

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

## **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices



The beginning of the Annual report describes Pohjolan Voima and its business operations.



 $15 \\ \text{ The Sustainability section describes the management of sustainability and successes as} \\ \text{well as more detailed information on the implementation of sustainability efforts.}$ 

# **Contents**

POHJOLAN VOIMA	3
This is Pohjolan Voima	4
Key figures	5
CEO's review	6
Highlights of the year	8
Decisive Power strategy	9
BUSINESS OPERATIONS	10
Production year 2024	11
Production year 2024	11
Production year 2024	11 12

CORPORATE SUSTAINABILITY	15
Corporate social responsibility is an intrinsic part of the strategy	16
Achievements in 2024	17
Implementation of sustainability efforts	19
Environmental information	30
Social information	40
Governance information	48
Entity-specific information – Security of electricity and heat supply	51
Appendices	53

Pohjolan Voima also publishes a separate Corporate Governance Statement 2024, Annual Report of the Board of Directors, and Financial Statements 2024. Photos: Akifoto, Toni Eskelinen, Kai Tirkkonen, Teollisuuden Voima, Pohjolan Voima archives

#### → POHJOLAN VOIMA

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 



#### **POHJOLAN VOIMA**

→ This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# This is Pohjolan Voima

Pohjolan Voima is a long-lived Finnish energy company. We are one of Finland's largest energy producers – our production accounts for approximately 20% of the nation's total electricity production.

The electricity we produce is almost completely carbon neutral. We produce electricity and heat at cost price for the needs of our owners – Finnish industrial and energy companies – with reliable and adjustable hydroelectric, thermal, and nuclear power that ensures security of supply.

We are a team of top professionals and have been proven to be a good place to work. At Pohjolan Voima, we pride ourselves on doing meaningful work in line with our values of skilfully, reliably, together.

We are committed to carbon neutrality and the improvement of biodiversity. Our objective is to create decisive power to strengthen competitiveness and contribute to a better tomorrow.

**Total assets** 

2,266

€ million

**Turnover** 

834

€ million

**GPTW Trust Index** 

**95%** 

excellent employee experience



Forest industry **73.2%** 

Energy companies Chemical industry

16.7% 7.3

7.3%

Metal industry

0.2%

Other

2.6%

As a responsible company, we reconcile competitive carbon-neutral production with biodiversity.

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



#### **POHJOLAN VOIMA**

This is Pohjolan Voima

→ Key figures

CEO's review

Highlights of the year

Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# **Key figures 2024**

We achieved

99%

carbon-neutral production in 2024

**16.1** TWh

of electricity produced in 2024

89%

of our heat production was carbon neutral in 2024

**2.5** TWh

of heat produced in 2024

20%

of total electricity production in Finland

2,889 mw

our electricity production capacity



#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

→ CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# CEO's review

World events, such as the wars in Ukraine and Gaza, the US presidential election, and the political situation in Germany and France, introduce uncertainties to the operating environment of companies operating in Finland. The poor economic outlook slowed down investments, for which there is fierce competition between countries. In 2024, the electricity price in Finland was the third lowest in Europe, although electricity price volatility was high. Wind power production continued to grow, highlighting the need to balance the electrical power system with electricity storage solutions and demand response.

# Scenario work allowed us to delve into the options of the future

Rapid changes in the operating environment triggered an update of the scenarios underlying our strategy.

Once again, we asked ourselves "what if"?

Our four scenarios into the year 2040 are

- > Stagnation
- > Economy in Crisis
- > Energy Exporter
- > Investment Target.

We will continue this work by assessing the potential need to change our strategy due to the four scenarios.



# **Over 50%**

More than 50% of the electricity produced in Finland came from Mankala companies. Securing the operating model is in the best interests of Finland as a whole.

18

We are responsible for a significant portfolio of assets, 18 power plants in total. We take care of our assets by planning investments and maintenance measures in the long term.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

→ CEO's review

Highlights of the year

Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# Pumped-storage plant plan PUHTI published

In the spring, we published a plan on the building of a pumped-storage plant of approximately 500 MW in the Askaannaava area in Kemijärvi, where the storage reservoir could at best allow for the production of balancing power for a week. The environmental impact assessment for the project is about to start. Understandably, people in Kemijärvi have concerns about the impact of the project on their local lake, for example. One of the guiding principles for the project is an open and appreciative dialogue with stakeholders. We want to work with local people to find the optimal solution.

We also continued to improve the balancing power capacity of our other power plants. We built an ultracapacitor at the Kierikki power plant in lijoki and applied for a patent for a completely new type of turbine regulator we developed together with the University of Oulu.

#### Olkiluoto delivers electricity reliably

The third nuclear power plant unit (OL3) of our joint venture Teollisuuden Voima (TVO) has regularly been producing electricity for almost two years. The plant has operated well and reliably.

Studies on the possible service life extension for the first and second plant units (OL1 and OL2 respectively) and on the possibility of their power uprating are ongoing. Posiva started full-scale testing of the world's first final disposal facility for spent nuclear fuel



One of the cornerstones in securing investments is a stable operating environment.

## Systematic asset management

We are responsible for a significant portfolio of assets, 18 power plants in total. We take care of our assets by planning investments and maintenance measures in the long term. An example of this is a flue gas heat condenser plant commissioned by Porin Prosessivoima that produces district heat from flue gas waste heat. In addition, we decided to completely overhaul the Melo hydroelectric power plant located in the Kokemäenjoki river.

#### Making sustainability reporting transparent

Sustainability is an intrinsic part of our strategy. We continued the implementation of our sustainability programme and the associated biodiversity programme. In terms of biodiversity, our main focus was on the restoration of migratory fish and the sustainability of fuels. We also launched a project spanning several years in which we will develop sustainability in our value chain. We prepared for the requirements of the Corporate Sustainability Reporting Directive (CSRD), which applies to us in terms of the data for 2025. Sustainability means persistent development of the operations and daily hard work, which can be made transparent through reporting.

# Competition for subsidies distorts the playing field

The competition for investments has led to a number of countries promising generous subsidies for new energy production. Discussions are also taking place in Finland. The competition for subsidies will inevitably distort the playing field. If subsidies were to be introduced, they should not undermine the operational conditions of existing facilities or place private and public funding in an unequal position.

Instead of market-distorting price guarantee schemes, there should be a more determined focus on the dismantling of investment barriers, such as the slow licensing and appeal processes, and the ever-growing level of detailed regulation. In addition, the right to interest deduction should be reinstated for electricity production, such as operations based on cost-price. The full power production of OL3 should be enabled in a cost-effective manner, which requires the continuous development of the established grid load limitation. One of the cornerstones in securing investments is a stable operating environment.

The cost-price operating model that has been widely adopted in Finland (the "Mankala model") has proven its strength in energy investments over the decades. In 2023, more than 50% of the electricity produced in Finland came from Mankala companies. Securing the operating model is in the best interests of Finland as a whole.

Pohjolan Voima is an expert organisation committed to continuous renewal and high performance. Based on the results of our personnel survey, we received the Great Place To Work (GPTW) certificate™ and we have been proven to be a good place to work. This is a great follow-up to the Suomen innostavimmat työpaikat (Finland's Most Inspiring Workplaces) award we received five times in a row. My thanks for a successful year go to Pohjolan Voima's employees, our customers, our partners, and our stakeholders.

Let's keep in touch!

Ilkka Tykkyläinen,

President and CEO, Pohjolan Voima Oyj

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

→ Highlights of the year **Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information security of electricity and heat supply

**Appendices** 

# Highlights of the year



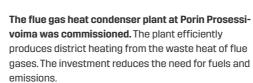


Illustration of the energy storage at the pumped-storage power plant

PVO-Vesivoima decided to completely overhaul the Melo hydropower plant. Located on the Kokemäenjoki river in Nokia, both turbines of the Melo hydropower plant are to be overhauled in 2025. The investment will boost the power plant's balancing power production.

Posiva began the testing of spent nuclear fuel disposal. In the joint operating test, final disposal is tested without spent fuel. The testing ensures that the final disposal is safe before starting actual disposal operations.

A natural fishway was completed at the Portimokoski power plant, partially owned by Pohjolan Voima, in the Tengeliönjoki river. A second fishway will be built in 2025. They will open up nearly 1,000 km of migration routes to breeding grounds.



The Neljän iin voimaa (The power of people, ideas, enthusiasm, and innovation) event consisted of stakeholder discussions about the relationship between people, ideas, enthusiasm, and innovation from many different perspectives.

Pohiolan Voima has been proven to be a good place to work. The company was awarded the Great Place To Work™ certification for excellent employee experience. Reflecting a corporate culture based on trust and a good work atmosphere, the score was 95%.

Pohjolan Voima is investigating the possibility of building a pumped-storage power plant in the Askanaava area of Kemijärvi. PUHTI, the pumped-storage power plant project, would respond to the need to

An energy storage pilot project with ultracapacitors was completed at Kierikki in the lijoki river. Together with the new turbine regulator, the project strengthens the power plant's capacity to produce balancing power quickly and extends the plant's lifecycle.

store the produced electricity.



#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

→ Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# **Decisive Power strategy**

The "Decisive Power" strategy of the Pohjolan Voima Group describes the company's purpose as follows: "We create decisive power to strengthen competitiveness and contribute to a better tomorrow." Pohjolan Voima produces electricity and heat for its shareholders on an "at-cost" basis. It thus plays its part in ensuring that the customers – the industry, other energy companies, and cities – will succeed. Indirectly, Pohjolan Voima creates jobs and wellbeing in Finland.

Pohjolan Voima's carbon-neutral production also helps the customers to reduce their emissions. This way, Pohjolan Voima contributes to a more sustainable future.

The strategy and the underlying strategic assumptions are annually reviewed. The strategy is based on a comprehensive scenario review carried out in 2021–2022. The scenarios were updated in 2024, and the updated scenarios serve as the input for the 2025 strategy update. During the scenario work, four different development paths for the operating environment until 2040 were prepared, and the opportunities and risks they would present to Pohjolan

Voima were assessed. The Pohjolan Voima scenarios have been published on our website.

## Pohjolan Voima's strategic themes for the 2024–2027 period are: Sustainable production on market terms

Pohjolan Voima's choices aim to promote competitiveness, wellbeing and biodiversity, as well as to mitigate climate change, and promote biodiversity. Nearly all of the energy produced is carbon neutral. Pohjolan Voima's target is for 99% of the electricity production and 85% of the heat production to be carbon neutral by 2025. In 2024, 99% of the electricity and 89% of the heat production was carbon neutral. Pohjolan Voima's long-term vision for the promotion of biodiversity is: "We will identify our key impact on biodiversity and move towards net positivity. We will promote our skill set and update our targets as our knowledge increases."

# Competitive advantage through balancing power capability and timeliness

In future, fluctuations in electricity production will be even faster and greater. Balancing power capability and timely production will become even more important. The increasing share of wind and solar power production, the volume of which fluctuate depending on weather conditions, in the electrical power system will further speed up this development. Pohjolan Voima develops the balancing capability of its production and the ability of the organisation to utilise it. Market information and data are used in the development work.

## Top expert in asset management

Pohjolan Voima controls a large portfolio of assets, which the company optimally manages. Pohjolan Voima performs effective maintenance measures, carries out timely investments, and develops lifecycle management. Pohjolan Voima utilises technology, digitalisation, and knowledge-based management in its operations. The operations are managed with the capability of the expert organisation and networks.

# We are a team of top professionals with a large portfolio of assets to manage

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

Pohjolan Voima's strategy emphasises sustainability in all business operations, and the company has recorded the following targets in its strategy:

- We are a responsible actor. We combine competitive and carbon-neutral production and biodiversity.
- Hydropower is an approved production form, and society recognises PVO-Vesivoima as a responsible actor.
- As an active owner, we participate in developing the competitiveness and sustainability of Teollisuuden Voima's nuclear power production.
- > Wood-based fuels in our combined heat and power production are sustainably sources. We use fossil fuels and peat only as startup and backup fuels to ensure the security of supply based on the market situation.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

## → BUSINESS OPERATIONS

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

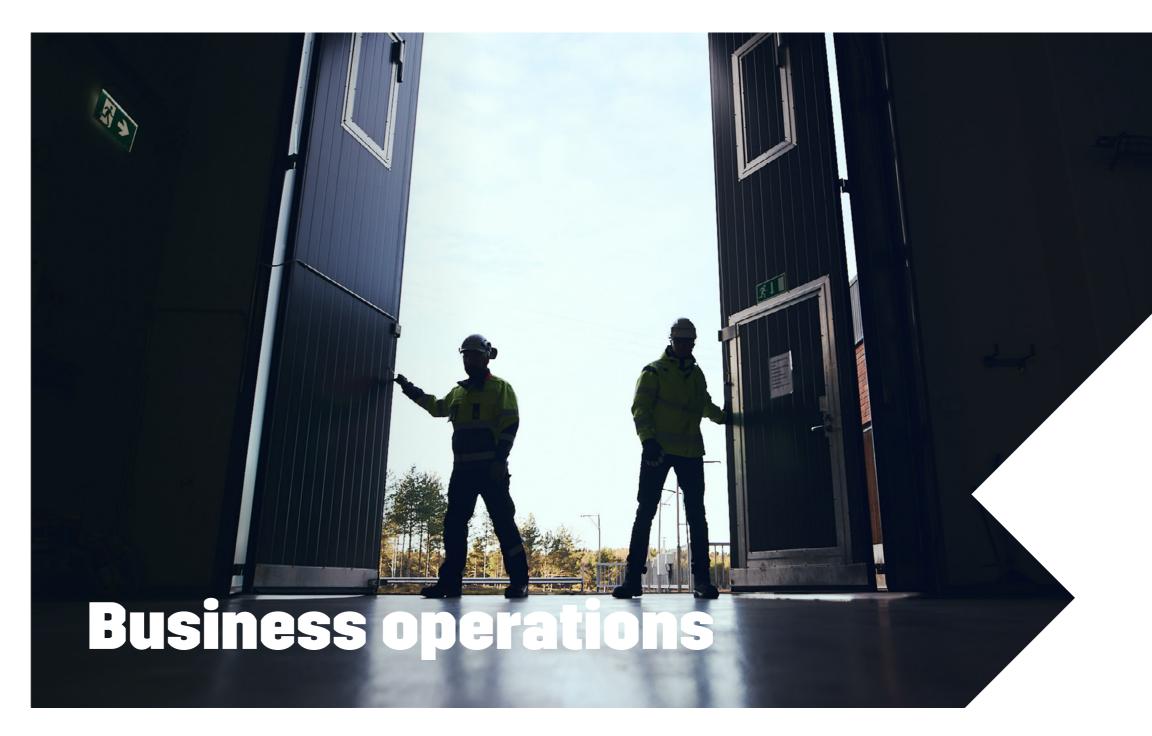
**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices



#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

→ Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

## **Production in 2024**

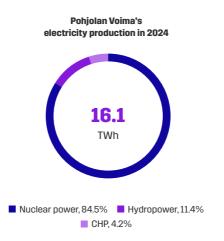
In 2024, Pohjolan Voima produced 16.1 TWh of electricity. Pohjolan Voima's share of all electricity produced in Finland was approximately 20%. Pohjolan Voima's heat production totalled 2.5 TWh.

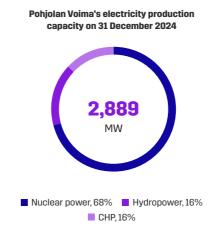
Pohjolan Voima produces electricity and heat at cost price for the needs of its shareholders with reliable and adjustable hydroelectric, thermal, and nuclear power that ensures security of supply. The total electricity production capacity was 2,889 MW at the end of 2024. The heat production capacity was 1,089 MW.

Pohjolan Voima's electricity production capacity includes the company's shares of the capacities of the hydropower and nuclear power plants, and the entire electricity production capacity of the combined heat and power plants, except for the power plant of the associated company Alholmens Kraft, of which only Pohjolan Voima's share is included. Pohjolan Voima does not have any condensing power production that produces only electricity.

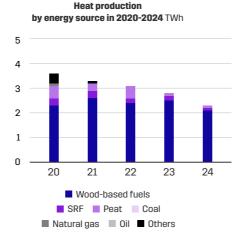
Finland's total electricity consumption in 2024 was 83 TWh. A total of 80 TWh of electricity was produced and net imports into the country totalled 3 TWh. Electricity production grew by 1.6% year-on-year due to an increase of the wind power production capacity. Net imports of electricity increased from the previous year, accounting for 3.8% of electricity consumption. In 2024, electricity consumption in Finland increased by 3% from the previous year. The increase in electricity consumption was mostly due to non-industrial consumption.

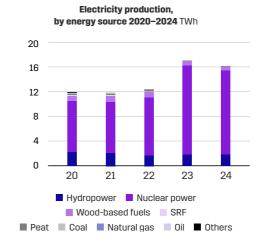
Also, see Pohjolan Voima's production capacity on 31 December 2024, page 24.

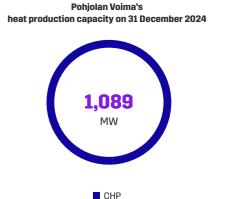












#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

→ Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# Balancing capacity of hydropower developed

Pohjolan Voima has eight fully and four partially owned hydropower plants located along the lijoki, Kemijoki, Kokemäenjoki, and Tengeliönjoki rivers. In addition, the company announced in 2024 that it is planning to construct a large pumped-storage power plant in the Askanaava area of Kemijärvi.

The combined output of the hydropower plants is 543 MW, of which Pohjolan Voima's share according to its shareholding is 451 MW. In 2024, Pohjolan Voima produced 1.8 TWh of electricity using hydropower, which is close to the production volume for an average year.

# Pumped-storage power plant planned for Kemijärvi

In the PUHTI pumped-storage power plant project, PVO-Vesivoima is investigating the possibility of building a pumped-storage power plant in the Kemijärvi area. In a pumped-storage power plant, water is pumped using an electric pump into a storage basin when there is plenty of electricity available. The water remains there until a time when electricity is scarce, at which time the water is discharged from the basin to the turbine. A pumped-storage power plant



would respond to the need to balance and secure electricity production. A pumped-storage power plant of about 500 MW would allow the storage of up to a week worth of electricity. Read more about the project on the website.

## Investments in the balancing capacity of hydropower plants

Distributed and reliable hydropower is crucial for the Finnish electrical power system's security of supply. Hydropower is Finland's most significant source of balancing power to even out the difference between electricity production and consumption. Pohjolan Voima develops the balancing capacity of its hydropower plants and systematically modernises its hydropower plants. Modern digital solutions and extensive partnerships are used in the development of the plants' operation and maintenance. With the development work and refurbishments, Pohjolan Voima gains more timely electricity and balancing power production, improves its energy efficiency, provides environmental benefits, and adds decades to the service life of the power plants.

PVO-Vesivoima is piloting short-term energy storage implemented with ultracapacitors at the Kierikki power plant in the lijoki river. Together with the new turbine regulator, the three-megawatt ultracapacitor responds to the growing need for fast balancing power while also extending the power plant's service life by reducing the stress on the mechanical machinery.

In 2024, PVO-Vesivoima made an investment decision on a complete overhaul of the Melo power plant and also replaced a turbine impeller at Haapakoski, as well as made changes to improve durability, and the production of balancing power.

# Cooperation to benefit the aquatic environment

Hydropower plants and the regulation of waterways affect river habitats and fish stocks in particular. On the other hand, regulation can reduce flood



damage and control water level fluctuation. In 2024, PVO-Vesivoima regulated water levels and operated its plants in compliance with permit conditions. The company manages the aquatic environment in its areas of operation and reduces the harm caused by regulation by protecting riverbanks, for example.

PVO-Vesivoima continued its active cooperation with a variety of stakeholders to benefit migratory fish and the aquatic environment. The company is committed to the development of the natural reproductive cycle of migratory fish through cooperation with other parties, by using diverse means based on research, progressing step by step and looking at the development of the river as a whole.

An assisted natural cycle of migratory fish has already been created in the lijoki river as a result of the cooperation. The lowermost power plant at Raasakka has a Fishheart fishway that boosts upstream migration, and the uppermost power plant at Haapakoski has Finland's first downstream migration route for migratory fish fry. With their help, fish and fry

can be transported past power plants. By researching and developing the impacts, it is possible to obtain valuable research data and more in-formation to be used when building the next bypass routes. In addition, the possibilities of using an old riverbed as a migration route and breeding area for migratory fish are being developed and modelled in cooperation with other parties at Raasakka. The ultimate solutions are being discussed with stakeholders.

In the Kemijoki river, PVO-Vesivoima takes part in ongoing cooperation on migratory fish. At Portimokoski power plant of the associated company Tornionlaakson Voima in the Tengeliönjoki river, a natural fishway was completed in the autumn of 2024 and another one will be built in 2025. They will open up nearly 1,000 kilometres of migratory routes.

Read more about the restoration of migratory fish and the measures to promote biodiversity on land.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

→ Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# Security of supply is a key aspect of thermal power

Pohjolan Voima's thermal power plants are combined heat and power plants, which produce process steam and district heat for the company's shareholders, local industry, and communities in addition to electricity. The power plants supply district heat to Kouvola, Lappeenranta, Pietarsaari, Pori, and Rauma.

At the end of 2024, Pohjolan Voima's total thermal power production capacity was 1,089 MW. The total combined electricity production capacity in thermal power production was 463 MW. Pohjolan Voima's share of the electricity production capacity according to its shareholding was 369 MW. In 2024, the heat output of the combined heat and power plants was 2.5 TWh, and the electricity output was 0.7 TWh. The electricity production capacity of the combined heat and power plants includes the total electricity production capacity of the power plants, except for the Alholmens Kraft power plant, of which a share corresponding to Pohjolan Voima's shareholding is included.

## Reliable production through systematic asset management

In thermal power production, the focus is on the security of supply, stable heat, and electricity production for our customers. Pohjolan Voima ensures the security of supply through systematic asset management and annual outages. Pohjolan Voima carries out continuous, proactive maintenance with its network partners to improve the resource and energy efficiency of operations and to reduce emissions.

In addition to heat production, combined heat and power plants play a significant role in electricity production during the winter season. The heating seasons are prepared for by storing fuels and ensuring uninterrupted production with the annual outages performed in the summer, as well as by means of continuous inspections and equipment monitoring.



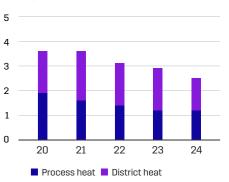
#### Waste heat recovery plant completed in Pori

In the autumn of 2024, a flue gas heat condenser plant was completed at the Porin Prosessivoima power plant. The resource-efficient plant turns waste heat from the plant's flue gas into district heat. The plant replaces 15% of the power plant's fuel requirement and reduces carbon dioxide emissions.

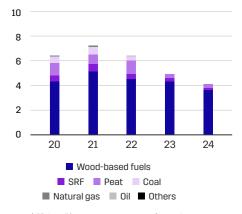
## Use of peat continued to decrease

Pohjolan Voima's combined heat and power plants use wood-based fuels as their main fuels. In accordance with the strategy, the wood-based fuels in combined heat and power production are sustainably produced and fossil fuels and peat are only used as startup and backup fuels, taking into account the market situation. The use of peat is being reduced in line with the long-term plan. In 2024, the use of peat decreased by 83% from the level of the benchmark year, 2019. The wood-based fuels used meet the sustainability criteria of the Renewable Energy Directive (RED II, sustainability of biomass).

#### Process heat and district heat production in 2020-2024 TWh



## Fuels in heat and electricity production 2020–2024 TWh



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

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

→ Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# Nuclear power supports Finland's self-sufficiency in electricity

The nuclear power plant of Teollisuuden Voima Oyj (TVO), a joint venture partially owned by Pohjolan Voima, is located at Olkiluoto in Eurajoki. The output of the Olkiluoto 3 nuclear power plant unit (OL3) is approximately 1,600 MW, and the combined nett output of the OL1 and OL2 plant units is 1,780 MW. Olkiluoto produces about 30% of Finland's electricity.

The total output of the Olkiluoto nuclear power plant in 2024 was 23.3 TWh, of which OL1 accounted for 6.9 TWh, OL2 for 6.6 TWh, and OL3 for 9.7 TWh. Pohjolan Voima's share of the total output was 13.6 TWh. The output was lower than in the previous year due to the annual outages in the spring being longer than planned and a generator fault in OL2 in September.

The transmission system operator Fingrid has set a maximum limit of 1,590 MW for the production of OL3. The power has also been limited in situations where adequate grid load limitation capacity was not available from Fingrid, and when production has been abundant relative to consumption. Since September 2024, OL3 has been part of Fingrid's reserve market, which balances the grid when there is temporarily too much electricity. The production of all the plant units supports Finland's self-sufficiency in terms of electricity and helps achieve the carbon neutrality targets.

At the end of 2024, TVO completed an environmental impact assessment (EIA) regarding a possible extension of the operating licences and an increase of the power level of OL1 and OL2. The plan is to extend the service life of the plant units from the current year 2038 until the year 2048, without excluding a possible further extension until 2058. The units' planned power increase is 10%, which would increase their output from the current 890 MW to 970 MW.

# Annual outages are part of lifecycle management

Annual outages ensure that the Olkiluoto nuclear power plant remains in good condition. The outages are part of the plant units' long-term lifecycle management and necessary due to refuelling, maintenance, and servicing works. The target is to complete the outages one plant unit at a time. The scheduling principles for annual outages were changed in September 2024 to account for delays caused by the repairs of unforeseen faults based on previous experience. The times of the annual outages of the Olkiluoto power plant units have been scheduled until 2027.

### **Nuclear fuel procurement is decentralised**

TVO has secured the supply of nuclear fuel through long-term agreements. The company procures fuel mainly through a decentralised supply chain, negotiating and signing the agreements itself at each stage of the supply chain. A significant part of TVO's uranium comes from the largest producing countries, which are Canada, Australia, Kazakhstan, and Namibia. The fuel assemblies are manufactured and assembled in Germany, France, Spain, or Sweden. TVO only procures uranium and nuclear fuel refining services from approved suppliers who have passed the company's evaluation process.

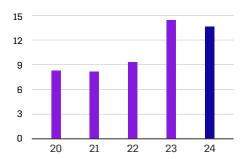
# Testing of Posiva's final disposal of spent nuclear fuel started

TVO's joint venture Posiva is building the world's first final disposal solution for spent nuclear fuel in Olkiluoto. The testing of Posiva's spent nuclear fuel disposal facility or the "integrated system test", started at the end of August 2024 in Olkiluoto. The final disposal is tested without spent fuel.



The testing ensures that the final disposal is safe before starting actual disposal operations. A safety assessment and a statement on the operating licence application for Posiva's spent nuclear fuel disposal facility by the Radiation and Nuclear Safety Authority (STUK) are expected to be completed by the end of 2025. Posiva is scheduled to start the disposal of spent nuclear fuel at Olkiluoto in the mid-2020s. Posiva will manage the final disposal of the spent nuclear fuel generated by the power plants of its owners, TVO's Olkiluoto nuclear power plant, and Fortum Power and Heat Oy's Loviisa nuclear power plant.

#### Nuclear power production in 2020-2024 TWh



#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### → CORPORATE SUSTAINABILITY

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

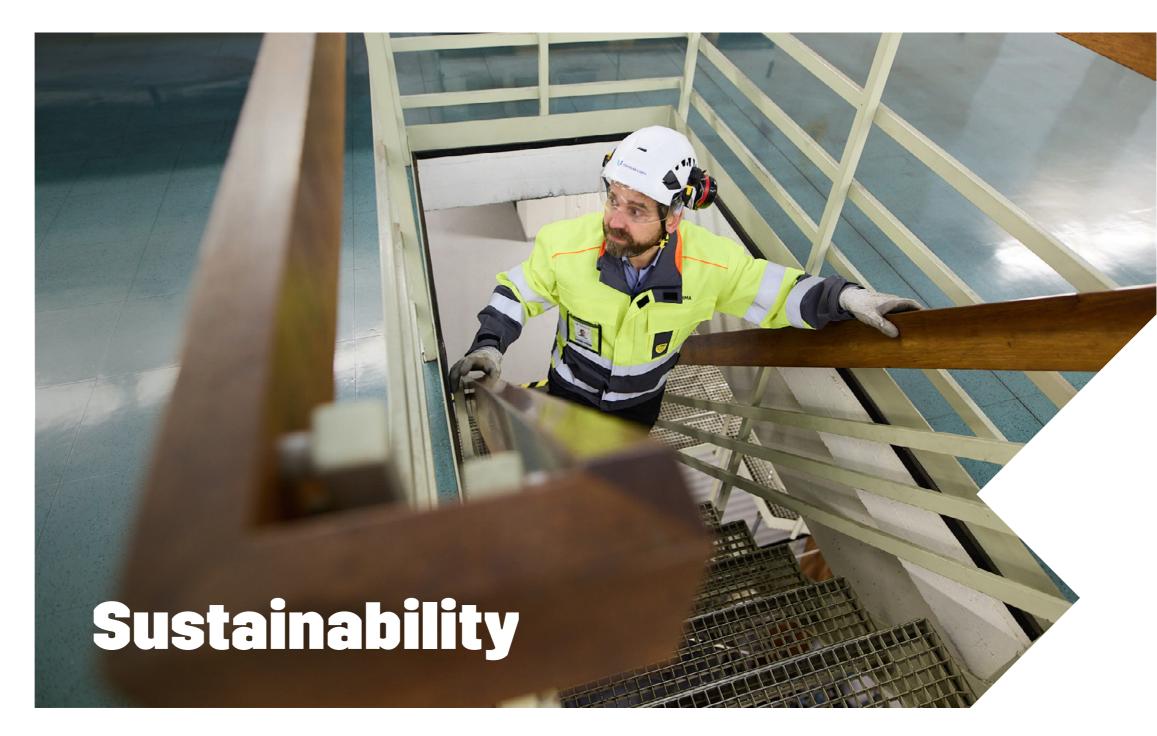
**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 



#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

→ Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# Sustainability is an intrinsic part of the strategy

Sustainability is an intrinsic part of Pohjolan Voima's strategy and becomes concrete in the company's daily operations. Throughout its existence, the company has strived to operate sustainably in accordance with the spirit of the time. Pohjolan Voima is continuously working on sustainability with increasingly ambitious targets. The company's values – skilfully, reliably, together – underpin everything the company does, including the sustainability efforts.

For Pohjolan Voima, sustainability means (1) ecological sustainability or reconciling competitive carbon-neutral production with the support of biodiversity and a reduction of the environmental impacts, (2) corporate social responsibility or taking into account the wellbeing of the company's employees, as well as using responsible practices in stakeholder engagement, and ethically sustainable practices in all operations, and (3) financial sustainability or producing as affordable energy as possible for the customers in a resource-efficient way in line with the other sustainability targets. Pohjolan Voima's goal is to create decisive power to strengthen competitiveness and contribute to a better tomorrow.

#### **Four Sustainable Development Goals**

Pohjola Voima has selected four of the UN Sustainable Development Goals (SDGs 7, 8, 15, and 17) that are directly applicable to its operations, and determined related targets and metrics. Pohjolan Voima's climate efforts and the related carbon neutrality targets are included in SDG 7 (Affordable and Clean Energy). SDG 8 is Decent Work and Economic Growth. Fish, and aquatic biodiversity, such as the restoration of migratory fish, are included in SDG 15 (Life on Land),

which in the UN's breakdown includes freshwater ecosystems that are especially important to Pohjolan Voima as company operating in a river environment. SDG 17 is Partnership for the Goals.

#### Sustainability programme 2024-2027

At Pohjolan Voima, sustainability is guided by international principles and the strategy approved by Pohjolan Voima's Board of Directors, the company's values, and annually updated Group-level

sustainability policies. Sustainability is also one of the strategic capabilities defined by Pohjolan Voima, and the related metrics are included in the indicators used to implement the Group's strategy. In addition to the policies, the Board of Directors annually approves the Group's sustainability programme and, as part of it, the biodiversity programme. The programme describes the targets and their implementation status.

The sustainability programme takes into account the selected UN Sustainable Development Goals

and the EU's sustainability regulations. The sustainability programme is based on a double materiality assessment in accordance with the Corporate Sustainability Reporting Directive, from which Pohjolan Voima has selected the development areas it considers the most important.

For more information about the sustainability programme targets and indicators, see page 29.



#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

→ Achievements in 2024

Implementation of sustainability efforts

Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

## **Achievements in 2024**

Sustainability work progressed according to plan in 2024. The 2025 carbon neutrality targets for electricity and heat were exceeded. The decrease in the use of peat also exceeded the target level.

The double materiality assessment was updated, the risks related to sustainability were integrated into the business risk review process, and a more detailed investigation of the value chains in procurement was started. Pohjolan Voima is preparing for mandatory reporting in accordance with the Corporate Sustainability Reporting Directive, which applies to Pohjolan Voima starting from the 2025 financial year.

## Determined path towards carbon neutrality

The key carbon neutrality achievements in 2024 were:

- 99% of the electricity production was carbon neutral.
- > 89% of the heat production was carbon neutral.
- The use of peat was reduced by 83% from the 2019 level.

Pohjolan Voima's carbon neutrality targets by 2025 are:

- > 99% of electricity production being carbon neutral.
- 85% of process steam and district heat production being carbon neutral.
- Using fossil fuels and peat only as startup and backup fuels to ensure the security of supply based on the market situation. Using wood-based fuels that are sustainably produced.
- Reducing the use of peat by 80% from the 2019 level.

In Pohjolan Voima's production, carbon-neutral energy includes hydropower and nuclear power, as well as energy produced from wood-based fuels that meet sustainability criteria and the bio share of solid recovered fuels.

Most of the targets set for 2024 in the biodiversity programme were achieved, and ongoing projects are proceeding according to plan. The wood-based fuels used by Pohjolan Voima met the sustainability criteria in 2024.

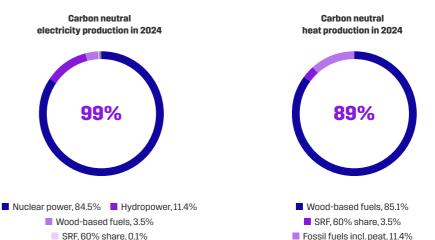
# Employee satisfaction is high, stakeholders appreciate the sustainbility efforts

The average score in the employee experience survey was 95%, which exceeded the target level of 80%. Based on the excellent employee experience, Pohjolan Voima was awarded a Great Place to Work™ certificate.

According to a study targeted at influencers and stakeholders in the energy industry, Pohjolan Voima's stakeholder work has been successful. In a survey carried out by Aula Research, Pohjolan Voima received strong approval for its sustainability efforts. The results of the customer satisfaction survey were also good: 69% would recommend Pohjolan Voima as a partner.







■ Fossil fuels incl. peat, 0.5%



#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

→ Achievements in 2024

Implementation of sustainability efforts

Environmental information

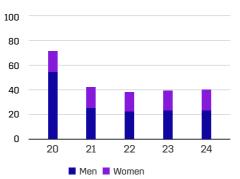
Social information

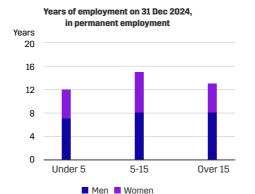
Governance information

Entity-specific information – security of electricity and heat supply

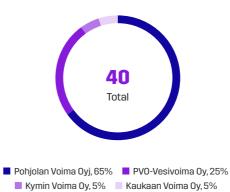
**Appendices** 

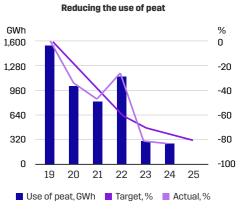
## Number of personnel on 31 Dec in 2020–2024, in permanent employment



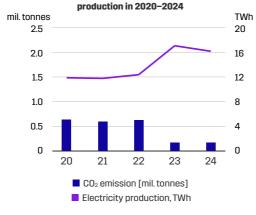


## Number of personnel by Group companies on 31 Dec 2024, in permanent employment

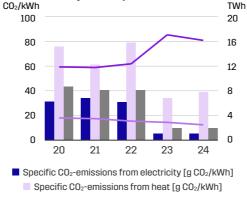




## Carbon dioxide emissions from heat and electricity

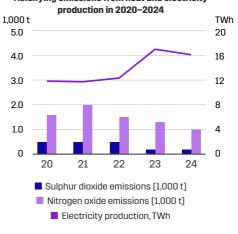


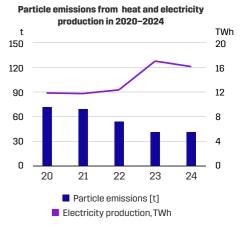
## Specific carbon dioxide emissions from electricity and heat production in 2020–2024



■ Specific CO<sub>2</sub>-emissions from electricity and heat [g CO<sub>2</sub>/kWh]
■ Electricity production, TWh ■ Heat production, TWh

## Acidifying emissions from heat and electricity





See value tables on pages 65-66

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

→ Implementation of sustainability efforts

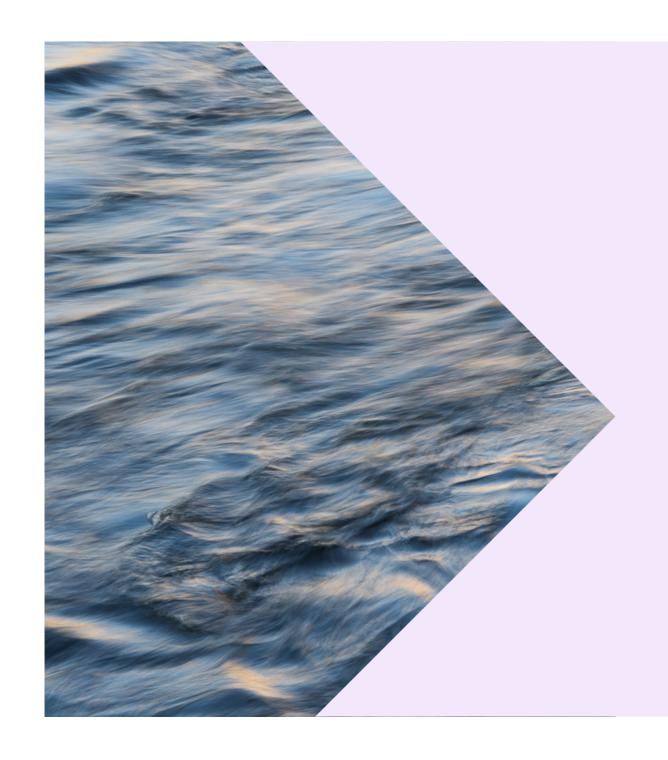
Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 



# Implementation of sustainability efforts

→ Starting points	20
→ Governance of sustainability and strategy	20
→ Strategy, business model, and value chain	21
→ Material sustainability impacts, risks, and opportunities	27

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

→ Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# Implementation of sustainability efforts

## **Starting points**

The figures related to Pohjolan Voima's sustainability are reported as consolidated figures. The figures of the subsidiaries are taken into account in the calculations with a 100% share. Pohjolan Voima has no operational control over its associated companies and joint ventures, and they are considered part of the value chain, unless otherwise stated. The reporting period is the same as for financial reporting, i.e. the financial year 1 January 2024 to 31 December 2024.

The Pohiolan Voima Group consists of the parent company Pohjolan Voima Oyj, PVO-Vesivoima Oy, Kaukaan Voima Ov. Kymin Voima Ov. Porin Prosessivoima Oy, and Rauman Biovoima Oy. PVO-Vesivoima's business segment is hydropower production, and the business segment of the other subsidiaries is combined heat and power production. Teollisuuden Voima Oyi, which produces nuclear electricity, is Pohjolan Voima's joint venture. Pohjolan Voima's other associated companies are Oy Alholmens Kraft Ab, which produces heat and electricity, and Tornionlaakson Voima Ov and Länsi-Suomen Voima Ov. which produce electricity with hydropower. Voimalohi Oy is PVO-Vesivoima's joint venture, and it manages the practical implementation of PVO-Vesivoima's fish stock management obligations and voluntary measures to restore migratory fish stocks. The Group also includes the energy management service companies PVO Power Management Ov and PVO Power Services Ov.

Subsidiaries	Production form	Ownership share		
Kaukaan Voima Oy	Thermal power	84.0%		
Kymin Voima Oy	Thermal power	76.0%		
Porin Prosessivoima Oy	Thermal power	89.0%		
PVO-Vesivoima Oy	Hydropower	100.0%		
Rauman Biovoima Oy	Thermal Power	72.0%		
PVO Power Management Oy	Service company	100.0%		
PVO Power Services Oy	Service company	100.0%		

Associated companies	Production form	Group ownership share	
Oy Alholmens Kraft Ab	Thermal power	49.9%	
Länsi-Suomen Voima Oy	Hydropower	19.9%	
Tornionlaakson Voima Oy	Hydropower	50.0%	
Joint ventures	Production form	Group ownership share	

Nuclear power

The reporting requirements under the Corporate Sustainability Reporting Directive (CSRD) are binding on Pohjolan Voima starting from 2025. To ensure the accuracy and timeliness of the reported information, Pohjolan Voima started to developed the sustainability reporting in 2022 and will continue to advance it in order to meet the required scope for the sustainability report of 2025. However, this sustainability review has not been compiled in accordance with the requirements of the CSRD.

Teollisuuden Voima Oyi

Voimalohi Ov

The reported sustainability themes and indicators are based on Pohjolan Voima's double materiality assessment, which was prepared in 2023 and updated in 2024 taking into account the requirements of the European Sustainability Reporting Standards. Matters that are material for the company's operations, products and stakeholders were selected on the basis of the materiality assessment. The Executive Team approved the themes based on the updated materiality assessment, and the themes were presented to the Board of Directors. For more information about the

materiality assessment and its results, see section Material sustainability impacts, risks, opportunities

58.8%

50.0%

In the materiality assessment, the short-term time span used for risks and opportunities is 2–5 years, the medium time span 5–15 years and the long-term time span 15–100 years. The method used to consolidate information was changed during the reporting year, and the joint venture Teollisuuden Voima and the associated company Alholmens Kraft were processed as part of the value chain.

Sustainability matters reported by virtue of other legislation, as well as other sustainability themes related to corporate social responsibility that were deemed non-material in the double materiality assessment, are described on Pohjolan Voima's website at www.pohjolanvoima.fi.

Pohjolan Voima's governance and financial information for 2024 are described in more detail in the separate Corporate Governance Report, Annual Report of the Board of Directors and Financial Statements 2024.

# Governance of sustainability and strategy

#### **Board of Directors**

Pohjolan Voima's Board of Directors is the Group's highest authority in terms of sustainability. It approves the Group's strategy, which is reviewed annually and in which sustainability is integrated into the strategic themes. The Board annually confirms Group policies that promote sustainability and steer responsible business, which are the Sustainability Code of Conduct (including the Code of Ethics), the competition law policy, the personnel policy, and the environmental and energy efficiency policy. The Board also approves the guidelines. In addition, Pohjolan Voima's sustainable business operations are governed by the values approved by the Board.

The Board annually approves the Group's sustainability programme and, as part of it, the biodiversity programme. The programme includes strategic and operational targets and metrics for Pohjolan Voima's sustainable business. It builds on selected UN Sustainable Development Goals and the results of the double materiality assessment. The sustainability programme also includes selected development projects. Sustainability metrics are included in the indicators on the implementation of the strategy.

## President and CEO and Executive Team of the Group and Managing Directors of the subsidiaries

The President and CEO of Pohjolan Voima is responsible for the implementation of the sustainability programme, which includes the Group's strategy confirmed by the Board of Directors and the sustainability targets, and reports to the Board all impacts, risks and opportunities involving the material sustainability themes.

The CEO has delegated some of the responsibility to the members of the Executive Team. The Executive Vice President of Public Affairs and Sustainability is

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

→ Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

responsible for the development and coordination of sustainability. The Executive Vice President reports on the progress to the CEO. Within the Executive Team, practical responsibilities have been divided so that the CEO is responsible for environmental and safety matters, the CFO is responsible for sustainability-related risks as part of the Group's risk management and for the sustainability report, and the Executive Vice President of Human Resources and Legal Affairs is responsible for the social responsibility dimension, the updating of the policies and guidelines approved by the Board of Directors, as well as sustainability training of the governing bodies. If necessary, the Executive Team will also discuss matters in more detail at its workshop meetings.

The managing directors of the subsidiaries are responsible for ensuring that sustainable practices and the planned measures are implemented in the operations of each company and that each subsidiary takes care of sustainability reporting. The joint sustainability matters of the subsidiaries are processed by the Executive Team for Production, led by Pohjolan Voima's CFO

#### Sustainability Manager and sustainability team

The monitoring and coordination of the practical sustainability efforts, as well as the monitoring and reporting of the targets at the Group level, are the responsibility of the Group's Sustainability Manager. The Sustainability Manager reports on the progress of sustainability efforts to the Executive Vice President of Public Affairs and Sustainability.

The sustainability work is supported by the Group's sustainability team, which contributes to ensuring the reaching of the sustainability targets and the realisation of the selected development projects, as well as proposing corrective measures if necessary. The sustainability team, which meets quarterly, is chaired by the Executive Vice President of Public Affairs and Sustainability. Its members include the CFO, the Executive Vice President of HR and Legal Affairs, the Group Treasurer, the Sustainability Manager, and specialists from relevant functions and business operations. If necessary, the Executive Vice President of Public Affairs and Sustainability will forward

matters to the Group Executive Team, which will issue guidelines.

During the financial year 2024, the Sustainability Manager and the sustainability team focused on an annual update of the sustainability programme and the implementation of sustainability reporting, as well as ensuring the progress of selected development projects.

Sustainability is part of the duties of all Pohjolan Voima employees, and it has been defined as one of the Group's strategic capabilities. During the financial year 2024, all employees completed mandatory sustainability training. The progress of the sustainability programme and the sustainability targets are discussed during a quarterly information event for the entire personnel.

To strengthen sustainability competence, all Board members active in the Pohjolan Voima Group companies completed sustainability training by an external training provider specialising in corporate social responsibility in 2024. The training for the parent company's Board members was realised in March in connection with a Board meeting. The training for the Board members active in the production companies of the Group was realised during a Board Day in April. At the end of 2024, all Board members active in the Pohjolan Voima Group companies completed an online sustainability training programme.

The Group Executive Team has also completed the same online training programme as the other personnel. The Executive Vice President of Public Affairs and Sustainability has 25 years of experience in positions involving sustainability and related topics.

#### **Good governance**

The Group's Board of Directors and the President and CEO are responsible for the management of Pohjolan Voima. In Pohjolan Voima, good governance is ensured through clear management, internal control, and internal audits. The company's external audits are performed by the company's auditor. For more information about internal control, internal audit and auditing, see the Corporate Governance Statement.

## Risk management and internal control in sustainability reporting

Sustainability reporting complies with Pohjolan Voima's Group-level principles and processes for statutory reporting, risk management, and internal control. The internal control of sustainability reporting is based on the identification and analysis of risks, the targeting of control to the most relevant identified risks, and best internal control practices.

Sustainability reporting is guided by international principles, the strategy approved by Pohjolan Voima's Board of Directors, the company's values, the annually updated Group-level sustainability policies, the corporate culture that emphasises sustainability, and the competent personnel.

In 2024, sustainability reporting was guided by the sustainability team. The practical reporting work was coordinated by the Group's Sustainability Manager under the guidance of the Executive Vice President of Public Affairs and Sustainability, the CFO, and the Executive Vice President of Human Resources and Legal Affairs. Reports are prepared by persons who are familiar with sustainability reporting and industry standards.

The identified risks in terms of sustainability reporting are the correctness of the information to be reported and the timeliness of the reporting.

# Strategy, business model, and value chain

#### Strategy

Pohjolan Voima's strategy is described in more detail in section Decisive Power strategy and on Pohjolan Voima's website at <a href="https://www.pohjolanvoima.fi">www.pohjolanvoima.fi</a>. This section focuses on describing sustainability in the strategy. The subsidiaries prepare their own strategies, which are based on the Group strategy.

The Pohjolan Voima Group strategy describes the company's purpose as follows: "We create decisive power to strengthen competitiveness and contribute to a better tomorrow." Pohjolan Voima produces electricity and heat for its customers at cost price with hydropower, combined heat and power production, and nuclear power. It thus plays its part in ensuring that

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

→ Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

the customers will succeed. Indirectly, Pohjolan Voima creates jobs and wellbeing in Finland.

Pohjolan Voima's customers are also its shareholders. There are a total of 23 shareholders, including industrial companies that use electricity and heat, other energy companies and the City of Pori.

Pohjolan Voima's Board of Directors annually confirms the strategy. The strategy is based on strategic assumptions about the operating environment. The Executive Team reviews the strategic assumptions in relation to changes in the operating environment twice a year and launches a more comprehensive strategy update if changes in the operating environment so require. The operating environment is examined from several viewpoints, such as the development outlook in terms of legislation, the development of technology, and the development of the customers' operating environment and customer expectations. Sustainability and responsibility are related to all the abovementioned aspects in the operating environment.

Pohjolan Voima's operating environment is affected particularly by the regulatory environment related to sustainability, the requirements of stakeholders as comes to climate change mitigation and halting biodiversity loss, and issues related to the security of energy supply. The measures related to Pohjolan Voima's strategy respond to the above-mentioned challenges that change the operating environment and, at the same time, open up new opportunities for Pohjolan Voima in the changing operating environment.

The current Group strategy, which extends to 2027, includes three strategic themes that cover important sustainability matters. The strategic themes are: sustainable production on market terms, competitive advantage by balancing power capability and timeliness, and top expert in asset management.

The sustainable production on market terms strategic theme starts with Pohjolan Voima's choices aiming to promote competitiveness, wellbeing, and biodiversity, as well as climate change mitigation and the promotion of biodiversity. The electricity and heat produced by Pohjolan Voima are almost completely carbon-neutral hydropower, combined heat and power, and nuclear power. Pohjolan Voima's target

is for 99% of the electricity production and 85% of the heat production to be carbon neutral by 2025. Pohjolan Voima's carbon-neutral production also helps its customers to reduce their emissions. This way, Pohjolan Voima contributes to a more sustainable future.

Pohjolan Voima's long-term vision for the promotion of biodiversity is: "We identify our key impact on biodiversity and move towards net positivity. We promote our skill set and update our targets as knowledge increases."

Pohjolan Voima's strategy emphasises sustainability in all business operations, and the company has recorded the following targets in its strategy:

- > We are a responsible actor. We combine competitive carbon-neutral production with biodiversity.
- Hydropower is an approved production form, and society recognises PVO-Vesivoima as a responsible actor.
- We participate in developing the competitiveness and sustainability of Teollisuuden Voima's nuclear power production through active ownership steering.
- > Wood-based fuels in combined heat and power production are sustainably sourced. We only use fossil fuels and peat as startup, backup and security of supply fuels, taking into consideration the market situation.

The strategic theme competitive advantage through balancing power and timeliness identifies a significant change that has taken place in the operating environment, i.e. the fact that the increasing share of wind and solar power production, the volume of which fluctuate depending on weather conditions, in the electrical power system increases the need to balance the system. Pohjolan Voima develops the balancing capacity of its production and the ability of the organisation to utilise it, thus enabling an increase in production depending on the weather conditions. At the same time, Pohjolan Voima contributes to ensuring the security of electricity supply.

#### The strategic theme top expert in asset

**management** is based on the significant portfolio of assets for which Pohjolan Voima is responsible, which it optimally manages. At the same time, effective maintenance measures, as well as timely investments and plant lifecycle management, contribute to resource efficiency.

Achieving the ambitious targets requires continuous development of the operations, ensuring the organisation's capabilities and investments. A responsible way of operating is one of the strategic capabilities needed to implement the strategy. This means that every Pohjolan Voima employee must understand the significance of their own work from the sustainability perspective.

#### Pohiolan Voima's own personnel by location

Location	Number of personnel
Helsinki	23
li	13
Kouvola	<5
Lappeenranta	<5
Oulu	<5

The development of the operations, asset management and investments are presented in more detail in the section on business operations. The risks and opportunities related to sustainable development are described in the sections for the different themes and under Risk management and risks.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

→ Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

The sustainability programme for 2024–2027 guides Pohjolan Voima's sustainability efforts. The programme takes into account Pohjolan Voima's strategy and its selected themes, and the targets are set using the double materiality assessment of sustainability. Pohjolan Voima's responsible operations and sustainability themes assist in the achievement of four UN Sustainable Development Goals (for more information, see page 16). These UN Sustainable Development Goal themes, the Group's sustainability targets, as well as a summary of the materiality assessment and the materiality assessment process, are described under Material impacts, risks and opportunities of sustainability.

## **Business model and value chain**

The Pohiolan Voima Group consists of the parent company Pohjolan Voima Oyj, PVO-Vesivoima Oy, Kaukaan Voima Oy, Kymin Voima Oy, Porin Prosessivoima Oy, and Rauman Biovoima Oy. PVO-Vesivoima's business segment is hydropower production, and the business segment of the other subsidiaries is combined heat and power production. Teollisuuden Voima Oyj, which produces nuclear electricity, is Pohjolan Voima's joint venture. In addition, Pohjolan Voima's associated companies are Oy Alholmens Kraft Ab, which produces heat and electricity, and Tornionlaakson Voima Oy and Länsi-Suomen Voima Oy, which produce electricity with hydropower. Voimalohi Oy is PVO-Vesivoima's joint venture, and it manages the practical implementation of PVO-Vesivoima's fish stock management obligations and voluntary measures to restore migratory fish stocks.

Pohjolan Voima's owners include 23 Finnish industrial companies that use electricity and heat, other energy companies, energy companies owned by municipalities and the City of Pori.

Shareholders by sector	Shareholding, %
Forest industry	73.2
Energy companies	16.7
Chemical industry	7.3
Metal industry	0.2
Others	2.6

Pohjolan Voima Oyj's shareholders 31.12.2024	Shareholding, %
EPV Energy Ltd	5.03
Helen Ltd	0.55
Ilmarinen Mutual Pension Insurance Company	1.31
Kemira Oyj (incl. Neliapila pension fund)	5.34
Kokkolan Voima Oy	1.53
Kymppivoima Oy	5.02
Metsä Group (Metsäliitto Cooperative, Metsä Fibre, Metsä Board Corporation)	3.05
Myllykoski Oyj*	0.55
Oulun Energia Ltd	0.81
Outokumpu Oyj	0.10
Perhonjoki Ltd	2.09
City of Pori	1.29
Rautaruukki Corporation	0.10
Stora Enso Oyj	16.14
Finnish Power Ltd	1.47
UPM Energy Ltd*	49.82
UPM Communication Papers Ltd*	3.68
Vantaa Energy Ltd	0.20
Yara Suomi Oy (incl. pension fund)	1.93
Total	100

<sup>\*</sup> The company is part of the UPM-Kymmene Group

The electricity and heat produced based on Pohjolan Voima's business model are sold at cost price to the shareholders, who are also customers. The shareholders pay the costs of Pohjolan Voima's energy production in proportion to their holdings in the company. The aim of the operations is not to make a profit. The customers benefit from the operations by using the products (electricity and heat) or by selling them forward. The operating model is specified in the Articles of association.

The operating model is based on strong networks. The core of the network consists of 23 shareholders, who are also Pohjolan Voima's customer companies. In the operating model, the shareholders pool their resources, share the risks associated with the operations and implement energy projects with competitive production costs. The operating model enables even the smaller shareholders to participate in large energy projects that they would not be able to realise alone. A large group of customer company representatives are members of the governing bodies of Pohjolan Voima's parent company and subsidiaries.

Some of Pohjolan Voima's shareholders are other energy companies, which themselves have an extensive network of regional or city enterprises that produce electricity and heat. Through the networking of ownerships, the benefits from the electricity and heat produced by Pohjolan Voima are spread widely across Finland, to a total of more than 130 municipalities.

Pohjolan Voima operates exclusively in Finland, where it has a total of 12 of its own or co-owned hydropower plants, five combined heat and power plants, and one co-owned nuclear power plant with three plant units.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

## **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

→ Implementation of sustainability efforts

Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices

## **Pohjolan Voima's production locations**

#### POHJOLAN VOIMA'S PRODUCTION CAPACITY ON 31.12.2024

	Power plant	Location	Energy source	Year of completion	Electricity output (MW)	Pohjolan Voima's share (MW)	Heat output (MW)	Production company
HYDROPOWER								
	Isohaara	Kemijoki	water	1949	112.5	113		PVO-Vesivoima Oy*
	Jumisko	Kemijoki	water	1954	27.8	28		PVO-Vesivoima Oy
	Raasakka	lijoki	water	1971	64.3	64		PVO-Vesivoima Oy
	Maalismaa	lijoki	water	1967	38.6	39		PVO-Vesivoima Oy
	Kierikki	lijoki	water	1965	37.5	38		PVO-Vesivoima Oy
	Pahkakoski	lijoki	water	1961	42.4	42		PVO-Vesivoima Oy
	Haapakoski	lijoki	water	1963	32.6	33		PVO-Vesivoima Oy
	Melo	Kokemäenjoki	water	1971	67.9	68		PVO-Vesivoima Oy
	Harjavalta	Kokemäenjoki	water	1939	105.0	21		Länsi-Suomen Voima Oy**
	Kaaranneskoski	Tengeliönjoki	water	1954	3.0	2		Tornionlaakson Voima Oy**
	Jolmankoski	Tengeliönjoki	water	1955	0.5	0		Tornionlaakson Voima Oy
	Portimokoski	Tengeliönjoki	water	1987	10.5	5		Tornionlaakson Voima Oy
	Total				543	451		
NUCLEAR POWER								
	Olkiluoto 1	Eurajoki	uranium	1978	890	505		Teollisuuden Voima Oyj***
	Olkiluoto 2	Eurajoki	uranium	1980	890	505		Teollisuuden Voima Oyj
	Olkiluoto 3	Eurajoki	uranium	2023	1,600	963		Teollisuuden Voima Oyj
	Total				3,380	1,974		
THERMAL POWER								
	Alholmens Kraft 1	Pietarsaari	wood. oil	1991	25	12	85	Oy Alholmens Kraft Ab**
	Alholmens Kraft 2	Pietarsaari	wood, peat, SRF, coal, oil	2001	240	120	160	Oy Alholmens Kraft Ab
	Kymin Voima	Kouvola	wood, peat, natural gas	2002	76	58	180	Kymin Voima Oy*
	Porin Prosessivoima	Pori	wood, peat, SRF, natural gas, oil	1987,2008	65	65	212	Porin Prosessivoima Oy*
	Rauman Voima	Rauma	wood, peat, SRF, coal, oil	2006	65	47	190	Rauman Biovoima Oy*
	Kaukaan Voima	Lappeenranta	wood, peat, natural gas	2009	125	68	262	Kaukaan Voima Oy*
	Total		,		596	369	1,089	
TOTAL CAPACITY					4,519	2,795		

<sup>\*</sup> Subsidiary

In the Annual report capacity is presented with consolidated figures. Pohjolan Voima's electricity production capacity includes Pohjolan Voima's share of the hydropower and nuclear power plant capacities, and the total electricity generation capacity of the CHP plants excluding associated company Alholmens Kraft's power plant, for which Pohjolan Voima's share is included.

<sup>\*\*</sup> Associated company

<sup>\*\*\*</sup> Joint venture

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

→ Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information security of electricity and heat supply

**Appendices** 

## Pohjolan Voima's value chain

## **Upstream: Purchased materials and services**



## **Own operations:**

Group operations as well as power and heat production and lifecycle management in the subsidiaries

## **Downstream:** Distribution and use of electricity and heat





Procurement of electricity and heat from associated companies and joint ventures

#### Fuels for thermal power

- > Wood-based fuels
- > Recycled fuels
- > Peat
- > Fuel oils
- > Natural gas

#### Equipment and spare parts

- > Equipment
- Spare parts
- > Tools

## Chemicals and other

- materials > Chemicals
- > Lubricating oils
- > Bed sand
- > Construction supplies
- > Soil and crushed stone

#### Transport

> Transport of purchased materials

#### Own personnel

> Personnel of the parent company and subsidiaries

#### Group services subcontractors

- > IT services
- > Payroll accounting
- > Purchase invoices, accounting and payment > Supply of energy to transactions

#### Outsourced expert services

- > Consultants
- Communications agencies > System suppliers
- > Occupational health

## **Production subcontractors**

- Operating and maintenance personnel
- Other maintenance and servicing
- Environmental management
- > Support services

### **Energy management**

shareholders and electricity trading

#### Recovery and recycling of waste

- > Utilisation of ash
- > Recycling of waste
- > Transport

## Main grid

> Distribution of electricity

## Owners Use of and heat

Sales of

electricity

and heat

- > Enterprises > Cities electricity

Users

- Municipalities
- > Citizens

The networked operating model also includes numerous partners who take care of functions important to Pohjolan Voima. This ensures strong expertise and efficiency. For example, Caverion operates and maintains the PVO-Vesivoima Oy hydropower plants, Power-Deriva provides energy management services, and Azets provides financial administration services. The operations are developed in close cooperation with equipment suppliers. Pohjolan Voima is also an active player in energy industry networks and Finnish society.

Pohjolan Voima creates value by producing electricity and heat for its owners, end users, enterprises, municipalities, cities, and citizens by the following means, for example:

- > Electricity production, 16.1 TWh in 2024
- > Process heat production for the processes of industrial shareholders, 1.2 TWh in 2024
- District heat production, 1.3 TWh in 2024

Upstream in its value chain, Pohjolan Voima acquires electricity and heat from its associated companies and joint ventures, as well as fuels, equipment, spare parts, chemicals, and other materials from suppliers. In its own operations, Pohjolan Voima produces electricity and heat and manages the lifecycle of its power plants, for which services are purchased from subcontractors of Group services, outsourced experts, production subcontractors, energy management partners, and waste recovery and recycling operators.

Pohjolan Voima's own personnel is described in more detail under Own workforce. Downstream in the value chain, partners in the distribution of electricity and heat produced by Pohjolan Voima are the transmission system operator Fingrid and the shareholders of Pohjolan Voima. In addition to the shareholders, end users of electricity include enterprises, cities, municipalities, and citizens.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

→ Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices

#### Interests and views of stakeholders

Pohjolan Voima engages with its key stakeholders and develops its operations based on stakeholder feedback.

Pohjolan Voima carries out an annual customer satisfaction survey, on the basis of which the operations are developed. Annual customer discussion rounds are also realised.

In 2024, Pohjolan Voima conducted a stakeholder survey, as it does every other year. The aim of the survey was to obtain more information about the stakeholders'

views on the operating environment in the energy industry, and on Pohjolan Voima's operating methods and sustainability. The survey consists of a questionnaire and interviews. A total of 180 key energy industry influencers active in politics, ministries, universities, research institutes, trade unions, organisations and the media responded the survey. In addition, 14 political leaders were interviewed.

As in previous years, Pohjolan Voima continued to work closely with young people in 2024 in order to hear

their expectations from the energy industry and Pohjolan Voima. These measures are described in more detail in the summary table and under Affected communities.

Of Pohjolan Voima's subsidiaries, PVO-Vesivoima Oy annually conducts an online stakeholder survey covering its close stakeholders at its operating locations, such as partners, service providers, and the media. The survey covers their views on how the cooperation is going and the sustainability of the company's operations.

Open feedback is also requested. The survey results are used as an indicator in PVO-Vesivoima's scorecard.

An annual action plan for the development targets is prepared based on the survey results, and the progress of the plan is monitored as part of the monitoring of the operational targets. In 2024, 44 persons responded the survey. Stakeholders' views were utilised in the double materiality assessment, on the basis of which the Pohjolan Voima's material sustainability themes were confirmed. The themes form the focus areas for Pohjolan Voima's development work. The materiality assessment was prepared in 2023 and updated in 2024.

Stakeholder group	Stakeholder involvement, and channels for interaction	Key expectations of the stakeholder group in 2024	Our response to the stakeholder expectations in 2024
Customers	Customer introductions Customer discussions Customer satisfaction survey Participation in strategy work Forums	According to the customer satisfaction survey, our customers' main expectations were:  Competitive operations Actions in line with needs Developing activities in the right direction Expertise New projects in the changing world as a development area	According to the customer satisfaction survey, we did well, scoring above 4 on all the expectations (on a scale of 1 to 5). For environmental and sustainability activities, we received a score of 4.3. Furthermore, 69% of the responding customer representatives would recommend Pohjolan Voima as a partner (NPS).
Personnel	Involving employees in the updating of operating environment scenarios Joint events at least once a week Personnel survey Sustainability survey 2024	The main strengths of Pohjolan Voima as an employer, as named by the employees, are:  A physically safe workplace  Facilities that create a good working environment  People are treated equally  Overall, a really good place to work	The results of the personnel survey were excellent, and we received a Great Place to Work certificate in recognition of the excellent employee experience. The average score for the statements that describe the employee experience, i.e. our TrustIndex score, was 95%.  The result of the PeopleImpact sustainability survey, 92.1, was better than the standard benchmark result.
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 are included in the parent company's syndicated facility.  A sustainability report reform, partly to meet the growing requirements of financiers and investors.  Constant dialogue with financiers.
Decision-makers	Decision-maker meetings Press releases and newsletters Statements Stakeholder survey 2024	Carbon-neutral production Taking biodiversity into account in the operations Reliable and dependable production	In 2024, 99% of our electricity and 89% 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. We highlight the importance of a predictable operating environment to decision-makers.
Authorities	Discussions Press releases, newsletters, events Stakeholder survey 2024	Transparent flow of information Operations in line with permits and licences	Our operations comply with the permits and licences, and information on any non-conformances is openly communicated. All key authorities are included in our distribution lists.
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, Virtaviesti magazine, migratory fish projects, cooperation projects	Open communication, security of energy supply, routes for fish to pass hydropower plants, reducing disadvantages from the regulation of waterways	In the annual stakeholder survey, our closest stakeholder groups in the immediate vicinity of our hydropower plants gave the cooperation a rating of 4.0 (on a scale of 1 to 5). Cooperation projects to restore migratory fish. Cooperation in regulation. An open door event at the Maalismaa power plant, supporting local events, communication and events linked to the PUHTI pumped-storage power plant project.
Interest groups	Communication, participation in the work of interest groups	Active dialogue, continuous improvement, promotion of shared themes	Active participation in preparatory and decision-making bodies in the energy industry.
Non-governmental organisations	Communication Stakeholder survey 2024, sustainability section	Carbon neutrality, migration of fish past plants, sustainability, open communication	Invitations to events, communication.
Young influencers	Meetings, visits, press releases, newsletters, social media Stakeholder survey 2024	Open and reliable communication, responsible operations, cooperation	Discussion events for young people, invitations to stakeholder events, sparring assistance from young people for the sustainability value chain project, podcast visits, power plant visits, supporting the Youth Environmental Summit, interviews in different channels.
Media	Press releases and newsletters Social media Meetings Stakeholder survey 2024	Open and reliable communication, accessibility	Meetings, clear and timely press releases. Invitations to events and media briefings.

26

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

→ Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# Material sustainability impacts, risks and opportunities

# Identification and assessment of material impacts, risks and opportunities

The assessment of Pohjolan Voima's material sustainability impacts, risks and opportunities was carried out as a double materiality assessment in 2023-2024. The aim of the materiality assessment was to assess the negative and positive impacts of Pohiolan Voima's operations, as well as business risks and opportunities related to sustainability and their financial impact on Pohjolan Voima. As background to the analysis, a stakeholder survey was conducted in 2023, to which 139 responses were received. In addition, representatives of eight stakeholders were interviewed. The purpose of the interviews was to find out more about the stakeholders' views and expectations regarding the sustainability efforts. The analysis was carried out with an external partner in the spring of 2023. The sustainability impacts, risks and opportunities were assessed and scored in more detail at workshops and by an expert partner. The stakeholders' views were taken into account and presented at a workshop to the Group's key sustainability personnel. As a final result, the most relevant topics in Pohjolan Voima were summarised in a materiality matrix. The Pohjolan Voima Executive Team approved the material sustainability aspects, which were presented to the Board of Directors.

In 2024, Pohjolan Voima came to the conclusion that the double materiality assessment had to be refined to better comply with the requirements of the European Sustainability Reporting Standards. A completely new stakeholder survey was not conducted. Instead, sustainability was included in the stakeholder survey realised by Pohjolan Voima in 2024. The aim of the stakeholder survey was to measure Pohjolan Voima's sustainability reputation and success in stakeholder engagement, as well as to find out the stakeholders' views on the operating environment in the energy industry. The survey included questions about the stakeholders' views regarding Pohjolan Voima's most important sustainability impacts. In addition, a sustainability survey for the personnel was

conducted. Among other things, the employees were asked about their views regarding Pohjolan Voima's sustainability impacts. The surveys did not reveal any new sustainability aspects that Pohjolan Voima had not taken into account earlier. The double materiality assessment was updated at workshops of the key sustainability personnel and the Executive Team. The Executive Team approved the material themes based on the updated materiality assessment, which were presented to the Board of Directors in November 2024. In future, the Board of Directors will confirm the sustainability aspects on an annual basis.

#### Methodology

The negative and positive impacts related to sustainability were assessed quantitatively based of their scale, scope, irreversibility, and probability. This process resulted in scores for the materiality of the assessed sustainability impacts. Regarding the economic materiality of sustainability, the financial impact of business risks and opportunities arising from the sustainability themes was quantitatively assessed. The financial impact was assessed as a product of significance and probability. The assessment covered Pohjolan Voima's own operations and value chains. A final assessment of double materiality was the combined result of both the sustainability impacts and the financial impacts. Material topics were defined as those that exceeded the selected threshold. The threshold was chosen to correspond to the risk classification in Pohjolan Voima's risk management model. When the materiality and financial impact of a sustainability impact is more than 10, the topic is considered material. A negative materiality value indicates a negative impact and risk, while a positive value indicates a positive impact and opportunity.

Based on the 2023 double materiality assessment, Pohjolan Voima prepared a sustainability programme for 2024–2027, the content of which is annually reviewed and approved by the Board of Directors.

## **Table for assessing the materiality and financial impact:**

	5	5	10	15	20	25
Likelihood	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5

Financial impact/Severity of impact

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

## **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

## **CORPORATE SUSTAINABILITYLL**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

→ Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices

## Material sustainability topics

Themes of Pohjolan Voima's sustainability				Severity of		
programme 2024-2027	Topic	Sub-topic	Theme	impact	Financial impact	Sustainability target
E - Environment						
Clean energy production and climate	Climate change	Climate change mitigation	Production of clean energy	20.0	20.0	Share of carbon-neutral electricity and heat production
Biodiversity and status of aquatic organisms			Climate	-16.7	-12	Reduction in peat use
Power plant and infrastructure lifecycle management	Biodiversity and ecosystems	Direct impact drivers of biodiversity loss	Biodiversity and status of aquatic organisms	-20.0	-12.0	Implementation of biodiversity programme measures
	Resource use and circular economy	Waste	Management and recycling of operational waste	12.5	12.0	Utilisation of by-products
S – Corporate social responsibility						
Proactive safety Inspiring workplace	Own workforce	Working conditions	Personnel wellbeing	15.0	12.0	Personnel satisfaction index
for top talent Interaction with stakeholders		Equal treatment and opportunities for all	Inspiring workplace for top talent	12.5	12.0	
Stakerioliders			Adequate wages and equal pay	12.5	12.0	
	Affected communities	Communities' economic, social, and cultural rights	Stakeholder dialogue	10.5	12.0	Result of stakeholder survey
G - Governance						
Ensuring responsible operations in the value chain and partnerships	Business conduct	Corporate culture	Transparent governance and management	15.0	16.0	
Reliability as a partner			Management diversity	12.0	10.0	
		Relationships with suppliers and payment practices	Reliability as a partner	15.0	12.0	Customer satisfaction survey HSEQ audits
			Financial transparency	20.0	15.0	
Entity-specific topic						
Security of supply of electricity and heat production			Security of electricity and heat supply	20	25	Subsidiaries' availability metrics in target

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

→ Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices

## **Metrics and targets**

SDG

#### Main indicators of the sustainability programme

Target	Target 2027	Target 2025	Actual 2024	Target 2024
Clean energy production and climate Carbon neutrality of electricity production Carbon neutrality of heat production	SBT	99%	99%	98%
	SBT	85%	89%	84%
<b>Biodiversity and status of water systems</b> The targets set for 2024 in the biodiversity programme were achieved.	100%	100%	80%	100%
Power plant and infrastructure lifecycle management Subsidiaries' availability metrics in target, share %	Defined annually	93.3%	23%	50%
Continuity of electricity and heat production Subsidiaries' availability metrics in target, share %	Defined annually	93,3%	23%	50%
Proactive safety Lost time accidents	Defined annually	Own workforce LTA = 0 Own workforce and suppliers <5	5.7 Own workforce and suppliers	0.0
Interaction with stakeholders The result of the stakeholder survey (every two years), the views of decision-makers, public officials, trade unions, researchers, and the media (Pohjolan Voima is a responsible operator) Scale 1.0–5.0	Defined annually	-	4.0	4.0
Inspiring workplace for top talent Employee satisfaction index	Defined annually	95	95	80
Reliability as a partner Customer satisfaction survey, Net Promoter Score (NPS), %	Defined annually	70%	69%	70%
Ensuring responsible operations in the value chain and partnerships Target number of HSEQ supplier assessments, pcs	Defined annually	5	10	5

## Other sustainability metrics

- Reduction in the use of peat by 80% from 2019 to 2025. The target was achieved, as the use of peat decreased by 83% from the 2019 level.
- The target for the maximum number of category 3 environmental incidents was 6 and the target for the maximum number of category 4 and 5 incidents was 0 in 2024. The target was not achieved in 2024, because an oil spill occurred at the PVO-Vesivoima Isohaara power plant, which was classified as a category 4 environmental incident. On 22 July 2024, approximately 500 litres of oil leaked into the Kemijoki river, which was collected in cooperation with the authorities.
- Utilisation rate of ash 100%. The target was achieved, as the utilisation rate was 112%.
- Own workforce making EHS observations at a rate of 5 observations per person. The target was achieved, as 5.5 observations per person were made.

## Principles for the compilation of the metrics

- Pohjolan Voima's subsidiaries, Teollisuuden Voima, and Alholmens Kraft of the associated companies and joint ventures, as well as PVO-Vesivoima's associate companies Tornionlaakson Voima and Länsi-Suomen Voima Oy are taken into account in the carbon neutrality targets for electricity and heat production.
- In Pohjolan Voima's production, carbon-neutral energy includes hydropower and nuclear power, as well as energy produced from wood-based fuels that meet sustainability criteria and the bio share of solid recovered fuels (SRF). The bio-share of SRF is calculated as 60 % according to the percentage used by Statistics Finland.
- The subsidiaries and Teollisuuden Voima are taken into account in the availability indicator.
- Accidents of own workforce and the subsidiaries' operation and maintenance partners and subcontractors are taken into account in the lost time accidents indicator.
- The personnel satisfaction index and EHS observations cover Pohjolan Voima's own personnel.
- The subsidiaries and the joint venture Alholmens Kraft are taken into account in the indicator on the decrease in the use of peat.
- Environmental events of the subsidiaries are taken into account in environmental events.
- The subsidiaries are taken into account in the utilisation rate of ash
- The availability metric takes into account the subsidiaries and Teollisuuden Voima. The calculation principles for the goals of 2024 and 2025 differ from each other. The companies have a total of 13 different usability targets. The 2024 usability metric indicates the percentage of the companies' availability targets that have been achieved. The 2025 metric indicates the average realisation of the availability metrics.

Pohjolan Voima is currently preparing a transition plan for climate change mitigation. In the future, it will be published in the sustainability report accompanying the Annual Report of the Board of Directors.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

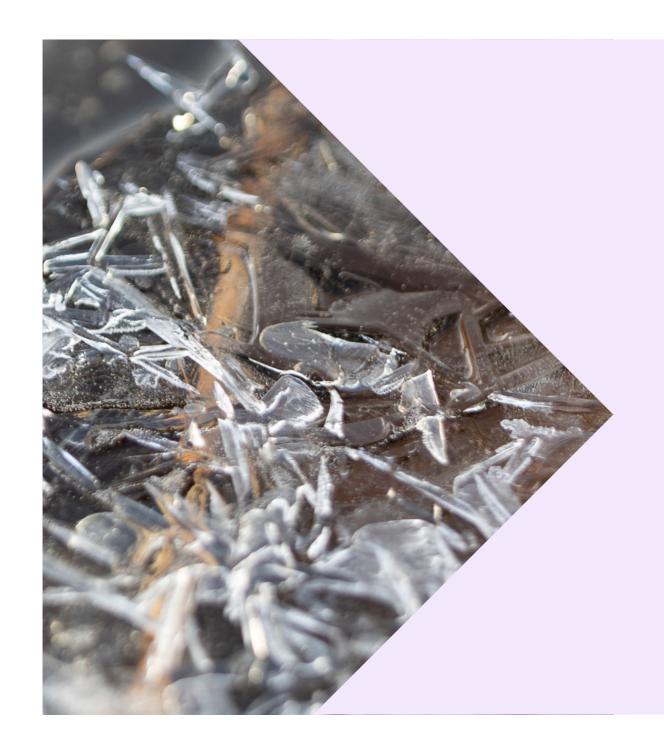
→ Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 



E

# **Environmental** information

→	Climate change	31
<b>→</b>	Biodiversity and ecosystems	35
<b>→</b>	Resource use and circular economy	38

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

→ Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices

## Climate change

# Material impacts, risks and opportunities related to climate change mitigation and adaptation

Impacts	Direction of impact	Risks and opportunities for Pohjolan Voima	Management
Climate change mitigation/Clean energy production			
Carbon-neutral production contributes to the green transition and an increase in carbon-neutral production reduces the company's own greenhouse gas emissions (Scopes 1 and 2).	Positive	Opportunity: Carbon-neutral production promotes acceptability, business in the long term, and access to funding and partners	Pohjolan Voima has set targets for the share of carbon-neutral production.
Climate change mitigation/Climate			
Pohjolan Voima's own operations cause greenhouse gas emissions that warm the climate (Scopes 1 and 2), as well as biogenic carbon dioxide emissions.	Negative	$\mbox{\bf Risk}: A failure to reduce greenhouse gas emissions in accordance with the target would jeopardise the acceptability of the operations and make it more difficult to obtain funding. In addition, the regulation of wood fuel emissions and requirements on the limitation of biogenic \mbox{CO}_2 will be made stricter, which will affect the acceptability of combustion.$	<ul> <li>Pohjolan Voima has set targets for the share of carbon-neutral production.         In accordance with the strategy, fossil fuels and peat are only used as startup and backup fuels to ensure the security of supply, taking into account the market situation.     </li> <li>Changes in the operating environment are monitored and anticipated.</li> <li>The possibilities of reducing combustion by means such as the recovery of waste heat will be explored.</li> <li>The opportunities to recover CO<sub>2</sub> will also be monitored.</li> </ul>

## Pohjolan Voima's sustainability targets

	Target 2027	Target 2025	Actual 2024	Actual 2023	Actual for the benchmark year 2020
Share of carbon- neutral electricity production	SBT	99%	99% (target 98%)	99% (target 97%)	96%
Share of carbon- neutral heat production	SBT	85%	89% (target 84%)	90% (target 83%)	65%

	Target 2025-2027	Actual 2024	Actual 2023	Actual 2020
Reducing the use of peat	80%	83% (target 75%)	81% (target 70%)	34% (target 20%)

## **Progress towards the targets**

In 2024, Pohjolan Voima achieved

its carbon neutrality target:

- 99% of the electricity production was carbon neutral.
- > 89% of the heat production was carbon neutral.

In addition, the use of peat was reduced by 83% from the 2019 level.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

→ Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# Identification and assessment of material impacts, risks and opportunities

The material impacts, risks, and opportunities related to climate change have been identified in the double materiality assessment described in the section

Material sustainability impacts, risks and opportunities.

Climate change and climate change adaptation are part of the regular risk assessments both at the group level and for each function.

In 2023, Pohjolan Voima prepared a thematic risk report on climate change, examining the impacts of climate change by 2050 from the perspective of Pohjolan Voima's production of hydropower, thermal power, and nuclear power. The assessment focused in particular on the physical risks of climate change in accordance with the classification of the Taxonomy Regulation.

## Operating principles

In its environmental and energy efficiency policy, Pohjolan Voima is committed to reducing its negative impact on climate change by increasing the share of carbon-neutral production. A target has also been set for reducing the use of peat. The impacts of climate change on the operations are identified and measures for adapting to them are defined in connection with the risk assessment process. In 2024, Pohjolan Voima started the process of committing to the Science Based Targets initiative. The Responsible Supplier Code of Conduct requires suppliers to minimise their negative climate impacts.

#### Measures

# Climate change mitigation – clean energy production and climate

Pohjolan Voima has set targets on the increasing of carbon-neutral electricity and heat production. In addition, Pohjolan Voima started the process of committing to the Science Based Targets initiative in 2024. However, an actual transition plan for climate change mitigation has not been prepared yet. The transition plan is one of Pohjolan Voima's sustainability development projects for 2025.

The production capacity of carbon-neutral electricity is increasing, as the share of nuclear power and hydropower among energy sources has increased. Regular electricity production of the Olkiluoto 3 nuclear power plant unit of Teollisuuden Voima, a joint venture of Pohjolan Voima, started on 16 April 2023, increasing the carbon-neutral capacity. The Olkiluoto nuclear energy plant annually produces about 30% of Finland's electricity, and as a producer of carbon-neutral energy, it has a major impact on Finland's climate change mitigation efforts and emission reduction targets.

Pohjolan Voima's target for the 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. In 2024, the use of peat decreased by 83% compared to 2019. A total of 1.54 TWh of peat was used during the benchmark year 2019. In 2024, the use of peat amounted to 0.26 TWh.

At the end of 2024, a flue gas heat condenser plant was completed in connection with the Porin Prosessivoima power plant. It produces district heat from the waste heat of the power plant's flue gas.

The investment will improve energy efficiency and reduce fuel consumption by 15%. Carbon dioxide emissions from the region's district heat production will decrease by 1,000 tonnes a year. In 2024, other studies on the possibility of reducing combustion by recovering waste heat were also carried out by several production companies. In addition, the opportunity to recover  $\text{CO}_2$  was monitored and the first preliminary study on the topic was started.

At the Kymin Voima power plant, net electricity and minimum power applications were introduced for a boiler. These improve the power plant's adjustability and enable more energy-efficient use of fuels.

# Climate risk reporting based on the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD)

Pohjolan Voima publishes a report based on the TCFD recommendations on its climate change risks.

#### Governance and strategy

Pohjolan Voima's Board of Directors ultimately approves the Group's strategy, sustainability policies, and sustainability programme, including climate matters. The Corporate Executive Team prepares proposals for decisions for the Board of Directors and oversees the development and implementation of corporate sustainability. In Pohjolan Voima's Corporate Executive Team, the Group President and CEO is responsible for environmental matters. The identification of climate and environmental effects and risks is an integral part of the operations of all subsidiaries. The thematic risk report on climate change realised in 2023 was discussed and approved by Pohjolan

Voima's Corporate Executive Team and the Audit and Financing Committee.

One of the sustainability development projects for 2024 was to include the assessment of sustainability risks and opportunities as part of the annual risk assessment and strategy process. The management of sustainability, including climate matters, is comprehensively described in section Government of sustainability and strategy.

#### Identified risks and their management

In 2023, Pohjolan Voima produced a thematic risk report on climate change, which examined the impact of climate change by 2050 from the perspective of Pohjolan Voima's hydropower, thermal power, and nuclear power production. The assessment focused in particular on the physical risks of climate change according to the classification of the EU Taxonomy Regulation.

Most of the climate risks related to Pohjolan Voima's hydropower, thermal power, and nuclear power production are chronic and related to temperature, water and their derivative risks. The identified key risks for the different production types are changes in rainfall and hydrological variation for hydropower, temperature change and its impact on the demand for district heat, electricity and cooling energy for thermal power, and warming of cooling water due to rising temperatures and the flood risk caused by rising sea levels for nuclear power. The most significant risk types and their management are described in the following table:

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

## **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

## **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

→ Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices

# The most important risk types related to climate change and their management actions

Risk/impact	Description	Description
Hydropower		
Hydrological variation	Annual variation will increase further, making it more difficult to predict regulation. The predictability of hydropower production will be reduced.	Adapting regulation practices to input flows. Refining forecasts and surveying additional storage and machinery capacity.
Hydrological variation	High flows during the ice cover season will cause the ice covers of rivers to break, which will lead build-ups of ice. The increased flows will delay the formation of the ice cover, increasing the risk of frazil ice.	Surveying areas with a high risk of ice build-up and flooding caused by frazil ice, as well as determining measures on a case-by-case basis.
Hydrological variation	Changes in flooding risk.	Land use planning, flood protection, surveying of additional storage and machinery capacity.
Thermal power		
Changes in temperature	The district heating season will become shorter, but demand for cooling energy and electricity will increase.	Adapting production, increasing balancing power, energy efficiency.
Changes in temperature	The harvesting of forest biomass will become more difficult as there will be less frost and the load-bearing capacity of the forest floor and forest roads will deteriorate. On the other hand, forests will grow more quickly and carbon storages will increase provided that forest decay is avoided. The likelihood of pests and forest decay will increase.	Fuel storage, back-up fuels.
Nuclear power		
Changes in temperature	Seawater becoming too warm for optimal cooling.	Capacity limitation if the seawater temperature becomes too high.
Rising sea level	The likelihood of coastal flooding will increase.	Coastal flooding has been taken into account in legislation and planning.
Side effects of climate change/ transitional risks		
Regulation	Legislation to prevent climate change will be tightened: hydropower compensation requirements will be especially likely, and in the case of thermal power, there may be limitations to the use of forests and wood-based fuels.	Participation in law drafting.
Emissions trading	Stricter emissions trading.	Monitoring the market and acting in a timely manner, negotiating long-term fuel supply contracts, identifying new fuel options, exploring carbon capture.

Fuels in electricity and heat production	2024	2023
Non-renewable fuels, mass/volume		
Solid recovered fuels, SRF (fossil), t	19,963	24,981
Peat, t	50,535	70,070
Coal, t	65	86
Natural gas, million m <sup>3</sup>	4	2
Fuel oil, t	960	1,237
Loaded nuclear fuel, t		
Others, t	64	71
Renewable fuels, mass		
Biomass, t	1,264,467	1,611,686
SRF (bio), t	29,945	37,471
Non-renewable fuels, GWh		
SRF (fossil), GWh	86	108
Peat, GWh	154	202
Coal, GWh	0	1
Natural gas, GWh	43	21
Fuel oil, GWh	28	15
Spent nuclear fuel, GWh	0	0
Others, GWh	20	16
Renewable fuels, GWh		
Biomass, GWh	2,889	3,639
SRF (bio), GWh	128	162

## POHJOLAN VOIMA

### **ANNUAL REPORT 2024**

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

→ Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices

	Retrospective		/e
	2023	2024	% N / N-1
Scope 1 -GHG emissions			
Gross Scope 1 GHG emissions (tCO₂eq)	157,740	136,901	87%
Percentage of Scope 1 GHG emissions from regulated emission trading schemes (%)	85	87	102%
Scope 2 GHG emissions			
Gross location-based Scope 2 GHG emissions (tCO <sub>2</sub> eq)	895	810	90%
Gross market-based Scope 2 GHG emissions (tCO <sub>2</sub> eq)	11,706	14,029	120%
Total GHG emissions			
Total GHG emissions (location-based) (tCO₂eq)	158,635		
Total GHG emissions (market-based) (tCO <sub>2</sub> eq)	169,446		
GHG intensity per net revenue	2023	2024	% N / N-1
Total GHG emissions (location-based) (Scope 1 and 2) per net revenue (tCO $_2$ eq/Monetary unit)	603	579	96%
Total GHG emissions (market-based) (Scope 1 and 2) per net revenue (tCO <sub>2</sub> eq/Monetary unit)	644	635	98%
Net revenue used to calculate GHG intensity	262,933	237,780	

577,033 596,423

839,964 834,203

Net revenue (other)

Total net revenue (in financial statements)

Wood-based biogenic CO <sub>2</sub> emissions 2024	2024
Wood-based biogenic CO <sub>2</sub> emissions t/CO <sub>2</sub> (Scope 1)	1,152,300

## Principles for the compilation of the metrics

Set in 2020, Pohjolan Voima's carbon neutrality and peat reduction targets apply to the subsidiaries, associated companies and joint ventures. The figures are reported as consolidated figures. The figures of the subsidiaries are taken into account in the calculations with a 100% share. The figures for the associated company Alholmens Kraft and the joint venture Teollisuuden Voima are taken into account in the ratio of energy delivered to Pohjolan Voima.

The subsidiaries and the associated company Alholmens Kraft are taken into account in the indicator on the decrease in the use of peat as consolidated figures.

Teollisuuden Voima and Alholmens Kraft are not included in Pohjolan Voima's Scope 1 and Scope 2 greenhouse gas emissions. Instead, they are included in Scope 3 emissions in category 1, Products and services delivered. The associated companies and joint ventures are not included in the fuel table or the calculation of wood-based biogenic carbon dioxide emissions either. Pohjolan Voima has changed the consolidation calculation method for the 2024 figures. The figures for the previous years have been corrected to correspond to the new consolidation method.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

→ Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

## **Biodiversity and ecosystems**

## Material impacts, risks and opportunities related to biodiversity

Impacts	Direction of impact	Risk and opportunities for Pohjolan Voima	Management
Direct impact drivers of biodiversity loss/Biodiversity and status of aquatic organisms			
Pohjolan Voima's operations influence biodiversity in many ways. Due to the damming of rivers and the regulation of water, hydropower deteriorates the state of fish and aquatic organisms. The aim is to restore aquatic organisms by complying with the fish management obligations and by developing fishway solutions. Improving water quality is also one of the key ways to improve the status of aquatic organisms. Thermal power plants use wood-based fuels such as by-products from forest industry. Fuels coming directly from the forest are also waste fractions that cannot be utilised by the forest industry. However, the commercial use of forests deteriorates the biodiversity of forest species. The harvesting of wood fuel affects the biodiversity of forests. The thermal power companies still use small amounts of peat as fuel even though the use of peat is being systematically reduced. Pohjolan Voima does not have its own peatlands, except for the associated company Alholmens Kraft. The drainage of marshes and the harvesting of peat affect the marshland environment.	Negative	Risk: Increasing biodiversity regulation increases costs and weakens business conditions. Regulation may cause restrictions on the use of hydropower and make the acquisition of wood fuel and other fuels more difficult.  Risk: If the negative impacts are not systematically minimised, reputational damage will occur.	The operating conditions can be influenced by active communication about the possibilities of reconciling hydropower with biodiversity. The reputation and the operating conditions can be improved by finding solutions to preserve biodiversity with the stakeholders.  To improve the status of aquatic organisms, Pohjolan Voima participates in cooperation projects in its operating area to produce more research data to be used as the initial data for the measures, to plan and implement bypass solutions, to develop regulation, and to improve water quality, for example. An extensive shared vision on the lijoki river is being implemented, and collaboration concerning migratory fish takes place in the Kemijoki river.

## **Pohjolan Voima's sustainability targets**

	Target 2027	2024	2023	2022
Implementation of the biodiversity programme measures	100%	Actual 80% (target 100%)	Actual 80% (target 100%)	-

### **Progress towards the targets**

Pohjolan Voima's biodiversity programme was introduced at the beginning of 2022. The measures to be taken are determined annually. The success of the biodiversity programme is measured by the share of implemented measures. A total of 80% of the planned measures were implemented in 2024 and 80% in 2023. The implementation of the unfinished measures will continue in 2025. One of the key targets is to develop the metrics for the impacts of the biodiversity efforts.

# Identification and assessment of material impacts, risks and opportunities

The material impacts, risks, and opportunities related to biodiversity have been identified in the double materiality assessment described on section Material sustainability impacts, risks and opportunities. The affected stakeholders were taken into account in the materiality assessment by asking the opinions of the mayors of the power plant locations and representatives of non-governmental organisations on Pohjolan Voima's impacts.

Biodiversity is part of the regular risk assessments both at the Group level and for each function.

The most significant impacts of Pohjolan Voima on biodiversity and ecological status are related to the

construction of power plants, the acquisition of fuels and the generation of greenhouse gas emissions, as well as the impacts on the aquatic environment and migratory fish. In addition, indirect impacts arise from the operations of the supply chains and partners. The significance of the indirect impacts on the operations has also been surveyed in the thematic risk report on climate change, for example.

The most significant negative impacts of hydropower production on nature involve the fact that migratory fish are unable to pass through the constructed dams, and ecosystems both upstream and downstream of the power plant are affected by the regulation of water. The regulation causes fluctuation of the water level and flow as the water flowing from the higher level to the lower level is converted into energy by diverting it through the plant's turbine. However, this does not decrease the water volume or cause any contamination of the

In the case of thermal power, the most significant negative impacts involve the use of wood fuel and the transport of fuels. The extraction and production of nuclear fuel cause biodiversity impacts in the country of production, and the heat load from the cooling water of a nuclear power plant affects aquatic ecosystems.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

→ Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

#### Operating principles

In its environmental and energy efficiency policy, Pohjolan Voima undertakes to minimise its impacts on biodiversity by setting targets and implementing measures to promote biodiversity. Efforts are made to reduce the effects of hydropower by measures such as developing the natural cycle of migratory fish through comprehensive cooperation. On the other hand, wood-based fuels must meet the sustainability criteria. Pohjolan Voima's long-term biodiversity vision is to understand the most important biodiversity impacts and moving towards net positivity. The skill set will be improved and targets updated as more information is obtained.

Pohjolan Voima prepared its first biodiversity programme in 2022. In 2024, it was incorporated into the sustainability programme. The sustainability programme is described in more detail in Section/Material impacts, risks and opportunities of sustainability. The biodiversity targets and measures are annually revised.

#### Biodiversity programme

Long-term targets of Pohjolan Voima Group:

Considering biodiversity in everything we do Indicators for the effectiveness of the work on biodiversity.

#### Long-term targets for hydropower:

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

#### Long-term targets for thermal power:

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

#### Measures

Direct impact drivers of biodiversity loss – Biodiversity and status of aquatic organisms

#### Developing the natural cycle of migratory fish

A hydraulic fishway, Fishheart, has been installed at Raasakka, the lowermost of PVO-Vesivoima Ov's power plant in the lijoki river, for the 2023-2025 period. The functionality of Fishheart has been actively developed and improved in cooperation with the supplier. A control fence for smolt and a downstream migration route have been in operation at the topmost powerplant, Haapakoski, since 2022. The functionality of the downstream migration route and control fence has been annually developed through collaboration. With Fishheart and the downstream migration route at the Haapakoski rapids, an assisted natural cycle of migratory fish has been started in the lijoki river. Fish that pass through Fishheart are moved to nursery areas above Haapakoski. The passage of smolts aiming for the sea arriving at the Haapakoski downstream migration route is monitored and their chances of survival are improved, and fish are moved downstream below Raasakka.

PVO-Vesivoima owns the lowermost power plant in the Kemijoki river at Isohaara. The owner of the two current fishways at the Isohaara power plant is the municipality of Keminmaa. PVO-Vesivoima aims to develop the migratory fish solutions at Isohaara as a whole. The company has sought to promote the natural cycle of migratory fish by surveying different natural and hybrid fishway solutions for the Isohaara power plant.

PVO-Vesivoima owns 50% of Voimalohi Oy, which manages the breeding, stocking and transfer of fish required to meet PVO-Vesivoima's fish management obligations and implements the measures laid down in PVO-Vesivoima's strategy on migratory fish. Voimalohi prepares river-specific operational programmes for the lijoki and Kemijoki rivers in accordance with the shareholders' migratory fish strategy. The programmes guide the future progress of the migratory fish efforts.

PVO-Vesivoima owns 50% of Tornionlaakson Voima Oy, which has power plants in the Tengeliönjoki river. Two fishways will be built in cooperation with other parties at the Portimokoski power plant. The first, natural bypass route was completed in the autumn of 2024.

To maintain the fish stocks of the Kemijoki and lijoki water systems and the adjacent sea area, approximately 3.2 million fry were planted in 2024. PVO-Vesivoima's fish management obligations also include the transfer of river lampreys in both the lijoki and Kemijoki rivers. The river lamprey transfer obligation has been implemented in lijoki, but challenges in the rising of river lampreys have been encountered in Kemijoki. A study on the environmental DNA of the river lamprey was started in 2024 to identify river lamprey breeding areas and determine the underlying reasons for the rising challenges. Using Fishheart to catch river lampreys for transfer has also been studied, and the results are being monitored.

In July 2024, the Regional State Administrative Agency for Northern Finland issued its decision on applications for amendments of the stocking and fish stock management obligations in the Kemijoki and lijoki rivers. The Lapland Centre for Economic Development, Transport and the Environment submitted the applications for amendments in 2017. The applications included both additions to the current obligations and completely new requirements. With its decisions, the Regional State Administrative Agency approved some of the requests and rejected others. The decisions are not final, and PVO-Vesivoima, the Lapland Centre for Economic Development, Transport and the Environment, and several stakeholders have appealed the decisions to the Vaasa Administrative Court. The request for a judicial review by PVO-Vesivoima concerns multiplied planting obligations, which is practically impossible to realise. PVO-Vesivoima does not oppose the building of fishways.

In 2017, Pohjolan Voima and Metsähallitus applied for a permit to build fishways at Raasakka. Stakeholders submitted a request for a judicial review concerning a permit granted by the Regional State Administrative Agency for Northern Finland in 2020. In October 2024, the Supreme Administrative Court issued its decision regarding the matter: it did not

grant the stakeholders leave to appeal. PVO-Vesivoima has continued its migratory fish collaboration in lijoki. Results of and lessons learned from the Fishheart solution at Raasakka and the downstream migration route at Haapakoski are being collected. In addition, a project on the modelling of the old riverbed at Raasakka investigates the possibility to use the riverbed as a spawning area and a route for migratory fish. Alternative fishway solutions are being reconsidered with stakeholders in the light of research data and experiences gained.

## Boosting stakeholder engagement in hydropower

PVO-Vesivoima participates in the implementation of the lijoki river vision 2030. The vision includes, among other things, targets for improving the natural cycle of migratory fish and freshwater pearl mussels, as well as improving water quality to an ecologically good level. The second period of the lijoki agreement used to implement the lijoki river vision 2030 runs from 2024 to 2028, and the participants are municipalities in the area, PVO-Vesivoima, Metsähallitus and the North Ostrobothnia Centre for Economic Development. Transport and the Environment. The measures include collaborative development of the old riverbed at the Raasakka power plant into a nursery area. The options are being explored through modelling, and a working group to monitor the work has been established. The ioint project for the development of the old riverbed at Raasakka has also improved the flow conditions of the old riverbed and developed its recreational use. The Lohi liiokeen 2 (Salmon to liioki 2) project continues the development of the Haapakoski downstream migration route, the monitoring of smolts, transfers, and the planting of fry in the lijoki river.

In the Kemijoki river, PVO-Vesivoima participates in a Kemijoki-Ounasjoki migratory fish working group led by the Regional Council of Lapland.

# Promoting biodiversity on lands owned by PVO-Vesivoima

PVO-Vesivoima has started the development of a restored wetland area in a former peat production area at Lampisuo, which it owns. According to the plan,

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

→ Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

the wetland restoration area will be built in 2025. It will provide a resting and nesting place for migratory birds.

In 2024, PVO-Vesivoima surveyed the nature and invasive alien species in the land areas it owns. Based on the survey results, the company plans to retain four areas intact to preserve biodiversity. In addition, the company has assigned land at Nokianvirta for nature conservation purposes. A hardwood stand is being protected there.

## Measures to promote the utilisation of by-products and the circular economy in thermal power production

The possibilities of reducing combustion by means such as the recovery of waste heat were explored in 2024. In 2024, Porin Prosessivoima constructed a fuel gas heat condenser plant in connection with its biofuel plant in the Kaanaa industrial area of Pori. The plant was in full production operation by December 2024. The total investment amounted to some €16.5 million.

The flue gas heat condenser plant produces district heat from the flue gas waste heat of the power plant for the Pori Energia district heating network. The investment has improved energy efficiency and reduced fuel demand and emissions. The plant reduces  $\mathrm{CO}_2$  emissions from district heat production in the Pori area by approximately 1,000 tonnes per year. The plant harnesses the energy contained in flue gases from biofuel. By energy-efficiently recovering the heat from the gases going into the chimney stack, it is possible to reduce the power plant's fuel consumption. This means that the power plant can completely stop using peat as a fuel.

Rauman Biovoima carried out a feasibility study on the conversion of an old disused rock oil storage facility into a geothermal heat storage facility. With a geothermal heat storage facility, waste heat from the area could be utilised more efficiently, which would also balance the fluctuation of the boilers' load and optimise the use and production of solid fuels.

Kaukaan Voima carried out a preliminary study on the possibilities of utilising waste heat from the Kaukaa plant in the production of district heat. The utilisation of waste heat would improve energy efficiency and reduce emissions.

Kymin Voima completed a feasibility study on flue gas heat recovery plant in connexion to the power plant. Heat recovery would improve fuel efficiency and produce district heat from waste heat.

In 2024, Pohjolan Voima carried out its first preliminary study on carbon capture. The aim was to examine the feasibility and cost structure of carbon capture using the oxyfuel combustion technology at the bioenergy plant. The energy and mass balance of the production of electrofuel was calculated, and the cost structure and possibility to integrate the solution to the power plant processes were assessed. The study was based on published research data and information from equipment suppliers.

The production companies implemented energy efficiency measures in accordance with their energy efficiency agreements. The measures implemented by the Pohjolan Voima subsidiaries in 2024 saved a total of 104 GWh of electricity, heat, and fuels during the year.

# Development of metrics, training and cooperation

The online sustainability training course for the staff and key partners was updated, including biodiversity in its scope. The employees completed the training in the autumn of 2024.

To develop the biodiversity metrics, a study was commissioned to assess Pohjolan Voima's impact on biodiversity using the Science Based Targets for Nature procedure. The study will also investigate whether commitment to the Science Based Targets for Nature initiative is possible. The report will be completed in early 2025.

To promote biodiversity in thermal power, Pohjolan Voima's employees participated in Adato Energia's nature management training related to biomass procurement. The aim was to increase understanding of how biodiversity should be taken into account in the procurement of wood-based fuels. The Group also prepared an audit template which allows the production companies to audit suppliers supplying wood fuels. In addition, wood-based fuel certification volumes were investigated.

Pohjolan Voima participates in the three-year UUMA5 programme launched in the spring of 2024. UUMA is a cooperation forum that aims to promote earthworks using recovered materials. It provides a cooperation platform for actors in the field of infrastructure and earthworks. The programme participants include several cities, the Finnish Transport Infrastructure Agency, associations, contractors, industrial enterprises, waste management companies, and consulting firms. Pohjolan Voima is involved in a project to develop and promote the reuse of ash.

#### Principles for the compilation of the metrics

Pohjolan Voima's biodiversity programme is part of the Group's sustainability programme and applies to the Group's hydropower and thermal power operations. The measures to be taken under the biodiversity programme are decided annually and their implementation is assessed at the end of each year.

Pohjolan Voima has its own hydropower plants in the lijoki river: Raasakka in Ii, Kierikki, Maalismaa and Haapakoski in Oulu, as well as Pahkakoski, which covers areas in both Ii and Oulu. The power plants in the Kemijoki river are Isohaara in Kemi/Keminmaa and Jumisko in Kemijärvi. The Melo hydroelectric power plant in Nokia is located in the Kokemäenioki river.

Pohjolan Voima's thermal power plants are Kaukaan Voima in Lappeenranta, Kymin Voima in Kouvola, Porin Prosessivoima in Pori, and Rauman Biovoima in Rauma. The thermal power plants are located in industrial areas. The power plants are listed in more detail under Business model and value chain.

Pohjolan Voima's power plants are not located in any areas that are sensitive from the biodiversity perspective, and no negative impacts on the terrestrial environment have been identified.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

→ Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

#### Resource use and circular economy

# Material impacts, risks and opportunities related to resource use and the circular economy

Impacts	Direction of impac	t for Pohjolan Voima	Management
Waste/Management and recy	cling of operational w	aste	
Pohjolan Voima's largest waste streams are fly ash and bottom ash generated in thermal power plants. They are used as ash fertiliser and in earthworks, for example.	Positive	Opportunity: Management of the utilisation of ash provides cost benefits compared to landfilling	Searching for potential uses for ash.
Targ	et 2027 2	024 2023	2022

Actual 112%

(target 100%)

#### Progress towards the targets

Utilisation of

by-products

The by-product utilisation target is 100%. The achieved level in 2024 was 112%. The five-year average for the recovery of by-products was 100%. 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%.

100%

# Identification and assessment of material impacts, risks and opportunities

The material impacts, risks, and opportunities related to resource use have been identified in the double materiality assessment described in section Material sustainability impacts, risks and opportunities.

The environmental aspects and risks of the production companies have been assessed according to requirements of the ISO 14001 environmental management system. As part of the identification of the aspects and risks, the generation and processing of waste as well as resource efficiency have been taken into account. In addition, environmental risks related to waste have been assessed in connection with the environmental permit processes for the thermal power plants. The environmental permits

include permit provisions relating to waste. Stakeholders have been able to comment on the environmental permits of the plants during the permit processes. Any comments from stakeholders are collected and processed in accordance with the requirements of ISO 14001.

Actual 109%

(target 100%)

## Operating principles

Actual 96%

(target 100%)

Dieke and apportunities

In its environmental and energy efficiency policy, Pohjolan Voima undertakes to safely utilise, process and dispose of the by-products and waste generated in its operations. Efforts are made to minimise the amount of non-hazardous and hazardous waste. Significant amounts of fly and bottom ash are generated during the combustion that is part of the thermal power plant production process. Pohjolan Voima aims to utilise all the generated ash. Waste from the maintenance and dismantling of power plants is utilised as efficiently as possible.

#### Measures

#### Waste - management and recycling of operational waste

The most significant by-products from Pohjolan Voima's production are fly ash and bottom ash from combined heat and power plants. The target 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.

Expansion of the utilisation of ash generated in combined heat and power plant processes is being investigated, as the use of ash saves natural materials. Already today, 100% of the ash produced by the power plants is being utilised, but new circular economy opportunities are constantly being sought. Pohjolan Voima participated in the three-year UUMA5 collaboration forum, which was launched in 2024 and aims to promote the reuse of recycled materials.

In 2024, 48,427 (61,763) tonnes of fly ash from flue gas scrubbing in the combustion process of the power plants and bottom ash from boilers were generated. 112% (96%) of by-products was utilised in earthworks and as forest fertiliser. The ash can be temporarily stored and used later, which means that the recovery rate varies between a little over and under 100%. The five-year average for the recovery of by-products was 100%.

In previous years, significant amounts of waste have been generated from the dismantling of power plants. The most recent plant to be dismantled was the Laanilan Voima power plant in Oulu in 2022–2023. However, no waste was generated from the dismantling of Laanilan Voima in 2024. Systematic waste management and collection practices are followed with the help of partners in the operating environment of the units.

Most of the other waste is demolition waste related to the maintenance of the power plants or other waste generated during the operation of the power plant. The total amount of waste was 604 tonnes, and the waste recycling rate was 82%.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

→ Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

#### Waste and by-products

Type of waste and disposal

Type of waste and disposal [metric tonnes]	I	2024	2023
Other waste	Recycled waste (external)	119	8,636
	Recycled waste (internal)	250	7,347
	Reuse of waste	9	0
	Incinerated waste (with energy recovery)	104	133
	Incinerated waste (without energy recovery)	108	0
	Landfill waste	0	118
Total other waste		588	16,235
Hazardous waste	Recycled waste (external)	5	88
	Recycled waste (internal)	0	0
	Reuse of waste	0	0
	Incinerated waste (with energy recovery)	8	2
	Incinerated waste (without energy recovery)	2	19
	Landfill waste	1	36
Total hazardous waste		16	145
Total		604	16,380
Total of reused, recycled or incinerated waste		494	16,207
Total disposals		110	173
Hazardous waste (%)		3	1
Recycling rate (%)		82	99
Recycling rate of non-hazardous waste (%)		82	99
Recycling rate of hazardous waste (%)		84	62

Materials included in waste	2024	2023
Main materials included in waste (e.g. critical substances)	The majority of waste is waste produced in the normal operation of the power plant such as metal, energy and mixed waste, and used lubricating oils.	The majority of waste is demolishing waste such as concrete of waste produced in the normal operation of power plant such as metal, energy and mixed waste, and used lubricating oils.
Waste streams relevant to industry and operations	The table does not include fly ash and bottom ash produced in thermal power production. The ashes are not necessarily reused or disposed immediately but some of the ash can be put into intermediate storage. In 2024, the total volume of ash was 48,427 tonnes. Their recovery rate was 112%.	The table does not include fly ash and bottom ash produced in thermal power production. The ashes are not necessarily reused or disposed immediately but some of the ash can be put into intermediate storage. In 2023, the total volume of ash was 61,763 tonnes. Their recovery rate was 96%. The recycled waste external and internal include the waste from the demolishing of the Laanilan Voima power plant, which was the most significant source of waste in 2023. The demolishing waste was almost completely reused.

#### Quantity and recovery rate of by-products, i.e. the amount of fly ash and bottom ash 2024 2023 61,763 Amount of by-products generated, t 48,427 Used in earthworks, t 46,879 49,231 6,515 Used as fertiliser, t 9,967 1,049 Other, t 0 96 112 Reuse.%

#### Principles for the compilation of the metrics

Waste volumes include waste generated by Pohjolan Voima's subsidiaries, waste sent directly to waste management and waste removed from intermediate storage during the year. The quantity of by-products generated is the amount of fly ash and bottom ash generated during the year. The quantities used in earthworks and as fertiliser, as well as the recovery rate calculation, include ash directly from the process, and ash transferred from intermediate storage for recovery. 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%. In the past, Pohjolan Voima's reported by-product and waste figures also included waste from the associated companies and joint ventures, but the reporting system has been changed from the previous year to only include the figures of the subsidiaries. The data for the subsidiaries is reported as 100% figures.

The ash quantities are collected from the weighing reports. The service providers submit the waste quantities and information about waste treatment.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

Environmental information

→ Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices



# Social information

>	Own workforce	41
---	---------------	----

→ Affected communities 46

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

Environmental information

→ Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

#### Own workforce

#### Material effects, risks and opportunities related to own workforce

Impacts	Direction of impact	Risks and opportunities for Pohjolan Voima	Management
Working conditions/Wellbeing of employees			
Pohjolan Voima's supportive work atmosphere and sense of community keep the employees committed and sustain their welfare.	Positive	Opportunity: Committed employees who feel well will help to achieve the company's strategic targets.	Operations in line with the values. Involving the personnel in activities such as work on the strategy. Active monitoring of employee satisfaction, and a development programme based on the results. Flexible ways of working. Regular performance reviews and joint events.
Equal treatment and opportunities for all/Adequate wages and equal pay			
Pohjolan Voima's pay system is transparent. The employer treats employees fairly in terms of pay and applies equal pay criteria. Equal wages are paid for work of equal value to everyone. All employees have the same, consistent, and transparent performance bonus targets.	Positive	Opportunity: Good employee satisfaction and commitment.	Comparison of wages is based on the international job evaluation system (IPE). Rewarding encourages good performance.
Equal treatment and opportunities for all/An inspiring workplace for top talent			
In Pohjolan Voima, employees are treated equally and fairly. The employees have rewarding and sufficiently challenging work duties. Performance reviews are held regularly and the employees are encouraged to train themselves. There is an internal recruitment policy for all positions.	Positive	Opportunity: The employees are enthusiastic about developing their own activities and the company's operations. Competence and capabilities are growing. The competence of the personnel is multidisciplinary.	Regular performance reviews, extensive development opportunities, personal training plans. Strategic capabilities, and development plans. Recruitment policies.

## Pohjolan Voima's sustainability targets

	Target 2027	2024	2023	2022
Personnel satisfaction index	Defined annually	Actual 95 (target 80)	Actual AAA (target AAA)	Actual AAA (target AAA)

#### Progress towards the targets

The employee satisfaction index is annually determined. The target was clearly exceeded in 2024, and it has also been reached in previous years.

# Identification and assessment of material impacts, risks and opportunities

The material impacts, risks, and opportunities related to own workforce have been identified in the double materiality assessment described in section Material sustainability impacts, risks and opportunities.

#### Operating principles

Pohjolan Voima's operations are based on a Group-wide sustainability attitude. The sustainability of Pohjolan Voima's own workforce is guided by applicable legislation, occupational safety and health regulations, the collective agreement for senior employees by the Energy Industry, and regulations on labour standards based on the UN Global Compact principles, as well as the values, Group policies, and guidelines approved by the parent company's Board of Directors.

In terms of own workforce, the key operating principles are enshrined in the personnel policy, which is based on trust, ethical principles, accountability, and responsibility.

The sustainability action plan acts as the framework for Pohjolan Voima's annual sustainability development measures. The sustainability action plan is approved annually by Pohjolan Voima's Board of Directors. Employees are also consulted when determining the sustainability development measures.

#### Personnel wellbeing

In line with the personnel policy, Pohjolan Voima is committed to promoting workplace wellbeing and occupational safety and health. By investing in workplace wellbeing, Pohjolan Voima aims to ensure that there is a proper balance between work and leisure, the work progresses smoothly, the employees recognise the relevance of their work, and everyone maintains their working capacity. Pohjolan Voima supports its employees in maintaining their working capacity and prevents occupational illnesses and injuries by taking preventive measures with regard to workplace wellbeing.

Pohjolan Voima's HR management aims to improve the employee experience. An independent personnel survey is annually commissioned to study the employee experience in Pohjolan Voima.

#### Adequate wages and equal pay

Pohjolan Voima uses the collective agreement for senior employees by the Energy Industry, and all employees except for the Group Executive Team are included in its scope. Pohjolan Voima is committed to respecting the provisions of the collective agreement.

Remuneration practices are part of sustainable operations, and the principles of sustainable operations are described in the code of conduct. Employees are consistently, fairly, and equally remunerated. The remuneration practices are transparent and open.

#### Inspiring workplace for top talent

All operations are based on Pohjolan Voima's jointly defined values of skilfully, reliably, together. The cornerstones of Pohjolan Voima's personnel policy are diversity, non-discrimination, the right to freedom of

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

→ Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

association, and the right to privacy. Pohjolan Voima treats all employees equally and consistently and does not allow any discrimination or preferential treatment based on age, gender, sexual orientation, disability, ethnicity or descent, political opinions, or any other personal characteristics. Pohjolan Voima actively acts against any and all discrimination and harassment of its personnel.

Management, supervisory work and the development of the employees are guided by the personnel policy. Pohjolan Voima's strategy and key strategic skills guide the training and competence development targets for all employees.

#### Other work-related rights

Pohjolan Voima respects internationally recognised human rights within its sphere of influence. The company complies with the law and the internationally recognised UN principles on human rights and labour in all its operations. Pohjolan Voima does not tolerate the use of forced or child labour in any part of its value chain.

# Process for engaging with own workforce and workers' representatives about impacts

Human resource management aims to improve the employee experience. Pohjolan Voima commissions an extensive personnel survey from an independent operator once a year. The aim with the personnel survey is to obtain feedback from the employees on matters such as their own work, the functioning of the work community, cooperation with their immediate supervisor, and their own wellbeing. Everyone can influence the development of the corporate culture through the personnel survey. The results of the personnel survey are used to define the annual development and action plan for the employees' Energetic Attitude focus area. During the preparation of the annual plan, the employees are heard to identify important HR focus areas. In the 2024 personnel survey, the strongest focus areas were equality, the organisation's image, and integrity.

The HR function is responsible for the personnel survey. The HR function is responsible for ensuring that the results are processed at the Group level

and that the results and other matters such as the development areas are taken into account when planning the operations and in related decision-making. The survey results are reviewed with the Board of Directors, Executive Team, employees, and union representatives. The results are also discussed by the occupational safety and health committee. The personnel survey results are one of the indicators for the implementation of the strategy.

Occupational safety and health and general wellbeing are matters for which every Pohjolan Voima employee is responsible in their daily work. The occupational safety and health committee mainly focuses on proactive measures. Any accidents are investigated, and incident and observation reports are processed in accordance with the principles agreed in Pohjolan Voima by the line management and the occupational safety and health organisation. The occupational safety and health committee meets at least once a year. Accidents and their prevention are also discussed at Board meetings and joint events for all employees.

On the basis of Pohjolan Voima's strategy, personnel policy, and capability definition, an annual action plan covering workplace wellbeing, safety, equality, capabilities, and the work community is prepared. The development plans are discussed through ongoing dialogue with employee representatives.

Continuous dialogue meetings between the employer and employee representatives on matters related to the work, working conditions and the status of the personnel are held regularly, at least twice a year. The Group's remuneration principles and matters such as the employer's plans for sectoral allowances under the collective agreement are also discussed with the employee representatives before implementation.

The management and supervisors implement the principles of responsible HR management and the approved management process. A good atmosphere at work, open interaction, trust, and presence form the basis for management and supervisory work. In Pohjolan Voima, every employee has the right to have a personal performance review.

# Processes to remediate negative impacts and channels for own workers to raise concerns

In Pohjolan Voima, the values, and the corporate culture enable and encourage open, and bold discussions. A culture of dialogue and the possibility to submit separate reports are important to ensure that Pohjolan Voima's operations are responsible and compliant with regulations.

In confidential matters and questions, employees can talk to their supervisor or the person responsible for the matter, or to any other person in their immediate work community. Everyone is encouraged to discuss issues related to accountability or compliance, and to raise concerns.

Low-threshold reporting of observations on occupational safety and health, the environment and energy efficiency using observation forms is important. Pohjolan Voima's employees may also report in confidence, through the internal whistleblowing channel, internal violations, any other suspected abuse, any conduct violating Pohjolan Voima's values, or any other inappropriate conduct. All notifications are processed confidentially in accordance with an established procedure. The confidential processing protects the rights of both the whistleblower and the subject of the notification. Pohiolan Voima's employees did not report any observations through the confidential whistleblowing channel in 2024. However, a large number of observations on occupational safety and health, environmental issues, and energy efficiency observations were made. The observations and related remedial measures are regularly discussed at joint

#### Measures

#### Working conditions: Personnel wellbeing

Employee involvement is a well-established operating method for Pohjolan Voima. The employees have been heavily involved in the strategy work and in determining the values according to which they want to work on a day-to-day basis. The values serve as a guideline for management and supervisory work. Employees are also actively involved in the development of the corporate culture.

Every Pohjolan Voima employee is responsible for creating a good work community and maintaining a good atmosphere at work. A sense of community is a key part of wellbeing and Pohjolan Voima's corporate social responsibility, and it is promoted through measures such as monthly joint meetings of the entire personnel. Group-wide dialogue is also promoted through measures such as weekly information events, which address issues of common importance and at the same time strengthen the sense of community.

In Pohjolan Voima, employees are encouraged to visit different locations by, for example, working at a different location for a few days. This allows the employees to work with Group employees from outside their own office, which reinforces the experience of working together and the sense of community.

Flexible working hours, the opportunity to work from home, and appropriate tools support a proper work-life balance. The majority of Pohjolan Voima Group's employees work flexible hours, which allows them to work independent of time and place. For senior officers who do not work flexible hours, flexitime is used.

Pohjolan Voima recognises that flexible working hour arrangements and working from home can cause a feeling of exclusion and loneliness, which is why special attention is paid to boosting the sense of community with the above-mentioned measures, for example. The boosting of communality and working together also aims to prevent the negative effects of workload. Regular discussions with supervisors, self-management training, personal development plans, and their regular monitoring, as well as extensive occupational healthcare services also ease

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

→ Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices

the workload. According to personnel surveys, the experience of the employees of the relevance of their work has increased over the past few years. Since 2024, Pohjolan Voima has increased the opportunities of the employees to feel that their work is relevant and improve their workplace wellbeing by allowing them to do charitable work during working hours. The responsible approach and the strengthening of social responsibility are also reflected as concrete actions in daily life. In 2024, the total volume of charitable work done during working hours was 197.5 hours, or some 1.4 hours per employee.

The results of the 2024 sustainability survey for the employees are described on page 50.

Development actions were defined in the areas of environmental sustainability, social responsibility, and the management of sustainability on the basis of the results of the PeopleImpact sustainability survey.

### **Equal treatment and opportunities for all**

#### Adequate wages and equal pay

Pohjolan Voima uses the collective agreement for senior employees by the Energy Industry, and all employees except for the Group Executive Team are included in its scope. The same conditions apply to those not covered by the collective agreement as to those covered by it. Pohjolan Voima is committed to respecting the provisions of the collective agreement. All employees are paid adequate wages. All employees are covered by social protection against loss of income due to major life events.

Pohjolan Voima uses equal pay criteria and pays equal wage for work of equal value. The wages of senior employees are agreed with the employee and primarily determined on the basis of the work duties. IPE (the International Position Evaluation) system is used to assess the complexity of positions. Every Pohjolan Voima employee has an opportunity to improve their performance and thus through their performance, the profitability of their actions and their own competence make a difference regarding their earnings.

#### Inspiring workplace for top talent

Every Pohjolan Voima employee has the right to a themed performance review at least twice a year. The performance reviews aim at personal development, development of the work community, success in one's work and the achievement of one's goals. The discussions clarify the employees' duties, assist them in prioritising and managing their workload, as well as support their wellbeing and the achievement of their goals. Each employee's personal career goals and skills in relation to the strategic targets are discussed during the performance review. In addition, personal development plans are prepared. In 2024, 100% of the personnel who were employed the entire year participated in two performance reviews.

Pohjolan Voima's strategy and key strategic skills guide the training and competence development goals. Pohjola Voima's employees are encouraged to attend training and to develop their professional skills. Supervisors are responsible for the competencies of the employees and their long-term target-oriented development. Every Pohjolan Voima employee is also personally responsible for the development of their own competence, as well as the competence of the work community as a whole. Successor planning is used to ensure that no key competencies are lost.

To lower the threshold for training and to ensure joint learning, Pohjolan Voima uses online training courses for certain areas. Sustainability, data protection, security, and competition law are mandatory training courses for all Pohjolan Voima employees. This way, Pohjolan Voima ensures the competence and commitment of all employees in sustainability.

Pohjolan Voima's recruitment is based on a commitment to equality and non-discrimination. All job applicants are valuable to Pohjolan Voima, including those who are not selected. Recruitment decisions are based on business requirements. The most suitable person with the greatest development potential who fits Pohjolan Voima's values and ambitions will be selected for each position.

Pohjolan Voima takes into account different life situations and has a positive attitude towards flexible working hours and the reconciliation of work and family life. Pohjolan Voima supports different types

of working hour solutions. Investments are made in the return to work from family leave or after a longer absence by, for example, supporting the employee and offering them orientation on a case-by-case basis.

All employees are entitled to family leave based on legislation and the collective agreements.

#### Other work-related rights

The data protection policy defines data protection, provides grounds for the requirements and lists the general objectives and responsibilities of Pohjolan Voima. The data protection policy is supplemented by data protection guidelines. In terms of employee data protection, the privacy policy sets out the procedures for the processing of employees' personal data, based on the exercise of the rights and obligations of the parties to the employment relationship, the benefits provided by Pohjolan Voima to its employees or the specific nature of the employment relationship.

Pohjolan Voima uses appropriate technical and organisational means of protection to limit the use of the personal data in its possession and protect the personal data from loss, unintended deletion, misuse, and unauthorised alteration. Personal data is only processed by employees who need the data for the purposes for which it was collected.

Information about employees' health is kept separately from other personal data and may only be processed by persons who prepare or make decisions concerning the employment relationship on the basis of this information.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

→ Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

#### Facts and figures on personnel

## Own workforce

Gender	Number of employees (head count)
Male	20
Female	23
Other	0
Not reported	0
Number of employees total	43
Country	Number of employees (head count)

43

## **Employees by contract type and gender**

#### Reporting period

Finland

Female	Male	Other*	Not reported	Total
Number of employees	(head count/FTE)			
20	23	0		43
Number of permanent	employees (head count/	ΓE)		
17	23	0		40
Number of temporary	employees (head count/F	TE)		
<5	0	0		<5
Number of non-guara	nteed hours employees (h	ead count/FTE)		
<5	0	0		<5
Number of full-time er	nployees (head count/FTE	E)		
18	23	0		41
Number of part-time e	mployees (head count/FT	E)		
<5				<5

<sup>\*</sup> Gender as specified by the employees themselves.

## **Employee turnover**

	2024	2023
Employee turnover rate, %	3.85%	3.90%
Employees leaving the company, total number	1	1

## Collective bargaining coverage and social dialogue

	Collective bargaining coverage	Social dialogue
	Employees - Finland	Workplace representation - Finland
Coverage rate, %	83.70%	74.40%

## Gender distribution in top management

Gender	2024	2023
Men in top management	4	4
Men in top management, %	57	57
Women in top management	3	3
Women in top management, %	43	43
Other/non-reported share in top management	0	0
Other/non-reported share in top management, %	0	0

## Age distribution

#### Age distribution of employees

(headcount)	2024	2023
Under 30 years old	<5	<5
30-50 years old	28	23
Over 50 years old	13	15

## Training and development of skills

# Percentage of employees who participate in regular performance and career development reviews

All employees, %	97.5	100
Men,%	95.5	100
Women,%	100	100
Other, %	0	n/a
Performance reviews per person	2	2
Number of reviews in proportion to the number of reviews agreed with the management	97.5	100
Average number of training hours		
All employees	15	19
Male	6.5	12
Female	25	29
Other	0	0

2024

2023

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

Environmental information

→ Social information

Governance information

Entity-specific information – security of electricity and heat supply

Appendices

#### **Health and safety metrics**

Health and safety metrics	2024	2023
Share of own workforce covered by the company's occupational safety, and health management system, %	0	0
Number of fatalities resulting from work-related injuries and work-related ill health	0	0
Number of fatalities resulting from work-related injuries and work-related ill health of other workers working on the undertaking's sites	0	0
Number of recordable work-related accidents	0	0
Rate of recordable work-related accidents per million working hours	0	0
Number of incidents associated with work-related ill health among own workforce	0	0
With regard to the undertaking's employees, the number of cases of recordable work-related ill health subject to legal restrictions on the collection of data	0	0
With regard to the undertaking's employees, the number of days lost to work-related injuries and fatalities from work-related accidents, work-related ill health and fatalities from ill health	0	0

#### Gender pay gap and annual total remuneration ratio

	2024	2023
Gender pay gap, %	-3.38	-4.63
Annual total remuneration ratio	4.74	5.41

## **Human rights incidents**

Human rights incidents	2024	2023
Number of severe human rights incidents connected to own workforce	0	0
Number of complaints to the National Contact Points for OECD Multinational Enterprises	0	0
Total amount of fines, penalties and compensation for damages as a result of the reported human rights incidents and complaints	0	0

#### Principles for the compilation of the metrics

The figures related to own workforce include the Pohjolan Voima Group companies with their own employees: Pohjolan Voima Oyj, PVO-Vesivoima Oy, Kymin Voima Oy, and Kaukaan Voima Oy.

The number of employees is reported as the number at the end of the reporting period (31 December 2024), excluding the use of external labour in 2024. The number of external labour in 2024 was fewer than five persons.

Recruitment includes permanent employees.

New permanent employment relationships and all reasons for leaving have been taken into account in the turnover rate.

The share of women in management includes the members of the Executive Team.

The occupational safety and health metrics include the company's own workforce. Accidents of own workforce and the subsidiaries' operation and maintenance partners and subcontractors are taken into account in the lost time accidents indicator included in the proactive safety theme of the sustainability programme. There were 5.7 lost time accidents in 2024.

The remuneration figures are reported on the basis of persons with an active employment contract on 31 December 2024. The figure includes all personnel employed excluding the President and CEO.

When comparing the ratio of the total annual remuneration of the highest paid person to the median total annual remuneration, persons whose employment started in the middle of the reporting

year, or who were absent for more than three months during the reporting year have been excluded from the calculation of the median. The total remuneration does not include the remuneration paid to the highest paid person in the Group either.

The personnel survey results are based on an annual personnel survey carried out by an independent operator. Each Pohjolan Voima employee has the opportunity to respond to the survey. In 2022-2023, the survey results were compared to the Finnish specialist norm. Responses were collected on a scale of 1 to 4 (fully disagree/agree). The results were converted to a scale of 0 to 100 (all fully agree) by the independent operator. Compared to the norm, the target for the survey, which was also the result (AAA), is "very good". The reference data for the results of the 2024 personnel survey was the previous year's Best Workplaces in Finland list of small workplaces (employing 20-49 persons). Responses were collected on a scale from 1 to 5 (rarely true – always or nearly always true), but the results consist of the average of positive responses, i.e. the number of respondents (%) who felt that the statement in question was true in their daily life and therefore responded "often true" or "always or nearly always true". The survey result consists of an average of 60 statements with positive responses. The result of 95% exceeds the set target of 80%.

Each Pohjolan Voima employee has a themed performance review twice a year.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

→ Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

#### **Affected communities**

### Material impacts, risks and opportunities related to affected entities

Impacts	Direction of impact	Risks and opportunities for Pohjolan Voima	Management						
Communities' economic, soci	Communities' economic, social and cultural rights/Dialogue with stakeholders								
Stakeholders are listened to and their views are taken into account in the operations.	Positive	Opportunity: Improved reputation and social acceptability. Ensuring transparency in operations. Smooth and fluent cooperation and making progress with matters.	Implementation of stakeholder surveys and measures. Active communication with various stakeholders. Involvement in projects. Interactive communication with stakeholders. Rules for sustainable lobbying.						

## Pohjolan Voima's sustainability targets

	Target 2027	2024	2023	2022
The result of the stakeholder survey (every two years), the views of decision-makers, public officials, researchers, and the media Scale 1.0–5.0	Determined annually	Actual 4.0 (target 4.0)	-	-

#### **Targets**

Pohjolan Voima operates in a network consisting of its shareholders, partners, and subcontractors. There is also cooperation, and dialogue with numerous other stakeholders. The purpose of the stakeholder dialogue is to ensure that stakeholders are met and heard, as well as to receive feedback on Pohjolan Voima's operations.

Pohjolan Voima's sustainability targets and the process of setting and monitoring them are described in more detail under Governance of sustainability and strategy on section Governance of sustainability and strategy. The purpose of the sustainability targets

related to the environment and the sustainability of the supply chain, in particular, is to directly or indirectly reduce Pohjolan Voima's negative impacts or to promote positive impacts in the affected communities.

# Identification and assessment of material impacts, risks and opportunities

Pohjolan Voima's material impacts, key risks and opportunities regarding the affected communities have been identified in the double materiality assessment described in Section Material sustainability impacts, risks and opportunities.

#### Operating principles

Sustainability regarding the affected communities is guided by the ethical operating principles and Responsible Supplier Code of Conduct (Pohjolan Voima's code of conduct for suppliers), as well as the Code of Ethics for Professional Communicators by Viestinnän eettinen neuvottelukunta (the Finnish advisory committee on ethics in communication) and the principles of lobbying activities by the Finnish Transparency Register.

Pohjolan Voima is honest and sincere in its dealings with all stakeholders, also informing them of any issues. Interaction with stakeholders is open and inclusive. The environmental management systems of the production companies require the recording of feedback on environmental issues and the measures taken based on the feedback. Feedback received by the parent company is also recorded and processed by the sustainability team. The Group Executive Team is informed of all feedback and the resulting measures, and the most important feedback is also communicated to the Board of Directors.

Pohjolan Voima regularly discusses sustainability matters with its customers. The customers are also informed about current sustainability matters and sustainability is discussed at Pohjolan Voima keskustelee (Pohjolan Voima Discusses) events, which are intended for both customers and the company's own personnel.

In all its operations, Pohjolan Voima respects internationally recognised human rights. For more information about the principles Pohjolan Voima follows, see Own workforce. In addition to the company's own workforce and all workers in the value chain, the principles apply to all affected communities.

The most material communities affected by Pohjolan Voima are the customers, the production locations and people living there, people earning a livelihood from the surrounding nature and people interested in the local nature, such as reindeer herders, fishermen, and various non-governmental organisations. As Pohjolan Voima operates in the energy industry, and contributes to the balancing of the electrical power system, its impacts reach all Finns through the security of electricity supply.

Affected communities are taken into account in Pohjolan Voima's stakeholder engagement, which aims to ensure good and interactive relations and low-threshold communication between Pohjolan Voima and its key stakeholders.

#### **Engagement with affected stakeholders**

The purpose of the stakeholder dialogue is to ensure that stakeholders are met and heard, as well as to receive feedback on Pohjolan Voima's operations. Feedback from all stakeholders is analysed, taken into account in the development of the company's operations and reported to the company's senior management and administration.

The scope and frequency of communication varies from stakeholder to stakeholder. Forms of communication include meetings, visits, open door events at the power plants, cooperation projects, and different types of discussion events. Bilateral communication is used as necessary. Pohjolan Voima communicates about its operations to its stakeholders, and discussing the communication and providing feedback through Pohjolan Voima's communication channels is possible.

Pohjolan Voima carries out an annual customer satisfaction survey to examine the success of the operations. Extensive annual customer discussions are also arranged.

Stakeholder feedback is collected from decision-makers, trade unions, non-governmental organisations, research institutes, and the media through a biennial stakeholder survey.

Pohjolan Voima's subsidiary PVO-Vesivoima
Oy annually sends an electronic survey to collect
feedback on the success of cooperation and the
sustainability of the operations from stakeholders
close to its locations. Every four years, PVO-Vesivoima
conducts a corporate image survey targeted at a representative sample of residents from its locations to
investigate the residents' views on energy production
forms and hydropower, as well as PVO-Vesivoima and
its operations.

PVO-Vesivoima participates in extensive cooperation projects to plan and implement measures to restore the natural cycle of migratory fish and, in particular, to implement the jointly developed lijoki river

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

→ Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

vision with the municipalities in the area, Metsähallitus and the Centre for Economic Development, Transport and the Environment. Participants to the Kemijoki-Ounasjoki migratory fish working group include PVO-Vesivoima, Kemijoki Oy, local municipalities, representatives of fisheries associations and fishermen, the Centre for Economic Development, Transport and the Environment, Metsähallitus, Natural Resources Institute Finland and the Regional Council of Lapland.

PVO-Vesivoima also participates in collaborative working groups on the development of regulation and flood protection.

Pohjolan Voima participates in the social debate at the EU level and the national level. Pohjolan Voima is registered in both the Finnish Transparency Register and the EU Transparency Register and complies with their rules. In the EU Transparency Register, Pohjolan Voima's REG number is 287403519124-60.

Pohjolan Voima's Board of Directors annually confirms the priority areas for lobbying activities, and their achievement is regularly reported as part of the CEO's review. Pohjolan Voima's Board of Directors also approves all lobbying messages. Pohjolan Voima has had an active impact on matters such as national decision-making on hydropower, thermal power, and nuclear power projects, as well as on matters related to hydropower in the EU, in particular.

Pohjolan Voima's memberships and roles in sustainability, the energy industry, and communities at the national level:

- > Confederation of Finnish Industries EK rv (member)
- > Finnish Energy (member)
- > Finnish Energy's Environmental Pool (financier)
- > Finnish Business & Society FIBS (member)
- > HSEQ Assessment Cluster (member)
- National Emergency Supply Agency (participation in the work of electricity and heat pools)
- ICC Finland's Sustainability working group (member)

Pohjolan Voima cooperates with young people by, for example, arranging discussion events, participating in Youth Environmental Summits and discussing young people's expectations of sustainability in Pohjolan Voima's operations.

# Processes to remediate negative impacts and channels for affected communities to raise concerns

An environmental impact assessment always precedes large projects, such as the construction of new power plants. The local communities and other stakeholders are heard during the EIA process. In other matters, affected communities can raise their concerns by being in direct contact with the local functions, such as the contact persons of the production plants. Pohiolan Voima's communications unit or persons responsible for sustainability, whose contact details are available on Pohjolan Voima's website. In addition, Pohjolan Voima has an email address on its website for stakeholders to contact the company. All questions and concerns raised by email are answered. It is also possible to leave anonymous feedback via a feedback form on the website. To remedy any negative impacts, the company acts promptly and works in close cooperation with local and regional authorities.

Open door events at PVO-Vesivoima's power plants are a well-established way of informing the local residents and other interested parties of the company's operations, as well as an opportunity to listen to their views, and obtain feedback.

#### Measures

Pohjolan Voima regularly carries out a double materiality assessment covering all of its operations, also assessing the impacts, key risks and opportunities of the operations. The materiality assessment is described in Section xxx. Material sustainability impacts, risks and opportunities. The assessment is further specified based on feedback from the affected communities. The identified opportunities are exploited by exploring potential business development and cooperation initiatives with interested stakeholders. Actions to manage negative impacts and promote positive impacts at the operating locations include systematic reduction of environmental impacts, involvement of local communities, and increasing cooperation. In 2024, Pohjolan Voima realised the following community-related measures:

- Customer satisfaction survey and customer dialogue round.
- Stakeholder survey for decision-makers and energy industry lobbyists.
- > Two breakfast meetings for young people interested in energy matters and inviting young people to participate in Pohjolan Voima's value chain project. The themes of the breakfast meetings for young people were "Towards more sustainable choices with a climate push" and "The impact of populist parties on climate policy in the European elections".
- > Two energy dinner events for a group of selected decision-makers.
- In the HSEQ assessment cluster for large enterprises, where suppliers' performance in HSEQ matters is assessed, a total of ten suppliers were assessed in 2024.
- The Sähkö tulee töpselistä (Electricity comes from the plug) podcast, which aims to generate discussion on energy and sustainability themes with stakeholder representatives, was continued.
- A Neljän iin voimaa (The power of people, ideas, innovation, and enthusiasm) event for Pohjolan Voima employees and stakeholders.

PVO-Vesivoima implemented the following measures in connection with its own operations:

- In the pumped-storage plant plan project PUHTI, which was launched in 2024, two public events have been arranged in Kemijärvi to hear stakeholders, as well as 19 other meetings with local residents and other stakeholders. Feedback and questions presented at the events will be answered as soon as the required information is available. A newsletter and a Facebook page with the option to submit comments have been established for local communication.
- In the PUHTI project, stakeholders have been invited to participate in the project's environmental impact assessment monitoring group, which will be launched at the beginning of 2025.
- An open-door event was arranged at the Maalismaa power plant in the lijoki river. It was attended by approximately 250 people.
- An online stakeholder survey for closest stakeholders (e.g. partners, service providers, and the media) on the success of the cooperation and their views on the sustainability of the operations was arranged. A total of 44 people responded.
- > For stakeholders involved in fish management, 5 events to communicate information about the fish management plans, their implementation, and their monitoring were arranged in cooperation with Voimalohi Ov.
- 6 power plant visits for schoolchildren and students were arranged.
- 5 power plant visits for other stakeholders were arranged.
- > A total of 79 direct contacts from stakeholders were recorded.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

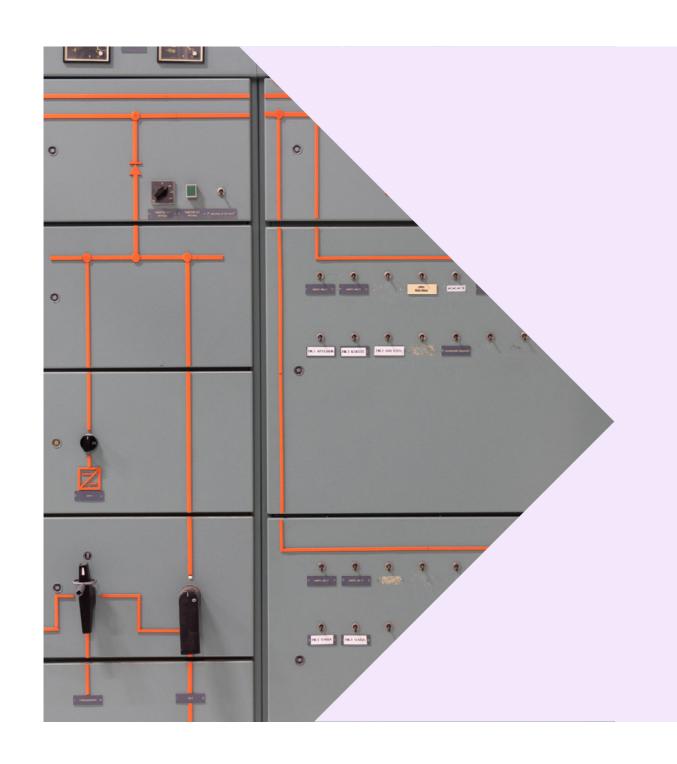
Environmental information

Social information

→ Governance information

Entity-specific information – security of electricity and heat supply

Appendices



G

# **Governance** information

Business conduct

49

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

→ Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

#### **Business conduct**

Impacts	Direction of impact	Risks and opportunities for Pohjolan Voima	Management
Corporate culture/Transparent g	jovernance and manag	ement	
Ethics and sustainability guide the management of Pohjolan Voima. Governance and the governance principles are transparently made available to stakeholders.	Positive	Opportunity: Ethical and sustainable operations and transparent governance and management safeguard Pohjolan Voima's business conditions. They also strengthen the company's reputation and corporate image and, if excellently managed, give a competitive edge over other companies.	Training the personnel and partners. Open dialogue and communication with stakeholders.
Corporate Culture/Diversity of n	nanagement		
Pohjolan Voima's decision- making bodies and senior management include a diverse range of people in terms of educational background, gender and age.	Positive	Opportunity: The diversity of management brings different ideas to decision-making and increases equality. The diversity of management improves the employer image and attracts young talent.	Equality plans and compliance with them. Special attention is paid to the matter when appointing the decision-making bodies. Recruitment.
Relationships with suppliers and	l payment practices/Re	eliability as a partner	
Pohjolan Voima operates in accordance with good trading rules in its supplier networks and with its owners and partners. Invoices are paid on time and terms of payment for suppliers are not extended.	Positive	Opportunity: A good reputation as a reliable partner offers a competitive advantage and expands opportunities as an energy producer.	Good procurement and payment practices, systematic management of finances, and financial systems.
Relationships with suppliers and	l payment practices/Fi	nancial transparency	
Pohjolan Voima reports on its finances transparently, comprehensively and in accordance with the requirements.	Positive	Opportunity: Transparent reporting improves business opportunities (trust of shareholders, access to funding, access to supplier partnerships).	Functional financial management system, reporting in compliance with IFRS at the Group level, audits, internal audits.

#### **Pohjolan Voima's sustainability targets**

	Target 2027	2024	2023	2022
Customer satisfaction survey, Net Promoter Score (NPS)	Determined annually	Actual 69% (target 70%)	-	-
HSEQ audits	Determined annually	Actual 10 (target 5)	Actual 7 (target 5)	Actual 3 (+7*) (target 5) (*comparison based on HSEQ audit reports)

#### Progress towards the targets

Pohjolan Voima carries out an annual customer satisfaction survey, on the basis of which the operations are developed. Annual customer discussion rounds are also realised. Customer satisfaction in 2024 was high with a Net Promoter Score of 69%.

In the HSEQ assessment cluster for large enterprises, where suppliers' performance in HSEQ matters is assessed, a total of 10 Pohjolan Voima's suppliers were assessed in 2024.

# Role of administrative, management, and supervisory bodies

The role of the administrative, management, and supervisory bodies is described in more detail under Role of the administrative, management, and supervisory bodies and information provided to and sustainability matters addressed by the bodies.

# Identification and assessment of material risks, opportunities and impacts

The material impacts, risks, and opportunities related to good governance and corporate culture have been identified in the double materiality assessment described in section on Material sustainability impacts, risks and opportunities.

# Business conduct policies and corporate culture

The sustainability of Pohjolan Voima's business operations is guided by applicable legislation and the UN's internationally recognised principles on human rights, labour, environment, and anti-corruption (the Ten Principles of the United Nations Global Compact), as well as the values approved by the Board of

Directors, the Code of Conduct, and other Group policies and guidelines.

Pohjolan Voima complies with all applicable laws and regulations, including applicable national, and international trade sanction regulations. Pohjolan Voima does not tolerate bribery or corruption, nor does the company engage in any business relations in which anti-bribery and anti-corruption laws and regulations are not followed. Pohjolan Voima complies with the principles of the Act on the Contractor's Obligations and Liability when Work is Contracted Out and ensures that suppliers comply with the Act.

To ensure the accountability of suppliers and contractual partners, Pohjolan Voima follows the procurement policy approved by the Board of Directors. Pohjolan Voima operates responsibly and ethically in procurement as described in the Sustainability Code of Conduct. Partners are required to follow corresponding principles. Pohjolan Voima's sustainability guidelines for suppliers are included in procurement agreements, and the sustainability of procurement is monitored through appropriate practices.

In 2024,11 of Pohjolan Voima's Group policies and six operating guidelines were reviewed from the sustainability perspective. Eight policies and three guidelines were updated. The updated policies and guidelines were reviewed and approved by the Board.

To ensure full understanding of sustainable business operations, all employees of the Group annual complete online training courses, of which sustainability training and "Competition law in your daily work" focus especially on the principles of sustainable business. All Board members of Pohjolan Voima Group's parent company and the production companies also complete these online training courses.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

→ Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

Pohjolan Voima's main contractual partners complete the online sustainability training course as well.

#### Sustainability survey

Pohjolan Voima aims to ensure that all employees are aware of Pohjolan Voima's sustainability targets and their role in the reaching of these targets. In 2024, a PeopleImpact sustainability survey was realised to assess the employees' experiences of sustainability. The survey measured the awareness of the personnel of Pohjolan Voima's sustainability targets and principles, the achievement of the environmental liability, corporate social responsibility and DEI (diversity, equity and inclusion) principles in their daily work, and their views on the management of sustainability. According to the sustainability survey results, Pohjolan Voima has succeeded in all areas of the survey at a level higher than the standard reference result. Pohjolan Voima will prepare development targets as part of the sustainability action plan based on the results.

In accordance with the principles of the personnel policy approved by Pohjolan Voima's Board of Directors, Pohjolan Voima respects human rights, equality, and non-discrimination. The cornerstones of Pohjolan Voima's personnel policy are diversity, non-discrimination, the right to freedom of association and the right to privacy.

In Pohjolan Voima, employee diversity refers to all employees being different from each other. Pohjolan Voima ensures diversity by, for example, not condoning any discrimination based on age, origins, nationality, language, religion, beliefs, opinions, political activity, trade union activity, family relations, state of health, disability, sexual orientation or any other reason related to the person.

Pohjolan Voima is committed to equality and non-discrimination starting from the recruitment process. The same principles apply throughout the employment relationship. Pohjolan Voima has prepared the Group's equality and non-discrimination plans as a joint document. The plan addresses the prevention of all forms of discrimination, with the equality section dealing with gender equality. The plan presents the

operating methods by which the Pohjolan Voima Group ensures the prevention of all types of discrimination in its own processes and, on the other hand, promotes equal treatment and diversity of the personnel.

The same principles of equality, non-discrimination and diversity apply to all Pohjolan Voima employees, including the management.

Personnel data is described in more detail under Own workforce.

# Mechanisms for identifying, reporting, and investigating concerns

Pohjolan Voima's employees may report in confidence, through the internal whistleblowing channel, internal violations, any other suspected abuse, any conduct violating Pohjolan Voima's values or any other inappropriate conduct. All notifications are processed confidentially in accordance with an established procedure. The confidential processing protects the rights of both the whistleblower and the subject of the notification. Pohjolan Voima's employees did not report any observations through the confidential whistleblowing channel in 2024.

The channels for own personnel to identify, report and investigate concerns are described in more detail under Own workforce.

#### **Relationship with suppliers**

#### Reliability as a partner

Pohjolan Voima's operations are based on strong networks, which include partners and subcontractors, among other parties.

Pohjolan Voima operates honestly, in good faith, and in compliance with good trading rules. Interaction with the different parties in the supply chain is open and constructive.

Pohjolan Voima protects confidential information in procurement processes and does not disclose any confidential or private information related to procurement to anyone without a legitimate need for it.

Pohjolan Voima operates in accordance with good trading rules in its supplier networks and with its owners and partners. Invoices are paid on the due dates and terms of payment for suppliers are not

extended. In 2024, the parent company's average term of payment was 14 days. Pohjolan Voima does not have any pending legal proceedings due to late payments.

#### Financial transparency

Pohjolan Voima reports on its finances transparently, comprehensively, and in accordance with the requirements. The consolidated financial statements are prepared in accordance with the IFRS accounting standards, and the financial statements of the special purpose entities comply with the Finnish Accounting Act. The financial statements are audited. The midyear report and financial statement release are published within two months of the end of the reporting period. The Board of Directors and the Audit and Financing Committee monitor financial reporting at their meetings. Due to a bond being listed on Nasdag Helsinki, the reporting follows the stock exchange rules. Transparent reporting improves business opportunities by maintaining the trust of shareholders, financiers, and suppliers.

#### Supplier management practices

Pohjolan Voima does not have a separate procurement organisation. The subsidiaries are independently responsible for their energy production procurement or handle it through their operating service providers.

The procurement of Pohjolan Voima's Group-wide services and commodities has been centralised to the Group services. Group-wide policies and guidelines ensure that the partners operating in the supply chain of the Group and the subsidiaries operate responsibly.

This is to minimise risks related to issues involving the environment, health, corruption, and human rights violations in the supply chain. As a minimum requirement in procurement agreements, suppliers must commit to Pohjolan Voima's Responsible Supplier Code of Conduct or their own corresponding operating principles and pass background checks.

There have been no cases of corruption or bribery in Pohjolan Voima.

#### Principles for the compilation of the metrics

The number of HSEQ audits include suppliers of Pohjolan Voima and its subsidiaries assessed during the year. The aim is for personnel of Pohjolan Voima or its subsidiaries to always participate in supplier audits. However, if participation in an audit is not possible due to time constraints, the assessments made by the cluster are still reviewed and the results are compared to get an idea of the success of the suppliers in the assessments.

Pohiolan Voima carries out an annual customer satisfaction survey. The aim is to get feedback from representatives of the customers regarding Pohjolan Voima's success in the management of customer relationships and the fair treatment of customers. Pohjolan Voima's competitiveness as well as whether Pohiolan Voima is able to meet the customers' needs and whether the company is being developed in the right direction from the customer's point of view. Customers' satisfaction with the different business functions and Group services is also investigated. The assessment is carried out on a scale of 1 to 5. The indicator chosen from the sustainability perspective is willingness to recommend, i.e. the respondents are asked how likely they would be to recommend Pohjolan Voima as a cooperation partner on a scale of 1 to 10 (NPS, Net Promoter Score).

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

→ Entity-specific information – security of electricity and heat supply Appendices



# Entity-specific information – security of electricity and heat supply

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

→ Entity-specific information – security of electricity and heat supply

**Appendices** 

# Impacts, risks and opportunities related to continuity of electricity and heat production

Impacts	Direction of impact	Risks and opportunities for Pohjolan Voima	Management					
Continuity of electricity and heat production								
Pohjolan Voima produces more approximately 20% of Finland's electricity and is a major producer of process and district heat. Pohjolan Voima is a significant district heat producer at its operating locations. Pohjolan Voima does not operate directly in the consumer market. Energy is delivered to the shareholders, who provide energy to private individuals and communities. Pohjolan Voima has an indirect impact on the health and safety of consumers. Pohjolan Voima acts as a reliable energy producer.	Positive	Opportunity: Reliability enables the company's own financial success and predictable supply of energy to the shareholders. Pohjolan Voima's reliable operations ensure the availability of district heat in cities and the energy security of the whole of Finland.	The focus is on reliable production. Lifecycle management and preventive maintenance of the power plants. Close customer cooperation.					

#### **Pohjolan Voima's sustainability targets**

	Target 2027	2024	2023	2022
Subsidiaries' availability metrics in target	Determined annually	Actual 23% (target 50%)	-	-

## **Progress towards the targets**

The availability metrics of the power plants of Pohjolan Voima's production companies are defined annually. In 2024, the overall availability target for all plants was 50%. The actual availability was 23%. The target was not reached because individual unexpected failures occurred in the production companies. Root cause analyses of the failures have been prepared and measures to prevent their reoccurrence are in progress.

# Identification and assessment of material impacts, risks and opportunities

In the double materiality assessment, the security of electricity and heat supply were identified as material aspects. Pohjolan Voima does its part to ensure 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. Pohjolan Voima supplies electricity and heat to its shareholders, who use the electricity and heat themselves or deliver energy to private individuals and communities.

#### **Operating principles**

Pohjolan Voima's articles of association define the company's operating principle, i.e. the shareholders' right to receive electricity and heat and their liability for the company's expenses. The shareholders have the right to receive energy from each production plant in proportion to their shareholding, and each shareholder bears the costs of the energy acquired by the company in proportion to the number of shares owned.

Pohjolan Voima's strategy focuses on maintaining and developing the current assets, risk management and securing future competitiveness. According to the strategic theme on sustainable production on market terms, "we will reconcile competitive carbon-neutral production and biodiversity." According to the strategic focus area competitive advantage through balancing power and timely production, "we will increase the value of our existing production capacity by improving the balancing capability of our plants."

#### Engagement on impacts with consumers and end-users

Pohjolan Voima discusses its success in ensuring the security of supply with its customers in particular. Pohjolan Voima does not operate at the consumer interface itself. Instead, those customers of Pohjolan Voima that sell electricity and heat are responsible for the engagement with consumers.

## Processes to remediate negative impacts and channels for consumers and end users to raise concerns

Pohjolan Voima actively communicates information about production and operation incidents to the residents of the operating area via the media in accordance with the company's crisis communication guideline.

Affected communities can raise their concerns by being in direct contact with the local functions, such as the contact persons of the production plants, Pohjolan Voima's communications unit or persons responsible for sustainability, whose contact details are available on Pohjolan Voima's website. In addition, Pohjolan Voima has an email address on its website for stakeholders to contact the company. All questions

and concerns raised by email are answered. It is also possible to leave anonymous feedback via a feedback form on the website. To remedy any negative impacts, the company acts promptly and works in close cooperation with the shareholders and local and regional authorities.

Open door events at PVO-Vesivoima's power plants are a well-established way of informing the local residents and other interested parties of the company's operations, as well as an opportunity to listen to their views and obtain feedback.

#### Measures

Undisturbed production is ensured by preventive maintenance, annual outages and the storage of fuels. The operation and maintenance of the power plants have been outsourced, and the operations are based on long-term partnership agreements.

#### Principles for the compilation of the metrics

The subsidiaries and Teollisuuden Voima are taken into account in the availability indicator. The companies have a total of 13 different availability targets. The availability indicator describes what percentage of the companies' availability targets have been achieved.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive power

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices



# **Appendices**

$\rightarrow$	EU Taxonomy	54

→ Value tables for diagrams 65

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices

#### **EU taxonomy**

# 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. The Regulation defines six environmental targets. The criteria for climate change mitigation and adaptation were published in a delegated climate regulation on 4 June 2021. A supplementary delegated act on nuclear power and natural gas, related to the climate change mitigation and adaptation criteria, was adopted on 5 July 2022, and based on it, nuclear power and gas were included in the EU taxonomy as 'transitional activities' from 1 January 2023. A delegated act for the other four environmental targets was published in July 2023, and companies will have to report under it from 1 January 2024, covering the year 2023. For reports containing data for the 2023 financial period, the reporting requirements are governed by Directive 2014/95/EU regarding disclosure of non-financial information (the Non-Financial Reporting Directive or NFRD), and Directive (EU) 2022/2464 regarding corporate sustainability reporting (the Corporate Sustainability Reporting Directive or CSRD) applies to financial periods starting on or after 1 January 2024. Pohjolan Voima has voluntarily reported the taxonomy eligibility of its business in the 2021 annual report and its taxonomy compliance in the 2022 and 2023 annual reports. Taxonomy reporting will be mandatory for Pohjolan Voima in accordance with the CSRD schedule, i.e. from 2025 onwards

The taxonomy eligibility assessment and the results in Pohjolan Voima's reporting are based on the information and interpretations of the EU Regulation available at the time of reporting, covering the criteria of 'substantial contribution' and 'do no significant harm' for the corresponding activities. In assessing compliance with the criteria for hydropower, we have reviewed the meeting of the technical criteria and the do no significant harm criteria for each plant, using Finnish Energy's interpretation guideline as an aid. The taxonomy compliance of nuclear power is consistent with TVO's interpretation. In terms of thermal power, we have reported the share of electricity and heat produced with biofuel as taxonomy-compliant where its share at an individual plant exceeds 50%. The part of production that we have not reported as compliant with the taxonomy is shown in the tables for taxonomy-eligible but not environmentally sustainable (non-taxonomy compliant) activities.

In terms of minimum safeguards, Pohjolan Voima is committed to respecting internationally recognised human rights and labour principles and rights: in addition to the OECD Guidelines for Multinational Enterprises and the ILO Fundamental Principles and Rights at Work, international human rights law, and the UN Guiding Principles on Business and Human Rights, in particular. Through company-level policies and compliance with national labour law, Pohjolan Voima ensures that it implements the minimum social safeguards in accordance with Article 18 of the Taxonomy Regulation.

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 and 2023, Pohjolan Voima continued the assessment by reviewing the taxonomy-eligible activities against the sustainability criteria defined in the regulations. This assessment has continued in 2024, and the taxonomy-eligibility has been assessed by activities also in case of possible changes in interpretation. The identified taxonomy-eligible activities of Pohjolan Voima 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). The identified taxonomy-eligible activities correspond to the categories in the EU taxonomy presented in the table below.

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.

Activity no	EU Taxonomy activity	Pohjolan Voima activity	NACE-code	Relevant for turnover	Relevant for Capex	Relevant for opex
4.5	Electricity generation from hydropower	Hydropower	35.11 production of electricity	Χ	Χ	Χ
4.20	Cogeneration of heat/cool and power from bioenergy	Thermal power	35.11 production of electricity, 35.30 steam and air conditioning supply	Χ	Х	Х
4.27	Construction and safe operation of new nuclear power plants, for the generation of electricity or heat, including for hydrogen production, using best available technologies	Nuclear power	35.11 production of electricity	Χ		Х
4.28	Electricity generation from nuclear energy in existing installations	Nuclear power	35.11 production of electricity	X		X

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices

## Taxonomy

## Proportion of turnover from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2024

Financial year 2024		Year			Subs	stantial cont	tribution cri	teria		DNSH criteria ("Does Not Significantly Ha				ntly Harı	n")				
Economic Activities (1)	Code (2)	Turnover (3)	Proportion of turnover, year 2024 (4)	Climate Change Mitgation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitgation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy- aligned (A.1.) or -eligible (A.2.) turnover, year 2023 (18)	Category enabling activity (19)	Category transitional activity (20)
Text		1,000 EUR	%	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	Т
TAXONOMY-ELIGIBLE ACTIVITIES																			
Environmentally sustainable activities (Taxonomy-aligned)																			
Hydropower	CCM 4.5	27,629,	3.3%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Υ	Y	Υ	N/A	N/A	Υ	Υ	3.5%	Е	
Thermal power	CCM 4.20	155,981,	18.7%	Υ	N/EL	N/EL	N/EL	N/EL	N/EL	Υ	Υ	Υ	Υ	N/A	Υ	Υ	18.8%	Е	
Nuclear power	CCM 4.27	426,896,	51.2%	Υ	N	N/EL	N/EL	N/EL	N/EL	Υ	Υ	Υ	Υ	Υ	Υ	Υ	38.6%		Т
Nuclear power	CCM 4.28	136,203,	16.3%	Y	N	N/EL	N/EL	N/EL	N/EL	Υ	Υ	Υ	Υ	Υ	Υ	Y	26.2%		Т
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		746,708,	89.5%	89.5%	0%	0%	0%	0%	0%	Υ	Υ	Υ	Υ	Υ	Υ	Υ	87.1%		
Of which enabling		183,610,	22.0%	22.0%	0%	0%	0%	0%	0%	Υ	Y	Υ	Υ	Υ	Υ	Υ	22.3%	Е	
Of which transitional		563,098,	67.5%	67.5%	0%	0%	0%	0%	0%	Υ	Υ	Υ	Υ	Υ	Υ	Υ	64.8%		Т
Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL;N/EL	EL;N/EL	EL;N/EL	EL;N/EL	EL;N/EL	EL;N/EL										
Thermal power	CCM 4.20	27,543,	3.3%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								3.0%		
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		27,543,	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%								3.0%		
Turnover of Taxonomy-eligible activities (A1.+A.2)		774,251,	92.8%	92.8%	0.0%	0.0%	0.0%	0.0%	0.0%								90.1%		
TAXONOMY-NON-ELIGIBLE ACTIVITIES																	0.0%		
Nuclear power		1,355,	0.2%														0.2%		
Others		58,597,	7.0%														9.6%		
Turnover of Taxonomy-non-eligible activities		59,952,	7.2%														9.9%		
TOTAL		834,203,	100 %														100.0%		

55

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices

## Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2024

Financial year 2024	Year				Subs	stantial cont	tribution cri	teria		DNSH	criteria ("D	oes Not S	Significa	ntly Harr	n")				
Economic Activities (1)	Code (2)	СарЕх (3)	Proportion of CapEx, year 2024 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy- aligned (A.1.) or -eligible (A.2.) CapEx, year 2023 (18)	Category enabling activity (19)	Category transitional activity (20)
Text		EUR	%	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	Е	т
TAXONOMY-ELIGIBLE ACTIVITIES	_															<u> </u>			
Environmentally sustainable activities (Taxonomy-aligned)																			
Hydropower	CCM 4.5	3,626,	17.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Υ	Υ	Υ	N/A	N/A	Υ	Y	51.1%	Е	
Thermal power	CCM 4.20	17,179,	80.7%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Υ	Υ	Υ	Υ	N/A	Υ	Y	10.8%	Е	
Nuclear power	CCM 4.27	0	0.0%	Y	N	N/EL	N/EL	N/EL	N/EL	Υ	Υ	Υ	Υ	Υ	Υ	Y	0.0%		T
Nuclear power	CCM 4.28	0	0.0%	Y	N	N/EL	N/EL	N/EL	N/EL	Υ	Υ	Υ	Υ	Υ	Υ	Y	0.0%		T
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		20,805,	97.7%	97.7%	0%	0%	0%	0%	0%	Υ	Υ	Υ	Υ	Y	Υ	Υ	61.9%		
Of which enabling		20,805,	97.7%	97.7%	0%	0%	0%	0%	0%	Υ	Υ	Υ	Υ	Υ	Υ	Υ	61.9%	Е	
Of which transitional		0	0.0%	0.0%	0%	0%	0%	0%	0%	Y	Υ	Υ	Υ	Υ	Υ	Y	0.0%		Т
Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL;N/EL	EL;N/EL	EL;N/EL	EL;N/EL	EL;N/EL	EL;N/EL										
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		0	0	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.00%		
CapEx of Taxonomy-eligible activities (A1.+A.2)		20,805	97.7%	97.7%	0.0%	0.0%	0.0%	0.0%	0.0%								61.90%		
TAXONOMY-NON-ELIGIBLE ACTIVITIES				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%										
CapEx of Taxonomy-non-eligible activities		489	2.3%														38.10%		
TOTAL		21,294	100 %														100.00%		

56

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices

## Proportion of OpEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2024

Financial year 2024	Year Substantial contribution criteria DNSH criteria ("Does Not Significantly Hard						m")												
Economic Activities (1)	Code (2)			Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy- aligned (A.1.) or -eligible (A.2.) OpEx, year 2023 (18)	Category enabling activity (19)	Category transitional activity (20)
Text		EUR	%	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y; N; N/ EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
TAXONOMY-ELIGIBLE ACTIVITIES			_																
Environmentally sustainable activities (Taxonomy-aligned)																			
Hydropower	CCM 4.5	5,794	6%	Υ	N/EL	N/EL	N/EL	N/EL	N/EL	Υ	Υ	Υ	N/A	N/A	Υ	Υ	13%	Е	
Thermal power	CCM 4.20	21,730	22%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Υ	Y	Υ	Υ	N/A	Υ	Y	75%	Е	
Nuclear power	CCM 4.27	67,065	69%	Y	N	N/EL	N/EL	N/EL	N/EL	Υ	Y	Υ	Υ	Υ	Υ	Y	0%		Т
Nuclear power	CCM 4.28	-543	-1%	Y	N	N/EL	N/EL	N/EL	N/EL	Υ	Y	Υ	Υ	Υ	Υ	Y	0%		Т
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		94,046	96%	96%	0%	0%	0%	0%	0%	Υ	Υ	Υ	Y	Υ	Y	Y	88%		
Of which enabling		27,524	28%	28%	0%	0%	0%	0%	0%	Υ	Y	Υ	Υ	Υ	Υ	Y	88%	Е	
Of which transitional		66,522	68%	68%	0%	0%	0%	0%	0%	Υ	Y	Υ	Υ	Υ	Υ	Y	0%		T
Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL;N/EL	EL;N/EL	EL;N/EL	EL;N/EL	EL;N/EL	EL;N/EL										
Thermal power	CCM 4.20	3,666	4%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								12%		
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		3,666	4%														12%		
OpEx of Taxonomy-eligible activities (A1.+A.2)		97,711	100%														100%		
TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
OpEx of Taxonomy-non-eligible activities		0	0%														0%		
TOTAL		97,711	100 %														100%		

	Proportion of turnover / Total turnover			Proportion of CapEx / To	otal CapEx		Proportion of OpEx /	Total OpEx
	Taxonomy-aligned per objective	Taxonomy-eligible per objective		Taxonomy-aligned per objective	Taxonomy-eligible per objective		Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	92.8%	89.5%	CCM	98%	98%	CCM	100%	96%
CCA	0%	0%	CCA	0%	0%	CCA	0%	0%
WTR	0%	0%	WTR	0%	0%	WTR	0%	0%
CE	0%	0%	CE	0%	0%	CE	0%	0%
PPC	0%	0%	PPC	0%	0%	PPC	0%	0%
BIO	0%	0%	BIO	0%	0%	BIO	0%	0%

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices

## Nuclear and fossil gas related activities

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to 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 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 best available technologies.	YES
3.	The undertaking carries out, funds or has exposures to 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
Row	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	NO
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	NO
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	NO

## **Taxonomy-aligned economic activities (denominator)**

Turnover - Taxonomy-aligned economic activities in the denominator (EUR 1,000)

		Amount and proportion								
		CCM+	Climate change mitigation CCM + CCA (CCM)  Amount % Amount				te ge tion ()			
Row	Economic activities	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%	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	426,896	51.2%	426,896	51.2%	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	136,203	16.3%	136,203	16.3%	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%	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%	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%	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	183,610	22.0%	183,610	22.0%	0	0.0%			
8.	Total applicable KPI	834,203	100.0%	834,203	100%	0,0	0.0%			

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices

CapEx - Taxonomy-aligned economic activities in the denominator (EUR 1,000)

#### OpEx - Taxonomy-aligned economic activities in the denominator (EUR 1,000)

		Amount and proportion				on					Am	ount and p	roportio	n	
	Row Economic activities		CCA	Clima chanç mitigat (CCM	je ion	Clima chan adapta (CC/	ge ition			CCM+	CCA	Clima chan mitiga (CCN	ge tion	Clima char adapta (CC	nge ation
Row	Economic activities	Amount	%	Amount	%	Amount	%	Row	Economic activities	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%	0	0.0%	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%	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%	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	67,065	68.6%	67,065	68.6%	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%	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	-543	-0.6%	-543	-0.6%	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%	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%	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%	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%	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%	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%	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	20,805	97.7%	20,805	97.7%	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	27,524	28.2%	27,524	28.2%	0	0.0%
8.	Total applicable KPI	21,294	100.0%	21,294	100%	0	0.0%	8.	Total applicable KPI	97,711	100%	97,711	100%	0	0.0%

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices

## Taxonomy-aligned economic activities (numerator)

Turnover - Taxonomy-aligned economic activities in the numerator (EUR 1,000)

		Amount and proportion							
		CCM+	CCA	Clima chan mitiga (CCN	ge tion	Climat chang adaptat (CCA	je ion		
Row	Economic activities	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%	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	426,896	51.2%	426,896	51.2%	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	136,203	16.3%	136,203	16.3%	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%	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%	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%	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	183,610	22.0%	183,610	22.0%	0	0%		
8.	Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI	746,708	100.0%	746,708	100%	0	0%		

#### CapEx - Taxonomy-aligned economic activities in the numerator (EUR 1,000)

		Amount and proportion							
		(CCM+	CCA)	Clima chan mitiga	ge	Climat chang adaptat	je		
Row	Economic activities	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%	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%	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%	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%	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%	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%	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	20,805	97.7%	20,805	97.7%	0	0%		
8.	Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI	20,805	100%	20,805	100%	0	0%		

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices

## Taxonomy-eligible but not taxonomy-aligned economic activities

Proportion

Turnover - Taxonomy-eligible but not taxonomy-aligned economic activities (EUR 1,000)

## OpEx - Taxonomy-aligned economic activities in the numerator (EUR 1,000)

			Am	ount and p	roportio	on						Clima	ite	Clima	ate
		(CCM+	CCA)	Clima chan mitiga	ge	Climat chang adaptat	е			(CCM+C	CCA)	chan mitiga (CCN	tion	chan adapta (CC	ation
Row	Economic activities	Amount	%	Amount	%	Amount	%	Row	Economic activities	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%	0	0%	1.	Amount and proportion of taxonomy-eligible but not 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%	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	67,065	68.6%	67,065	68.6%	0	0%	2.	Amount and proportion of taxonomy-eligible but not 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%	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	-543	-0.6%	-543	-0.6%	0	0%	3.	Amount and proportion of taxonomy-eligible but not 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%	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%	0	0%	4.	Amount and proportion of taxonomy-eligible but not 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%	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%	0	0%	5.	Amount and proportion of taxonomy-eligible but not 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%	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%	0	0%	6.	Amount and proportion of taxonomy-eligible but not 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%	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	27,524	96.2%	27,524	96.2%	0	0%	7.	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	27,543	3.3%	27,543	3.3%	0	0.0%
8.	Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI	94,046	100%	94,046	100%	0	0%	8.	Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	27,543	100%	27,543	100%	0	0.0%

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

Environmental information

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices

CapEx - Taxonomy-eligible but not taxonomy-aligned economic activities (EUR 1,000)

#### OpEx - Taxonomy-eligible but not taxonomy-aligned economic activities (EUR 1,000)

		Proportion							Proport	tion					
		(CCM+	CCA)	Clima chan mitigat (CCN	ge tion	Clima chan adapta (CC/	ge ition			(CCM+(	CCA)	Clima chan mitiga (CCN	ge tion	Clima chan adapta (CC)	nge ation
Row	Economic activities	Amount	%	Amount	%	Amount	%	Row	Economic activities	Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-eligible but not 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%	0	0.0%	1.	Amount and proportion of taxonomy-eligible but not 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%	0	0.0%
2.	Amount and proportion of taxonomy-eligible but not 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%	0	0.0%	2.	Amount and proportion of taxonomy-eligible but not 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%	0	0.0%
3.	Amount and proportion of taxonomy-eligible but not 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%	0	0.0%	3.	Amount and proportion of taxonomy-eligible but not 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%	0	0.0%
4.	Amount and proportion of taxonomy-eligible but not 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%	0	0.0%	4.	Amount and proportion of taxonomy-eligible but not 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%	0	0.0%
5.	Amount and proportion of taxonomy-eligible but not 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%	0	0.0%	5.	Amount and proportion of taxonomy-eligible but not 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%	0	0.0%
6.	Amount and proportion of taxonomy-eligible but not 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	0.0%	6.	Amount and proportion of taxonomy-eligible but not 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%	0	0.0%
7.	Amount and proportion of other taxonomy-eligible but not 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%	0	0.0%	7.	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	3,666	3.8%	3,666	3.8%	0	0.0%
8.	Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%	8.	Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	3,666	100%	3,666	100%	0	0.0%

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

Decisive Power strategy

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices

## Taxonomy non-eligible economic activities

#### Turnover - Taxonomy non-eligible economic activities (EUR 1.000)

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	59,952	7.2%
8.	Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI	59 952	100 %

### CapEx - Taxonomy non-eligible economic activities (EUR 1.000)

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	489	2.3%
8.	Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI	489	100%

#### OpEx - Taxonomy non-eligible economic activities (EUR 1.000)

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0.0%
8.	Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI	0	0.0%

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

→ Appendices

#### **Accounting principles for Taxonomy reporting**

Pohjolan Voima group reports the proportion of economic activities eligible, ineligible, and compliant with the taxonomy for the following key performance indicators (KPIs): the turnover KPI, the capital expenditure KPI and the operating expenditure KPI. The KPI data is presented in different tables as specified in the regulation.

Performance indicators related to the EU taxonomy in the consolidated delegated disclosure obligation regulation (EU) 2021/2178 are calculated from data obtained from Pohjolan Voima's financial systems, and they are based on the same information and accounting principles as Pohjolan Voima's consolidated financial statements of 31 December 2024 for the ended financial year (see notes to the consolidated financial statements for further information).

Pohjolan Voima's consolidated financial statements are prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union. Based on the Accounting Act and the regulations issued under it, the IFRS refer to standards and interpretations adopted by the EU in accordance with the procedure described in Regulation (EC) No 1606/2002 of the European Parliament and of the Council. Pohjolan Voima has calculated the KPIs based on the financial data in the 2024 consolidated financial statements and verified that no double claiming has occurred. The definitions of the KPIs are based on the Group's interpretation of the definitions in the consolidated delegated disclosure obligation regulation.

#### **Turnover:**

Pohjolan Voima has calculated turnover indicator 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 includes segmentally only 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-related indicators 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. Pohjolan Voima does not report capital expenditures for its nuclear power operations, as due to the nature of its shareholdings, nuclear-related capital expenditures are also not included in the Investments presented in Pohjolan Voima's annual report.

#### Operating expenditure (OpEx):

In accordance with the Commission Delegated Regulation, Pohjolan Voima has included in OpEx-related indicator direct, non-activated expenditure that are necessary to ensure continued and effective operation of property, plant and equipment, including 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. The taxonomy-eligible operating expenses for activities 4.27 and 4.28 include maintenance expenses for fixed assets in existing nuclear power plant units, in accordance with the Commission Delegated Regulation.

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

# **Value tables of diagrammes**

## Pohjolan Voima's electricity production in 2024

TWh	%
1.8	11.4
13.6	84.5
0.7	4.2%
16.1	100
	1.8 13.6 0.7

## Pohjolan Voima's electricity production capacity on 31 December 2024

	TWh	%
Hydropower	451	16
Nuclear power	1974	68
CHP	463	16
Total	2,889	100

## Pohjolan Voima's heat production in 2024

	TWh	%
Process heat	1.2	49
District heat	1.3	51
Total	2.5	100

## Pohjolan Voima's heat production capacity on 31 December 2024

	TWh	%
CHP	1,089	100
Total	1,089	100

## Nuclear power production in 2020-2024

	2020	2021	2022	2023	2024
Nuclear power	8.3	8.2	9.3	14.4	13.6

## Electricity production, by energy source 2020–2024 TWh

	2020	2021	2022	2023	2024
Hydropower	2.2	2.1	1.7	1.8	1.8
Nuclear power	8.3	8.2	9.3	14.4	13.6
Wood-based fuels	0.8	1.0	0.9	0.7	0.6
SRF	0.1	0.1	0.1	0.0	0.0
Peat	0.2	0.2	0.3	0.1	0.1
Coal	0.2	0.2	0.1	0.0	0.0
Natural gas	0.0	0.0	0.0	0.0	0.0
Oil	0.0	0.0	0.0	0.0	0.0
Others	0.1	0.0	0.0	0.0	0.0

## Heat production by energy source in 2020-2024 TWh

	2020	2021	2022	2023	2024
Wood-based fuels	2.3	2.6	2.4	2.5	2.1
SRF	0.3	0.3	0.2	0.2	0.1
Peat	0.5	0.3	0.5	0.1	0.1
Coal	0.0	0.0	0.0	0.0	0.0
Natural gas	0.1	0.0	0.0	0.0	0.0
Oil	0.0	0.0	0.0	0.0	0.0
Others	0.4	0.1	0.0	0.0	0.0

## Hydropower production in 2020-2024 TWh

	2020	2021	2022	2023	2024
Hydropower	2.2	2.1	1.7	1.8	1.8

## Process heat and district heat production in 2020-2024 TWh

	2020	2021	2022	2023	2024
Process heat	1.9	1.6	1.4	1.2	1.2
District heat	1.7	2.0	1.7	1.7	1.3

#### POHJOLAN VOIMA

#### **ANNUAL REPORT 2024**

#### **POHJOLAN VOIMA**

This is Pohjolan Voima

Key figures

CEO's review

Highlights of the year

**Decisive Power strategy** 

#### **BUSINESS OPERATIONS**

Production year 2024

Hydropower

Thermal power

Nuclear power

#### **CORPORATE SUSTAINABILITY**

Corporate social responsibility is an intrinsic part of the strategy

Achievements in 2024

Implementation of sustainability efforts

**Environmental information** 

Social information

Governance information

Entity-specific information – security of electricity and heat supply

**Appendices** 

## Fuels in heat and electricity production 2020-2024 TWh

	2020	2021	2022	2023	2024
Wood-based fuels	4.3	5.1	4.5	4.3	3.6
SRF	0.5	0.6	0.4	0.3	0.2
Peat	1.0	0.8	1.1	0.3	0.3
Coal	0.5	0.6	0.3	0.0	0.0
Natural gas	0.1	0.1	0.0	0.0	0.0
Oil	0.0	0.0	0.1	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0

## Carbon neutral electricity production in 2024

	%
Nuclear power	84.5
Hydropower	11.4
Wood-based fuels	3.5
SRF, 60% share	0.1
Fossil fuels incl. peat	0.5
Total	100

## Carbon neutral heat production in 2024

	70
Wood-based fuels	85.1
SRF, 60% share	3.5
Fossil fuels incl. peat	11.4
Total	100

## Number of personnel on 31 Dec in 2020-2024, in permanent employment

	2020	2021	2022	2023	2024
Men	54	25	22	23	23
Women	17	17	16	16	17

## Years of employment on 31 Dec 2024, in permanent employment

Years of employment	Men	Women
under 5	7	5
5-15	8	7
over 15	8	5

## Number of personnel by Group companies on 31 Dec 2024, in permanent employment

	Persons	%
Pohjolan Voima Oyj	26	65.0%
PVO-Vesivoima Oy	10	25.0%
Kymin Voima Oy	2	5.0%
Kaukaan Voima Oy	2	5.0%
Total	40	100.0%

## Reducing the use of peat

	2019	2020	2021	2022	2023	2024	2025
Use of peat, GWh	1,517	1,016	816	1,143	295	263	
Target, %	0	-20	-40	-60	-70	-75	-80
Actual, %	0	-34	-47	-26	-81	-83	

# Specific carbon dioxide emissions from electricity and heat production in 2020–2024 $\ensuremath{\mathsf{TWh}}$

	2020	2021	2022	2023	2024
Specific CO <sub>2</sub> -emissions from electricity [g CO <sub>2</sub> /kWh]	31.1	33.9	30.7	5.1	5.0
Electricity production, TWh	11.8	11.7	12.3	17.0	16.1
Specific CO <sub>2</sub> -emissions from heat [g CO <sub>2</sub> /kWh]	76.0	61.3	79.0	34.0	39.0
Heat production, TWh	3.6	3.5	3.1	2.8	2.5
Specific CO <sub>2</sub> -emissions from electricity and heat [g CO <sub>2</sub> /kWh]	43.0	40.3	40.5	9.2	9.6

## Carbon dioxide emissions from heat and electricity production in 2020–2024

	2020	2021	2022	2023	2024
CO <sub>2</sub> emission [mil. tonnes]	0.64	0.60	0.63	0.18	0.18
Electricity production, TWh	11.8	11.7	12.3	17.0	16.1

## Acidifying emissions from heat and electricity production in 2020–2024

	2020	2021	2022	2023	2024
Sulphur dioxide emissions [1,000 t]	0.5	0.5	0.5	0.2	0.2
Nitrogen oxide emissions [1,000 t]	1.6	1.8	1.5	1.3	1.0
Electricity production. TWh	11.8	11.7	12.3	17.0	16.1

## Particle emissions from heat and electricity production in 2020-2024

	2020		2022	2023	2024
Particle emissions [t]	72	69	54	41	41
Electricity production. TWh	11.8	11.7	12.3	17.0	16.1



Pohjolan Voima Oyj Mikonkatu 7 A5 P.O. Box 40 FI-00101 Helsinki, Finland Business ID 0210161-4 Tel. + 358 (0)10 478 5000 www.pohjolanvoima.fi





