 2030. The criteria in the EU taxonomy for sustainable activities on climate change mitigation and adaptation have been accepted. Nuclear power and natural gas were also accepted as sustainable forms of energy. In addition to the emergency packages to tackle the energy crisis, the Commission adopted a proposal for a regulation on nature restoration.



The energy crisis made security of supply a key energy policy issue.



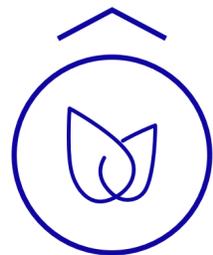
STRATEGY

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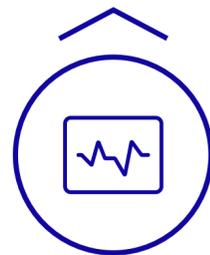
Pohjolan Voima – Decisive Power

Strategy 2022–2027

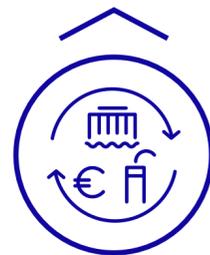
We create decisive power to strengthen competitiveness and contribute to a better tomorrow



**Sustainable
production on
market terms**



**Competitive advantage by balancing
power capability
and timeliness**



**Top expert in asset
management**

Skilfully – Reliably – Together

We bear our responsibility for tomorrow

We updated our Pohjolan Voima – Decisive Power strategy in 2022. The update was based on comprehensive scenario work. We further emphasised sustainability and added biodiversity to the strategy. The other main elements remained largely unchanged. We describe our purpose with the expression “We create decisive power to strengthen competitiveness and contribute to a better tomorrow”. 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 – will succeed. Indirectly, we create jobs and wellbeing in Finland. With our carbon neutral production, we also assist our customers in reducing their emissions. We play our part in creating a cleaner world.

The update of the Decisive Power strategy was based on scenario work that started in 2021, involving our customers and all employees of Pohjolan Voima. During the scenario work, we prepared four different development paths for our operating environment until 2035 and the opportunities and risks they present to Pohjolan Voima.

Our strategic themes for 2022–2027 are:

Sustainable production on market terms

We want to be a responsible company. We therefore reconcile competitive carbon neutral production with biodiversity. Our goal is for 99% of our electricity production and 85% of our heat production to be carbon neutral by 2025. We emphasise sustainability in all our business operations and aim to:

- Make hydropower an accepted form of production and PVO-Vesivoima a recognised responsible actor in society.
- As an active owner, participate in the development

of the competitiveness and sustainability of Teollisuuden Voima’s nuclear power production.

- Ensure that the wood-based fuels in CHP are sustainably produced. We use fossil fuels and peat only as startup and backup fuels to ensure the security of supply based on the market situation.

Competitive advantage through balancing power and timely intervention

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 the 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 will increase the value of our existing production capacity by improving the balancing capacity of our plants (including storage and other technologies) and our ability to utilise the capacity. Furthermore, we will make extensive use of market information and internal knowledge in the development of timely production and balancing power.

Top asset management expert

We have large assets in our hands, and we take care of them in the best possible way. We safeguard the value of our assets and manage the operating model based on cost price through the capabilities of our expert organisation and networks. We improve the competitiveness of our assets by leveraging technology and knowledge, optimising our cost structure and developing our operating models. We also develop the lifecycle management of our production assets for each form of production.

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, efficiency and responsibility in 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 in the whole of Finland. More than 130 municipalities benefit from Pohjolan Voima's cost-price electricity and heat.

We have several partners who take care of functions that are important to us. This ensures extensive expertise and efficiency. For example, Caverion maintains our hydropower plants, Power-Deriva provides us energy management services, and Adner provides us financial administration services. We work in close cooperation with equipment suppliers and research institutions when developing our operations. We are also actively involved in networks of the energy sector and society.

When developing our sustainability, we engage in dialogue with our customers. It is important for us that our contractual and cooperation partners are aware of their role in Pohjolan Voima's value chain and are committed to sustainable operating principles and their development. Sustainability is included in our agreements, and we encourage our partners to work towards sustainability through training and audits, for example. During 2022, we updated the Sustainability Code of Conduct for Pohjolan Voima's suppliers. In addition to the principles of the Supplier Code of Conduct, we expect all our contracting parties and partners to comply with all applicable laws, operating permits and other binding requirements with the aim of sustainably managing economic, social and environmental matters. Suppliers must grant Pohjolan Voima the right to audit their operations and provide information on compliance with the requirements of the Code of Conduct on request. If a supplier fails to meet the requirements of the Code of Conduct, Pohjolan Voima will support the improvement of the supplier's sustainability. Pohjolan Voima reserves the right to ultimately terminate the cooperation and all related agreements if a supplier breaches the Code of Conduct.

We require our partners to commit to sustainable operations.



BUSINESS OPERATIONS

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BUSINESS OPERATIONS/PRODUCTION IN 2022

Production year 2022

In 2022, Pohjolan Voima produced 12.2 TWh of electricity. Pohjolan Voima's share of all electricity produced in Finland was approximately 18%. Heat production totalled 3.1 TWh.

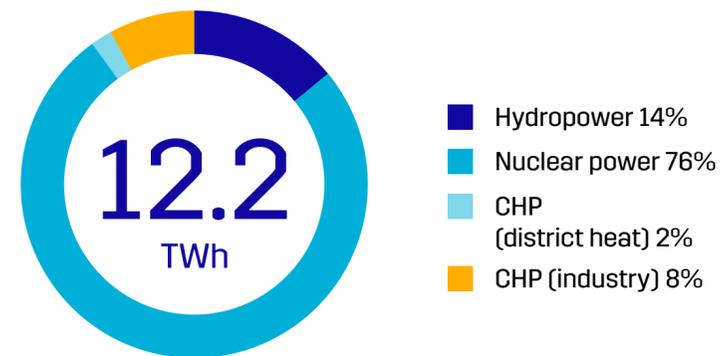
Pohjolan Voima's total electricity production capacity was 2,041 MW at the end of 2022, amounting to approximately 11% of all the electricity produced in Finland. The heat production capacity was 1,264 MW. The electricity generation capacity includes Pohjolan Voima's shares of the capacity of hydropower and nuclear power plants and the entire electricity generation capacity of thermal power plants, except for the power plants of the associate company Alholmens Kraft and joint venture Vaskiluodon Voima. Olkiluoto 3 also produced electricity during its test production phase. The total production capacity decreased with the sale of business operations of Hämeenkyrön Voima on 1 January 2022. The total production capacity will be affected by the sale of Vaskiluodon Voima's Vaasa power plant on 31 December 2022 and the start of regular electricity production at Olkiluoto 3. Laanilan Voima's power plant operations were closed in 2021, and the demolition of the power plant has started.

Pohjolan Voima does not have any condensing power production.

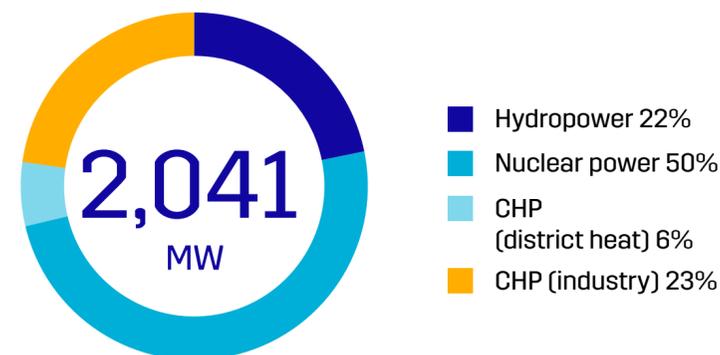
Electricity consumption in Finland in 2022 amounted to 82 TWh. Finnish electricity production totalled 69 TWh, while net imports into Finland amounted to 18 TWh. In 2022, electricity consumption in Finland decreased by 6% year-on-year. Industrial electricity consumption fell by 6%, as did consumption in other sectors.

[Also see Pohjolan Voima's production capacity on 31 December 2022](#)

Pohjolan Voima's electricity production in 2022



Pohjolan Voima's electricity production capacity on 31 December 2022



Fuels in electricity and heat production in 2022

Non-renewable fuels, mass/volume **Volume used**

Solid recovered fuels, SRF (fossile), t	31,861
Peat, t	403,351
Coal, t	46,681
Natural gas, million m3	2
Fuel oil, t	4,650
Loaded nuclear fuel, t	19
Others, t	0

Renewable fuels, mass

Biomass, t	2,033,424
SRF (bio), t	47,792

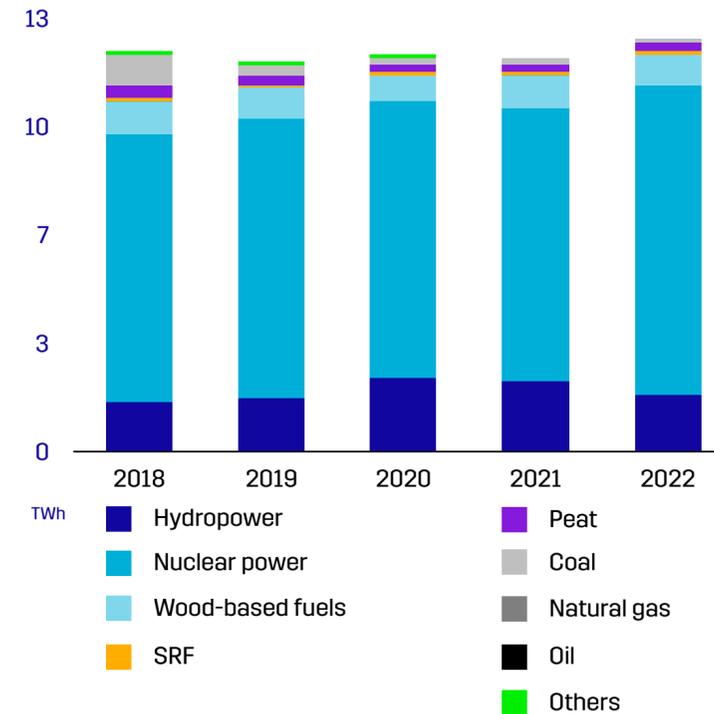
Non-renewable fuels, GWh

SRF (fossile), GWh	142
Peat, GWh	1,143
Coal, GWh	325
Natural gas, GWh	22
Fuel oil, GWh	54
Spent nuclear fuel, GWh	27,118
Others, GWh	0

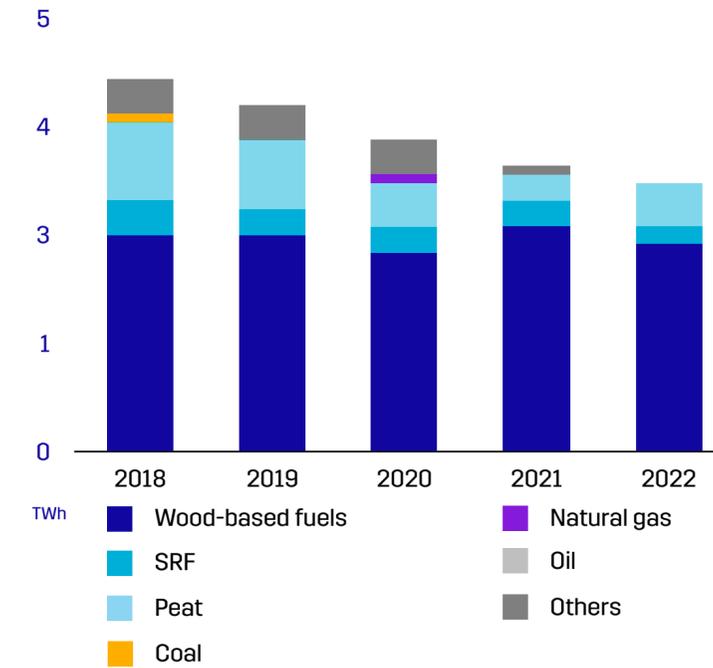
Renewable fuels, GWh

Biomass, GWh	4,533
SRF (bio), GWh	214

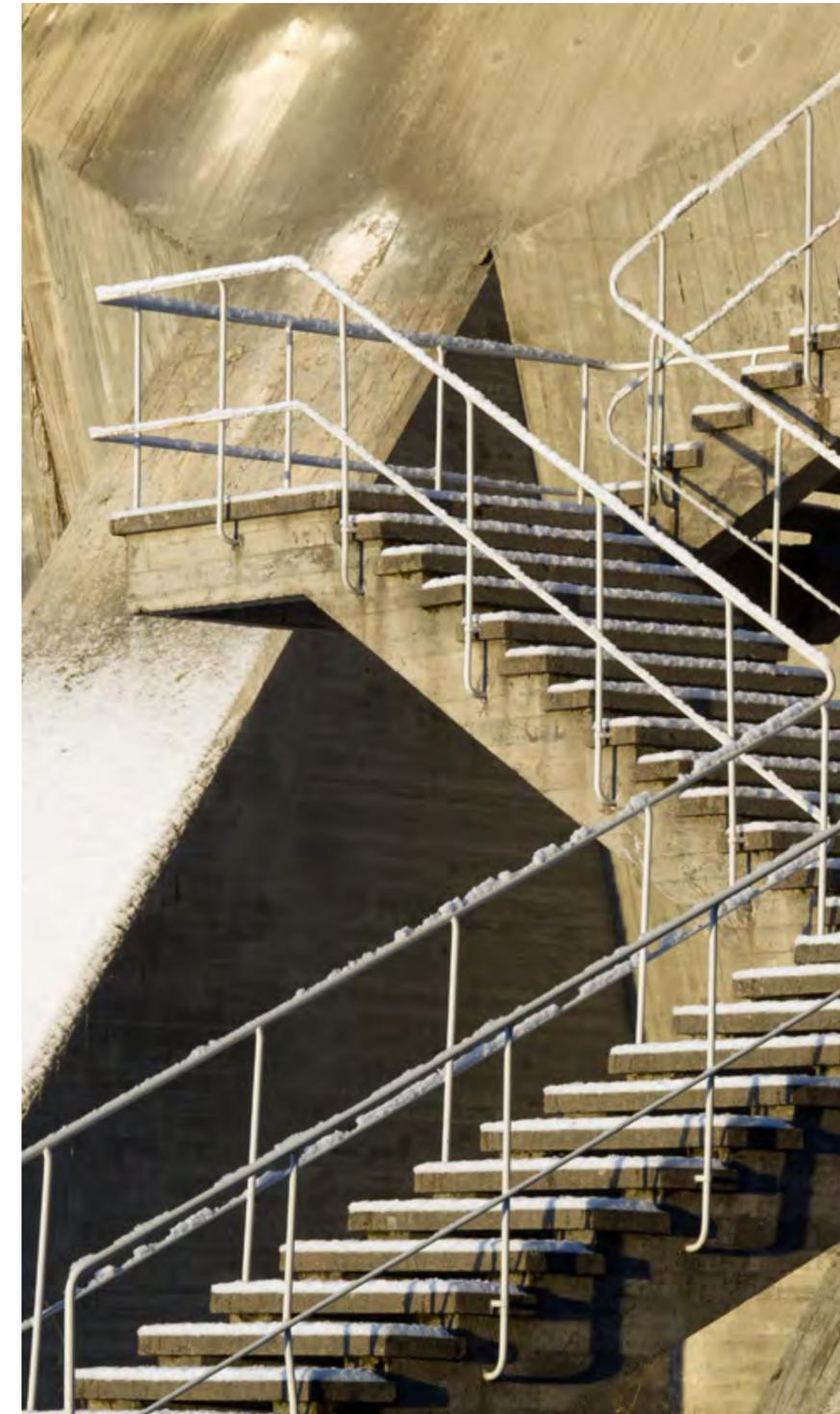
Electricity production, by energy source 2018–2022



Heat production by energy source in 2018-2022



Pohjolan Voima's electricity and heat production continued at a normal level in 2022.



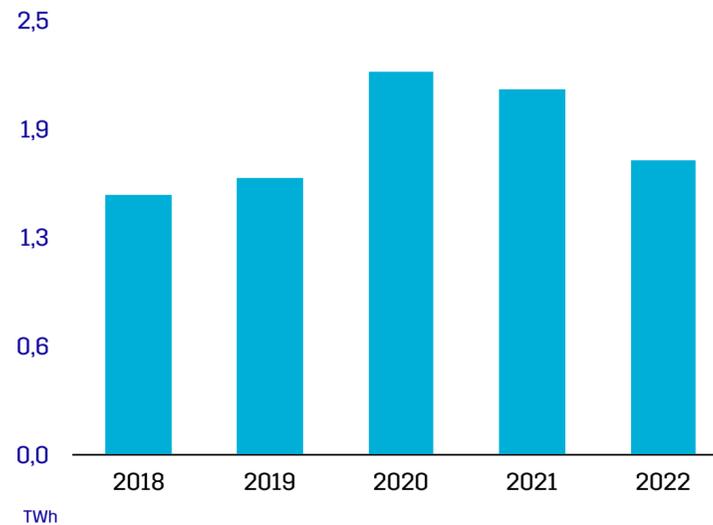
BUSINESS OPERATIONS/HYDROPOWER

Hydropower

Pohjolan Voima has 8 totally and 4 partially owned hydropower plants located along the Iijoki, Kemijoki, Kokemäenjoki and Tengeliönjoki rivers. The combined electricity generation capacity of these plants is 543 MW, of which Pohjolan Voima's share is 451 MW.

In 2022, a total of 1.7 TWh of electricity was produced using hydropower. Hydropower production remained slightly below the average due to a drier-than-normal latter part of the year.

Hydropower production in 2018–2022



Hydropower is a vital source of balancing power

Modern hydropower is part of the Finnish electrical power system. Almost 50% of all the renewable electricity and some 20% of all electricity produced in Finland is produced using hydropower. It is Finland's most significant source of balancing power. Distributed and reliable hydropower is crucial for the security of our electrical power system's production and supply.

In 2022, we continued the implementation of a systematic long-term programme of refurbishment and modernisation of our hydropower plants. With the refurbishments, we will gain more electricity and balancing power, provide environmental benefits and add decades to the service life of our power plants. We use technologies such as remote sensors and robotic imaging in the maintenance of our facilities, and drones to monitor the condition of riverbanks.

We made an investment decision on the replacement of a stator in the second generating unit at the Raasakka power plant on the Iijoki river. The replacement investment will be implemented during the summer and autumn of 2023.

[Read more about our development projects](#)

Extensive cooperation to benefit migratory fish and the aquatic environment

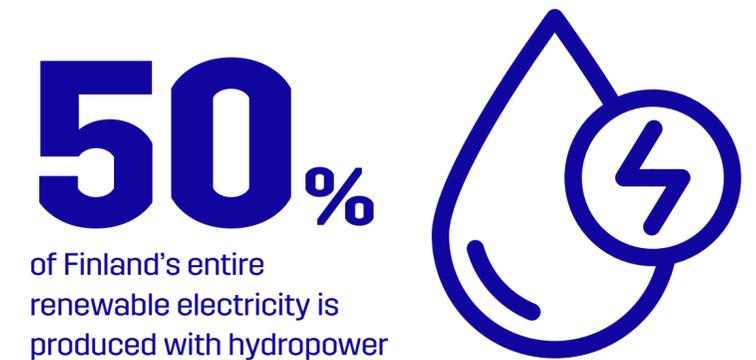
We actively cooperate with various stakeholders for the benefit of migratory fish and the aquatic environment (municipalities in the area, the Council of Oulu Region, the Centres for Economic Development, Transport and the Environment, the Ministry of Agriculture and Forestry, Natural Resources Institute Finland, local residents, fishery associations and collectives, as well as Metsähallitus). 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.

In the summer of 2022, Finland's first downstream migration route for salmon fry was opened at Haapakoski, the uppermost power plant on the Iijoki river. We continued our extensive cooperation on migratory fish at Iijoki, as well as the implementation of the vision for the Iijoki river in cooperation with other actors in the region.

We also participated in joint projects to restore migratory fish stocks in the Kemijoki and Ounasjoki rivers. Our associated company Tornionlaakson Voima applied for a permit to build natural fishways at Haapakoski on the Tengeliönjoki river.

[Read more about the management of our obligations and our work to promote environmental management](#)

[Read also on biodiversity](#)



Case: Earth dam in Melo sealed with a bored pile wall

In 2022, nearly 200 bored piles were used to reinforce the earth dam of the Melo power plant on the Kokemäenjoki river. The dam is the deepest bored pile wall structure in Finland and the largest dam ever reinforced using this method. Developed in Finland, the bored pile technique is usually used at bridge construction sites, for example.

A total of 193 piles were bored in the earth dam. The longest piles are 67 metres long. The wall consisting of the bored piles is embedded in rock. A total of almost 7.8 kilometres of steel piles has been drilled into the ground. The earth dam was completely renovated, covering an area of 4,500 square metres.

The core of the power plant's dam now consists of a 123-metre high bored pile wall. The former dam will remain in place to support the structure instead of being demolished.

Assurance of the dam's condition

The restoration of the Melo earth dam has been a long-term project. Since the early 2000s, changes observed in the dam have been repaired by injecting cement mortar and bentonite clay.

The dam has now been sealed with the bored pile wall because the injections did not produce the desired results. The bored pile wall ensures that the dam remains watertight, and we can now be confident that the dam is in very good condition.

No impact on water level or quality

There was no need to drain the reservoir, and the work did not affect the water level in Lake Pyhäjärvi above the power plant or the water quality in the vicinity of the power plant. Electricity production also continued without interruption.

The repairs of the earth dam were implemented in close cooperation with partners and the authorities supervising dams.

[Read more about the work on the dam](#)

**7.8 km
of steel piles were drilled
into the ground at the Melo
dam construction site.**



BUSINESS OPERATIONS/THERMAL POWER

Thermal power

In its thermal power production, Pohjolan Voima's heat production capacity was 1,264 MW. The total combined electricity generation capacity was 578 MW at the end of 2022. The figure includes the total electricity generation capacity of all the thermal power plants except for Pohjolan Voima's shares of the Vaskiluodon Voima and Alholmens Kraft plants. Pohjolan Voima's share of the thermal power plants' electricity generation capacity was 484 MW.

The combined heat and power plants produce steam and district heat for local industry and communities, as well as electricity. In 2022, the heat output of our CHP plants was 3.1 TWh, and the electricity output was 1.2 TWh. The power plants supplied district heat to Kouvola, Lappeenranta, Pori, Rauma and Vaasa.

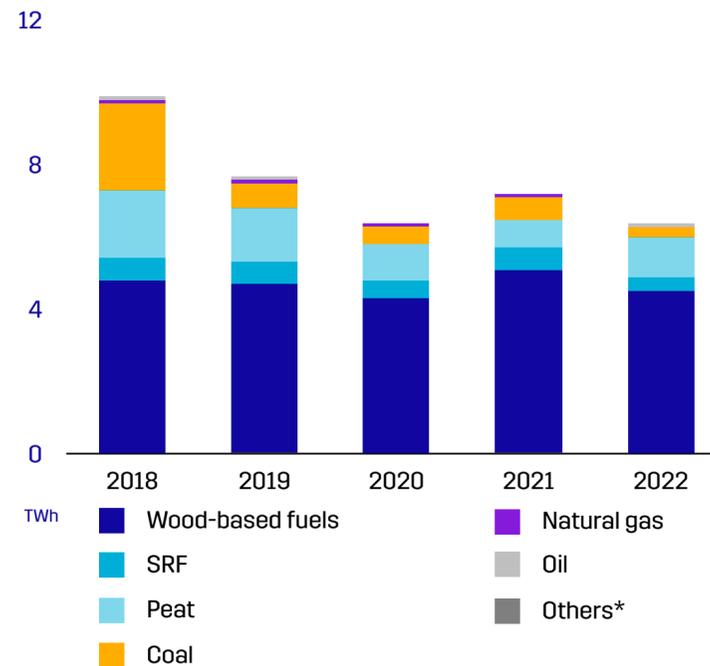
In 2022, the thermal power plants consumed 4.5 TWh of wood-based fuels, 1.1 TWh of peat, 0.4 TWh of recycled fuel and 0.3 TWh of coal. Oil and natural gas are used as startup and backup fuels.

Use of fuels in 2022

Fuel	Volume used, TWh
Wood-based fuels	4.5
Solid recovered fuels (SRF)	0.4
Peat	1.1
Coal	0.3

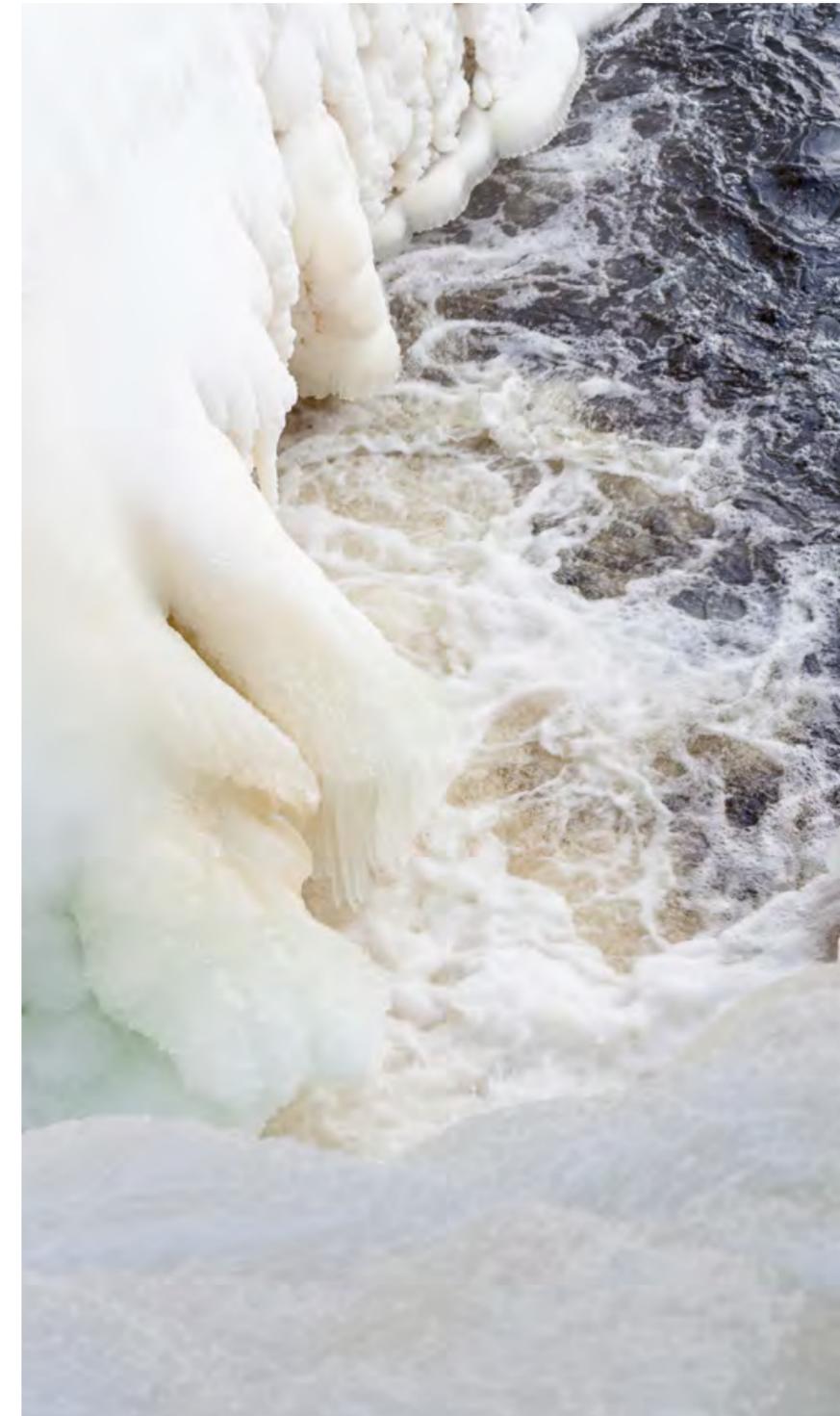
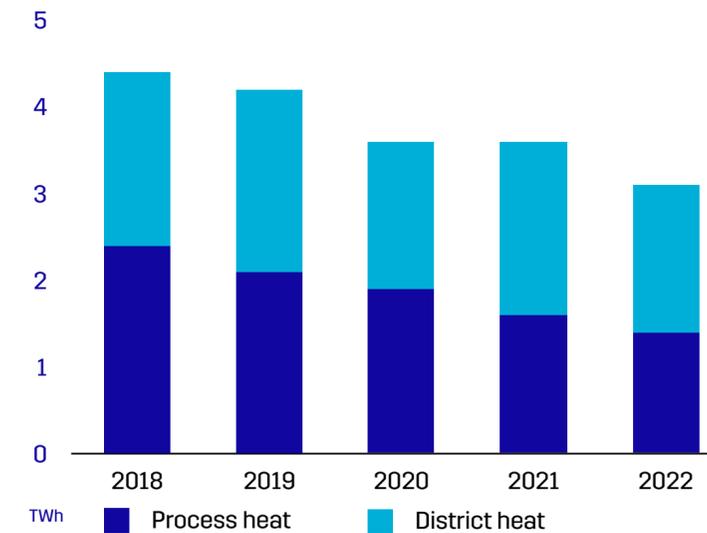
Oil and natural gas are used as startup and backup fuels.

Fuels in heat and electricity production 2018–2022



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

Process heat and district heat production in 2018–2022



Energy crisis emphasised security of heat and electricity supply

The security of heat and electricity supply was especially critical in 2022, which is why we had to use more peat as a supplementary fuel than in previous years. This was due to a strike at UPM's mills and Russia's war in Ukraine, and the resulting energy crisis.

In 2022, we prepared for the heating season by storing fuels and ensuring uninterrupted production during the summer maintenance cycles, as well as by means of continuous inspections and equipment monitoring.

In the case of thermal power, the work focuses on asset management and scheduled annual maintenance. These actions allow us to ensure the plants' security of supply, i.e. stable heat and electricity production for society, as well as resource efficiency. We carry out ongoing proactive maintenance with our network partners (for more information, [see Development projects below](#)).

- We reduced the minimum power levels at the Kaukaan Voima biopower plant (see the case study).
- In the autumn, Kaukaan Voima introduced a fuel quality measurement system (see Development projects).
- Rauman Biovoima improved process efficiency and continued to work on energy efficiency through process automation software changes.
- Kymen Voima renewed automation process stations in connection with annual maintenance.

Moving towards carbon neutrality

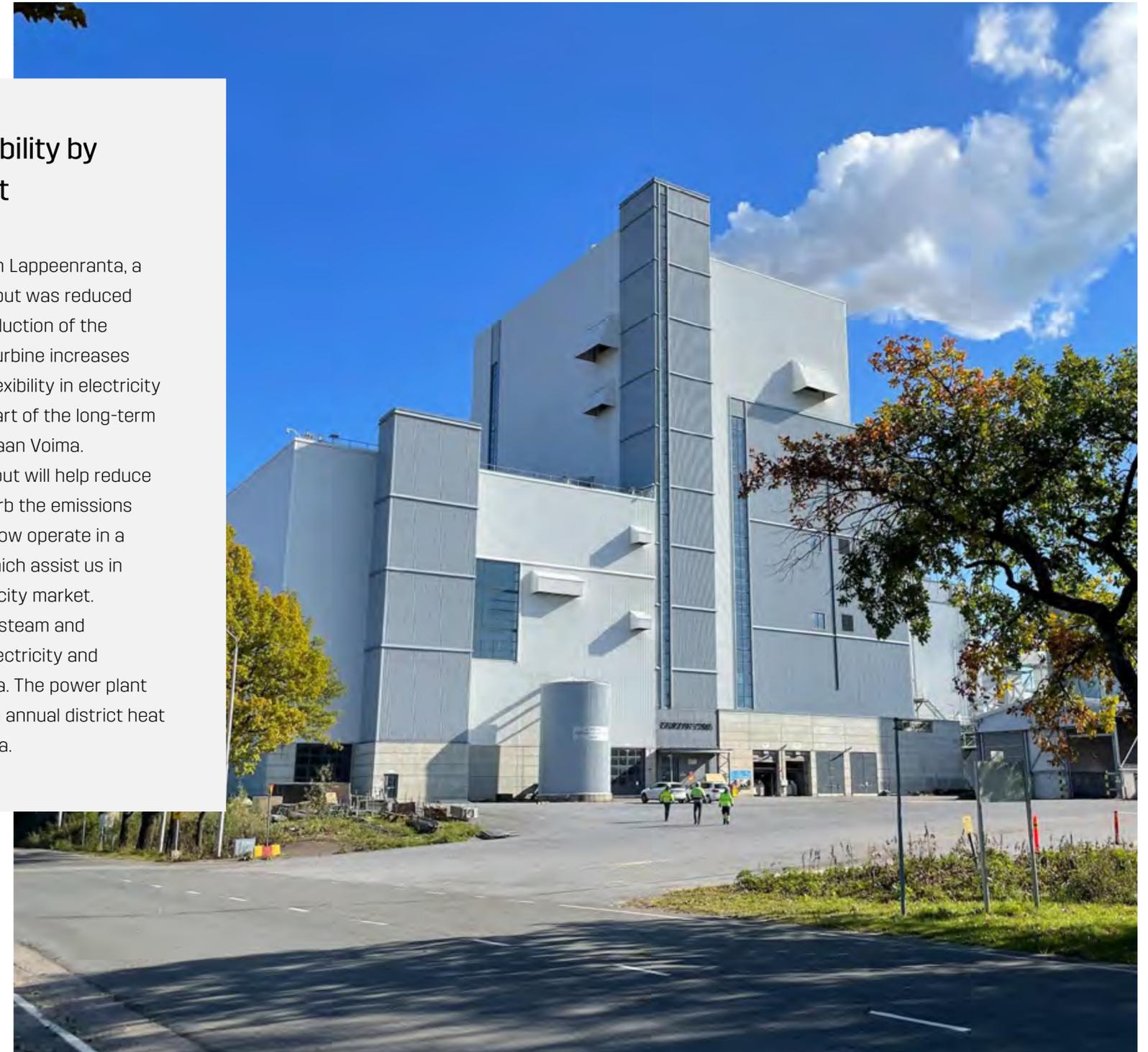
Our carbon neutrality targets remain valid: our goal is for 99% of our electricity production and 85% of our heat production to be carbon neutral by 2025. Our strategy is to use only fossil fuels and peat as startup and backup fuels, taking into account the market situation.

Case: Efficiency and flexibility by reducing minimum output

At the Kaukaan Voima biopower plant in Lappeenranta, a project where the plant's minimum output was reduced by almost 20% was completed. The reduction of the minimum output of the boiler and the turbine increases energy efficiency and provides more flexibility in electricity production. The current changes are part of the long-term development work carried out by Kaukaan Voima.

The reduction of the minimum output will help reduce fuel consumption, which will further curb the emissions from the plant. The boiler and turbine now operate in a more extensive performance range, which assist us in operating better in the changed electricity market.

Kaukaan Voima produces process steam and electricity for UPM's Kaukas mill and electricity and district heat for Lappeenrannan Energia. The power plant accounts for approximately 85% of the annual district heat requirement of the city of Lappeenranta.



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 plant units OL1 and OL2 is 1,780 MW. The output of OL3, which is currently at the test production phase, is 1,600 MW.

The joint capacity factor of the OL1 and OL2 plant units was 93.0%. OL3 produced 1.9 TWh during its test production. Total production volume of the entire power plant was 16.4 TWh. Pohjolan Voima's share of the production was 9.3 TWh.

In the spring of 2022, OL1 underwent a maintenance outage of 33 days, while OL2 had a refuelling outage of nine days. The annual outages were successfully completed in cooperation with an extensive network of partners.

Both plant units have been modernised throughout their service history, and tens of millions are still being invested annually in both units. Modernisation of the I&C systems of OL1 and OL2 continued during the 2022 annual outages.

Nuclear fuel procurement

TVO procures the fuel used by the plants mainly through a decentralised supply chain, negotiating and signing the agreements themselves at each stage of the supply chain. Most of the uranium procured by TVO comes from Kazakhstan, Canada and Australia. The fuel assemblies ordered by TVO are manufactured and assembled in Germany, Spain or Sweden.

TVO only procures uranium and nuclear fuel refining services from approved suppliers who have passed the company's evaluation process.

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

The OL3 nuclear power plant unit was synchronised with the national grid on 12 March 2022. In 2022, OL3 proceeded in stages to test production at full reactor power (1,600 MW). Tests at full power were started in late September.

Test production was interrupted in October when damage in the internals of the feedwater pumps at the turbine island was detected during repairs and maintenance. The feedwater pumps are not significant in terms of nuclear safety. Test production could be resumed at the end of December when the assessment of the damage in the feedwater pumps was mostly completed. During its test production in 2022, OL3 produced 1.9 TWh of electricity.

OL3 is Finland's most significant contribution to the climate effort, and it will markedly improve Finland's self-sufficiency in electricity generation and contribute to the achievement of the carbon neutrality targets.



Disposal of spent nuclear fuel progressed

Work progressed at Posiva's spent nuclear fuel disposal facility ONKALO. Excavation of the first five deposition tunnels was completed in the summer of 2022. Their total length is some 1,700 metres. Drilling of the first disposal holes was also completed.

Above ground, Skanska handed over the encapsulation plant building to Posiva in the early summer. The work then continued with the installation of various types of equipment. A welding station arrived and was hauled into place in October and November. The installation of a spent nuclear fuel drying station in the encapsulation chamber was also completed at around the same time.

Posiva is scheduled to start the disposal of spent nuclear fuel at Olkiluoto in the mid-2020s. Posiva's owners are TVO and Fortum Heat and Power.

Record support for nuclear power in Finland

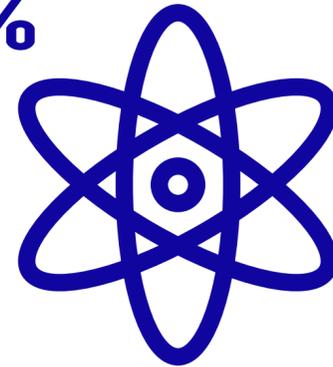
Support for nuclear power reached an all-time high in a survey of the energy attitudes of Finns by Finnish Energy: overall support for nuclear power rose to 83%. A total of 65% of Finns would like to have more nuclear power, and 18% are satisfied with the current volume. Only 11% of respondents would like to reduce the use of nuclear power. In the 2021 survey, 50% of respondents were in favour of more nuclear power. Support for nuclear power has risen among all population groups, regardless of gender, place of residence, age or political affiliation.

The attitude towards small modular reactors (SMRs) was also more positive than ever before: 68% of respondents were in favour of SMRs. Finns' attitudes towards energy have been monitored since 1983.

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

83%

support nuclear power in Finland according to a survey by Finnish Energy



Case: One of Europe's largest Battery Energy Storage Systems to be built in Olkiluoto

One of Europe's largest Battery Energy Storage Systems (BESS) will be built in Olkiluoto. At 90 MW, the BESS will contribute to the stability of Finland's overall energy system and help meet Finland's climate targets. The BESS can be used as rapidly deployable backup power.

The BESS will be used as the backup power source until the ramping up of replacement production in the event of a disruption in production at the Olkiluoto nuclear power plant. This ensures the operability of the main grid even if a large volume of electricity is missing from the grid capacity.

BUSINESS OPERATIONS/DEVELOPMENT PROJECTS

Development projects

We are responsible for a significant portfolio of assets, with 18 power plants in total. We take good care of them throughout their lifecycle. We are improving the balancing capacity and timeliness of our production, further reducing emissions and finding solutions for energy storage.

Systematic asset management forms the core of our work

We take a systematic approach to planning the investments and refurbishments of our power plants to ensure timely and reliable energy production. For example, annual outages of our thermal power plants are carried out according to a systematic programme in different parts of the plants: fuel handling, the boiler, the turbine and the auxiliary equipment. The inspection reports of overhauls are analysed and used to plan further actions to ensure reliable energy generation. In addition, we monitor and develop the year-round proactive maintenance plan in accordance with the continuous improvement principles.

We increase the value of our production assets and manage the lifecycle of our power plants through investments, maintenance, optimising the operation processes and developing operation models. Efficient use of resources is at the core of our operations. We seek synergies in power plant maintenance and share best practices.

We utilise data gathered from the production systematically and use it to help develop the operations of our power plants. The systematic plant development also aims to increase carbon neutrality and the balancing capacity and flexibility of our plants. This is even more necessary in the changing electricity market.

- In the autumn of 2022, Kaukaan Voima introduced a new fuel quality measurement system. It provides real-time measurement data on the moisture and contaminant content of wood-based fuels to allow for the determination of the energy content per load.
- Finland's most advanced automation solution for river regulation was introduced at all the Iijoki hydropower plants. It controls the production at the Iijoki plants as a whole and boosts the efficiency of balancing power production, thus contributing to the green transition. The aquatic environment will benefit from the more accurate water level control.
- A completely new version of the turbine controller that we have developed with the University of Oulu was introduced at the Iijoki and Kemijoki Isohaara power plants. It enables more precise control of electricity production, as well as protects the equipment.

Investigation on expanded recovery of ash

We are currently in the process of exploring how ash recovered from the thermal power plant processes could be utilised beyond the current level, as the recovery of ash saves virgin natural materials. We already recover 100% of the ash produced by our power plants, but are now looking for new circular economy opportunities for ash. Most of the ash is

100%

We utilise all the ash from our thermal power plants

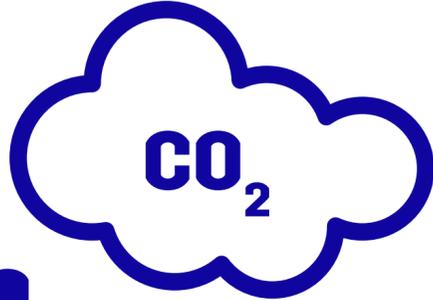


used in civil construction, and some is used to manufacture forest fertiliser. We are involved in the UUMA4 cooperation forum, which promotes renewable civil construction in Finland.

Developing balancing power and energy storage

We are an important and reliable energy producer in Finland, but we also play an important role as a producer of carbon neutral balancing power at the required times. We develop balancing power and energy storage because it is essential for the balance of the electrical power system and supports the green transition and the increase of wind power.

We monitor developments in the industry, such as small modular reactors (SMRs) and new energy storage technologies, e.g. hydrogen and ultracapacitors. We are conducting a study on the potential of new technologies such as energy storage to increase the balancing power of thermal power plants (the future of CHP).

20,000_t 

The amount of CO₂ that the future power-to-gas plant would utilise in a year

Case: Planned sizeable investment in the production of green hydrogen and renewable Finnish gas

Porin Prosessivoima Oy and Nordic Ren-Gas Oy, which are part of Pohjolan Voima Group, have signed a cooperation agreement on a feasibility study concerning a power-to-gas plant that would produce renewable methane and green hydrogen.

The electrolysis efficiency of the power-to-gas plant planned for the Kaanaa district of Pori is 20 MW, and it would use some 20,000 tonnes of carbon dioxide per year in the production of renewable fuel. The CO₂ would be recovered from the combustion gases of the Kaanaa power plant. In addition to carbon dioxide, the other raw materials of

the power-to-gas process would be water and renewable electricity. The renewable electricity would be procured with long-term agreements from new Finnish wind farms.

The output of this process would be a clean liquefied gas fuel that can be used in heavy goods vehicles. The power-to-gas plant would also produce a significant amount of waste heat without any CO₂ emissions. The waste heat could be used to reduce combustion-based energy production in Pori.

The amount of clean gas fuels produced by the power-to-gas plant could annually replace nearly ten million litres of fossil-based diesel fuel in heavy goods vehicles. The investment would represent a significant increase in the production of clean Finnish gas fuels. Finnish renewable gas plays an important role, both in the green transition and in terms of security of supply.





SUSTAINABILITY

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Successes in 2022

Corporate social responsibility is an intrinsic part of Pohjolan Voima's strategy. Our ethical principles and sustainability policy set the framework for our corporate responsibility. We also use targets set by the UN, such as the Sustainable Development Goals. However, responsibility does not become concrete until it is realised through daily actions. Our strong values – skilfully, reliably, together – form the basis for the work of every Pohjolan Voima employee.

Determined path towards carbon neutrality

The key elements of carbon neutrality in 2022 were:

- We produced approximately 20% of all the electricity produced in Finland.
- A total of 97% of our electricity production was carbon neutral hydropower, nuclear power and forest energy (96% in 2021).
- A total of 80% of our electricity production was forest energy (81% in 2021).
- We used 26% less peat to produce heat, compared to our target of reducing the use of peat by 60% from the 2019 level by 2022.

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

- Carbon neutrality in electricity production 99% by 2025
- Carbon neutrality in industrial steam and district heat production 85% by 2025
- We use fossil fuels and peat only as startup and backup fuels to ensure the security of supply based on the market situation. We use wood-based fuels that are sustainably produced.
- We will reduce our use of peat by 80% from the level of 2019 by 2023.

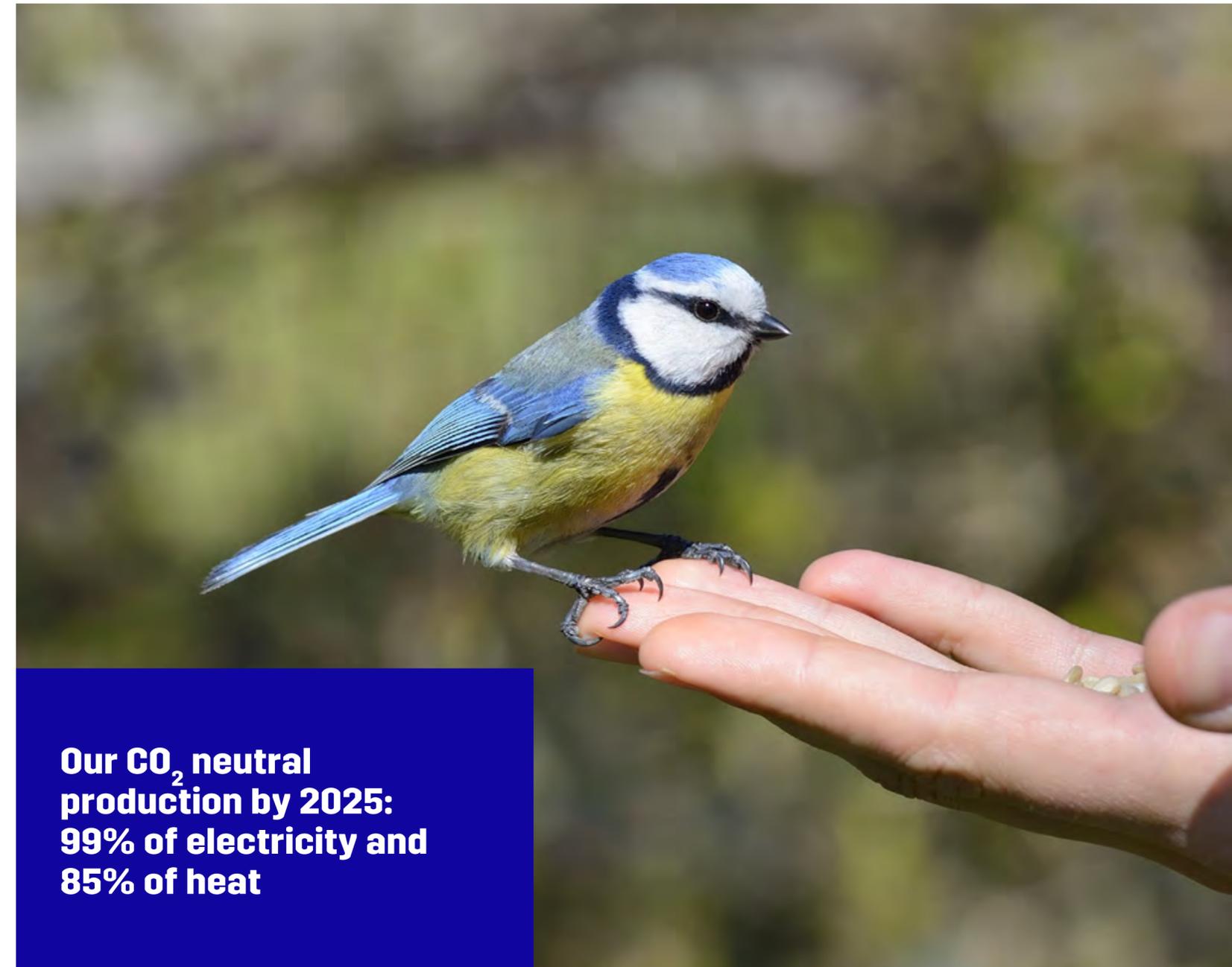
The share of carbon neutral production will not increase linearly. Instead, emissions will vary to some extent year by year, depending on weather conditions, the availability of fuel and market fluctuations. In early 2022, the forest industry company UPM was hit by long strikes that reduced the availability of forest energy, forcing us to use more peat as fuel than planned. The import of forest energy from Russia ended with Russia's invasion of Ukraine, which contributed to a reduction in the availability of forest chips and an increase in the use of peat.

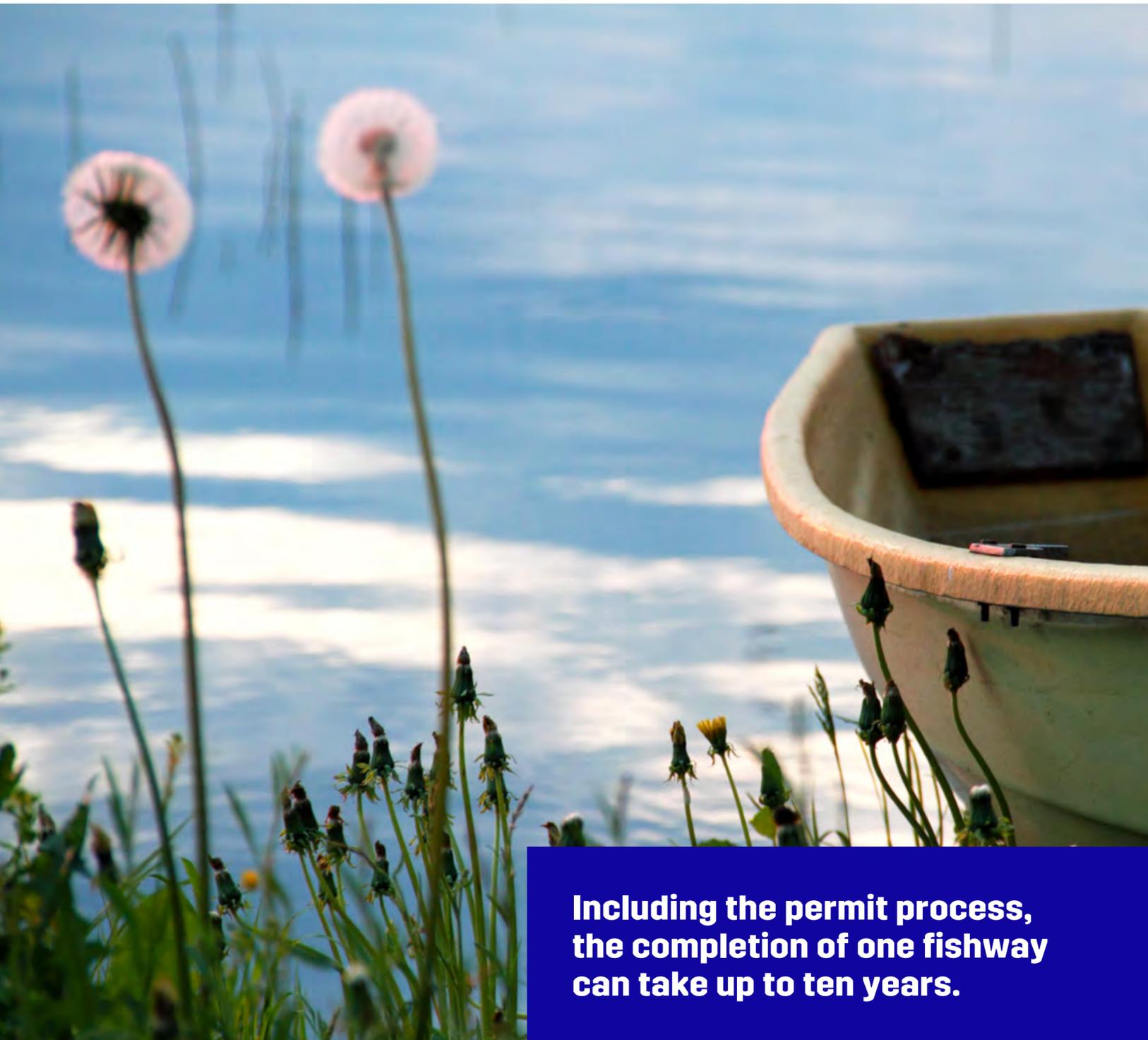
[Read more about our carbon neutrality efforts](#)

Finland's first downstream migration route introduced

The years of extensive smooth 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 introduced at Haapakoski, the uppermost power plant on 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.





Including the permit process, the completion of one fishway can take up to ten years.

We have been unable to build the Raasakka fishway at the lowermost power plant on the Iijoki river because stakeholders lodged an appeal against the construction permit with the Administrative Court. The appeal process has been ongoing for several years.

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

Biodiversity programme completed

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 2022, we launched a project to improve our understanding of our impact and set targets for the coming years.

[Read more about biodiversity](#)

One of Finland's most inspiring workplaces for the fourth year in a row

For the fourth 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](#)

Reporting developed

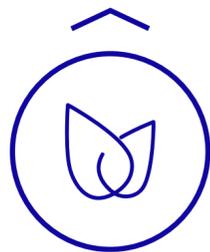
We set targets for sustainability reporting and made related changes. We also started defining a target path based on the Science Based Targets initiative. For the first time, sustainability indicators were included in the refinancing of the parent company's revolving credit facility. We carried out a GRI GAP Analysis and prepared a three-year plan to improve sustainability reporting.

Development of sustainability was one of the flagship projects for the whole Group in 2022.

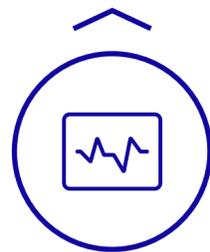
Sustainability themes

Strategy

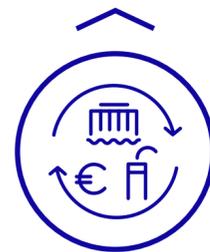
We create decisive power to strengthen competitiveness and contribute to a better tomorrow.



Sustainable production on market terms



Competitive advantage through balancing power capability



Top expert in asset management

Skilfully – Reliably – Together

Sustainability themes



Carbon neutral and sustainable energy



Competitive energy



Safe working and wellbeing of employees



Sustainability in networks and stakeholder relations

Key aspects by sustainability 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

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



Corporate social responsibility is an intrinsic part of our strategy

Updated in 2022, Pohjolan Voima's strategy takes corporate responsibility into account even more strongly than before. Our strategy slogan "We create decisive power to strengthen competitiveness and contribute to a better tomorrow" reflects our sense of responsibility. In line with the strategic theme "sustainable production on market terms", we aim to be a responsible operator and reconcile competitive carbon neutral production with biodiversity.

Our strategy emphasises sustainability in all our business operations and aims to achieve the following:

- Make hydropower an accepted form of production and PVO-Vesivoima a recognised responsible actor in society.
- As an active owner, we participate in the development of the competitiveness and sustainability of Teollisuuden Voima's nuclear power production.
- Ensure that the wood-based fuels in CHP are sustainably produced. We use fossil fuels and peat only as startup and backup fuels to ensure the security of supply based on the market situation.

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. Our goal is that 99% of our electricity and 85% of our heat will be produced from carbon neutral sources in 2025, and we are proceeding towards this goal.

Key sustainability aspects

Our corporate responsibility is based on a materiality assessment carried out in 2019 and updated annually. The next major update will take place in 2023.

In cooperation with our customers, we have selected the following sustainability themes and key aspects:

Theme 1: Carbon neutral and sustainable energy

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

Theme 2: Competitive energy

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

Theme 3: Safe work and wellbeing of employees

- Proactive safety
- Inspiring workplace for top experts

Theme 4: Sustainability in networks and stakeholder relations

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

Four UN Sustainable Development Goals

We have selected four of the UN Sustainable Development Goals (SDGs) and determined related targets and indicators. Our climate efforts are included in SDG 7 and the restoration of migratory fish in SDG 15.

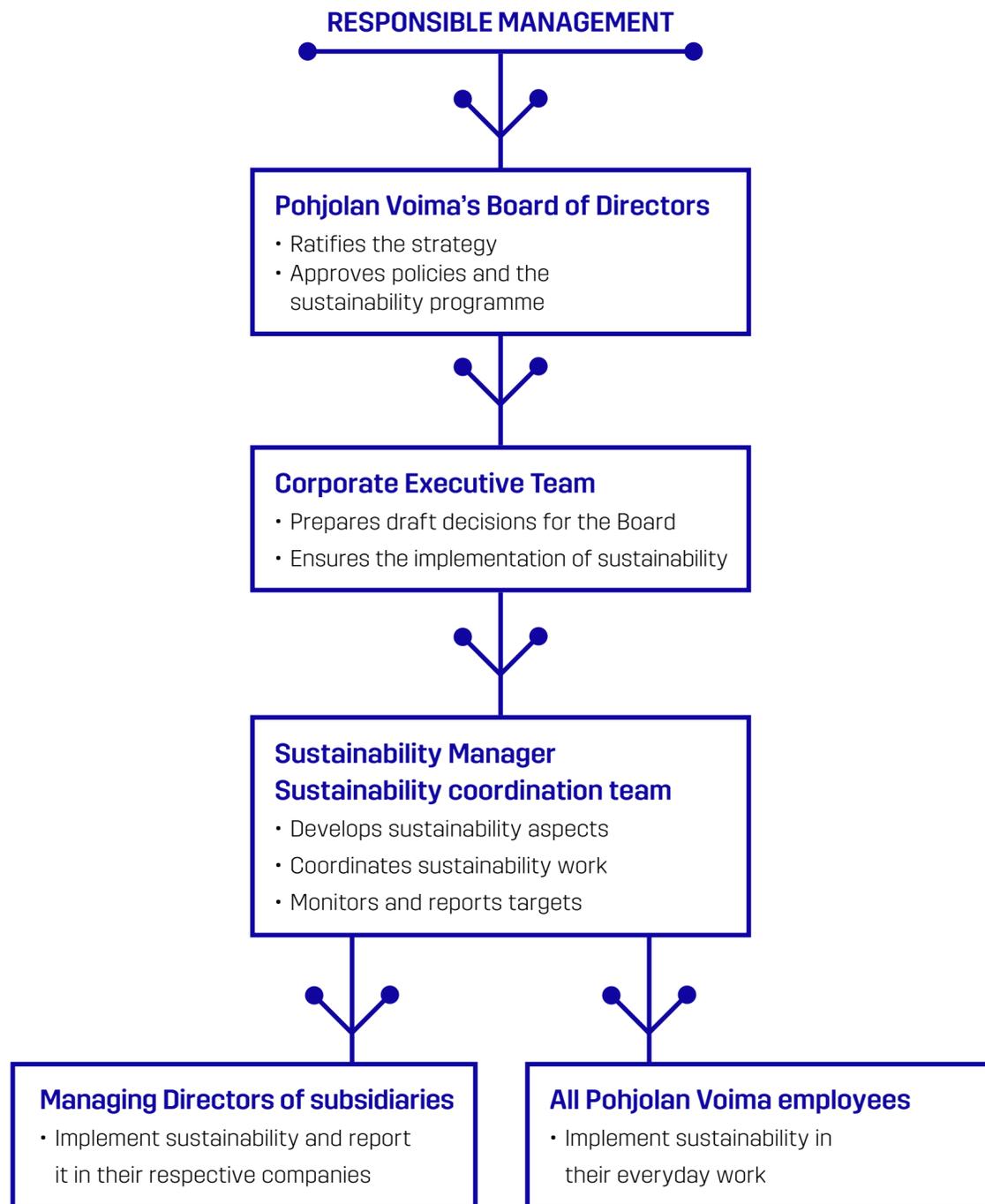
[Read more about our selected UN Sustainable Development Goals](#)

International targets and frameworks guiding our operations

- UN Sustainable Development Goals
- Human rights, labour and anti-corruption principles in line with the UN Global Compact
- UN Guiding Principles on Business and Human Rights
- ILO Declaration on Fundamental Principles and Rights at Work
- Energy efficiency agreements implementing the EU Energy Efficiency Directive

Pohjolan Voima's strategy and policies guiding our work

- Decisive Power 2022–2027 strategy
- Sustainability Code of Conduct (including Code of Ethics)
- Competition law policy
- Personnel policy
- Environmental and energy efficiency policy



Management of sustainability

Our corporate responsibility is guided by international principles and the strategy approved by Pohjolan Voima's Board of Directors, our values and our annually updated sustainability policies.

In addition to the policies, Pohjolan Voima's Board of Directors annually approves our sustainability programme in which we describe our goals and their implementation status. Our sustainability programme is based on the UN Sustainable Development Goals we have chosen. In addition, we annually identify significant areas for development that we include in our sustainability flagship project. Key sustainability events are reported to the Board as part of the CEO's reviews.

In the Corporate Executive Team, the development of sustainability is the responsibility of the Group director responsible for corporate affairs and corporate responsibility. The development of sustainability aspects is the responsibility of the Group director responsible for sustainability. The implementation of sustainability is coordinated by a sustainability team with representatives from different functions: finance, financing, HR, legal, environment, security, customer relations, as well as communications and community relations. The managing directors of the subsidiaries are responsible for ensuring that responsible practices are implemented in their respective companies. Sustainability is the responsibility of all Pohjolan Voima employees. Sustainability is one of the strategic skills in the updated strategy. Sustainability indicators are

included in the indicators on the implementation of the Group's strategy.

Ethical business practices

According to the rules ratified by the Board, we conduct our business ethically and in compliance with legislation. Our operating principles include principles on 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 Code of Ethics is included in the sustainability Code of Conduct that can be viewed on our website at www.pohjolanvoima.fi, and includes the following:

- Respecting employees
- Sustainable energy
- Compliance and ethics
- Sustainability in networks and stakeholder relations

Respecting employees

We respect human rights and diversity. We use fair employment practices and promote equal treatment for everyone throughout the employment relationship. We do not discriminate against anyone based on age, gender, ethnic background, beliefs, trade union membership, sexual orientation, political opinions or any other personal attributes. We do not tolerate the use

of forced or child labour in any part of our value chain. We respect the freedom of association of our staff and comply with collective agreements. We do not tolerate sexual harassment or any other form of harassment, bullying or inappropriate treatment.

Our open and interactive corporate culture creates a basis for trust, a good atmosphere at work and good management. We involve our employees in the development of the work community, the corporate culture and our practices. We do not disclose or share confidential or private information with anyone without proper authorisation and a legitimate need. We ensure safe working conditions and improve the wellbeing and development of employees.

Sustainable energy

We reduce our impact on the climate and environment. We recognise and determine the environmental impact and risks resulting from our operations, the natural values related to them, and the opportunities to make our production and energy use more efficient. We monitor and measure the impact of our operations on the air, climate, water, soil and biodiversity. We are committed to reducing greenhouse gases and other emissions and to safeguarding biodiversity. Our aim is to increase the efficiency of energy production and reduce energy consumption. Our more detailed operating principles regarding the environment are described in our Environmental and Energy Efficiency Policy.

Every Pohjolan Voima employee must recognise the environmental and energy efficiency aspects related to their work, as well as the associated development opportunities. We require our personnel and service providers to have the necessary competence to carry out their work responsibly and professionally.

Compliance and ethics

We comply with all applicable laws and regulations, including applicable national and international trade sanction regulations. To ensure compliance, every Pohjolan Voima Group employee must follow Pohjolan Voima's competition law guidelines. The competition law guidelines and their efficient implementation ensure that the company's best practices and competition legislation are known and understood, and that they are followed at all levels of the Group.

We do not take advantage of our position or any information received through our work for personal gain, and we transparently announce all of our commitments. We follow the commonly used good practices of social influencing. We do not tolerate bribery or corruption, and we do not engage in any business relations in which anti-bribery and anti-corruption laws and regulations are not followed.

We do not accept nor offer any gifts or benefits beyond what is considered reasonable and common hospitality in the ordinary course of business or employment. If accepting or offering a gift or a service might appear to give rise to a

conflict of interest or is open to interpretation, we always discuss the situation with the management in advance.

We take care of the company's property and resources, and only use them to achieve our business goals. We protect confidential information, information systems, and tangible and intangible assets owned or managed by Pohjolan Voima from damage and misuse. We carry out our work in a responsible and professional manner. We comply with rules and regulations to prevent abuse of the financial market and the wholesale energy market.

Sustainability in networks and stakeholder relations

We operate in networks consisting of our owners, partners and subcontractors. Corporate responsibility in networks is discussed in more detail in the section on our networked operating model.

[For more information on the ethical principles in our operations, our corporate responsibility policies and our sustainability goals, visit our website.](#)

Corporate responsibility in stakeholder relations

We act with honesty and integrity in all our stakeholder relations. We also highlight any problems. We engage in open and constructive interaction with our stakeholders.

[For more information on the stakeholders and their significance, please see the table below.](#)



Sustainability is the responsibility of all Pohjolan Voima employees.



Pohjolan Voima's stakeholder cooperation

Stakeholder group	Stakeholder involvement and channels for interaction	Key expectations of the stakeholder group in 2022	Our response to the stakeholder expectations in 2022
Customers	Customer introductions Customer discussions Customer satisfaction survey Participation in strategy work Forums	According to the customer satisfaction survey, our customers' main expectations were: · Expertise · Developing activities in the right direction · Actions in line with needs · Competitive operations · Investing in the right things	According to the customer satisfaction survey, we did well, scoring above 4 on all the expectations (on a scale of 1 to 5). Furthermore, 62% of the responding customer representatives would recommend Pohjolan Voima as a partner (NPS).
Personnel	Involving staff in strategy work Value project: values defined jointly by all employees Joint events at least once a week Personnel survey Quick pulse survey (work and wellbeing)	The main strengths of Pohjolan Voima as an employer identified by the employees are: it is clear to the employees who makes decisions on what; the company creates good prerequisites for wellbeing of employees at work; and the strategy and outlook are well communicated.	The results of the personnel survey were excellent, and we achieved the best PeoplePower rating of AAA.
Investors and financiers	Active dialogue Meetings Communication on the website and via the annual report	A reliable and responsible operator Active dialogue and sharing of information	Sustainability indicators included in the parent company's syndicated facility A sustainability reporting reform partly to meet the growing requirements of financiers and investors Constant dialogue with financiers
Decision-makers	Decision-maker meetings Press releases and newsletters	Carbon neutral production Reliable and dependable production OL3's regular electricity production	In 2022, 97% of our electricity and 80% of our heat production was carbon neutral. Hydropower contributed to the balancing of the electrical power system. Our thermal power plants play an important role in the production of carbon neutral district heat for urban areas. The capacity factor of OL1 was 89.1% and that of OL2 96.8% in 2022. During its test production in 2022, OL3 produced 1.9 TWh of electricity.
Authorities	Discussions Press releases, newsletters, events	Open flow of information, operation according to permit conditions	Our operations comply with the permits, and information on any deviations is published. The key authorities are included in our distribution lists.



Pohjolan Voima's stakeholder cooperation

Stakeholder group	Stakeholder involvement and channels for interaction	Key expectations of the stakeholder group in 2022	Our response to the stakeholder expectations in 2022
Partners	Cooperation projects	A reliable partner Security Systematic progress of projects	Cooperation projects to improve production and asset management
Neighbours	Open-door events, newsletters, press releases, websites, migratory fish projects, cooperation projects	Open communication Security of energy supply Migration of fish past hydropower plants	In the annual stakeholder survey, our closest stakeholder groups in the immediate vicinity of our hydropower plants gave the cooperation an average rating of 4.30 (on a scale of 1 to 5). Cooperation projects to restore migratory fish (see Biodiversity) Cooperation in regulation Open-door event at Raasakka power plant, support for local events
Interest groups	Communication, participation in the work of interest groups	Active dialogue, continuous improvement, promotion of shared themes	Active participation in energy industry committees and working groups
Non-governmental organisations	Communication, discussions, participation	Carbon neutrality Migration of fish past plants Sustainability Open communication	Invitations to events Podcast visits Communication Youth representatives in biodiversity work
Media	Press releases and newsletters Social media Meetings	Open and reliable communication, accessibility	Active dialogue Clear and timely press releases Encouraging experts to participate in the discussions



Sustainable development goals promoted by Pohjolan Voima



We produce electricity and heat for our customers by means of hydropower, thermal power and nuclear power. We are committed to carbon neutrality. Ensuring that our production plants operate reliably and efficiently is a prerequisite for reaching this goal.

Sub-targets

What we do/situation assessment

Goals/actual figures/indicators

7.1 Ensure universal access to affordable, reliable and modern energy services

We generate approximately 20% of all electricity produced in Finland. We play our part in ensuring that electricity and heat are reliably produced, and that sufficient balancing power is available to balance the electrical power system in both normal and abnormal conditions.

In 2022, we updated our strategy and defined our objectives:

- Being a responsible company. Reconciling competitive carbon neutral production with biodiversity.
- Making hydropower an accepted form of production and PVO-Vesivoima a recognised responsible actor in society.
- As an active owner, participating in the development of the competitiveness and sustainability of Teollisuuden Voima's nuclear power production.
- Ensuring that the wood-based fuels in CHP are sustainably produced. Using fossil fuels and peat only as startup and backup fuels to ensure the security of supply based on the market situation.

We are committed to becoming carbon neutral on market terms. In 2022, 97% of our electricity and 80% of our heat production was carbon neutral.

Our main measures for achieving carbon neutrality are the commissioning of the Olkiluoto 3 (OL3) plant unit, the phase-out of fossil fuels and peat, and hydropower production. OL3, Finland's most significant contribution to the climate effort, was started in late 2021.

In 2022, prolonged industrial action in the forest industry and Russia's aggressive offensive war on Ukraine meant that not enough forest chips were available, and we had to use more peat than planned. Our goal is to reduce the use of peat by 80% from the 2019 level by 2025.

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 and fuel market fluctuation.

• Carbon neutrality of our electricity production:

- Target 2027: SBT
- Target 2026: SBT
- Target 2025: 99%
- Target 2024: 98%
- Target 2023: 97%
- Actual 2022: 97%
- Actual 2021: 96%
- Actual 2020: 96%

• Carbon neutrality of our heat production:

- Target 2026-2027: SBT
- Target 2025: 85%
- Target 2024: 84%
- Target 2023: 83%
- Actual 2022: 80%
- Actual 2021: 81%
- Actual 2020: 65%

• Reduction of the use of peat from the 2019 level:

- Target 2025-2027: 80%
- Target 2024: 75%
- Target 2023: 70%
- Actual 2022: 26%, target 60%
- Actual 2021: 47%
- Actual 2020: 34%
- Bechmark year 2019, 1.54 TWh



Sustainable development goals promoted by Pohjolan Voima



We produce electricity and heat for our customers by means of hydropower, thermal power and nuclear power. We are committed to carbon neutrality. Ensuring that our production plants operate reliably and efficiently is a prerequisite for reaching this goal.

Sub-targets

What we do/situation assessment

7.2 Increase the share of renewable energy in the global energy mix

We develop our production assets so that we only use fossil fuels and peat as startup and backup fuels to ensure the security of supply based on the market situation. Meanwhile, we increase the share of renewable fuels. The indicator for peat use is presented in Section 7.1.

In our hydropower plants, we use modern control methods (river regulation) and develop existing equipment to meet the regulatory requirements. This is to ensure weather-dependent balancing power.

In 2021, we introduced a regulation method at the Iijoki river that allows us to look at the Iijoki plants as a whole, making the regulation more efficient and accurate, which also benefits the environment.

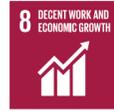
River regulation and ERP systems were fine-tuned in 2022. We also launched an ultracapacitor survey.

7.3 Double the global rate of improvement in energy efficiency

We perform effective maintenance actions and carry out timely investments. The goal with digitisation is to make our production plants even more energy-efficient, emission-free and reliable.

All our subsidiaries have specified energy efficiency goals. The goals of all the subsidiaries that have signed an energy efficiency agreement are specified in the agreement.

Sustainable development goals promoted by Pohjolan Voima



The relevance of their work, occupational health and safety, and wellbeing at work are important to the employees of Pohjolan Voima. In addition to carbon neutrality, relevance includes competitiveness and resource efficiency.

Sub-targets

What we do/situation assessment

Goals/actual figures/indicators

8.1 Sustain universal economic growth

In accordance with our purpose, we create decisive power to strengthen competitiveness and contribute to a better tomorrow. We produce electricity and heat at cost price for our owners, who play a key role in terms of economic growth. Indirectly, we create jobs and wellbeing in Finland. In 2022, we produced 18% of the electricity produced in Finland.

8.2 Achieve higher level of economic productivity through diversification, technological upgrading and innovation

We monitor the development of new technologies. We test and utilise proven solutions. We are capable of deploying profitable solutions on an industrial scale. In the development work, we utilise digitisation and knowledge-based management, as well as synergies between plants.

In 2021, we implemented a total of 53 development projects, some of which continued in 2022.

In 2022, Porin Prosessivoima Oy and Nordic Ren-Gas Oy started cooperation on a feasibility study concerning a power-to-gas plant that would produce renewable methane and green hydrogen, and Kaukaan Voima completed a project to reduce the plant's minimum output. We also launched a study on the future of CHP. Projects to improve hydropower plant regulation are described in Section 7.2.

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation

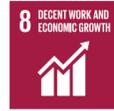
Our corporate culture is based on our shared values: skilfully, reliably, together. We want to be an inspiring workplace. We promote continuous professional development of our employees and encourage them to search for new solutions. We regularly measure the employee experience and employee satisfaction to boost the development of a motivating corporate culture and promote the wellbeing of employees.

We have been selected as one of Finland's most inspiring workplaces four times in a row, in 2022, 2021, 2020 and 2019. We have updated our values, which are now: "skilfully, reliably, together" (previously "skilfully, boldly, together").

• PeoplePower results for the Group

Goal 2027: AAA
 Goal 2026: AAA
 Goal 2025: AAA
 Goal 2024: AAA
 Goal 2023: AAA
 Actual 2022: AAA
 Actual 2021: AAA
 Actual 2020: AAA

Sustainable development goals promoted by Pohjolan Voima



The relevance of their work, occupational health and safety, and wellbeing at work are important to the employees of Pohjolan Voima. In addition to carbon neutrality, relevance includes competitiveness and resource efficiency.

Sub-targets

What we do/situation assessment

Goals/actual figures/indicators

8.4 Improve global resource efficiency in consumption and production

We promote the circular economy by improving our energy efficiency, as well as by maintaining and reusing our plants. Well-managed assets and asset lifecycle management are resource-efficient in terms of the use of materials, energy efficiency and environmental impact. We effectively utilise the by-products of our power plants. We use recycled fuels that enable the circular economy.

- By-product utilisation goal: 100%
 - Goal 2027: 100%
 - Goal 2026: 100%
 - Goal 2025: 100%
 - Goal 2024: 100%
 - Goal 2023: 100%
 - Actual 2022: 112%
 - Actual 2021: 75%
 - Actual 2020: 143%
 - (incl. unloading of by-product storages)

8.8 Protect labour rights and promote safe and secure working environments for all workers

We promote wellbeing at work and a proactive safety culture. Our goal is zero accidents. We invest in the continuous improvement of OHS and wellbeing at work by, for instance, reacting to observations and promoting the employees' safety awareness. We pay special attention to the safety cultures of our subcontractors.

- Safety indicators
- Zero accidents (own + others)
 - Goal 2027: 0 + 0
 - Goal 2026: 0 + 0
 - Goal 2025: 0 + 0
 - Goal 2024: 0 + 0
 - Goal 2023: 0 + 0
 - Actual 2022: 4 + 5
 - Actual 2021: 1 + 7

In 2022, our own staff made an average of 6.4 EHS observations per person. The year was challenging in terms of accidents, and we did not meet our target of zero accidents. The employees of our production companies and subcontractors had a total of 9 accidents requiring sick leave. The accident frequency was 24 per one million hours worked. All accidents were investigated and corrective measures were taken to prevent reoccurrence. The accidents were reported to the Board of Directors of Pohjolan Voima Group and discussed at regular meetings with all persons responsible for safety at the power plants. We improved the investigation of subcontractor accidents and shared best safety practices between power plants.

- Safety, environmental and energy efficiency observations
 - Goal 2023: 5/person/year
 - Actual: 2022: 6.1/person/year
 - Actual 2021: 11.9/person/year (Goal 10)

Sustainable development goals promoted by Pohjolan Voima



Our operations influence the environment. Themes important to us include biodiversity and the sustainable use of forests and freshwater ecosystems, including migratory fish.

Sub-targets

What we do/situation assessment

Goals/actual figures/indicators

15.2 Promote the implementation of sustainable management of all types of forests

The biomass fuel we use originates from sustainable silviculture and mainly consists of silvicultural by-products. We comply with the energy industry's forest energy recommendation, which promotes the leaving of decaying wood in forests, for example. In 2022, we prepared a biodiversity programme for 2023–2027. One of our goals in thermal power production is that our wood-based fuels are sustainable. We will survey the current situation and identify any needs to update our sustainability criteria to better take the protection of biodiversity into account.

- The biomass we use complies with the REDII sustainability criteria (yes/no)
Goal 2023–2027: yes
Actual 2022: yes

15.5 Take action to reduce the degradation of natural habitats, halt the loss of biodiversity and protect and prevent the extinction of threatened species

From our perspective, biodiversity is connected to forest energy, peat and hydropower production. TVO is responsible for biodiversity in connection with nuclear power.

In 2022, we implemented a biodiversity project to identify which biodiversity issues were related to Pohjolan Voima's operations. We prepared a biodiversity programme in which we have defined our vision, long-term business objectives and a long-term action plan. We will annually update the programme.

- Promoting biodiversity
- Implementing the measures determined for 2023–2027, which will be annually specified
- Actual 2022: A biodiversity programme including targets and measures was completed.

The Group's long-term vision is to identify our key impact on biodiversity and move towards net positivity. We will promote our skill set and update our targets as knowledge increases. We have defined goals and measures for our business operations for the strategy period, which are described in more detail in separate tables.

In hydropower in 2022, we continued cooperation to ensure that hydropower production and migratory fish can exist side by side. We are committed to restoring the natural migration patterns of migratory fish in cooperation with others, utilising a variety of means and research. A downstream migration route completed at the Haapakoski power plant in 2021 was opened in 2022. We will continue the cooperation to improve the old Raasakka riverbed. Appeals against the Raasakka fishway permit decision are pending in court. We will continue with the cooperation projects to restore migratory fish to the Iijoki, Kemijoki, Kokemäenjoki and Tengeliönjoki rivers.

15.9 Integrate ecosystem and biodiversity values into national and local planning

In all our hydropower operating areas, we cooperate with local communities in concrete projects of local importance which consider biodiversity. See the previous section.



Sustainable development goals promoted by Pohjolan Voima



Our networked operating method is an integral part of our operating model. It is also part of the expertise of each Pohjolan Voima employee. We promote sustainable development together with our partners.

Sub-targets

17.17 Encourage and promote effective public, public-private and civil society partnerships

What we do/situation assessment

Our operating model is based on strong networks, consisting of our owners, partners, technology suppliers, subcontractors and society at large. Our activities in the networks are guided by our values: "skilfully, reliably, together".

Our operating model benefits small parties, too.

We use agreements and fuel supplier audits, among other measures, to promote the commitment of our partners and subcontractors to sustainable development. The objectives of the audits are defined separately each year.

In 2022, we updated our Supplier Code of Conduct on sustainability. The implementation of the Code of Conduct will continue in 2023.

What we do/situation assessment

- We perform supplier audits
 - Goal 2023: 5 audits
 - Actual 2022: 3 (+7*) audits (*comparison with HSEQ-audit reports)
 - Actual 2021: 5 actual/5 goal



Review of operations based on the EU taxonomy

Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment, i.e. the EU taxonomy, was published in 2020. The aim of the taxonomy is to increase sustainable investments and direct capital flows towards technologies and businesses that are considered sustainable. In 2021, the European Commission adopted a delegated disclosure regulation for the EU taxonomy, which obligated large public interest entities to provide information for the financial year 2021 on the share of taxonomy-eligible and non-taxonomy-eligible economic activities in their combined turnover, investments and operating

costs. Furthermore, on 2 February 2022, the Commission published a Complementary Delegated Regulation on the criteria for certain gas and nuclear activities, according to which nuclear power and gas will become part of the EU taxonomy as “transitional activities” from the accounting period that starts on 1 January 2023. Starting from the 2022 accounting period, companies must report activities that comply with the taxonomy, i.e. that meet the environmental objectives and their technical assessment criteria. In line with the EU Taxonomy Climate Delegated Act, the initial focus will be on activities that contribute to environmentally

sustainable climate objectives, namely climate change mitigation and adaptation to climate change.

In 2021, Pohjolan Voima carried out a regulatory assessment to identify taxonomy-eligible activities, i.e. activities included in the scope of the EU taxonomy. The European NACE (Nomenclature of Economic Activities) was used as a reference when identifying the activities. In 2022, Pohjolan Voima continued the assessment by reviewing the taxonomy-eligible activities against the sustainability criteria defined in the regulations. The identified taxonomy-eligible activities focus on the objective “Substantial contribution to climate change mitigation”. The

identified activities are hydropower electricity production, combined production of heat or cooling and electricity with bioenergy, and nuclear power electricity production (Regulation [EU] 2022/1214).

Non-financial undertakings covered by the Non-Financial Reporting Directive are required to report on key performance indicators (“KPIs”). The KPIs include turnover, capital expenditure (CapEx) and operating expenditure (OpEx) related to economic activities that are taxonomy-eligible as defined in the Commission Delegated Regulation, as well as information on non-taxonomy-eligible economic activities. Pohjolan Voima is not obliged to report in accordance with

the taxonomy, but has assessed its taxonomy eligibility and taxonomy compliance due to the significance of its financial activities.

The financial information related to compliance with the taxonomy is presented below in accordance with Article 8 of the Taxonomy Regulation. The Group has confirmed that each activity has been considered only once when calculating the KPIs. The identified taxonomy-eligible activities correspond to the following categories in the EU taxonomy:

Activity number	EU taxonomy activity	Pohjolan Voima's business activity	NACE-code	Relevant to turnover	Relevant to capital expenditure	Relevant to operating expenditure
4.5	Hydropower electricity production	Hydropower	35.11 electricity production	X	X	X
4.20	Combined production of heat or cooling and electricity with bioenergy	Thermal power	35.11 electricity production 35.30 heat and cooling production and distribution	X	X	X
4.27	The construction and safe use of new nuclear installations to produce electricity or heat, including hydrogen production, using best available technologies	Nuclear power	35.11 electricity production	X	X	X
4.28	Nuclear power electricity production	Nuclear power	35.11 electricity production	X	X	X



TURNOVER EUR 1000

	Code(s)	Absolute turnover (tEUR)	Proportion of turnover (%)	Substantial contribution criteria						Does not significant harm -criteria (DNSH)						Minimum safeguards	Taxonomy aligned proportion of turnover, year 2022 %	Category: Enabling activity	Category: Transitional activity
				Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems				
Economic activities																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)		323,847	53.1%	100%	0	0	0	0	0	n.a.	Y	Y			Y	Y	%		
Hydropower	35.11	51,383	8.4%	100%	0	0	0	0	0	n.a.	Y	Y	n.a.	n.a.	Y	Y	8.4%	E	
Thermal Power	35.11/ 35.30	46,009	7.5%	100%	0	0	0	0	0	n.a.	Y	Y	n.a.	Y	Y	Y	7.5%	E	
Nuclear power (4.27)	35.11	24,715	4.1%								Y	Y	Y	Y	Y	Y	4.1%	T	
Nuclear power (4.28)	35.11	201,740	33.1%	100%	0	0	0	0	0	n.a.	Y	Y	Y	Y	Y	Y	33.1%	T	
A.2 Taxonomy-aligned, but not environmentally sustainable activities (Not Taxonomy-aligned activities)																			
Turnover of Taxonomy eligible but not environmentally sustainable activities (not Taxonomy aligned activities) (A.2)																			
Thermal Power	35.11/ 35.30	10,451																	
Total (A.1+A.2)		334,298	54.8%														%	%	
B. TAXONOMY NON-ELIGIBLE ACTIVITIES																			
Turnover of Taxonomy non-eligible activities (B)		275,895	45.2%																
Nuclear power	35.11	2,761	0.5%																
Others		273,134	44.8%																
Total (A+ B)		610,193	100%																



Capex EUR 1000

				Substantial contribution criteria						Does not significant harm -criteria (DNSH)						Minimum safeguards	Taxonomy aligned proportion of turnover, year 2022 %	Category: Enabling activity	Category: Transitional activity
	Code(s)	Absolute turnover (tEUR)	Proportion of turnover (%)	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems				
Economic activities																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)		6,936	74.6%	100%	0	0	0	0	0	n.a.	Y	Y			Y	Y	%		
Hydropower	35.11	5,724	61.5%	100%	0	0	0	0	0	n.a.	Y	Y	n.a.	n.a.	K	Y	61.5%	E	
Thermal Power	35.11/30	1,212	13.0%	100%	0	0	0	0	0	n.a.	Y	Y	n.a.	Y	K	Y	13.0%	E	
Nuclear power (4.27)	35.11	0	0.0%	100%							Y	Y	Y	Y	K	Y	0%	T	
Nuclear power (4.28)	35.11	0	0.0%	100%	0	0	0	0	0	n.a.	Y	Y	Y	Y	K	Y	0%	T	
A.2 Taxonomy-aligned, but not environmentally sustainable activities (Not Taxonomy-aligned activities)																			
Capex of Taxonomy eligible but not environmentally sustainable activities (not Taxonomy aligned activities) (A.2)																			
Total (A.1+A.2)		6,936	74.6%														%	%	
B. TAXONOMY NON-ELIGIBLE ACTIVITIES																			
Capex of Taxonomy non-eligible activities (B)		2,365	25.4 %																
Total (A+ B)		9,301	100.0%																



OPEX EUR 1000

Economic activities	Code(s)	Absolute turnover (tEUR)	Proportion of turnover (%)	Substantial contribution criteria						Does not significant harm -criteria (DNSH)						Minimum safeguards	Taxonomy aligned proportion of turnover, year 2022 %	Category: Enabling activity	Category: Transitional activity
				Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems				
A.1. Environmentally sustainable activities (Taxonomy-aligned)		22,288	81.4%	100%	0	0	0	0	0	n.a.	Y	Y			Y	Y	81.4%		
Hydropower	35.11	3,875	14.2%	100%	0	0	0	0	0	n.a.	Y	Y	n.a.	n.a.	Y	Y	14.2%	E	
Thermal Power	35.11/ 35.30	18,413	67.2%	100%	0	0	0	0	0	n.a.	Y	Y	n.a.	Y	Y	Y	67.2%	E	
Nuclear power (4.27)	35.11	0	0.0%								Y	Y	Y	Y	Y	Y	0%		T
Nuclear power (4.28)	35.11	0	0.0%	100%	0	0	0	0	0	n.a.	Y	Y	Y	Y	Y	Y	0%		T
A.2 Taxonomy-aligned, but not environmentally sustainable activities (Not Taxonomy-aligned activities)																			
Opex of Taxonomy eligible but not environmentally sustainable activities (not Taxonomy aligned activities) (A.2)																			
Thermal Power	35.11/ 35.30	5,092	18.6%																
Total (A.1+A.2)		27,381	100.0%														%	%	
B. TAXONOMY NON-ELIGIBLE ACTIVITIES																			
Opex of Taxonomy non-eligible activities (B)		0	0.0%																
Total (A+ B)		27,381	100.0%																



Template 1 Nuclear and fossil gas related activities

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to the research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to the construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using the best available technologies.	YES
3.	The undertaking carries out, funds or has exposures to the safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES

Turnover

Template 2 Taxonomy-aligned economic activities (denominator)

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI.	24,715,000	4%	24,715,000	4%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	201,740,237	33%	201,740,237	33%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0%	0	0%	0	0%
8.	Total applicable KPI	226,455,237	37%	226,455,237	37%	0	0%

**Capex**

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI.	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0%	0	0%	0	0%
8.	Total applicable KPI	0	0%	0	0%	0	0%



Opex

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI.	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0%	0	0%	0	0%
8.	Total applicable KPI	0	0%	0	0%	0	0%



Turnover

Template 3 Taxonomy-aligned economic activities (numerator)

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI.	24,715,000	4%	24,715,000	4%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	201,740,237	33%	201,740,237	33%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	0.00	0%	0.00	0%	0	0%
8.	Total applicable KPI	226,455,237	37%	226,455,237	37%	0	0%

**Capex**

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI.	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	0	0%	0	0%	0	0%
8.	Total applicable KPI	0	0%	0	0%	0	0%



Opex

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI.	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	0	0%	0	0%	0	0%
8.	Total applicable KPI	0	0%	0	0%	0	0%



Turnover

Template 4 Taxonomy-eligible but not taxonomy-aligned economic activities

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI.	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0%	0	0%	0	0%
8.	Total applicable KPI	0	0%	0	0%	0	0%



Turnover

Template 5 Taxonomy non-eligible economic activities

Row	Economic activities	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI.	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	2,760,764	0.5%
8.	Total applicable KPI	2,760,764	0.5%

Turnover:

Pohjolan Voima has calculated turnover determined in accordance with the Commission Delegated Regulation using the same accounting principles as for turnover under IFRS, i.e. including all revenue from the sale of goods and services in the ordinary course of business. The total turnover corresponds to the turnover presented in the consolidated financial statements. For more information on the accounting policies, see note 4 to the consolidated financial statements. The taxonomy-eligible turnover only includes turnover from activities covered by the taxonomy. Pohjolan Voima's taxonomy-eligible turnover includes electricity production with hydropower, CHP from biomass and electricity production with nuclear energy.

Capital expenditure (CapEx):

In accordance with the Commission Delegated Regulation, Pohjolan Voima has included in CapEx additions to tangible and intangible fixed assets before depreciation, amortisation, impairment or changes in fair value during the financial period. These items have been accounted for in accordance with IAS 16 Property, Plant and Equipment, IAS 38 Intangible Assets and IFRS 16 Leases. CapEx corresponds to the cash paid

for the acquisition of fixed assets presented in the consolidated cash flow statement, adjusted with items accrued but not paid at the end of the reporting period, and additions to leased fixed assets.

Taxonomy-eligible CapEx includes capitalised expenditure on investments in hydropower plants, capitalised expenditure on investments in biopower plants and other capitalised, taxonomy-eligible development expenditure related to the pursuit of a future not dependent on fossil fuels.

Operating expenditure (OpEx):

In accordance with the Commission Delegated Regulation, Pohjolan Voima has included in OpEx research and development expenditure recognised in accordance with IAS 38 Intangible Assets, short-term lease expenses recognised in accordance with IFRS 16 Leases and maintenance expenditure for fixed assets (or repair and maintenance expenses) recognised in accordance with IAS 16 Property, Plant and Equipment. Maintenance expenditure for fixed assets includes maintenance materials and outsourced maintenance service expenditure.

SUSTAINABILITY/PERSONNEL

Personnel - an energetic attitude

Pohjolan Voima's energetic attitude enables the implementation of the strategy and the objectives and measures it contains. The energetic and motivated staff drive everything we do. At the heart of our HR work is a strong sense of relevance enabled by, for example, the involvement of all employees in the joint strategy work from the preparation stage and early involvement in new projects, changes and the strengthening of the corporate culture.

Our shareholders are our customers. Ensuring customer satisfaction and the creation of added value for our shareholder-customers is our common goal. We take responsibility, both as individuals and together. Working in networks is an important way for us at Pohjolan Voima to complement our own expertise and resources. Together we are strong.

In 2022, the focus of the HR work was on developing our corporate culture by strengthening collaboration and our sense of community.

We are committed to responsible operating methods

Our energetic attitude is based on trust, our ethical principles, the bearing of responsibility, and accountability. We act responsibly and develop our corporate culture and HR management in a goal-oriented manner. We comply with national and international laws, applicable collective agreements and industrial safety regulations, as well as the UN Global Compact principles on labour.

In 2022, we emphasised sustainability in our internal HR work. The personnel policy for the whole Group, which guides all our personnel management, was renewed, paying

special attention to sustainability principles. The personnel policy contributes to ensuring our responsible approach. We respect human rights, equality and non-discrimination. The cornerstones of our personnel policy are non-discrimination, the right to freedom of association and the right to privacy.

The personnel policy is approved by the Board of Directors of the parent company, and is binding on all the Pohjolan Voima Group companies.

Pohjolan Voima was again one the most inspiring employers in Finland

For the fourth time, Pohjolan Voima participated in the EezyFlow personnel survey.

The results were excellent: for the fourth year in a row, we were listed as one of Finland's most inspiring workplaces. In addition, we achieved the top PeoplePower rating of AAA for the third year in a row. According to the survey results, our strengths include the facts that it is clear to the employees who makes decisions on what, that the company creates good prerequisites for the wellbeing of employees at work, and that the strategy and outlook are well communicated to the employees.





Our values – “skilfully, reliably, together” – provide energy and direction to everything we do

Our values – “skilfully, reliably, together” – underpin everything we do. The values can be seen in our structures, management, customer work and daily work in general. The values were jointly defined by the employees during a value project in 2022. Our personnel policy is also based on our values, and the values guide management and supervisory work.

Experience of the relevance of one’s work is built on a strategic context

Pohjolan Voima’s strategy for 2022–2027 was clarified with the aid of a scenario review. The starting point was our previous strategy, and we reviewed the choices, policies and strategic themes in light of the new situation. The clarification of the strategy was preceded by extensive scenario work with customers and stakeholders. The staff also participated extensively in the scenario work already in 2021.

The clarification of the strategy continued throughout 2022. Employees of the entire Group attended a joint strategy preparation workshop in May. Opened by Tapio Korpeinen, the chairperson of the Board of Pohjolan Voima, the workshop was about reviewing the development of the policy environment and the strategic policies and themes. We discussed the content of the strategy in smaller groups, as well as the significance of Pohjolan Voima, the strategy and our own work together.

Strengthening collaboration and a sense of community as priority areas

We strengthen our corporate culture by continuously developing our operations.

In 2022, we introduced to our everyday work and practices lessons learned from our earlier extensive “We are decisive power” training on everyday interaction,

self-knowledge, the understanding diversity, the giving of feedback and coaching.

Now that the global pandemic and the widespread recommendations on working from home have eased, we will continue to work on strengthening collaboration and our sense of community. Pohjolan Voima practises multilocation working. In the parent company, we worked with the staff to identify the strengths, challenges and practices of multilocation working and the flexible employment contract model we use. We considered what worked well in the current model and how the model should be improved. Together, we worked out ground rules for working at the office and working from home, as well as hybrid work practices.

The move of the parent company’s Helsinki office to new premises and the renovation of PVO-Vesivoima’s office in Raasakka, li, were also implemented to support flexible hybrid work practices.

The way we communicate and interact is our source of energy

Communication and interaction are the source of energy for everybody at Pohjolan Voima. The objectives of an internal communication reform in 2022 included the clarification of our communication channels and a commitment to shared ways of communicating.

Communication is a collaborative effort in which everyone should be actively involved. We all committed to our way of communicating and interacting as follows:

- We make sure that we know enough and are curious about everything new
- We share information and play our part in ensuring that our colleagues know what we are doing
- We are present – listening, participating and involving others
- We openly raise ideas and give feedback
- We use our communication channels as jointly agreed.

As our colleagues are one of our sources of energy, we believe it is important that we know them and what they do in their specific areas of expertise and responsibility. This makes it easier to build collaboration and work together. We support this approach through Friday briefings: in 2022, we convened a total of 38 times to discuss common educational and topical matters. At the briefings, we also share information about our skills and what we are doing. In 2022, we took turns to introduce ourselves, inviting one of our colleagues to introduce themselves next. We will continue with this practice.

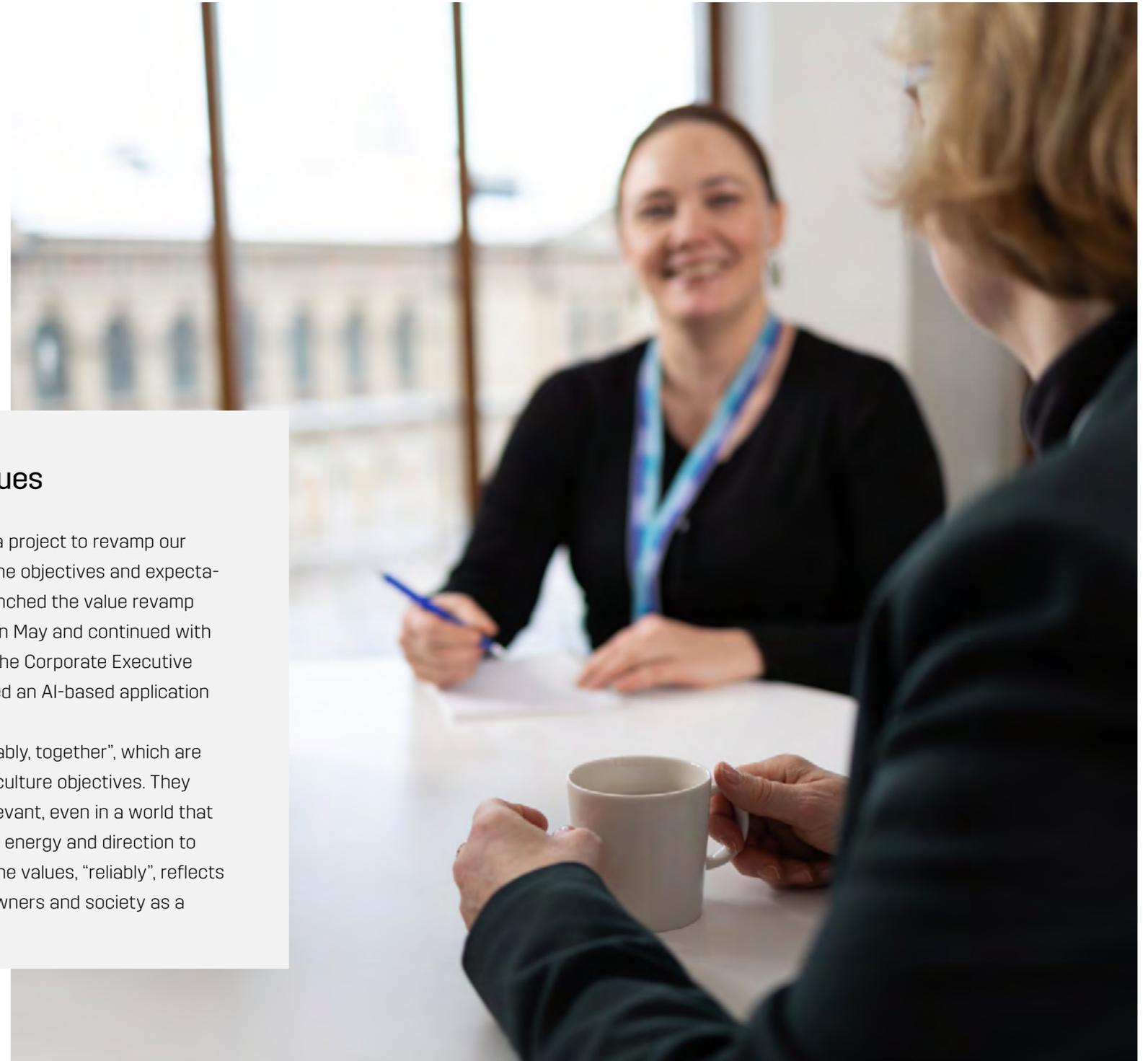
We strive to continuously improve ourselves, our work and our way of working. A personal appraisal discussion is arranged at least twice a year with each employee. Although our dialogue is ongoing, our development discussions focus on the employee's own goals, successes and development plans. A common training objective is to provide e-learning programmes in areas such as sustainability, competition law, data protection, information security and security at the office.



Case: We updated our values

All employees of the Group took part in a project to revamp our long-held values. Together, we defined the objectives and expectations for the work on the values. We launched the value revamp project at a joint strategy event in Oulu in May and continued with joint meetings and workshops for both the Corporate Executive Team and the employees. We also utilised an AI-based application when working on the values.

Our updated values are "skilfully, reliably, together", which are in line with our strategic and corporate culture objectives. They are ours and feel like it, and they are relevant, even in a world that has changed greatly. The values provide energy and direction to everything we do. The new addition to the values, "reliably", reflects the importance of what we do for our owners and society as a whole.





Key personnel figures in 2022

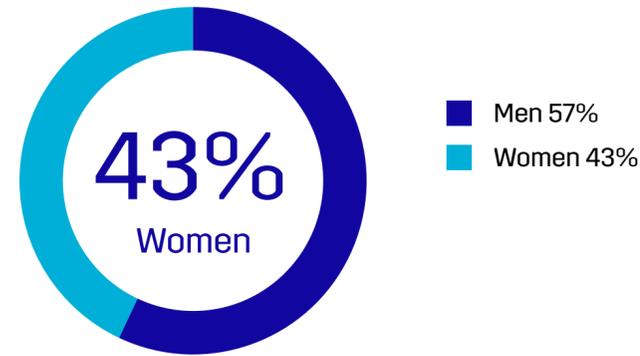
At the end of 2022, we employed 41 (in 2021: 44) people, of whom three had a fixed-term employment relationship. During the year, ten permanent employment contracts were terminated, and six new permanent employment contracts were signed. (The number of permanent employees decreased by four from the previous year.) The total turnover of permanent employees in 2022 was 19% (23.9%).

In 2022, there were five (six) fixed-term employment relationships, and five agency contract workers were used.

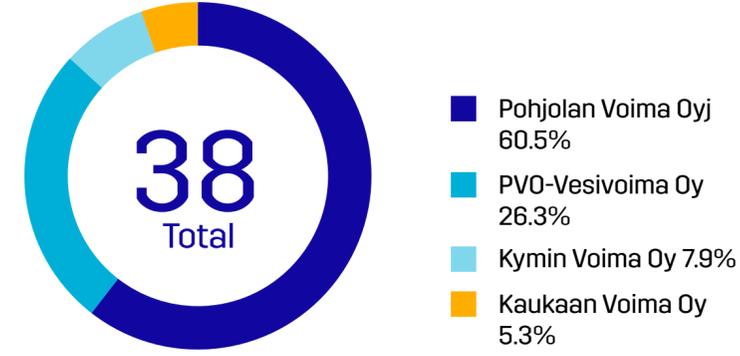
At the end of 2022, the average age of the permanent employees was 48 (47), and 42.1% (40.5%) of them were female. The average length of the permanent employees' employment relationships was approximately 12 years.

In 2022, the staff health percentage, i.e. the proportion of employees with no sick leave, was 60% (86%).

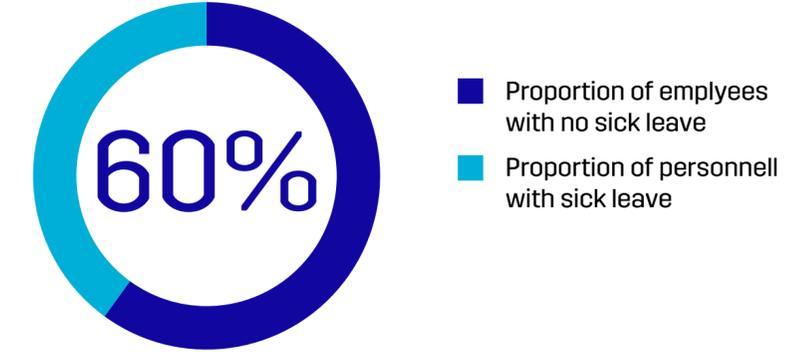
Gender breakdown of Corporate Executive Team



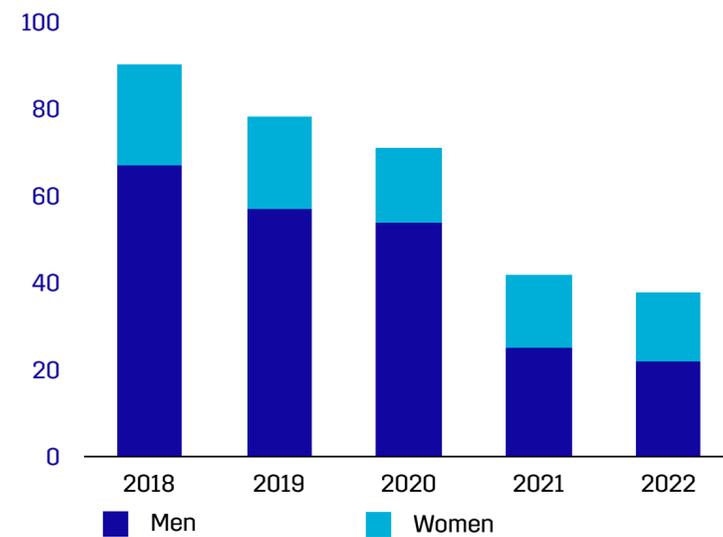
Number of personnel by Group companies on 31 Dec 2022, in permanent employment



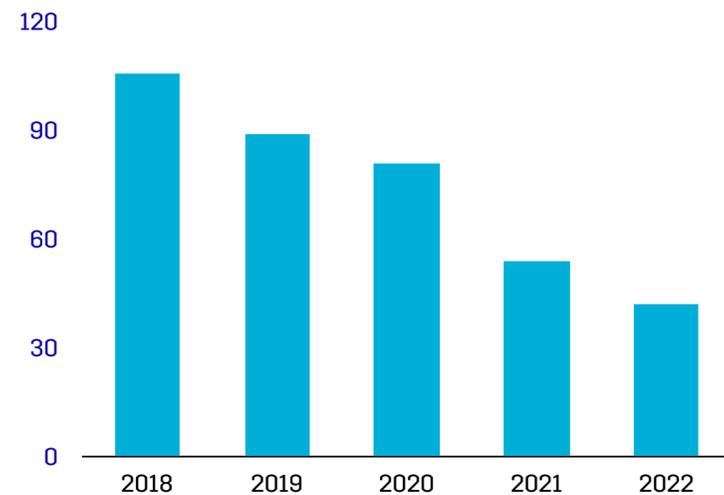
Health percentage in 2022



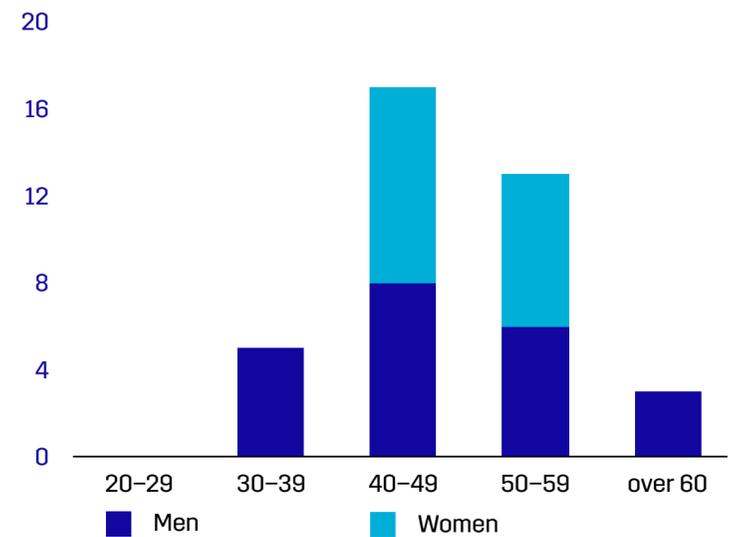
Number of personnel on 31 Dec in 2018–2022, in permanent employment



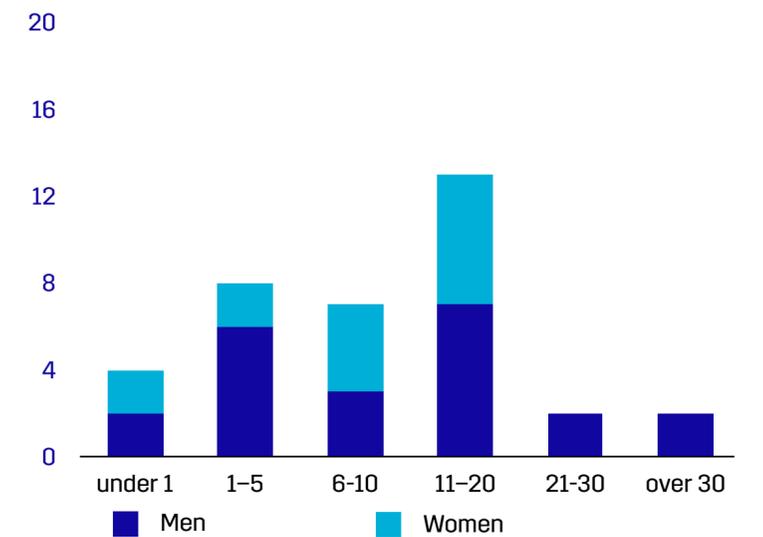
Average number of personnel in 2018–2022, in permanent employment and on fixed-term contracts



Breakdown of personnel by age on 31 Dec 2022, in permanent employment



Years of employment on 31 Dec 2022, in permanent employment



SUSTAINABILITY/SAFETY

Safety starts with observations

Our corporate culture and operating methods are based on the values that have been determined with the employees: “skilfully, reliably, together”. The “skilfully” value also covers the fact that we always work safely. In 2022, our goal was to promote the safety culture and improve supplier safety.

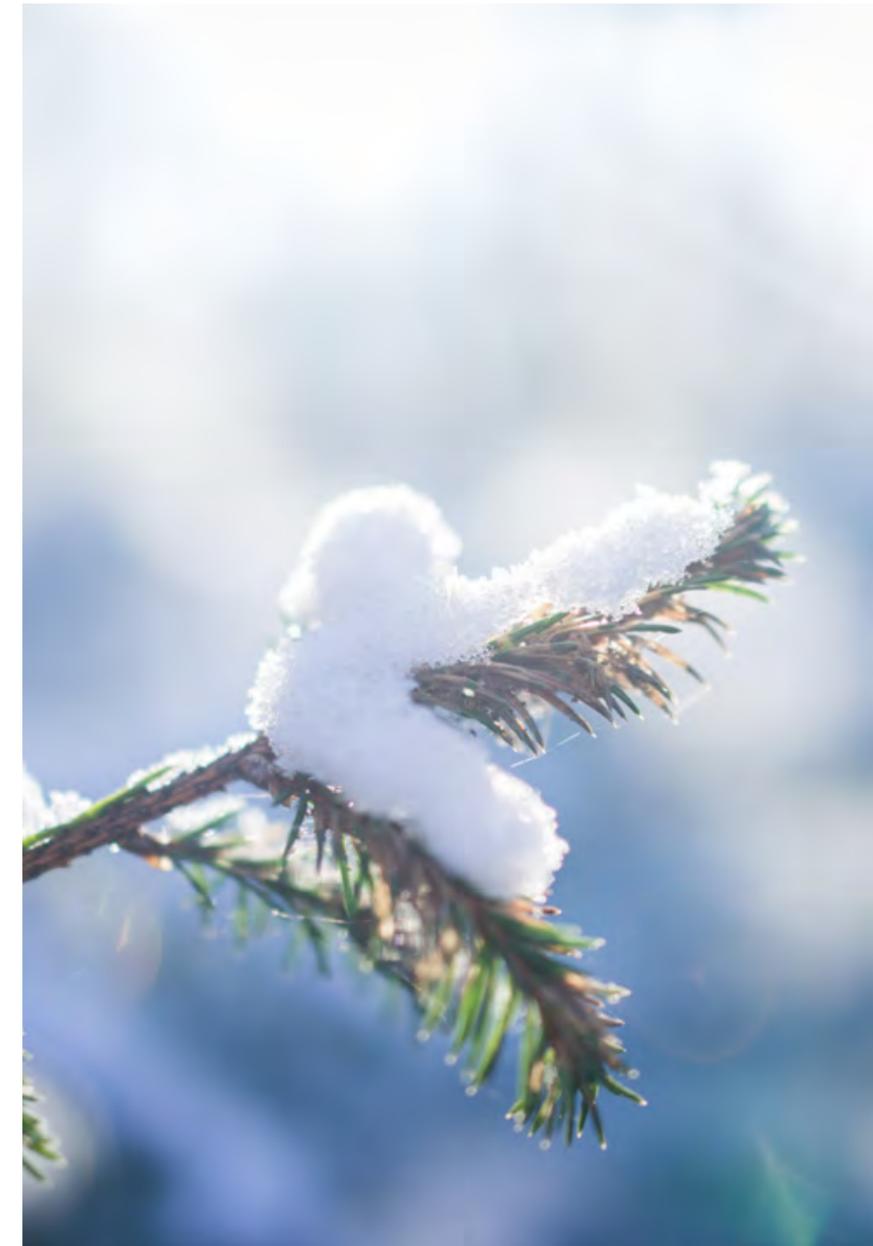
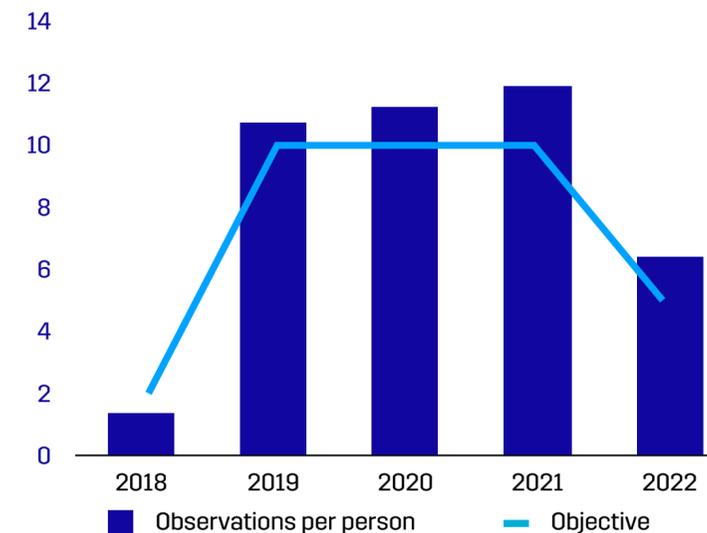
Working together to improve safety

Our target for safety, environmental and energy efficiency observations by our employees was five observations per person. In 2022, each employee made an average of 6.4 observations. The year was challenging in terms of accidents, and we did not meet our target of zero accidents. The accident statistics include the parent company of Pohjolan Voima Group and all the production companies except for Teollisuuden Voima and Alholmens Kraft. There were four accidents requiring sick leave involving the personnel of the parent company and the production companies, and five such accidents involving the personnel of our subcontractors. This means that the accident frequency for our own staff and subcontractors was 24 per one million hours worked. All accidents were investigated, and corrective measures were taken to prevent reoccurrence. The accidents were reported to the Board of Directors of Pohjolan Voima Group and discussed at regular meetings with all persons responsible for safety at the power plants. We improved the investigation of subcontractor accidents and shared best safety practices between power plants.

Pohjolan Voima is involved in an HSEQ supplier assessment cluster for large-scale enterprises. In 2022, we conducted three supplier audits through the cluster. We also compared the performance of our suppliers in cluster audits. The audits cover occupational health and safety, environmental matters, sustainability and quality aspects.

In early 2022, the COVID-19 pandemic still required us to make extensive preparations to ensure the continuity of our operations. 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. We updated our continuity management system in 2022 to verify that our policies and procedures were up to date in the event of any exceptional situations or incidents.

Safety, environmental and energy efficiency observations per person





SUSTAINABILITY/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 2022, 97% of our electricity production and 80% of our heat production was carbon neutral. We reached our goals in terms of electricity production. We did not reach our goal in terms of carbon neutrality in heat production because the global political situation affected access to forest energy. Furthermore, a trade union strike at UPM's Finnish mills in early 2022, which lasted for almost four months, also affected the use of our power plants.

Share of carbon neutral production continues to increase

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 in our thermal power plants (the share used by Statistics Finland is 60%). In 2022, carbon dioxide emissions from the production of electricity and heat amounted to 0.6 million tonnes. Specific CO₂ emissions from electricity production were 31 g CO₂/kWh in 2022.

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

- The share of nuclear power and hydropower in our carbon neutral energy sources has increased.
- We have ceased the production of electricity with coal.
- Furthermore, regular electricity production at the OL3 EPR plant unit will increase the capacity.

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.

Aiming for a reduction in the use of peat

Our target was to reduce the use of peat by 60% from the 2019 level by 2022. In 2022, peat use was 26% below this, meaning that the target was not reached. The underlying reason was the poor availability of forest energy. The goal for our 2022–2027 strategy period is to use fossil fuels and peat only as startup and backup fuels to ensure the security of supply based on the market situation.

Focusing on the climate change impact

Climate change affects the operating environment in all industries, including the energy sector. In addition to reducing our emissions, we assessed the impact of climate change on our operations and produced a thematic risk report in 2022. The report was nearly completed by the end of 2022 and is currently being finalised.

Systematic contributions to energy efficiency

All our production companies use the energy efficiency system ETJ+ or ISO 50001. Some of these systems are certified. Energy efficiency is improved in many ways both at the production plants and in offices.

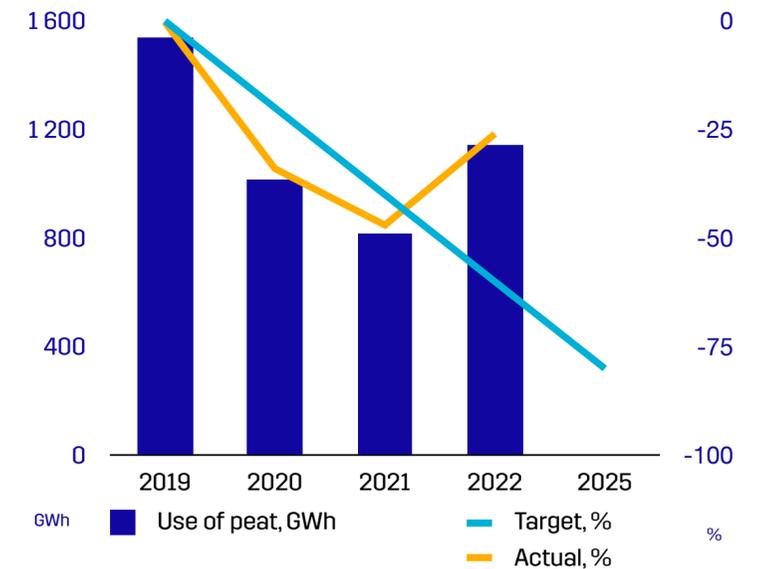
Nearly all Pohjolan Voima Group companies have signed an energy efficiency agreement. Energy efficiency agreements are a central part of Finnish energy and climate policy. This is now the third agreement period. It is valid until 2025.

We and the other companies who have joined the agreement are committed to investigating and further enhancing our energy efficiency as part of the planning and management of our operations.

Each year, we report on what we have done to improve our energy efficiency or to save energy, how much energy we have saved, and how much energy we have used in the previous year. Of the Pohjolan Voima companies, PVO-Veivoima Oy and Porin Prosessivoima Oy have joined the Action Plan for Energy Production. Pohjolan Voima's joint venture Teollisuuden Voima Oyj and our affiliated company Alholmens Kraft Oy Ab have also joined the Action Plan for Energy Production.

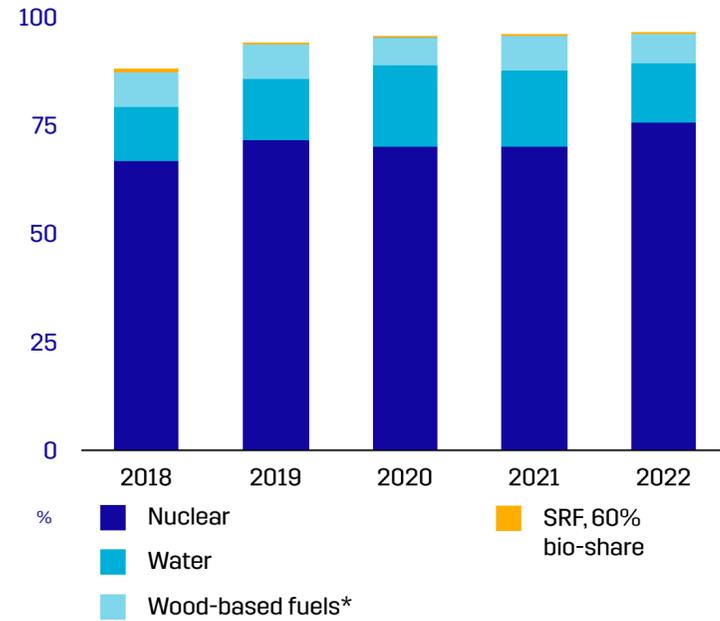
Kaukaan Voima Oy and Rauman Biovoima Oy have joined the Action Plan for Energy-intensive Industry as Pohjolan Voima companies through UPM-Kymmene Corporation.

Reducing the use of peat



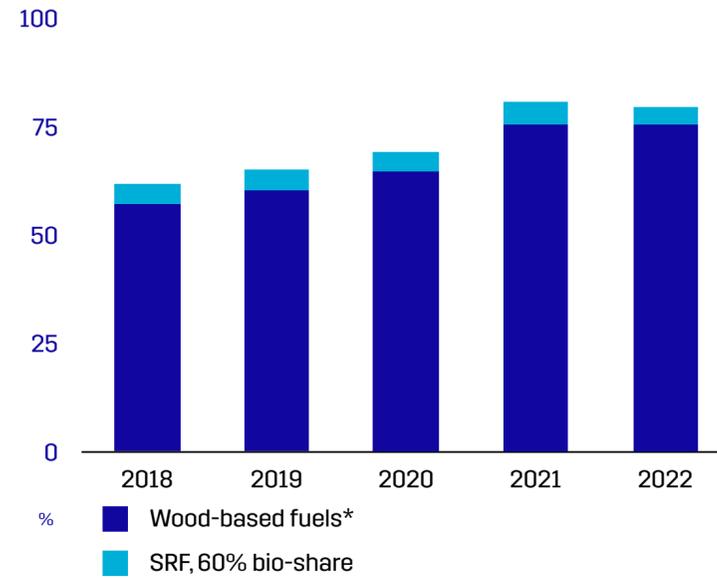


Carbon-neutral sources of Pohjolan Voima's electricity production in 2018–2022



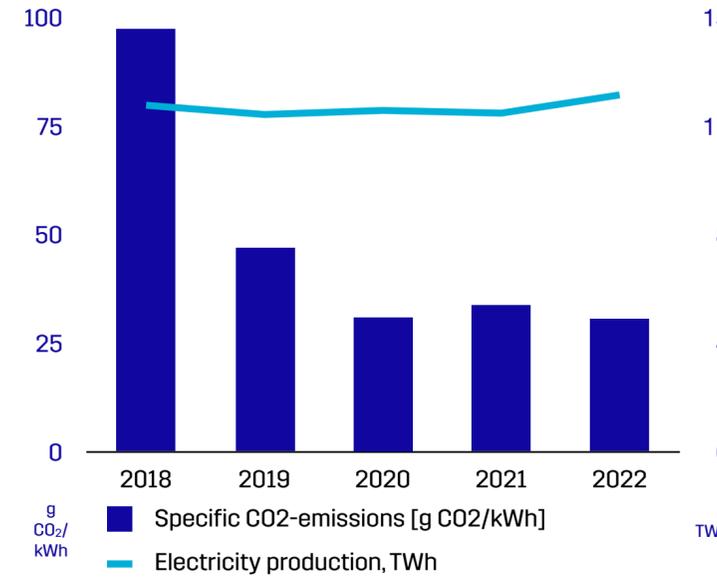
*Wood-based fuels are carbon-neutral

Carbon-neutral sources of heat production in 2018–2022

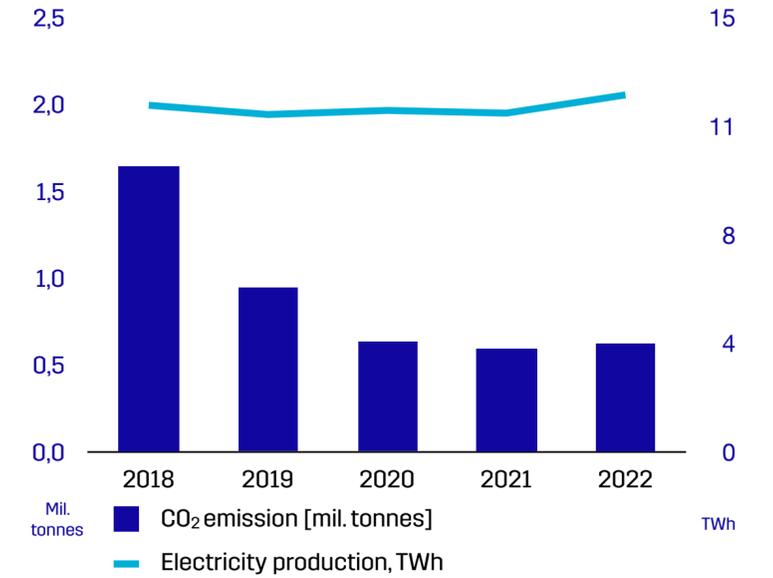


*Wood-based fuels are carbon-neutral

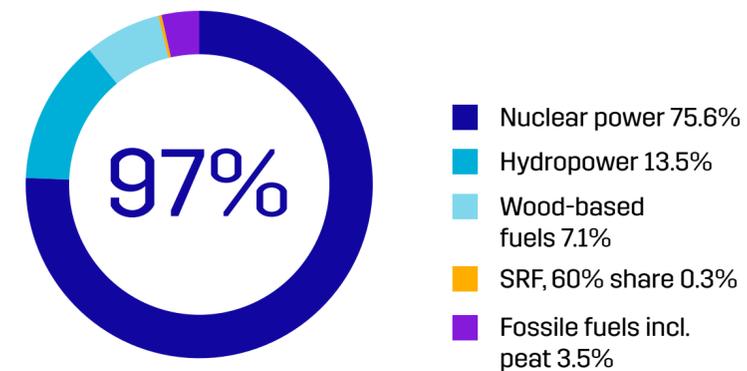
Specific carbon dioxide emissions from electricity production in 2018–2022



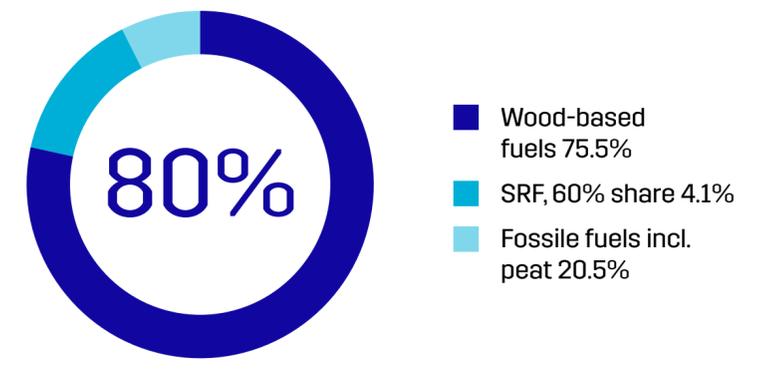
Carbon dioxide emissions from heat and electricity production in 2018–2022



Carbon neutral electricity production in 2022



Carbon neutral heat production in 2022



SUSTAINABILITY/BIODIVERSITY

Biodiversity

Alongside climate change, the loss of biodiversity is the biggest threat to the planet. In 2022, we surveyed how our operations have affected biodiversity, and how we can play our part in halting the loss of biodiversity. We prepared an action plan for 2023–2027 based on the survey results, focusing on hydropower and thermal power. In terms of nuclear power, the work on biodiversity is carried out by our joint venture Teollisuuden Voima.

Biodiversity is included in our strategy. As a responsible company, we reconcile competitive carbon neutral production with biodiversity. We want to produce hydropower responsibly and use sustainably produced wood-based fuels in CHP.

Our long-term biodiversity vision is to identify our key impact on biodiversity and move towards net positivity. We will promote our skill set and update our target as knowledge increases. We have set long-term goals to achieve our vision.

In hydropower, we continued our collaboration in migratory fish projects

In 2022, we continued cooperation to benefit migratory fish and the aquatic environment in our operating areas.

- Finland's first downstream migration route for salmon fry, including catching equipment, was introduced at Haapakoski on the Iijoki river in the summer of 2022.
- In 2022–2024, the *Lohi Iijokeen* (Salmon to Iijoki) project will continue the extensive cooperation of the Iijoki river migratory fish project of 2020–2022 and produce, among other things, information on the functionality of the Haapakoski downstream migration route.

The target of Pohjolan Voima Group:

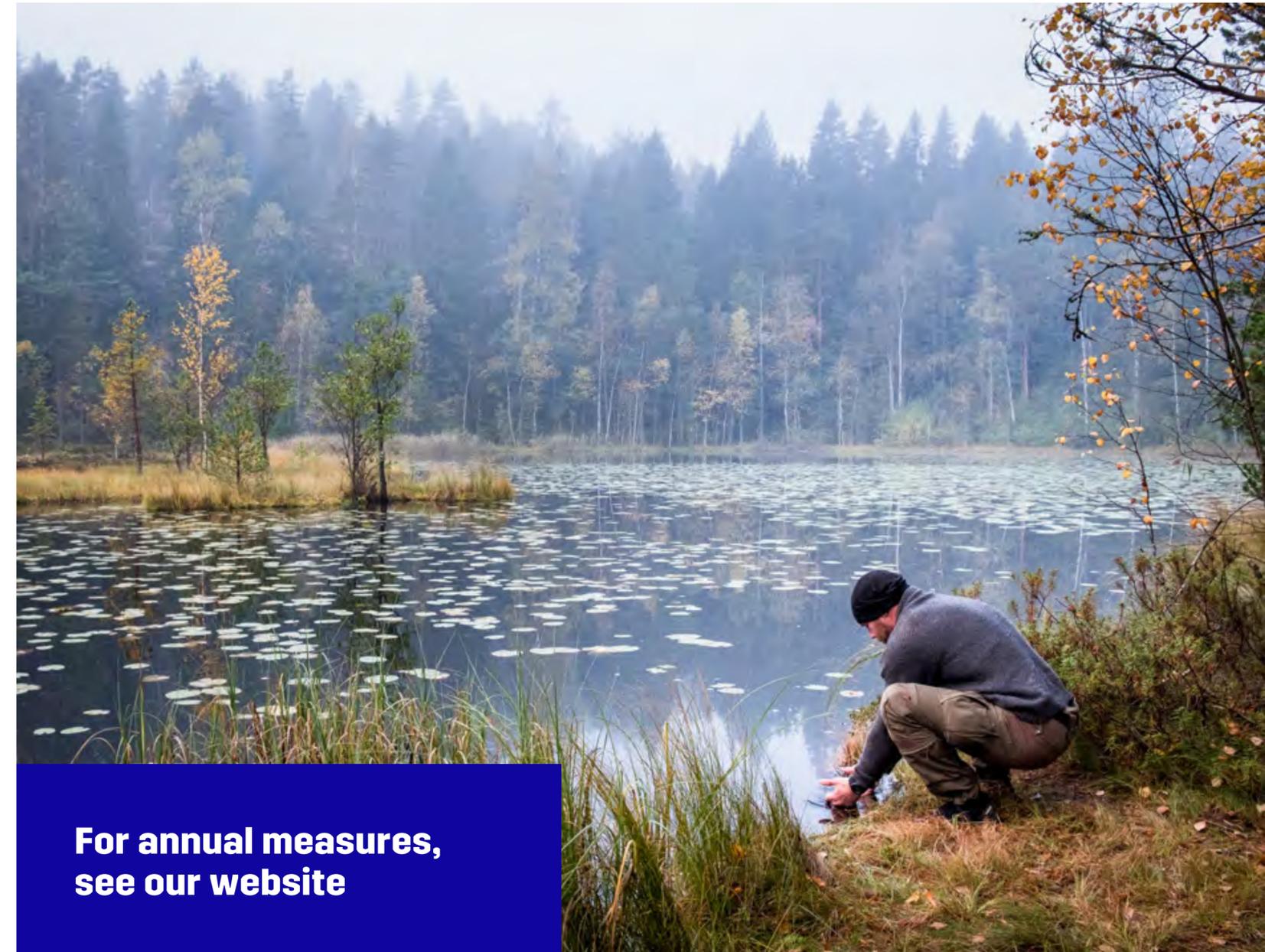
- Considering biodiversity in everything we do
- Setting up indicators for the effectiveness of the work on biodiversity

The long-term objectives for hydropower:

- Developing the natural migration patterns of migratory fish through extensive cooperation
- Strengthening stakeholder cooperation
- Promoting biodiversity on lands owned by PVO-Vesivoima

The long-term objectives for thermal power:

- Our wood-based fuels are sustainable.
- By-products and the circular economy are utilised.



**For annual measures,
see our website**



- The Iijoki agreement for 2019–2023 is implementing the Iijoki waterway vision by restoring drained swamps and improving water quality in the Iijoki river catchment area, for example.
- The development of the approximately 9 km long old Raasakka riverbed as a natural breeding area for migratory fish continued by the pumping of 5.5–9.5 m³/s of water into the riverbed throughout the summer season.
- Appeals regarding the Raasakka fishways are still pending at the Administrative Court of Vaasa.
- Our affiliated company Tornionlaakson Voima applied for a permit to build two natural fishways at Portimokoski on the Tengeliönjoki river. This would open up a breeding area of 1,000 km for migratory fish.
- We also participated in joint projects to restore migratory fish stocks in the Kemijoki and Ounasjoki rivers.
- The regulation of Suolijärvi Lakes in the Jumiskonjoki river and lake system was studied, and the recommended water level regulation ranges were prepared in cooperation with the authorities and residents.

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, for example. The sustainability criteria have been 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 the companies to demonstrate that the origin and use of the biomass fuel we use meet the sustainability criteria. The criteria have also been considered in our fuel contracts. The sustainability schemes are still being processed by the Energy Authority. The application of sustainability criteria to demonstrate the sustainability of zero emission biomass in emissions trading was delayed and postponed to the beginning of 2023.

SUSTAINABILITY/ENVIRONMENT

Continuous improvement in environmental matters

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 the tackling of climate change and the reduction of emissions, our goal is to safeguard biodiversity.

Hydropower: we stocked 2.8 million fry

Hydropower production has regional and local effects on water systems and fish stocks. In 2022, 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 2.8 million fry in 2022.
- Of these, 0.7 million were used to stock the Kemijoki sea and river area. This amounted to 17% of the total of 3.9 million fry stocked with Kemijoki Oy.

Dam safety: regular dam inspections

In 2022, inspections in compliance with the Dam Safety Act, to be held every five years, took place at the dams of the Kierikki and Jumisko power plants, as well as at the Irnijärvi, Kostonjärvi and Maunujärvi dams. The injection repairs of a leak detected in 2016 in the earth dam of the Melo power plant were completed in 2022. The final repairs were carried out in 2022 by building a bored pile wall in the dam. The

repair work has not affected the environment or the power generation operations at the power plant.

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

In March 2017, the Centre for Economic Development, Transport and the Environment for Lapland (Lapland ELY Centre) filed a change application with the Regional State Administrative Agency for Northern Finland concerning stocking and fish stock management obligations regarding the Kemijoki river. In October 2017, the ELY Centre filed a similar application concerning the Iijoki river. PVO-Vesivoima submitted complaints regarding both petitions to the Regional State Administrative Agency. In 2021, PVO-Vesivoima submitted its rejoinder to the petitioner's accounts and statements issued by the Finnish Environment Institute. The petitioner submitted its rejoinder to the statements in April 2022, and PVO-Vesivoima submitted its rejoinder to this rejoinder in June 2022. The Regional State Administrative Agency for Northern Finland did not issue a decision on either matter by the end of 2022.





Aiming for reduced emissions from thermal power production

The most significant environmental impact of thermal power production concerns the atmosphere. The largest combustion gas emissions include carbon dioxide, nitrogen oxide, sulphur dioxide and particle emissions. Thermal power plant emissions in tonnes (t) are affected by the production volume of the plants, but the emissions can be reduced through fuel choices, by optimising the combustion process and by using combustion gas cleaning technology. We have developed all of these over the years. Emissions into the air decreased or remained at the previous year's level. In 2022, emissions from heat and electricity production were as follows:

- Carbon dioxide emissions were 0.6 million tonnes
- Sulphur dioxide emissions were 0.5 thousand tonnes
- Nitrogen oxide emissions were 1.5 thousand tonnes
- Particle emissions were 0.1 thousand tonnes

There were no significant environmental deviations in our production in 2022.

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. As a result of the LCP BAT, our power plants have either already renewed their environmental permits or will do so. The emission limits for new environmental permits are 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. Our production companies use the energy efficiency system ETJ+ or ISO 50001. Some of these are certified. Nearly all our production companies have signed energy efficiency agreements for the 2017–2025 period.

[Read more on energy efficiency efforts](#)

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

Our goal is to reuse 100% of the by-products from thermal power production as raw materials to replace non-renewable natural resources such as rock and stone. In 2022:

- Our power plants generated a total of 94,000 tonnes of fly ash and gypsum from the combustion gas cleaning processes and bottom ash from boilers.
- A total of 112% of the by-products was reused in civil construction, as forest fertilisers or in the construction industry.

The five-year average for the recovery of by-products was 102%. Any fly ash that is not immediately reused can be put into intermediate storage and reused at a later date. As a result, the recovery rate varies on either side of 100%.



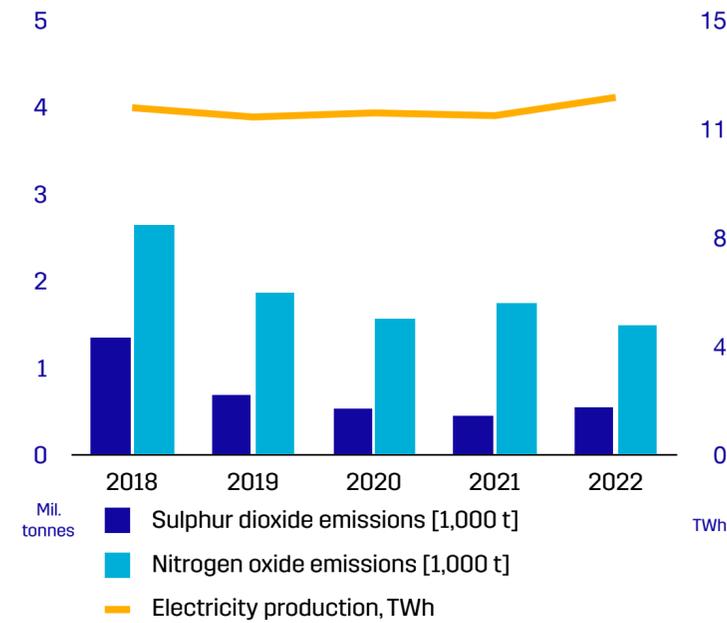
Nuclear production complied with environmental permits

In 2022, the operations of the Olkiluoto nuclear power plant, which is owned by TVO, a joint venture partly owned by Pohjolan Voima, complied with legislation, environmental permits, the environmental management system and the energy efficiency system, except for the recovery of screenings at OL1/OL2, where operational failures occurred. The equipment will be modified during the spring of 2023.

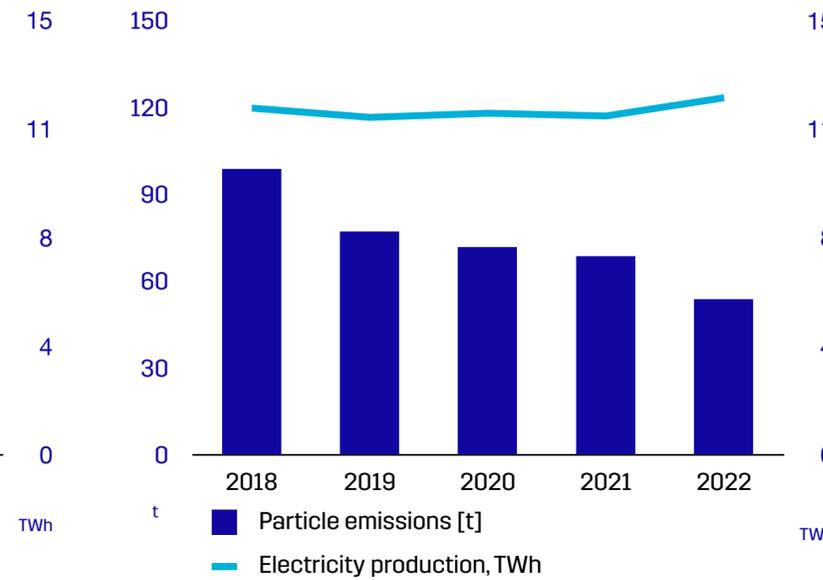
Environmental matters related to the production of nuclear power, environmental indicators and the results of the environmental programme for 2022 are reported in more detail in TVO's responsibility and environmental report. The data has been verified by a third party.

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

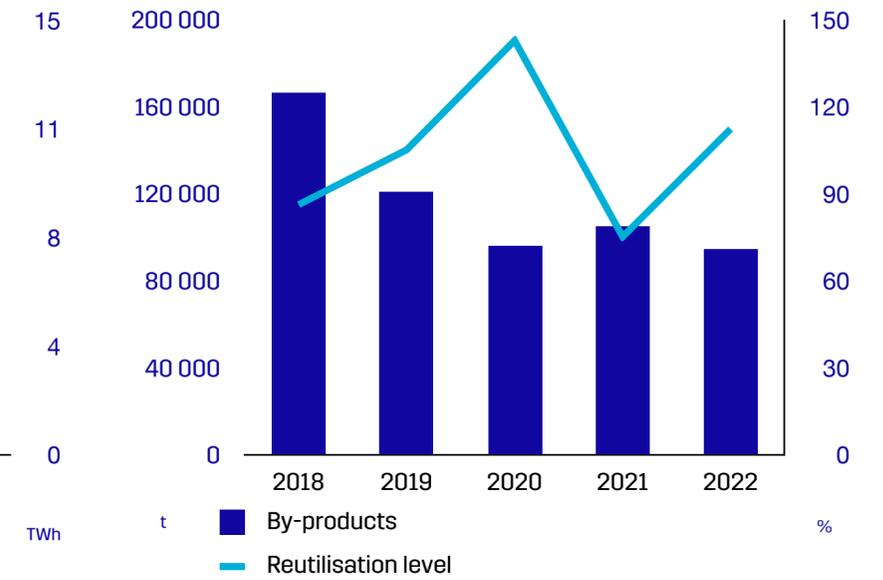
Acidifying emissions from heat and electricity production in 2018–2022



Particle emissions from heat and electricity production in 2018–2022



Usage of by-products and reutilisation levels in 2018–2022





CORPORATE GOVERNANCE

Corporate Governance Statement 2022

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Corporate Governance Statement 2022

1 Corporate Governance

Pohjolan Voima Oyj and its subsidiaries form the Pohjolan Voima Group. The registered office of the Group's parent company, Pohjolan Voima Oyj, is in 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 responsibilities 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 24 March 2022 the financial statements of Pohjolan Voima Oyj for 2021, 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.

An extraordinary general meeting of 15 November 2022 decided on an amendment of the terms for a shareholder loan arrangement.

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 24 March 2022, 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 Hakkila, Vice President Tomi Sederholm, Managing Director Anders Renvall, CEO Esa Kaikkonen, President and CEO Rami Vuola, CEO Juha Juntunen and CEO Mikko Rintamäki.

From 1 January to 24 March 2022, the Board consisted of Tapio Korpeinen (chair), Seppo Parvi, Jukka Hakkila, Tomi Sederholm, Anders Renvall, Esa Kaikkonen, Rami Vuola, Juha-Pekka Weckström and Jouni Lampinen.

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 2022, the remuneration paid to ordinary and deputy Board members totalled €474,000.

The Board of Directors convened 15 times in 2022. On average, 99.3 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 2022. 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 2022 Annual General Meeting, the Board nominated Tomi 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 11 times in 2022. 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 2022, the Corporate Executive Team consisted of the President and CEO, Minna Laakso, Riitta Larnimaa, Tiina Nyström, Jani Pulli, Kaj Råttts 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 effectiveness 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. Pohjolan Voima's internal control partner is BDO Ltd.

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 the 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 the 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 a 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 2022 elected PricewaterhouseCoopers Oy, authorised public accountants, as the Company's auditor. Niina Vilske, Authorised Public Accountant, has acted as a principal auditor.

In 2022, the auditor received €129,027 as auditing fees.



DIRECTORS' REPORT

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Annual report of the board of directors 2022

Operating environment

Russia's offensive warfare in Ukraine triggered a pan-European energy crisis, and Europe is moving quickly to break its dependence on Russian energy. Energy prices have been high at times, and concerns about security of supply have become a key energy policy issue. In Finland, the situation was affected by the end of electricity and wood fuel imports from Russia and a strong increase in weather-dependent production, among other things.

Decision-makers in the EU and Finland have proposed and introduced several measures aimed specifically at assisting consumers in coping with their large electricity bills. The EU adopted a Council Regulation requiring Member States to impose a revenue cap of €180/MWh on electricity producers and to allocate the collected revenue to consumers. In Finland, the regulation will be implemented through a temporary tax for which the Government submitted a proposal to Parliament in December 2022. According to the proposal, electricity producers participating in the electricity market will have to pay an additional 30% of corporation tax on any revenue from electricity business exceeding the 10% revenue calculated from the equity committed to electricity operations. Based on the preliminary assessment, the proposal does not apply to Pohjolan Voima's operations.

In 2022, electricity consumption in Finland was 82 TWh (86.8 TWh in 2021). Of this volume, 69 (69) TWh was produced

in Finland, while net imports into Finland amounted to 13 (17) TWh. Imported electricity covered 15.9% (20.1%) of Finnish electricity consumption. Most of the imported electricity came from Sweden. In 2022, electricity consumption in Finland decreased by 6% year-on-year. Industrial electricity consumption decreased by 6%, and electricity consumption in other sectors also decreased by 6%.

Nord Pool Spot trade amounted to 1,077 (956) TWh. The annual average system price in 2022 was high, at €135.86 (62.31) per MWh, while the annual average of the Finnish area price was €154.04 (72.34) per MWh. Imports of gas and electricity from Russia fell significantly during the spring and summer, leading to a sharp rise in prices. The hot and dry summer in Europe, as well as challenges at nuclear power plants in France and elsewhere, also contributed to the price crisis.

The EUA emission allowance price remained high throughout the year, varying between €57.91 and €97.51.

Weather-dependent production continued to grow. Challenges related to the balancing of the electrical power system and the integration of energy flows from different industries by developing hydrogen technology, among other measures, are even more important than before.

Climate change remains one of the megatrends driving the energy industry. The end of natural gas imports from Russia to Europe will contribute to an acceleration of the transition to carbon neutral production. Protection of biodiversity began

to emerge as a future megatrend alongside climate change mitigation.

Finland's climate target is to be carbon neutral by 2035 and carbon negative shortly thereafter. The Government submitted a report on the national climate and energy strategy to Parliament in the summer of 2022, and the debate in Parliament continued in 2023. The strategy outlines measures to help Finland achieve carbon neutrality by 2035. The strategy recognises the importance of all forms of carbon neutral production. The acceptability of nuclear power is very high. Hydropower is seen as an essential balancer of the electrical power system as the volume of wind power production, which varies according to the weather, continues to grow rapidly. According to the strategy, combustion-based forms of production will be necessary for decades to come, and peat has become increasingly acceptable as a fuel to ensure the security of supply. At the end of 2022, the debate on meeting the climate target intensified when estimates by Natural Resources Institute Finland showed that forest carbon sinks are lower than previously estimated.

The EU continues to work on the Fit for 55 package, which includes several initiatives to meet the EU's climate target of reducing emissions by at least 55% from the level of 1990 by 2030. The criteria in the EU taxonomy for sustainable activities on climate change mitigation and adaptation have been accepted. Nuclear power and natural gas were also accepted as sustainable forms of energy. In addition to

the emergency packages to tackle the energy crisis, the Commission adopted a proposal for a regulation on nature restoration.

In Finland, the energy crisis has contributed to the fact that several legislative projects in the Government Programme have not progressed. Proposals that the current Government will not make during its term include exempting cost-price nuclear power production from interest expense deduction restrictions, a proposal on value creation in real estate taxation, amending the Water Act in relation to "zero obligation" power plants, as well as a long-term overall reform of energy taxation. However, preparation of these projects will continue.

Pohjolan Voima's heat and power production

In 2022, Pohjolan Voima's total electricity supply was 12.9 (12.4) TWh. The Group's own electricity production accounted for 12.2 (11.7) TWh, of which the parent company's supplies to its shareholders were 11.9 (11.3) TWh. The subsidiaries supplied 0.3 (0.5) TWh to their other shareholders. Purchases from the Nordic electricity markets were 0.7 (0.6) TWh, and sales amounted to 0.4 (0.2) TWh. Heat deliveries were 3.1 (3.5) TWh.

Nuclear power made up 72.2% (66.2) of the electricity supply, increasing after the Olkiluoto 3 power plant unit started producing electricity during its test production phase. Teollisuuden Voima Oyj's (TVO) Olkiluoto nuclear power plant



Electricity supply (GWh)

	2018	2019	2020	2021	2022
Nuclear power	7,987	8,366	8,279	8,186	9,336
Hydropower	1,524	1,631	2,216	2,056	1,663
CHP	2,065	1,669	1,312	1,471	1,235
Condensing power	409	0	0	0	0
Electricity purchases	543	423	490	646	671
Total	12,528	12,089	12,298	12,360	12,906

generated 16.4 (14.4) TWh of electricity, of which Pohjolan Voima obtained 9.3 (8.2) TWh, in accordance with its shareholding. The joint capacity factor of the Olkiluoto plant units was 93.0% (92.8).

Hydropower accounted for 1.7 (2.1) TWh, or 12.9% (16.6) of the electricity supply. Hydropower production remained slightly below the average due to a drier-than-normal latter part of the year. A total of 1.2 (1.5) TWh of electricity was produced in combined heat and power (CHP) plants. Their share of the total supply was 9.6% (11.9).

In 2022, approximately 97% of the electricity and 80% of the heat produced by Pohjolan Voima was carbon neutral.

Key events in 2022

In December 2021, the Radiation and Nuclear Safety Authority (STUK) granted TVO a criticality and low power test licence, and the reactor in the OL3 EPR plant unit was subsequently started up. The plant unit was connected to the national grid on 12 March 2022, and electricity production started. The electricity production capacity was increased in stages during the test production to around 850 MW. On 29 April 2022, Pohjolan Voima Oyj published a stock exchange release reporting that due to inspection and

repair needs detected in the generator cooling system, the regular electricity production of OL3 would be postponed to September instead of the end of July as previously announced. Another stock exchange release on 15 June 2022 reported that the commissioning of OL3 would be suspended until the end of July due to foreign material issues observed in the turbine's steam reheater. It was stated that regular electricity production would start in December 2022 instead of September. On 19 October 2022, damage detected in the internals of feedwater pumps was reported. On 21 November 2022, the company announced that an investigation of the faults would be completed in December. The company also stated that, according to information from the plant supplier Areva-Siemens, electricity production would not continue before 11 December 2022, and regular electricity production would not start before the end of January 2023. On 21 December 2022, Pohjolan Voima Oyj announced that electricity production at OL3 would continue on 27 December 2022, and regular electricity production would start on 8 March 2023.

On 29 June 2022, Pohjolan Voima Oyj signed a new €350 million revolving credit facility to replace previous facilities totalling €329 million. The new facility has a maturity period

of five years, and it also includes two one-year extension options. For the first time, the margin of the revolving credit facility is linked to the achievement of the company's key sustainability targets of carbon neutrality in electricity and heat production.

On 15 November 2022, the extraordinary general meeting of Pohjolan Voima Oyj approved an extension of the validity of shareholder loan commitments between the company and shareholders of B2 series shares until 31 December 2023. An extension of the subscription period for shares covered by first refusal clause 1B/2020 to 1 January 2024 was simultaneously approved.

On 25 October 2021, Pohjolan Voima Oyj announced a decision by the extraordinary general meeting to approve the sale of shares in Hämeenkyrön Voima Oy to Metsä Board Corporation. The transaction was finalised 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 and a reduction of the share capital by €359,249.42 to acquire the company's G10 series shares. The repayment of capital took place on 5 January 2022, and the reduction of the share capital took place and the shares were acquired and annulled in March 2022.

Pohjolan Voima's joint venture Vaskiluodon Voima Oy sold its business on 31 December 2022, which meant that the joint venture terminated the energy production. The transaction completed an arrangement agreed by the owners of Vaskiluodon Voima in 2019.

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, Financial risk management.

The Group's liquidity is good. On 31 December 2022, cash and cash equivalents totalled €36 (38) million, and the Group had €350 (329) million of unused binding credit facility agreements. The credit facility agreement will mature in June 2027 and includes two one-year extension options. For short-term funding, the Group had a domestic commercial paper programme of €300 (300) million, of which €99 (100) million had been used.

The Group's interest-bearing liabilities amounted to €1,181 (1,198) 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 44.3% (40.6%). Consolidated turnover from continuing operations was €610.2 (470.6) million. Consolidated turnover increased as the energy production volume grew. The consolidated result for the financial period was €3.1 (-27.0) million. The result for the financial period was affected by a positive change in the value of derivatives recorded at fair value and the positive result of the parent company Pohjolan Voima Oyj. The parent company started to invoice the shareholders of B2 series shares for the costs incurred during the construction of the OL3 project after the start of the test production at OL3.

Investments

Total investments of Pohjolan Voima Group, excluding financial investments and the purchase of emission allowances, amounted to €7.2 (6.9) million.

PVO-Vesivoima Oy invested in the repair of a dam at the Melo power plant, and the repair project was completed in December. A downstream migration route for migratory fish built at the Haapakoski power plant was opened in the autumn. PVO-Vesivoima's investments totalled €5.7 million. The Group's remaining investments were made in replacements and renovations.

Between 2004 and 2022, Pohjolan Voima Oyj invested a total of €991.6 (991.6) million in the new OL3 nuclear power plant project currently under the test production phase. 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 €64 thousand (2021: 35 and 2020: 78).

Personnel

The average number of employees working for the Group was 42 (2021: 54 and 2020: 82). The number of employees decreased due to the closure of Laanilan Voima in 2021. The Group's salaries and fees for the financial period totalled €4.6 million (2021: 5.9 and 2020: 7.2). The average age of permanent employees was 48 (47) years. During the year, ten (31) permanent employment contracts were terminated, and six (three) new permanent employment contracts were signed. The absenteeism rate was 0.75 (1.03). The Group annually conducts a personnel satisfaction survey. We achieved the top People Power rating of AAA in the Eezy Flow survey for the third year in a row.

The average number of employees working for the parent company was 27 (2021: 30 and 2020: 35). Salaries and fees for the financial period totalled €3.4 million (2021: 3.7 and 2020: 3.9).

Corporate responsibility

Pohjolan Voima's strategy was updated in 2022, and responsibility was incorporated more strongly into the strategy. Our strategy slogan "We create decisive power to strengthen competitiveness and contribute to a better tomorrow" reflects our sense of responsibility. In line with the strategic theme "sustainable production on market terms", we aim to be a responsible operator and reconcile competitive carbon-neutral production with biodiversity. Our strategy emphasises sustainability in all our business operations.

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. We have prepared an annually updated sustainability programme to ensure compliance with the UN Sustainable Development Goals.

In 2022, sustainability and biodiversity was one of Pohjolan Voima Group's flagship projects. As part of the flagship project, we developed sustainability reporting, prepared a biodiversity action plan for 2023–2027, updated the sustainability section of our supplier guidelines and defined sustainability issues to be taken into account in all decision-making. We also produced a climate risk report on the impact of climate change and launched a study to allow

commitment to the Science Based Targets initiative in 2023. We will continue our work on all these areas in 2023.

A total of 97% (96%) of our electricity and 80% (81%) of our heat production was carbon neutral. The decrease in the carbon neutral share of heat production was caused by the fact that a strike in the forest industry early in the year and Russia's offensive warfare in Ukraine reduced the use of wood-based fuels and increased the use of peat in our combined heat and power (CHP) plants. We introduced Finland's first downstream migration solution for migratory fish at the Haapakoski hydropower plant on the Iijoki river. For the first time, the margin of the revolving credit facility that was signed in the summer of 2022 was linked to the achievement of Pohjolan Voima's sustainability targets.

For more information about Pohjolan Voima's sustainability targets and the related work, visit the company's website at www.pohjolanvoima.fi.

Reporting according to the EU taxonomy

Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment, i.e. the EU taxonomy, was published in 2020. The aim of the taxonomy is to increase sustainable investments and direct capital flows towards technologies and businesses that are considered sustainable. In 2021, the European Commission adopted a delegated disclosure regulation for the EU taxonomy, which obligated large public interest entities to provide information for the financial year 2021 on the share of taxonomy-eligible and non-taxonomy-eligible economic activities in their combined turnover, investments and operating costs. In 2022, the Commission also published a complementary delegated act on the criteria for certain gas and nuclear activities, according to which nuclear power and gas will become part of the EU taxonomy as "transitional activities" from the accounting period that starts on 1 January 2023. Pohjolan Voima is not

obligated to report in accordance with the taxonomy but has assessed its taxonomy eligibility and taxonomy alignment due to the significance of its financial activities and will publish its taxonomy report as part of the annual report in week 11.

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 the 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 2.8 (2.3) million fry during the reporting period.

PVO-Vesivoima participated in the Iijoki project on migratory fish in 2020–2022, which was a continuation of 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 promoted the Raasakka fishway. Furthermore, PVO-Vesivoima will participate in the subsequent migratory fish project, the Lohi Iijokeen (Salmon to Iijoki) project in 2022–2024. Project measures include smolt monitoring in the Haapakoski and Pahkakoski rapids, experimental use and development of the downstream migration route, the transfer of smolt and anadromous fish, a fry transplanting programme and the production of a video on the Iijoki river.

In December 2020, the Regional State Administrative Agency for Northern Finland granted a water management permit applied for by PVO-Vesivoima and Metsähallitus for the Raasakka fishway. The Raasakka fishway project is awaiting the outcome of appeals by stakeholders against the construction licence. Measures to return migratory fish to the old natural riverbed of the Iijoki river at Raasakka continue. In March, the municipality of Ii, PVO-Vesivoima, and the South and North Ii fishery collectives signed an agreement on the development of the old Iijoki riverbed at Raasakka in 2022 and 2023.

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. In addition to entirely new requirements, these involve additions to the current obligations. The Regional State Administrative Agency gave public notice of the petition concerning Iijoki in February 2020 and of the one concerning Kemijoki in June 2020. PVO-Vesivoima submitted complaints regarding both petitions to the Regional State Administrative Agency. In 2021, PVO-Vesivoima submitted its rejoinder to the petitioner's accounts and statements issued by the Finnish Environment Institute. The petitioner submitted its rejoinder to the statements in April 2022, and PVO-Vesivoima submitted its rejoinder to this rejoinder in June 2022. The Regional State Administrative Agency for Northern Finland did not issue a decision on either matter by the end of 2022.

All the thermal power plants operated by the Group fall within the sphere of the Emissions Trading Act (Päästökäytäntö 311/2011). 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 report the

CO₂ emissions of the subsidiaries, which amounted to 0.3 (0.3) million tonnes. Emissions into the air remained at the previous year's level. Sulphur dioxide emissions amounted to 0.5 (0.5) thousand tonnes, nitrogen oxide emissions to 1.5 (1.8) 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 for new environmental permits will be stricter.

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 the realisation of the strategy and the achievement of the business goals, as well as to 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

Pohjolan Voima Oyj's shareholders

Shareholder	Shareholding, % 31 December 2022	Shareholding, % 31 December 2021
EPV Energy Ltd	5.525	5.489
Helen Ltd	0.623	0.619
Ilmarinen Mutual Pension Insurance Company	1.843	1.831
Kemira Oyj (incl. Neliapila pension fund)	5.093	5.060
Kokkolan Voima Oy	1.815	1.803
Kymppivoima Oy	5.946	5.907
Metsä Group (Metsäliitto Cooperative, Metsä Fibre, Metsä Board Corporation)	3.020	3.657
Myllykoski Oyj*	0.635	0.631
Oulun Energia Ltd	0.912	0.906
Outokumpu Oyj	0.097	0.096
Perhonnjoki Ltd	2.222	2.208
City of Pori	1.376	1.366
Rautaruukki Corporation	0.091	0.090
Stora Enso Oyj	15.711	15.608
Finnish Power Ltd	1.486	1.476
UPM Energy Ltd*	48.043	47.727
UPM Communication Papers Ltd*	3.480	3.457
Vantaa Energy Ltd	0.230	0.229
Yara Suomi Oy (incl. pension fund)	1.852	1.840

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



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 project, as well as the sufficient financial capacity of the consortium company Areva to fulfil its responsibilities until the end of the guarantee period and the profit-yielding capacity of the plant unit. Under the plant contract, electricity production was scheduled to start at the end of April 2009. The completion of the project plant unit has been delayed. Regular electricity production at OL3 will commence in March 2023.

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

TVO implemented several risk management actions related to the OL3 EPR project in 2022 to promote TVO's readiness to commission the plant unit as well as to operate three nuclear power plant units. TVO closely monitors compliance of the conditions set in the settlement agreement in March 2018 and the 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 fails to reach the projected output level, load factor or operating cost structure, or if the Finnish national grid limits the capacity level, there is a risk that the production costs will rise to the objective. This risk has been analysed with the help of various scenarios influencing the profit-yielding capacity of OL3. The risk has also been analysed as regards the sufficiency of Fingrid Oyj's system protection and the related costs resulting to TVO.

TVO is implementing several risk management measures to ensure the profit-yielding capacity of OL3. Examples of risk management measures include the

utilisation of the experiences gained from the Flamanville and Taishan sister plants during nuclear commissioning of OL3.

In addition, the general economic situation has led to an increase in financial risks. The financial risks of Pohjolan Voima's business operations are related to liquidity, market and credit risks. Diversification of funding sources and long-term credit facilities reduce the financial risks. Financial risk management is covered in note 3 to the consolidated financial statements.

Share capital and share issues

On 31 December 2022, Pohjolan Voima's share capital was €55.0 (55.3) million, and the total number of shares was 32,295,513 (32,509,113). On 25 October 2021, the extraordinary general meeting decided on a reduction of the share capital by €359,249.42, and the reduction was registered during the financial period.

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 2024 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

On 24 March 2022, the annual general meeting appointed the following persons to the Board of Directors: Tapio Korpeinen, Executive Vice President (UPM-Kymmene Corporation), Seppo Parvi, Chief Financial Officer (Stora Enso Oyj), Jukka Hakkila, Group General Counsel (Kemira Oyj), Anders Renvall, Managing Director (Kymmenvoima Oy), Tomi Sederholm, Vice President (UPM-Kymmene Corporation), Esa Kaikkonen, CEO (Metsä Tissue Oyj), Rami Vuola, President & CEO (EPV Energy Ltd), Mikko Rintamäki, Managing Director (Kokkolan Energia Oy) and Juha Juntunen, Managing Director (Oulun Energia Oy).

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 15 (19) times in 2022. The company's CEO was Ilkka Tykkyläinen, M.Sc. (Eng.), eMBA.

Major legal actions pending

The Group had no pending legal action at the end of the financial period.

At the beginning of the financial period, PVO-Lämpövoima Oy had a pending arbitration procedure regarding a dispute between the company and Alfa Oil Oy. In the arbitration decision issued in February 2022, Alfa Oil was ordered to meet its obligations without delay.

Events after the end of the financial period

After tests at full reactor capacity, TVO's OL3 plant unit's production was interrupted according to plan in January 2023 in order to replace the impellers of the feedwater pumps. Thereafter, before the start of regular electricity production, an approximately month-long production phase will follow in the test production. Regular electricity production starts in March 2023.

Outlook

During the current financial period, power and heat production are expected to continue as normal. However, the continued commissioning of OL3 and the future start of commercial operation will increase Pohjolan Voima's electricity supply.

TVO is preparing for the start of regular electricity production at OL3 in March 2023 and the provisional takeover of the plant unit in accordance with the Plant Contract. TVO will carefully follow the fulfilment of the conditions according to the 2018 GSA and the amendment agreements signed in June 2021, which continue until the end of the guarantee periods.

Proposal of the Board of Directors regarding the distribution of profit

On 31 December 2022, the parent company's distributable funds totalled €301,963,383.44, of which the net profit for the financial period amounted to €11,498,553.92. The Board of Directors proposes to the Annual General Meeting that the profit for the financial period be transferred to the retained earnings account, and that no dividend be distributed.



Key figures (IFRS)

IFRS	2022	2021	2020	2019	2018
Turnover, € million	610	471	411	417	515
Operating result, € million	-16	-20	-3	45	-7
Net interest-bearing liabilities, € million	586	600	629	738	753
As percentage of turnover, %	96	127	153	175	146
Equity ratio, %	44	41	41	39	39
Total assets, € million	2,242	2,174	2,189	2,106	2,103
Investments, € million	7	7	8	4	5
Average number of personnel	42	54	82	89	106



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Consolidated financial statements (IFRS)

Consolidated statement of comprehensive income

1,000 €	Note	1 Jan-31 Dec 2022	1 Jan-31 Dec 2021
Continuing operations			
Sales	7	610,193	470,550
Other operating income	8	1,436	2,512
Materials and services	9	-507,350	-370,729
Personnel expenses	10	-5,458	-7,105
Depreciation, amortisation and impairment	11	-31,204	-51,883
Other operating expenses	12,13	-46,801	-47,584
Share of (loss)/profit of associates and joint ventures	19	-36,786	-15,735
Operating profit or loss		-15,970	-19,974
Finance income	14	27,114	8,408
Finance costs	14	-15,637	-14,826
Finance costs - net		11,477	-6,418
Profit before income tax		-4,493	-26,392
Income tax expense	15	8,226	-1
Profit for the year from continuing operations		3,733	-26,393
Discontinued operations			
Profit/loss from discontinued operations		-623	-557
Profit for the year		3,110	-26,950

Other comprehensive income:

1,000 €	Note	1 Jan-31 Dec 2022	1 Jan-31 Dec 2021
Items, that may be reclassified later to profit or loss			
Share of other comprehensive income of associates			
Cash flow hedging	19	123,865	25,952
Other comprehensive income for the year		123,865	25,952
Total comprehensive income for the year		126,975	-998
Profit attributable to:			
Owners of the parent		3,248	-26,731
Non-controlling interest		-138	-219
Total comprehensive income attributable to:		3,110	-26,950
Owners of the parent		127,113	-779
Non-controlling interest		-138	-219
		126,975	-998



Consolidated balance sheet

1,000 €	Note	31 Dec 2022	31 Dec 2021
ASSETS			
Non-current assets			
Intangible assets	16	285,942	284,091
Property, plant and equipment	17,18	345,568	368,611
Deferred tax assets	15	8,231	0
Investments in associated companies and joint ventures	19	832,060	744,981
Other financial assets	20	471	471
Loans and other receivables	21	610,631	596,530
Non-current assets total		2,082,903	1,994,684
Current assets			
Inventories	23	13,630	6,131
Trade and other receivables	21	110,244	103,371
Cash and cash equivalents	22	35,511	38,430
Current assets total		159,385	147,932
Assets held for sale	24	152	31,475
Total assets		2,242,440	2,174,091

1,000 €	Note	31 Dec 2022	31 Dec 2021
EQUITY			
Equity attributable to owners of the parent			
Share capital	25	54,962	55,321
Share premium		203,865	203,865
Reserve for invested non-restricted equity		311,176	322,778
Revaluation reserve		134,070	10,205
Subordinated shareholders loans (hybrid equity)		90,347	90,347
Retained earnings		161,243	158,910
Total		955,663	841,426
Non-controlling interests		38,470	40,853
Total equity		994,133	882,279
LIABILITIES			
Non-current liabilities			
Provisions	26	5,562	6,076
Borrowings	27	1,067,707	1,082,398
Other non-current liabilities	27,29	0	4,662
Non-current liabilities total		1,073,269	1,093,136
Current liabilities			
Borrowings	27	113,128	116,087
Trade and other payables	28	61,910	61,486
Current liabilities total		175,038	177,573
Liabilities related to assets held for sale	24	0	21,103
Total liabilities		1,248,307	1,291,812
Total equity and liabilities		2,242,440	2,174,091



Consolidated statement of cash flows

1,000 €	Note	1 Jan- 31 Dec 2022	1 Jan- 31 Dec 2021
Cash flows from operating activities			
Profit for the year		3,110	-26,950
Adjustments to the profit for the year	6	47,761	76,227
Change in net working capital	6	-13,729	-12,040
Interest paid and other financial expenses		-14,278	-14,788
Interest received		4,166	2,829
Income tax paid		-5	-1
Net cash generated from operating activities		27,025	25,277
Cash flows from investing activities			
Purchases of intangible assets and property, plant and equipment (PPE)	16,17	-6,737	-7,216
Proceeds from sales of intangible assets and PPE	16,17	357	971
Proceeds from sales of subsidiaries	5	11,962	0
Net cash used in investing activities		5,582	-6,245
Cash flows from financing activities			
Acquisition and annulment of own shares	25	-359	0
Equity refunds paid	25	-11,602	-7,000
Interest paid on subordinated shareholders loans (hybrid equity)	25	-636	-491
Proceeds from borrowings	24,27	122,728	144,728
Repayments of borrowings	24,27	-130,736	-146,000
Principal elements of lease payments	24,27	-8,411	-16,112
Proceeds (+) or repayments (-) of current liabilities	24,27	-5,618	-39
Net cash used in financing activities		-34,634	-24,914
Net (decrease)/increase in cash and cash equivalents		-2 027	-5 882
Cash and cash equivalents at the beginning of the year		38,430	44,312
Change in cash and cash equivalents		-2,027	-5,882
Cash and cash equivalents of subsidiaries sold		-892	0
Cash and cash equivalents at the end of the year	22	35,511	38,430

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 1.1.2021		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
Interest paid on 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 31.12.2021		55,321	203,865	10,205	322,778	90,347	158,910	841,426	40,853	882,279



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 1.1.2022		55,321	203,865	10,205	322,778	90,347	158,910	841,426	40,853	882,279
Comprehensive income										
Profit or loss							3,248	3,248	-138	3,110
Other comprehensive income:										
Cash flow hedges				123,865				123,865		123,865
Total other comprehensive income for the year		0	0	123,865	0	0	0	123,865	0	123,865
Total comprehensive income for the year		0	0	123,865	0	0	3,248	127,113	-138	126,975
Interest paid on subordinated shareholders loans (hybrid equity)	25						-915	-915		-915
Non-controlling interest of the sold group companies								0	-2,245	-2,245
Acquisition and annulment of own shares	25	-359						-359		-359
Refund of reserves	25				-11,602			-11,602		-11,602
Transactions with owners total		-359	0	0	-11,602	0	-915	-12,876	-2,245	-15,121
Balance at 31.12.2022		54,962	203,865	134,070	311,176	90,347	161,243	955,663	38,470	994,133

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 18 power plants in 15 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 at Mikonkatu 7, 00100 Helsinki, Finland.

These consolidated financial statements were approved for issue by PVO's Board of Directors on 16 February 2023. 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 IFRIC and SIC Interpretations valid as at 31 December 2022 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 a 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 Russia's war in Ukraine on the financial statements

The Ukrainian situation has not had a direct effect on the Group's operations or on the production of electricity during the reporting period. The increase in general cost and the interest rate level will however affect the expenses in the near future.

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 produced 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 liabilities 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 recognised 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, 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 recognised in turnover monthly and are paid retrospectively on the 24th of the 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 capitalised 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, and therefore the Group does not generally recognise any deferred tax assets or liabilities on these operations. Deferred tax may arise in energy related operations if the invoicing of the costs incurred does not match with the period when the costs are incurred. 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 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 Immovable 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 the 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. The 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 capitalised 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 modernisation 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 realisable value.

Leases

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 recognised 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 an equal period and with equal collaterals. Right-of-use assets are measured at 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 cases where the Group is reasonably certain to exercise a 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 terms less than twelve months or to leases for which the underlying asset 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 recognised 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 recognise the credit risks in trade receivables on the basis of which a deductible item is recognised 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 recognises 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 reorganisation, 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. The Group has not applied for hedge accounting and has recognised the gains and losses resulted from fair value measurement through the income statement in finance income or cost.

Teollisuuden Voima Oyj (TVO), a joint venture of the Group, is consolidated using the equity method, see Associated 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 organisation 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

Pension arrangements are classified as defined benefit plans or defined contribution plans. Defined benefit plans are plans that are not defined contribution plans. The Group does not have any defined benefit plans. 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.

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 the 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 capitalised investment cost of the power plant. The initial present value is adjusted according to subsequent planned future changes. The amount recognised 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 recognised 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 13 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 recognised 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 installments. 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 recognised in liabilities when the obligation to pay interest is incurred. Interest expenses are recognised in the retained earnings and are not recognised 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 a 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 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. A subscription can be made once a year.

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 to the shareholder loan commitments, two separate series of option rights were also subscribed. Option rights 2020 1A entitle to a maximum of 3,599,472 new B2 shares with the subscription price of 0.01 Euros. The subscription period of new series B2 shares is 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 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 2024 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 is based 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 plan 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 recognised in the other comprehensive income relating to a non-current asset classified as held for sale as well as 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 2021. The Group has applied the following new standards, amendments and interpretations from 1 January 2022 on:

- AS 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

The Group adopts the following published standards, interpretations and changes to existing standards and interpretations in its 2023 financial statements or later. Based on initial assessment, the Group estimates that these have no impact on the consolidated financial statements, unless separately stated below.

- IAS 1 Presentation of Financial Statements, IAS 8 Disclosure of Accounting Policies (amendments) – accounting policy disclosures and definition of accounting estimates
- IAS 12 Income taxes (amendment) – deferred tax related to assets and liabilities arising from a single transaction
- IAS 1 Presentation of Financial Statements (amendment)* – classification of liabilities as current or non-current
- IFRS 16 Leases (amendment)* - lease liability in a sale and leaseback

* 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 April 30, 2009.

TVO started the electricity production in March 2022 when the plant unit connected to the national grid. Regular electricity production starts in March 2023.

Pohjolan Voima is not aware of any technical or other issues that would prevent the completion of OL3 EPR power plant from the test production phase or the start of electricity production. All the ongoing actions 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 the 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 expected 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, customary for the industry, provisions for environment protection expenses to cover its legal obligations.

Environmental provisions are based 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 recognises 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 upon so that a maximum of 1/3 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 realised 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 2022, 99 (100) million Euros out of the commercial paper program was in use.

In addition to liquid assets, Pohjolan Voima Group's liquidity is secured by 350 million Euro (329) revolving credit facilities as well as by shareholder loan commitments of 238 (238) million Euros. The revolving credit facility will mature in June 2027 and it includes two one-year extension options. The facility was fully undrawn as at 31 December 2022 (as well as per 31 December 2021). The shareholder loan commitments were also undrawn as at 31 December 2022 (as well as per 31 December 2021).

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

2022

1,000 €	2023	2024	2025	2026	2027-	Total	Carrying amount
Loans from financial institutions ¹	-4,500	-67,650	-193,000		-70,000	-335,150	-335,150
Finance costs ²	-10,130	-9,100	-6,550	-2,582	-2,098	-30,460	
Bonds	-125,000		-150,000			-275,000	-274,701
Finance costs	-4,063	-1,875	-1,875			-7,813	
Loan from the State Nuclear Waste Management Fund (TVO) ³					-350,000	-350,000	-350,000
Finance costs	-10,302	-13,129	-13,129	-13,129	-13,129	-62,818	
Lease liabilities ⁴	-10,459	-10,441	-15,713	-17,923	-69,918	-124,454	-122,631
Finance costs	-2,455	-2,236	-2,014	-1,690	-5,410	-13,805	
Commercial papers	-98,353					-98,353	-98,353
Finance costs	-646					-646	
Interest rate derivatives	-2,029	-1,233	-278	-411	-179	-4,130	14,629
Total	-267,937	-105,664	-382,559	-35,735	-510,734	-1,302,629	

¹ Repayments to be made in 2023 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 section 52 of the Nuclear Energy Act, Teollisuuden Voima Oyj is entitled to borrow from the 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 for securing collateral for the loan.

⁴ Lease liabilities according to IFRS 16 included



Undiscounted cash flows of financial liabilities

2021

1,000 €	2022	2023	2024	2025	2026-	Total	Carrying amount
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	-8,870	
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	-1,239,040	

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 section 52 of the Nuclear Energy Act, Teollisuuden Voima Oyj is entitled to borrow from the 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 for 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 76.5% (77%) of the Group's total borrowings. Interest rate swaps currently in place cover approximately 26% (28%) 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 2022 the increase or decrease of one percentage point in the interest rate would affect the result of the year by approximately +3.5/-1.2 (+7.5/-8.3) 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 euro-denominated borrowings are hedged at the latest at the time when the loan is drawn. All Pohjolan Voima Group's loans were euro-denominated in 2022 and 2021.

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 did not recognise any impairment (2021: 12 thousand Euros) 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 the 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.

	2022	2021
Equity on assets ratio (%) (IFRS, Group) *	44	41

$$* \text{ Equity on assets ratio } \% = 100 \times \frac{\text{Shareholders' equity}}{\text{Balance sheet total}}$$



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 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. The nuclear power plant unit Olkiluoto 3 is under the test production phase.

The other operations cover the group functions of the parent company Pohjolan Voima Oyj as well as the service companies PVO Power Management Oy and PVO Power Services 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 the 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 for the liabilities.

2022

Income statement	Hydropower	Thermal power	Nuclear power	Other	Total	Discontinued operations
Sales, external	51,383	240,078	229,216	89,516	610,193	65
Sales, inter-segment	-5,722	97,323		95,468	187,069	
Elimination					-187,069	
Sales total	45,661	337,401	229,216	184,984	610,193	65
Depreciation, amortisation and impairment	-5,060	-25,441		-703	-31,204	
Share of (loss)/profit of associates and joint ventures	-55	-3,222	-33,509		-36,786	
Operating profit or loss	3,687	-4,162	-33,509	18,014	-15,970	-635
Finance income and costs	-1,282	-1,170	-5,375	19,304	11,477	12
Income taxes				8,226	8,226	
Profit/loss for the year from continuing and discontinued operations	2,405	-5,332	-38,884	45,544	3,733	-623

**2022**

Assets	Hydropower	Thermal power	Nuclear power	Other	Total
Non-current assets	432,132	253,900	1,336,112	46,743	2,068,888
Other non-current assets					14,015
Non-current assets total					2,082,903
Current assets	22,460	75,544	0	82,242	180,245
Elimination					-20,860
Current assets total					159,385
Assets held for sale		152			152
Total assets	454,592	329,596	1,336,112	128,985	2,242,440
Liabilities					
Non-current liabilities					
Non-current liabilities	153,676	133,644	782,581	3,367	1,073,269
Current liabilities					
Current liabilities	10,020	46,588	0	139,290	195,898
Elimination					-20,860
Current liabilities total					175,038
Total liabilities	163,696	180,232	782,581	142,658	1,248,307

**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

5 SOLD NON-CURRENT ASSETS AND BUSINESS COMBINATIONS

Sold non-current assets

The shares of Hämeenkyrön Voima Oy were sold to Metsä Board Oyj as at 1 January 2022.

Assets and liabilities of sold companies	2022
Intangible assets	1,314
Property, plant and equipment	29,698
Trade and other receivables	3,222
Cash and cash equivalents	892
Total assets	35,126
Non-controlling interests	2,245
Provisions	291
Borrowings	18,215
Trade and other payables	2,596
Total liabilities	23,347
Net assets sold	11,779
Gain on disposal	183
Total consideration	11,962
Cash consideration received	11,962
Cash and equivalents disposed of	-892
Cash inflow arising from disposal	11,070

There were no sold non-current assets in 2021.

Business combinations

There were no business combinations in 2022 or in 2021.

6 NOTES TO THE STATEMENT OF CASH FLOWS

Adjustments to profit or loss for the year (1,000 €)

	2022	2021
Depreciation, amortisation and impairment	31,204	51,883
Increase/decrease in fair value of derivatives	-20,400	-5,625
Income taxes	-8,226	1
Gains (+) or losses (-) from disposal of non-current assets	-529	-956
Finance costs - net	8,913	12,004
Share of (loss)/profit of associates and joint ventures	36,786	15,735
Other adjustments	13	3,185
Total	47,761	76,227

Change in net working capital

	2022	2021
Increase (-) or decrease (+) in non-interest-bearing receivables	-3,549	-27,882
Increase (-) or decrease (+) in inventories	-7,499	3,079
Increase (+) or decrease (-) in current non-interest-bearing liabilities	-2,154	12,571
Change in provisions	-527	192
Total	-13,729	-12,040

7 SALES

1,000 €	2022	2021
Sales of electricity produced	339,088	279,937
Sales of heat produced	128,671	138,731
Sales of purchased electricity	97,269	42,215
Other sales	45,165	9,667
Total	610,193	470,550

Electricity delivered to shareholders (GWh)

Electricity produced	12,234	11,713
Heat produced	3,128	3,374
Purchased electricity	671	645

PVO's electricity purchases are determined by the electricity required by the shareholders. In 2022, Pohjolan Voima Group's total electricity purchases from continuing operations were 12.9 (12.4) TWh. The Group's electricity generation accounted for 12.2 (11.7) TWh, of which the parent company delivered to its shareholders 11.9 (11.3) TWh. Subsidiaries supplied 0.3 (0.5) TWh to other owners. Purchases from continuing operations from the Nordic electricity market were 0.7 (0.6) TWh and sales were 0.4 (0.2) TWh. Heat deliveries were 3.1 (3.5) TWh.

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

8 OTHER OPERATING INCOME

1,000 €	2022	2021
Rental income	517	515
Gain on sale of property, plant and equipment	246	251
Other income	672	1,746
Total	1,436	2,512

9 MATERIALS AND SERVICES

1,000 €	2022	2021
Fuels	100,583	85,482
Change in inventories	-7,399	2,626
Materials and services	2,689	2,066
Emissions allowances - carbon dioxide	2,791	4,216
Energy purchased; Nordic electricity market	97,592	42,064
Energy purchased; Associates and Joint ventures	286,155	222,792
Energy purchased; other	19,340	6,278
External services	5,599	5,205
Total	507,350	370,729

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 €	2022	2021
Wages and salaries	4,569	5,896
Pension expenses - defined contribution	718	1,024
Other personnel expenses	171	185
Total	5,458	7,105

Average number of personnel

	2022	2021
Salaried employees	41	45
Wage-earners	1	9
Total	42	54

The above average number of personnel includes personnel of continued operations only.



11 DEPRECIATION, AMORTISATION AND IMPAIRMENT

1,000 €	2022	2021
Amortisation of intangible assets		
Intangible rights	108	122
Other intangible assets	593	491
Total	701	613
Depreciation of property, plant and equipment		
Land and water areas	281	319
Buildings and constructions	4,736	5,329
Machinery and equipment	23,712	28,188
Other tangible assets	1,774	1,988
Total	30,503	35,824
Impairments		
Other intangible assets	0	214
Land and water areas	0	130
Buildings and constructions	0	422
Machinery and equipment	0	14,489
Prepayments	0	191
Total	0	15,446
Depreciation, amortisation and impairment total	31,204	51,883

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

12 OTHER OPERATING EXPENSES

1,000 €	2022	2021
Repair, servicing and maintenance services	11,276	10,684
Real estate taxes	5,997	5,934
Rents	230	217
Operation services	13,797	15,140
Other expenses	15,502	15,609
Total	46,801	47,584

Auditor's fees

1,000 €	2022	2021
Audit fees	176	201
Other services	6	8
Total	182	209

13 RESEARCH & DEVELOPMENT

Research and development recognised as an expense during the period totalled 64 (35) thousand Euros in 2022.



14 FINANCE INCOME AND COSTS

1,000 €	2022	2021
Interest income on loans and receivables	6,713	2,783
Derivative financial instruments (hedge accounting is not applied)		
Fair value gains	20,400	5,625
Finance income total	27,114	8,408
Interest expense on liabilities at amortized costs	12,957	12,986
Other finance cost	2,681	1,840
Finance costs total	15,637	14,826
Total finance income and costs	11,477	-6,418

15 INCOME TAX

Pohjolan Voima delivers electricity and heating to its shareholders at cost price. According to cost-based pricing, the Group does not pay any taxes on its energy related operations, and therefore the Group does not recognise any deferred tax assets or liabilities on these operations. However, in the parent company there are tax losses carried forward from the uninvoiced costs relating to OL3 that have been incurred during the project period. As the electricity production started in the test production phase Pohjolan Voima started to invoice the costs incurred from the shareholders. A simultaneously deferred tax asset was recorded in the parent company as the tax losses carried forward can be utilised in the coming years. 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 €	2022	2021
Result before income tax	-4,493	-26,392
Tax based on Finnish tax rate 20%	899	5,278
Change in the utilisation of deferred tax assets	8,231	0
Share of profits and losses of associates and joint ventures	-7,315	-3,140
Income taxes from the previous financial periods	-5	0
Unrecognised deferred taxes due to cost-price principle	6,416	-2,139
Income taxes recognised in consolidated income statement	8,226	-1

16 INTANGIBLE ASSETS

1,000 €	Emission allowances - carbon dioxide	Intangible rights	Other intangible assets	Total
Cost or valuation at 1.1.2022	2,786	281,565	6,031	290,382
Additions	4,349			4,349
Disposals	-3,274		6,339	3,065
Reclassifications		80	1,398	1,478
At 31.12.2022	3,861	281,645	13,768	299,274
Accumulated amortisation and impairment 1.1.2022	0	1,597	4,695	6,292
Disposals			6,339	6,339
Amortisation and impairment, for the period		108	593	701
Accumulated amortisation and impairment 31.12.2022	0	1,705	11,627	13,332
Closing net book amount 31.12.2022	3,861	279,940	2,141	285,942
Closing net book amount 31.12.2021	2,786	279,968	1,337	284,091

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 the value-in-use method. The testing unit is the hydropower segment. The calculation model includes an estimate of 50 years and the terminal value. The price of electricity is obtained from

1,000 €	Emission allowances - carbon dioxide	Intangible rights	Other intangible assets	Total
Cost or valuation at 1.1.2021	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 31.12.2021	2,786	281,565	6,031	290,382
Accumulated amortisation and impairment 1.1.2021	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 31.12.2021	0	1,597	4,695	6,292
Closing net book amount 31.12.2021	2,786	279,968	1,337	284,091
Closing net book amount 31.12.2020	1,590	279,938	2,041	283,569

quotations of 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 7.05% and the weighted average capital cost has been used in the discount rate calculation. The 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 +/- 147 million Euros. A change in the weighted average capital cost of +/- 1.0 percentage point would accordingly affect approximately -361/+529 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 1.1.2022	40,258	121,992	689,116	80,103	12,846	944,316
Additions	677	1,330	112		7,182	9,301
Disposals		-3,000	-37,230	-12		-40,242
Reclassifications		5,043	6,067	911	-13,499	-1,478
Cost or valuation 31.12.2022	40,935	125,365	658,065	81,002	6,529	911,897
Accumulated depreciation and impairment 1.1.2022	1,045	68,402	455,208	50,859	191	575,705
Disposals and reclassifications		-2,649	-37,230			-39,879
Depreciation and impairment for the period	281	4,736	23,712	1,774		30,503
Accumulated depreciation and impairment 31.12.2022	1,326	70,489	441,690	52,633	191	566,329
Net book amount 31.12.2022	39,609	54,876	216,376	28,368	6,338	345,568
Net book amount 31.12.2021	39,213	53,590	233,909	29,243	12,655	368,611



1,000 €	Land and water areas	Buildings and constructions	Machinery and equipment	Other tangible assets	Prepayments	Total
Cost or valuation at 1.1.2021	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 31.12.2021	40,258	121,992	689,116	80,103	12,846	944,316
Accumulated depreciation and impairment 1.1.2021	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 31.12.2021	1,045	68,402	455,208	50,859	191	575,705
Net book amount 31.12.2021	39,213	53,590	233,909	29,243	12,655	368,611
Net book amount 31.12.2020	40,847	65,285	297,734	31,501	7,521	442,889

In 2022 the cost estimate of one landfill was revised. In 2021 the cost estimate as well as the lifetime of one landfill were revised.

Management has assessed that there are no indications of impairment.

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 1.1.2022	460	14,925	111	15,496
Disposals		-182		-182
Cost or valuation at 31.12.2022	460	14,743	111	15,314
Accumulated depreciation and impairment 1.1.2022	344	9,145	85	9,575
Disposals		-182		-182
Depreciation and impairment for the period	19	566	5	590
Accumulated depreciation and impairment 31.12.2022	363	9,529	90	9,983
Net book amount 31.12.2022	97	5,213	21	5,331
Net book amount 31.12.2021	116	5,779	26	5,921

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 1.1.2021	460	15,642	111	16,213
Transferred to assets held for sale		-717		-717
Cost or valuation at 31.12.2021	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 31.12.2021	344	9,145	85	9,575
Net book amount 31.12.2021	116	5,779	26	5,921
Net book amount 31.12.2020	134	6,877	30	7,041

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



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 cases where the Group is reasonably certain to exercise a 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 terms less than twelve months or to leases for which the underlying asset 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 €	2022	2021
Land and water areas	281	319
Buildings	504	549
Machinery and equipment	11,234	12,946
Other tangible assets	129	224
Total	12,148	14,038
Interest expense (included in finance cost)	1,033	1,303
Expense relating to short-term leases	39	79
Expense relating to leases of low-value assets that are not shown above as short-term leases	55	69

The total cash outflow of leases in 2022 was 1,123 (5,868) 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 €	2022	2021
Land and water areas	5,877	5,509
Buildings	1,401	927
Machinery and equipment	98,215	108,833
Other tangible assets	1,024	1,153
Total	106,517	116,422
Assets held for sale	0	18,129
Provisions	1,928	2,000
Lease liabilities		
Current	10,275	10,464
Non-current	112,356	120,818
Total	122,631	131,282
Liabilities related to assets held for sale	0	18,507

Additions to the right-of-use assets in 2022 were 2,089 (912) thousand Euros and to disposals 352 (1,201) thousand Euros.

There were no impairments in 2022 (2021: 1,096 thousand Euros).

19 ASSOCIATES AND JOINT VENTURES

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

1,000 €	2022	2021
Länsi-Suomen Voima Oy	9	66
Oy Alholmens Kraft Ab	598	386
Tahkoluodon Polttoöljy Oy	0	0
Teollisuuden Voima Oyj	-33,509	-14,186
Torniolaakson Voima Oy	-73	-54
Vaskiluodon Voima Oy	-3,820	-1,954
Voimalohi Oy	9	7
Total	-36,786	-15,735

Investments in associates and joint ventures

1,000 €	2022	2021
At 1 January	744,981	734,764
Share of profit	-36,786	-15,735
Other comprehensive income	123,865	25,952
At 31 December	832,060	744,981

Associates and Joint Ventures

Company, domicile	Interest held %		Book value 1 000€	
	2022	2021	2022	2021
Associates				
Oy Alholmens Kraft Ab, Pietarsaari	49.90%	49.90%	18,955	18,356
Länsi-Suomen Voima Oy, Harjavalta	19.90%	19.90%	33,744	33,736
Tahkoluodon Polttoöljy Oy, Pori	32.00%	32.00%	0	0
Torniolaakson Voima Oy, Ylitornio	50.00%	50.00%	1,757	1,830
			54,456	53,922
Yhteisyritykset				
Teollisuuden Voima Oyj, Helsinki	58.50%	58.50%	776,380	686,024
Vaskiluodon Voima Oy, Vaasa	50.00%	50.00%	991	4,811
Voimalohi Oy, Kemi	50.00%	50.00%	233	224
			777,604	691,059
Associates and joint ventures total			832,060	744,981

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 as at 31 December 2022 (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 455 (486) million Euros.

Goodwill on the acquisition of Länsi-Suomen Voima Oy is included in the investments in the associates totalling 28 million Euros as at 31 December 2022 (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 as at 31 December 2022.

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 (-)
2022				
Oy Alholmens Kraft Ab	74,658	36,217	101,831	1,199
Länsi-Suomen Voima Oy	38,679	10,919	6,391	1
Tahkoluodon Polttoöljy Oy	5	0	0	0
Teollisuuden Voima Oyj	9,171,020	6,953,502	358,208	-47,878
Torniolaakson Voima Oy	6,259	2,743	1,374	-18
Vaskiluodon Voima Oy	11,865	9,970	93,198	-1,528
Voimalohi Oy	2,669	2,200	5,325	0
Total	9,305,153	7,015,551	566,327	-48,225

1,000 €	Assets	Liabilities	Revenue	Profit/ loss (-)
2021				
Oy Alholmens Kraft Ab	80,913	43,671	72,224	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	4,283	0
Total	8,843,128	6,698,915	456,574	-19,869

Related-party transactions - transactions with associates and joint ventures

1,000 €	2022	2021
Sales to associates and joint ventures	25,413	24,427
Purchases from associates and joint ventures	274,712	205,866
Receivables from associates and joint ventures	623,808	628,331
Liabilities to associates and joint ventures	359,750	361,821
	2022	2021

Personnel employed by associates and joint ventures in average	1,113	1,084
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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	2022	2021
Current		
Cash and cash equivalents	353,203	172,318
Other current assets	509,919	544,132
Current assets in total	863,122	716,450
Financial liabilities (excl. trade payables)	-258,669	-445,619
Other current liabilities (incl. trade payables)	-177,846	-186,094
Current liabilities in total	-436,515	-631,713
Non-current		
Assets	8,307,898	7,945,813
Financial liabilities	-6,516,988	-5,967,489
Non-current liabilities in total	-6,516,988	-5,967,489
Net assets	2,217,517	2,063,061



Summary of the statement of comprehensive income	TVO Group	
	2022	2021
Sales	358,208	298,713
Depreciation	-46,992	-43,996
Finance income	6,295	4,681
Finance costs	-81,480	-41,887
Profit/loss from continuing operations before income tax	-47,826	-19,653
Income tax expense	-52	0
Profit/loss from continuing operations after income tax	-47,878	-19,653
Other comprehensive income	211,736	44,363
Profit/loss from continuing operations	163,858	24,710

Summary of the financial information	2022	2021
Net assets at 1 January	2,063,061	2,042,948
Profit/loss for the year	163,858	24,710
The change and interest of subordinated shareholder loans	-9,402	-4,597
Net assets at the end of the period	2,217,517	2,063,061
Group ownership %	58.50%	58.50%
Group ownership share	1,297,247	1,206,891
Subordinated shareholder loans	-543,641	-543,641
IFRS entries relating to the valuation	22,773	22,774
Book value	776,380	686,024

20 OTHER FINANCIAL ASSETS

1,000 €	2022	2021
Investments in non-listed securities	471	471
Total	471	471

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 €	2022	2021
Loans to associates and joint ventures	559,733	559,733
Derivative financial instruments	14,015	0
Other non-current receivables	36,883	36,797
Total	610,631	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 €	2022	2021
Trade receivables	79,865	70,841
Pledged cash deposits	33	335
Prepayments and accrued income	26,395	27,748
Derivative financial instruments	614	0
Other current receivables	3,336	4,447
Total	110,244	103,371

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

Prepayments and accrued income:

1,000 €	2022	2021
Prepayments, energy purchases	13,701	12,321
Indirect taxes	2,492	5,595
Other	10,202	9,832
Total	26,395	27,748

The Group did not record credit losses in 2022 (12 thousand Euros in 2021) on trade receivables or other receivables. The Group had no material outstanding receivables as per 31 December 2022. Therefore, the aging of trade receivables is not presented.

22 SHORT-TERM DEPOSITS, CASH AND CASH EQUIVALENTS

CASH AND CASH EQUIVALENTS

1,000 €	2022	2021
Cash at bank and on hand	35,511	38,430
Total	35,511	38,430

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 €	2022	2021
Fuels		
Coal	455	467
Other fuels	13,075	5,664
Prepayments	100	0
Total	13,630	6,131

No inventory impairment was recorded from continued nor discontinued operations (2021: not recorded) in 2022.

24 DISCONTINUED OPERATIONS AND ASSETS HELD FOR SALE

Discontinued operations

1,000 €	2022	2021
Income	559	3,810
Costs	-1,182	-4,367
Profit before income tax	-623	-557
Profit from discontinued operations	-623	-557

Cash flow from discontinued operations

1,000 €	2022	2021
Cash flows from operating activities	1,885	-1,773
Cash flows from investing activities	136	907
Cash flows total	2,021	-866

The Board of Directors of PVO-Lämpövoima Oy decided on 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 on 13 November 2015. PVO-Lämpövoima's operations are presented in the financial statement 2015-2022 as discontinued operations. PVO-Lämpövoima's tangible assets are presented as assets held for sale in 2022 and 2021.

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

Assets held for sale

1,000 €	2022	2021
Intangible assets	0	1,315
Tangible assets	152	29,877
Trade and other receivables	0	283
Total	152	31,475

Liabilities related to assets held for sale

1,000 €	2022	2021
Provisions	0	291
Borrowings	0	18,216
Trade and other payables	0	2,596
Total	0	21,103



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 of 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
1.1.2021	32,509,113	55,321	205,999	-15,747	327,644	90,347	186,132	849,696
Interest paid on 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
31.12.2021	32,509,113	55,321	203,865	10,205	322,778	90,347	158,910	841,426
Interest paid of subordinated shareholders loans (hybrid equity)							-915	-915
Acquisition and annulment of own shares	-213,600	-359						-359
Refund of reserves					-11,602			-11,602
Other comprehensive income				123,865			3,248	127,113
31.12.2022	32,295,513	54,962	203,865	134,070	311,176	90,347	161,243	955,663

Shares

The number of shares as at 31 December 2022 was 32,295,513.

The shares have no nominal value. All issued shares are fully paid.



The company has 13 registered series of shares

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 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 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 C: - entitling the holder to obtain energy produced or purchased by PVO-Lämpövoima Oy	2,224,498	1,983
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 G: - entitling the holder to obtain 49.9% of the energy produced by Oy Alholmens Kraft Ab	354,290	596
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 Voima Oy	296,486	499

Share capital by share category	Number	1,000 €
Series G5: - entitling the holder to obtain energy produced by Laanilan Voima Oy	155,272	261
Series G6: - entitling the holder to obtain energy produced by Porin Prosessivoima Oy	646,217	1,087
Series G9: - entitling the holder to obtain 54.0% of the energy produced by Kaukaan Voima Oy	589,071	991
Series M: - entitling the holder to obtain 100% of the energy produced by Mussalon Voima Oy	307,707	2,921
Series V: - entitling the holder to obtain 50.0% of the energy produced by Vaskiluodon Voima Oy	1,046,823	1,761
	32,295,513	54,962

The following shares were issued during the financial year:

There were no share issues subscribed in 2022.

Other changes in shareholders' equity:

Pohjolan Voima Oyj's Extraordinary General Meeting held on 25 October 2021 decided on an equity refund amounting to 11,602,350.58 Euros from the reserve for invested non-restricted equity as well as on the reduction of the company's share capital by 359,249.42 Euros. The equity refund was paid on 5 January 2022 and the share capital was decreased, with the corresponding shares acquired and annulled in March 2022. The arrangement related to the sale of the shares of Hämeenkyrön Voima Oy to Metsä Board Oyj. The share deal entered into force on 1 January 2022.



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 realise. 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 a 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 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 on 31 January at the latest. Furthermore, a share subscription right can be used in connection to 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 1A/2020 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 1B/2020 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. Furthermore, a share subscription right can be used in connection to 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 2022	6,076
Additions	200
Disposals	-582
Change in accounting estimates	395
Effect of discounting	-527
At 31 December 2022	5,562

1,000 €**2022 2021**

Non-current provisions	5,562	6,076
Total	5,562	6,076

Environmental provisions

The environmental provisions include provision for the landscaping of power plant landfills. The present value of the landscaping is capitalised as part of the other tangible assets and recorded as a provision. The environmental provision totalled 3.3 million Euros at 31 December 2022 and it is estimated that it will be fully utilised by 2030.

In 2022 the cost estimate of one landfill was revised.

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

The discount rate used to determine present value was 2.34%.



27 BORROWINGS

1,000 €	2022	2021
Non-current:		
Borrowings from associates and joint ventures	350,000	350,000
Borrowings from financial institutions	330,650	337,150
Bonds	274,701	274,429
Leases	112,356	120,819
Total	1,067,707	1,082,398
Current:		
Borrowings from financial institutions	4,500	5,735
Other interest-bearing current liabilities	98,353	99,888
Leases	10,275	10,464
Total	113,128	116,087
Total borrowings	1,180,835	1,198,485

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 60% 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 €	2022	2021
Other non-current liabilities		
Derivative financial liabilities		
Interest rate swaps	0	4,662
Total	0	4,662

Fair values of derivatives are disclosed in note 29.

INTEREST-BEARING NET LIABILITIES

1,000 €	2022	2021
Interest-bearing liabilities total	1,180,835	1,198,485
Interest-bearing financial assets		
Non-current		
Loan receivables	559,733	559,733
Total	559,733	559,733
Current		
Pledged cash deposits	33	335
Cash and cash equivalents	35,511	38,430
Total	35,544	38,765
Interest-bearing financial assets total	595,277	598,498
Interest-bearing liabilities net	585,558	599,987



THE CHANGES OF NET LIABILITIES IN THE CASH FLOW

1,000 €	Other assets		Liabilities arising from financial activities				Other liabilities, current	Total
	Financial assets, non-current	Financial assets, current	Finance lease, non-current	Finance lease, current	Borrowings, non-current	Borrowings, current		
Net liabilities								
1.1.2021	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								
31.12.2021	559,733	38,765	-120,819	-10,464	-961,579	-5,735	-99,888	-599,987
Cash flows		-2,329	9,572	-51	6,228	1,235	1,535	16,190
Cash and cash equivalents of subsidiaries sold		-892						-892
Changes in leases			-1,110	241				-869
Net liabilities								
31.12.2022	559,733	35,544	-112,356	-10,275	-955,351	-4,500	-98,353	-585,558



28 TRADE PAYABLES AND OTHER CURRENT LIABILITIES

1,000 €	2022	2021
Trade payables	16,149	12,924
Liabilities to associates and joint ventures	9,587	11,821
Accrued expenses	29,727	26,327
Other current liabilities	2,586	7,362
Held emission allowances, Energy Authority	3,861	2,787
Derivative financial instruments	0	265
Total	61,910	61,486

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 €	2022	2021
Accrued personnel expenses	1,679	1,738
Accrued expenses for fuel purchases	6,420	5,653
Accrued expenses for energy purchases	1,937	2,099
Accrued rents	985	721
Interest liabilities	5,239	3,948
Other	13,467	12,168
Total	29,727	26,327

29 DERIVATIVE FINANCIAL INSTRUMENTS

Fair value of derivative financial instruments

	2022	2022	Total
1,000 €	Positive fair values	Negative fair values	
Interest rate swaps	14,863	-234	14,629
Total	14,863	-234	14,629

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

Nominal value of derivative financial instruments

1,000 €	2022	2021
Interest rate swaps	235,000	263,000



30 FINANCIAL ASSETS AND LIABILITIES BY CATEGORY AND FAIR VALUE HIERARCHY

1,000 €	31 Dec 2022	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			
Derivative financial instruments		14,015		14,015		21		14,015	
Other receivables			36,883	36,883		21			
		14,486	596,616	611,102				14,015	471
Current financial assets									
Cash and cash equivalents			35,511	35,511		22			
Loan receivables			33	33		21			
Derivative financial instruments		614		614		21		614	
Trade and other receivables			83,201	83,201		21			
Prepayments and accrued income			26,395	26,395		21			
		614	145,141	145,755				614	
Total		15,100	741,757	756,857				14,629	471
Non-current financial liabilities									
Borrowings from associates and joint ventures			350,000	350,000		27			
Borrowings			330,650	330,650		27			
Bonds			274,701	274,701	263,140	27	263,140		
Lease liabilities			112,356	112,356		27			
			1,067,707	1,067,707	263,140		263,140		



1,000 €	31 Dec 2022	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			102,853	102,853		27			
Trade payables			16,149	16,149		28			
Other current liabilities			16,034	16,034		28			
Accrued expenses			29,727	29,727		28			
Lease liabilities			10,275	10,275		27			
			175,038	175,038					
Total			1,242,745	1,242,745	263,140		263,140		

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

As at 31 December 2022, the amount of offsetting derivative instruments included in the financial assets and financial liabilities in the Group was 14.6 (-4.9) million Euros.

	Gross amounts recognised in the balance sheet	Net amount
Derivative contracts 2022	14,629	14,629
Derivative contracts 2021	-4,927	-4,927



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					471
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			
			141,801	141,801					
Total		471	738,331	738,802					471
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	278,450		278,450	4,662	



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		265	21,970	22,235		28		265	
Accrued expenses			26,327	26,327		28			
Lease liabilities			10,464	10,464		27			
		265	177,308	177,573				265	
Total		4,927	1,259,706	1,264,633	278,450		278,450	4,927	



Financial assets and liabilities by measurement categories

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

Level 1: quoted prices in active markets for identical assets or liabilities. The bond with the nominal value of 125 million Euros issued by Pohjolan Voima Oyj in 2018, was listed on Nasdaq Helsinki in June 2019. Accordingly, the bond with the nominal value of 150 million Euros issued in November 2019 was listed on Nasdaq Helsinki. Both bonds were classified at level 1 as at 31 December 2022. The fair value corresponds the quotations.

Level 2: inputs other than the 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 recognised 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 the market rate prevailing at the closing date as the discount rate, which was 2.73% (-0.56%) (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 €	2022	2021
On behalf of own loans		
Pledged deposits	33	34
Other contingent liabilities	141,012	18,792
On behalf of associated companies and joint ventures		
Guarantees	28	30
Guarantee according to Nuclear Energy Act	317,991	286,664
Total	459,064	305,520

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 317.99 (286.7) million Euros.



INVESTMENT COMMITMENTS

Joint ventures

Pohjolan Voima Oyj has committed to an investment into the nuclear power plant Olkiluoto 3 EPR built by Teollisuuden Voiman Oyj during 2004 to 2022. The commitment consists of a 432 million Euro investment, a shareholder loan of 108 million and an additional shareholder loan of a maximum of 693 million Euros. As at 31 December 2022, 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

There were no legal proceedings ongoing at the end of the financial year.

At the beginning of the financial year, PVO-Lämpövoima Oy had a pending arbitration proceeding in a dispute between PVO-Lämpövoima and Alfa Oil Oy. The decision given at the end of the proceeding at February 2022 was that Alfa Oil was enjoined to meet its obligations without any delay.

32 EMISSION ALLOWANCES

Carbon Dioxide Emission

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

	2022	
	tCO ₂	1,000 €
Allowances received free of charge	171,373	
Combined annual emissions of the plants'	253,761	
Emission allowances held	1,165,395	
External sales of emission allowances *	6,888	579
External purchases of emission allowances **	47,000	2,791
Transfer outside the group	34,375	
	2021	
	tCO ₂	1,000 €
Allowances received free of charge	30,260	
Combined annual emissions of the plants'	266,171	
Emission allowances held	1,254,802	
External sales of emission allowances *	300,000	17,271
External purchases of emission allowances **	73,147	4,216

* Emission sales are included in revenue.

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



33 GROUP COMPANIES

Company	Production	Country	Ownership (%)	Voting right (%)
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

List of associated companies and joint ventures

Associated companies	Registered Office
Oy Alhomens 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.

2022	Sales	Purchases	Receivables	Liabilities
Associates and joint ventures	25,413	274,712	623,808	359,750
UPM-Kymmene Group	258,748	104,518	27,297	14,966

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

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 as at 31 December 2022 nor 31 December 2021.

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

1,000 €	2022	2021
Salaries and other short-term employee benefits - board members	474	461
Salaries and other short-term employee benefits - executive team	1,358	1,376
Total	1,832	1,837

No pension benefits were paid to the Board of Directors in 2022 and 2021.

Salaries and benefits of the CEO

1,000 €	2022	2021
Salaries and other short-term employee benefits	399	404
Statutory pension scheme	69	65
Voluntary pension plan	48	48
Total	515	517



35 BREAKDOWN OF SHARE OWNERSHIP AND SHAREHOLDER INFORMATION

Shareholder	2022 % of shares	2021 % of shares
EPV Energia Oy	5.53%	5.49%
Helen Oy	0.62%	0.62%
Kemira Oyj (incl. Neliapila pension fund)	5.09%	5.06%
Ilmarinen Mutual Pension Insurance Company	1.84%	1.83%
Kokkolan Energia Oy	1.82%	1.80%
Kymmivoima Oy	5.95%	5.91%
Metsä Group (Metsäliitto, Metsä Fibre, Metsä Board Oy)	3.02%	3.66%
Myllykoski Oyj*	0.64%	0.63%
Oulun Energia Oy	0.91%	0.91%
Outokumpu Oyj	0.10%	0.10%
Oy Perhonjoki Ab	2.22%	2.21%
City of Pori	1.38%	1.37%
Rautaruukki Oyj	0.09%	0.09%
Stora Enso Oyj	15.71%	15.61%
Suomen Voima Oy	1.49%	1.48%
UPM Energy Oy	48.04%	47.73%
UPM Communication Papers Oy	3.48%	3.46%
Vantaan Energia Oy	0.23%	0.23%
Yara Suomi Oy (incl. pension fund)	1.85%	1.84%
Total	100.00%	100.00%

*) Myllykoski Oyj is a part UPM-Kymmene Group.

Shareholders by sector	2022 % of shares	2021 % of shares
Forest industry	70.89%	71.08%
Energy companies	18.76%	18.64%
Chemical industry	6.95%	6.90%
Metal industry	0.19%	0.19%
Other	3.22%	3.20%
Total	100.00%	100.00%

36 EVENTS AFTER THE REPORTING PERIOD

After tests at full reactor capacity, the OL3 plant unit's production was interrupted according to plan in January 2023 in order to replace the impellers of the feedwater pumps. Thereafter, before the start of regular electricity production, an approximately month-long production phase will follow in the test production. Regular electricity production starts in March 2023.



Parent company financial statement (FAS)

Income statement

1,000 €	Note	1 Jan–31 Dec 2022	1 Jan–31 Dec 2021
Revenue	2	486,991	363,298
Other operating income	3	129	379
Materials and services	4	-239,916	-130,547
Personnel expenses	5	-4,098	-4,493
Depreciation, amortisation and impairment	6	-169	-224
Other operating expenses	7	-225,198	-228,315
Operating profit or loss		17,738	98
Finance income and costs	8	-6,239	-7,201
Profit or loss before appropriations and taxes		11,499	-7,104
Profit or loss for the year		11,499	-7,104



Balance sheet

1,000 €	Note	31 Dec 2022	31 Dec 2021	1,000 €	Note	31 Dec 2022	31 Dec 2021
ASSETS				EQUITY AND LIABILITIES			
Non-current assets				Equity			
Intangible assets	9	202	211	Share capital	14	54,962	55,321
Property, plant and equipment	10	254	432	Share issue		203,865	203,865
Investments	11			Share premium		218,644	218,644
Holdings in Group undertakings		384,746	402,610	Revaluation reserve		311,176	322,778
Other investments		1,289,881	1,289,881	Reserve for invested non-restricted equity		-20,711	-13,607
Total non-current assets		1,675,083	1,693,134	Retained earnings		11,499	-7,104
Current assets				Total equity			
Non-current receivables	12	36,884	36,797			779,434	779,897
Current receivables	13	88,499	69,471	Liabilities			
Cash and cash equivalents		40,430	48,205	Non-current liabilities	15	875,347	875,347
Total current assets		165,814	154,473	Current liabilities	16	186,115	192,362
Total assets				Total liabilities			
		1,840,897	1,847,607			1,061,462	1,067,709
Total assets				Total equity and liabilities			
		1,840,897	1,847,607			1,840,897	1,847,607



Cash flow statement

1,000 €	1 Jan–31 Dec 2022	1 Jan–31 Dec 2021	1,000 €	1 Jan–31 Dec 2022	1 Jan–31 Dec 2021
Operating activities			Financing		
Operating profit or loss	17,738	98	Acquisition and annulment of own shares	-359	0
Adjustments (+/-):			Equity refunds paid	-11,602	-7,000
Depreciation, amortisation and impairment	169	224	Proceeds (+) or repayments (-) of current interest-bearing liabilities	2,024	16,424
Losses(+) or gains (-) of sales of non-current assets	2	-195	Proceeds from borrowings	105,000	0
Cash flow from operating activities	17,909	127	Repayments of borrowings (-)	-105,000	0
			Cash flow from financing activities	-9,938	9,424
Change in net working capital:					
Increase (-) or decrease (+) of non-interest-bearing receivables	-16,712	-10,663	Change in cash and cash equivalents, increase (+) / decrease (-)	-7,774	-4,471
Increase (+) or decrease (-) of current non-interest-bearing liabilities	-9,699	3,955			
Cash flow from operating activities before financial items and taxes	-8,502	-6,581	Cash and cash equivalents at 1 Jan	48,205	52,676
Interest paid and payments of financial items	-12,474	-12,283	Cash and cash equivalents at 31 Dec	40,430	48,205
Dividends received from operating activities	0	0			
Interest received and payments of financial income	5,259	4,897			
Cash flow from operating activities	-15,717	-13,967			
Investments					
Purchases of property, plant and equipment and intangible assets	6	-136			
Proceeds from sales of property, plant and equipment and intangible assets	9	208			
Proceeds from sales of subsidiaries	11,964	0			
Equity refunds received	5,900	0			
Cash flow from investing activities	17,880	72			



1 NOTES TO THE FINANCIAL STATEMENTS

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 recognised.

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 are 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 €	2022	2021
Sales of electricity	395,605	256,797
Sales of heat	89,287	103,590
Other sales	2,099	2,911
Total	486,991	363,298

3 OTHER OPERATING INCOME

1,000 €	2022	2021
Gains on sale and dissolution of fixed assets	11	206
Rental income	113	171
Other income	5	2
Total	129	379

4 MATERIALS AND SERVICES

1,000 €	2022	2021
Energy purchases	239,916	130,547
Total	239,916	130,547

5 PERSONNEL EXPENSES AND AVERAGE NUMBER OF PERSONNEL

Average number of personnel

	2022	2021
Salaried employees	27	29
Workers	0	1
Total	27	30

Wages, salaries and pension expenses

1,000 €	2022	2021
Wages and salaries		
Board members and CEO	873	866
Other wages and salaries	2,577	2,815
Pension expenses	553	682
Other personnel expenses	96	130
Total	4,098	4,493

6 DEPRECIATION, AMORTISATION AND IMPAIRMENT

1,000 €	2022	2021
Depreciation according to plan		
Other capitalised long-term expenditure	37	79
Intangible assets	52	51
Buildings and constructions	42	42
Machinery and equipment	38	52
Total	169	224

7 OTHER OPERATING EXPENSES

1,000 €	2022	2021
Energy purchases	220,153	222,693
Repair, servicing and maintenance services	57	33
Rents	710	708
Real estate taxes	18	19
Fees to experts	1,905	2,696
Other expenses	2,355	2,166
Total	225,198	228,315

Auditor's fees

1,000 €	2022	2021
PricewaterhouseCoopers Oy:		
Audit fees	123	144
Other services	6	8
Total	129	153

8 FINANCE INCOME AND COSTS

1,000 €	2022	2021
Dividend income		
from others	0	0
Interest income from investments		
in participating interests	5,663	2,769
Other interest and finance income		
from Group undertakings	1,397	2,434
from others	603	3
Total finance income	7,662	5,206
Interest costs and other financial costs		
to Group undertakings	-529	0
to participating interests	-1,774	-1,774
to others	-11,598	-10,633
Total finance costs	-13,902	-12,407
Total finance income and costs	-6,239	-7,201



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	4,265	4,581
Additions	0	0	0
Disposals	0	-1,861	-1,861
Reclassifications	80	0	80
Cost or valuation at 31 Dec	396	2,403	2,800
Accumulated amortisation 1 Jan	-143	-4,228	-4,371
Accumulated amortisation of disposals and reclassifications	0	1,861	1,861
Amortisation of the period	-52	-37	-89
Impairment	0	0	0
Accumulated amortisation 31 Dec	-195	-2,403	-2,598
Net book value 31 Dec 2022	202	0	202
Net book value 31 Dec 2021	174	37	211



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	96	555	1 005	40	136	1,832
Additions	0	0	0	0	-6	-6
Disposals	0	0	-873	-11	0	-884
Reclassifications	0	0	0	0	-80	-80
Cost or valuation at 31 Dec	96	555	132	29	49	862
Accumulated amortisation 1 Jan	0	-433	-967	0	0	-1,400
Accumulated amortisation of disposals and reclassifications	0	0	873	0	0	873
Amortisation of the period	0	-42	-38	0	0	-80
Impairment	0	0	0	0	0	0
Accumulated amortisation 31 Dec	0	-475	-132	0	0	-607
Net book value 31 Dec 2022	96	80	0	29	49	254
Net book value 31 Dec 2021	96	122	38	40	136	432
Production machinery and equipment at 31 Dec 2022			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	471	1,709,588
Disposals	-17,864	0	0	0	-17,864
Cost or valuation at 31 Dec	390,967	740,554	559,732	471	1,691,724
Accumulated impairment 1 Jan	-6,222	-10,875	0	0	-17,097
Accumulated impairment 31 Dec	-6,222	-10,875	0	0	-17,097
Net book value 31 Dec 2022	384,746	729,678	559,732	471	1,674,627
Net book value 31 Dec 2021	402,610	729,678	559,732	471	1,692,491
Revaluations included in the cost at 31 Dec 2022	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 €	2022	2021
Capital loan receivables	0	1
Other non-current receivables	36,884	36,796
Total	36,884	36,797
Receivables from Group undertakings		
Capital loan receivables	0	1
Total receivables from Group undertakings	0	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 €	2022	2021
Trade receivables	61,032	46,043
Other receivables	2,187	2
Prepayments and accrued income	25,281	23,425
Total	88,499	69,471
Receivables from Group undertakings		
Trade receivables	282	1,250
Prepayments and accrued income	4,805	1,265
Total receivables from Group undertakings	5,088	2,515
Receivables from participating interests		
Trade receivables	6,612	1,714
Prepayments and accrued income	13,259	16,218
Total receivables from participating interests	19,871	17,933
Prepayments and accrued income:		
Accrued financial expenses	2,307	2,042
Accrued personnel expenses	8	8
Accrued interest income	3,201	798
Accrued sales of emission rights	0	3,786
Accrued VAT on prepayments	1,576	3,294
Accrued energy purchases, credit	0	875
Accrued energy purchases	13,082	12,031
Accrued purchases credited in accrued income	4,408	0
Others	699	593
Total	25,281	23,425
Interest-bearing receivables		
Non-current assets	559,732	559,732
Current assets	40,430	48,205
Total	600,163	607,937



14 EQUITY

1,000 €	2022	2021
Share capital 1 Jan	55,321	55,321
Acquisition and annulment of own shares	-359	0
Share capital 31 Dec	54,962	55,321
Share premium 1 Jan	203,865	205,999
Transfer to reserve for invested non-restricted equity	0	-2,134
Share premium 31 Dec	203,865	203,865
Revaluation reserve 1 Jan	218,644	218,644
Revaluation reserve 31 Dec	218,644	218,644
Reserve for invested non-restricted equity 1 Jan	322,778	327,644
Transfer from share premium	0	2,134
Refund of reserves	-11,602	-7,000
Reserve for invested non-restricted equity 31 Dec	311,176	322,778
Retained earnings 1 Jan	-20,711	-13,607
Retained earnings 31 Dec	-20,711	-13,607
Profit or loss for the year	11,499	-7,104
Total	779,434	779,897

Distributable earnings 31 Dec

	2022	2021
Retained earnings	-20,711	-13,607
Profit or loss for the year	11,499	-7,104
Reserve for invested non-restricted equity	311,176	322,778
Total	301,963	302,067

Share capital by share category

See note 25 in the consolidated financial statements.



15 NON-CURRENT LIABILITIES

1,000 €	2022	2021
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
Liaibilities 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 €	2022	2021
Other interest-bearing liabilities	151,962	149,938
Trade payables	18,789	27,141
Other current liabilities	204	260
Accrued expenses	15,160	15,023
Total	186,115	192,362
To Group undertakings		
Trade payables	11,828	19,541
Other current liabilities	53,608	50,050
Accrued expenses	1,486	1,438
Total	66,923	71,029
To participating interests		
Trade payables	6,576	7,273
Accrued expenses	2,270	2,099
Total	8,846	9,372
Accrued expenses, material items		
Accrued personnel expenses	1,259	1,330
Accrued interest costs	7,109	5,681
Accrued energy sales, credit	0	875
Accrued energy purchases	2,270	2,409
Accrued emission right purchases	0	729
VAT of accrued liabilities	1,020	331
Accrued sales credited in accrued expenses	1,933	0
Other items	1,568	3,667
Accrued expenses, total	15,160	15,023
Non-interest-bearing and interest-bearing current liabilities		
Non-interest-bearing	34,153	42,424
Interest-bearing	151,962	149,938
Total	186,115	192,362



17 GUARANTEES AND CONTINGENT LIABILITIES

1,000 €	2022	2021
Guarantees		
Guarantees for loans		
On behalf of participating interests	14	16
Other guarantees		
As security for own liabilities	0	325
On behalf of Group undertakings	140,000	0
Total guarantees	140,014	341
Leasing liabilities		
Payments during the following year	88	84
Payments in subsequent years	65	51
Total leasing liabilities	153	135
Rental liabilities		
Payments during the following year	368	357
Payments in subsequent years	1,438	137
Total leasing liabilities	1,806	494
Other contingent liabilities		
Guarantee according to Nuclear Energy Act	317,991	286,664
As security for own liabilities	0	0
Total other contingent liabilities	317,991	286,664

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 318 (286.7) million Euros. The amount of the guarantee increased during the financial year as the 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 2022. The commitment consists of a 432 million Euro investment, a shareholder loan of 108 million and an additional shareholder loan of a maximum of 693 million Euros. As at 31 December 2022, Pohjolan Voima Oy has fulfilled 992 (992) million Euros of its commitments. Investments are based on the financial plan of Olkiluoto 3, according to which capital is raised in accordance with the progress of the project.



18 DERIVATIVE FINANCIAL INSTRUMENTS

1,000 €	2022	2021
Interest rate swap contracts		
Nominal value	235,000	263,000
Market value (including retained interests)	7,872	-1,972
Average maturity (years)	3.4	3.2
Floating reference rate (company receives)	6 months Euribor/	6 months Euribor/
Fixed rate (on average, company pays)	0.71%	0.66%
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 350 (329) million Euro revolving credit facility, which matures in 2027. The loan facilities were fully undrawn as per 31 December 2022. For its short-term financing, the company uses mainly its domestic 300 million Euro 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 profit of € 11,498,553.92.

The Board of Directors proposes to the Annual General Meeting that the profit be transferred to the retained earnings account, and that no dividends be distributed.

Helsinki 16 February 2023

Tapio Korpeinen
Chairman

Seppo Parvi
Deputy Chairman

Jukka Hakila

Anders Renvall

Tomi Sederholm

Esa Kaikkonen

Rami Vuola

Mikko Rintamäki

Juha Juntunen

Ilkka Tykkyläinen
President and CEO

THE AUDITOR'S NOTE

Our auditor's report has been issued today..

Helsinki 28 February 2023

PricewaterhouseCoopers Oy
Authorised Public Accountants

Niina Vilske
Authorised Public Accountant

Auditor's Report

(Translation of the Finnish original)

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 2022. 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

- 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 (2021: € 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 judgement, 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 ja 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 test production phase continued and electricity production started in 2022, but the plant investment is still incomplete.

The valuations of joint venture Teollisuuden Voima Oyj are 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 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, particularly estimated future cash flows and discount rates, are subject to significant management judgement.

The 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 a 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.

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 judgement 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, on 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.

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.



- 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 28 February 2023

PricewaterhouseCoopers Oy

Authorised Public Accountants

Niina Vilske

Authorised Public Accountant (KHT)



Pohjolan Voima Oyj
Mikonkatu 7 A5
P.O. Box 40
FI-00101 Helsinki, Finland
Business ID 0210161-4
tel. 010 478 5000
www.pohjolanvoima.fi/en/

