

# 2022

Annual report



# 2022

SAVON VOIMA OYJ ANNUAL REPORT



SAVON VOIMA OYJ, SAVON VOIMA VERKKO OY  
P.O. Box 1024 (Kapteeninväylä 5), 70901 Toivala  
exchange +358 17 223 111

**CUSTOMER SERVICE NUMBER:**

+358 17 224 400  
asiakaspalvelu@savonvoima.fi

**24 H SERVICE NUMBERS:**

Electricity: +358 800 307 400, district heat: +358 800 307 800

**EMAIL ADDRESS FORMAT:**

firstname.lastname@savonvoima.fi

www.savonvoima.fi

**SOCIAL MEDIA:**

facebook.com/savonvoima  
twitter.com/savonvoima  
instagram.com/savonvoima

LAYOUT: Kari Vesterinen, Savon Voima Oyj

PHOTOGRAPHS: Kari Vesterinen

PAPER: Nautilus Classic

PRESS: Offsetpaino L. Tuovinen Ky

## Contents

- 3** Savon Voima in brief
- 4** CEO's review
- 6** Key figures
- 7** Savon Voima in 2022

### REVIEW OF BUSINESS AREAS

---

- 8** Electricity network
- 9** District heating and power generation
- 10** Customer service
- 11** Personnel

### SUSTAINABLE DEVELOPMENT

---

- 12** Materiality analysis
- 13** Materiality matrix
- 14** Savon Voima's tax footprint

### REPORT OF THE BOARD OF DIRECTORS AND FINANCIAL STATEMENTS

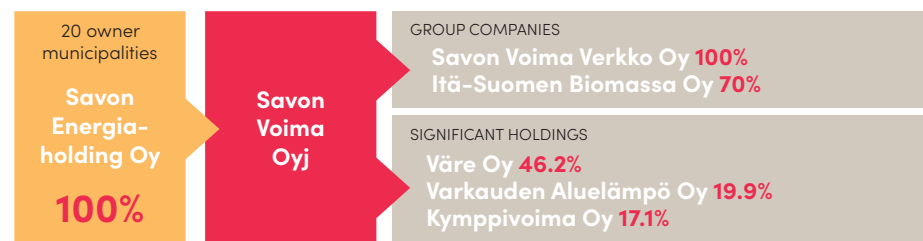
---

- 16** Report of the Board of Directors
- 25** Financial statements
  - 26** Consolidated balance sheet
  - 27** Consolidated income statement
  - 27** Consolidated cash flow statement
  - 28** Parent company balance sheet
  - 29** Parent company income statement
  - 29** Parent company cash flow statement
  - 30** Notes to the income statement and balance sheet
  - 41** Auditor's report

# Savon Voima in brief

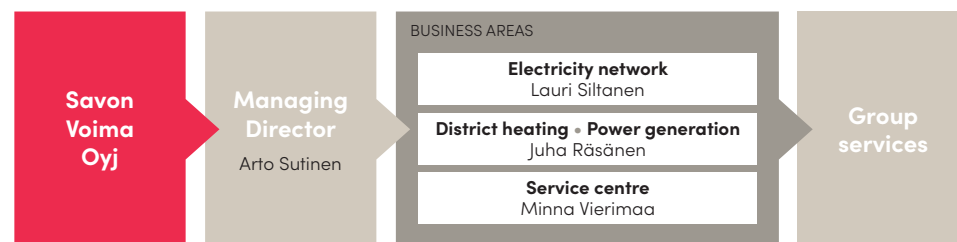
## Group structure 1 January 2023

Savon Voima Oyj is wholly owned by Savon Energiaholding Oy, which is owned by the 20 municipalities in our network area.



*Savon Voima Joensuu Oy merged with the parent company on 31 December 2022.*

Savon Voima Group's business activities include the distribution of electricity and network services, production and distribution of district heat, power generation and customer service and invoicing solutions offered to other operators in the energy sector.



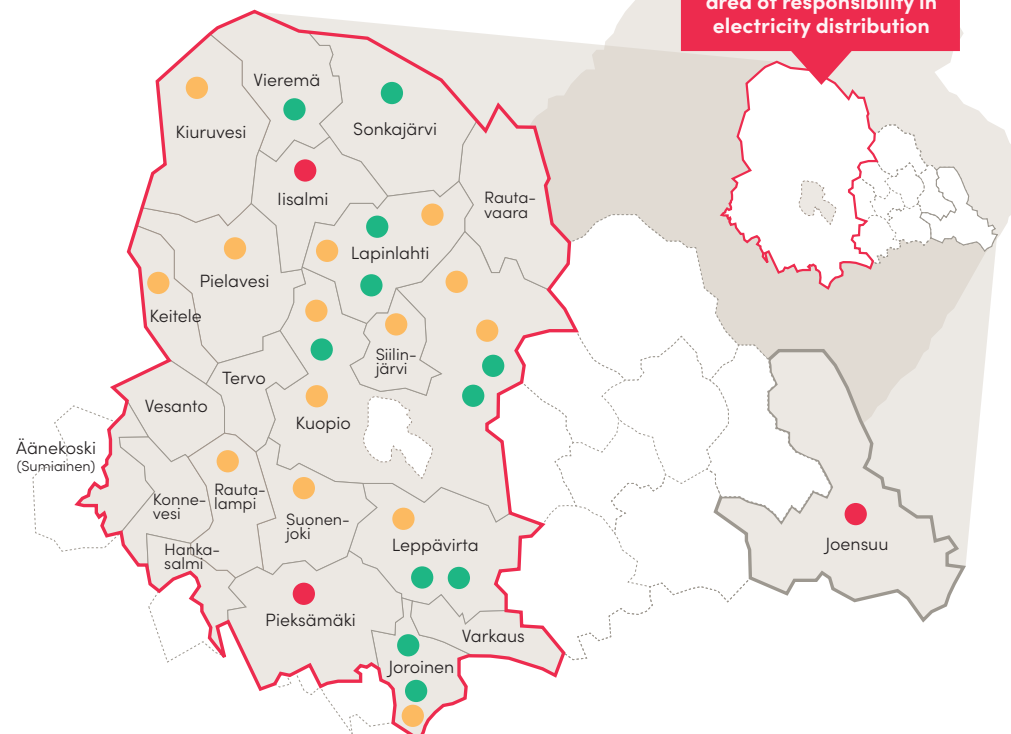
[savonvoima.fi/kestavakehitys](https://savonvoima.fi/kestavakehitys)

Want to read more about Savon Voima's corporate responsibility and sustainable development themes? View our sustainable development review.

**Savon Voima** offers district heating in 21 district heating networks in 13 municipalities, mostly from renewable heat sources. In addition, we generate electricity at 11 hydroelectric power plants and have combined heat and power generation at the Iisalmi, Pieksämäki and Joensuu power plants.

**Savon Voima Verkko** is the 6th-largest distribution system operator in Finland, responsible for the distribution of electricity and other network services to approximately 120,000 customers in North Savo and parts of South Savo and Central Finland. The electricity network is approximately 27,000 km long, about 230 m per customer.

- Separate production of district heat
- Combined heat and power generation (CHP)
- Hydroelectric power generation



## CEO's review

# We achieved stable results in a crisis environment



The financial year began with optimistic expectations of the easing of COVID-19 restrictions and an increase in economic activity. Russia attacked Ukraine on 24 February 2022, and previous rises in the commodity market were attributable to Russia's preparations for military action. As the spring progressed, the focus moved towards the next heating season: solving the shortages caused by sanctions, the availability and price challenges, and the practical testing of preparedness and recovery plans. By autumn, political debate and efforts to influence the market situation increased. The operating profit for 2022 was at the previous year's level, and the availability of the company's own operations was at an excellent level.

In 2022, the average price of electricity in the price area of Finland was EUR 154.04/MWh (72.30). The market price of electricity was the highest ever measured on an annual level. On average, the area price for Finland was 13% higher than Nord Pool's system price, which was high at EUR

135.86/MWh (62.31). At the European level, the price of electricity was affected by the dependence of the Nordic market on the margin price of German natural-gas condensate, increased grid connections and France's surprising challenges in the availability of nuclear power.

In Finland, the test run period of Olkiluoto 3, which started promisingly, was interrupted several times during 2022, pushing the already meagre electrical power situation to its limits in the forecasts. The interruptions were caused by loose parts in the turbine reheater, lack of an automation update and damage to the feed water pumps. The delay was challenging not only nationally but also for Savon Voima in terms of risk policy hedging, with one of the largest shares in its production forecast missing. The scaling up of the company's own power generation was sufficient to cover the shortfall in production. However, during the year, power shortages due to the weather, major power plant damage or other reasons became a realistic scenario. Energy savings were highlighted in communications by both our company and the whole sector with the *Down a Degree* campaign. The results have been promising, with electricity savings of about 10% both nationally and in Northern Savo.

The Russian invasion of Ukraine launched political processes whose outcome seems to be detrimental both to the desired end result and to the additional investments required by the energy transition. The rise in the prices of energy products, together with core inflation, posed challenges in many ways. During the summer, the working capital crisis related to producers' guarantee requirements escalated. The energy crisis culminated in government intervention and the rebalancing of Fortum's situation with a stability loan, whose terms



were tight compared to market-based loans. Municipality Finance also launched a package for financing municipal energy companies.

The energy crisis also affected consumers, for whom the rise in the price of electricity became visible when old contracts were replaced by new ones. In connection with the budget negotiations, the Ministry of Economic Affairs and Employment published a package for electricity users in order to alleviate the situation, with the aim of maintaining incentives for saving electricity and thereby preventing power shortages during the winter. In November, high electricity prices rekindled the discussion, including at the EU level. In 2023, the consequences appear to result in legislation that is significantly detrimental to the energy sector. Initiatives such as an electricity price cap, intervention in the pricing of the market by means of regulation and an excess profits tax are examples that do not bring more clean power generation capacity to the market, therefore failing to address the root cause of the situation. By contrast, a price cap would reduce electricity savings and increase the likelihood of power shortages. At worst, a price change in the market model would cut the market-based investments in the green transition.

Despite the challenging operating environment, Savon Voima continued its investments as planned. The group's investments were EUR 56.6 (56.6) million. The investments were mainly directed at the weatherproofing investments of EUR 42.4 (43.3) million for the electricity network in the whole region. The investments in production and heating amounted to EUR 14.2 (12.4) million.

Savon Voima and Joensuu Biocoal Oy have launched a joint procurement com-

pany with the aim of acquiring biomass for Savon Voima's plants and supplying raw materials for Joensuu Biocoal Oy's new bioindustrial plant. The start-up of the company took place at the beginning of the war started by Russia, when Savon Voima decided to suspend the procurement of Russian peat and forest industry by-products, taking into account the security of supply aspects and the ethical basis of raw material sources. Alternative domestic sources of supply were rapidly built to replace Joensuu's share of approximately 34% of the energy fractions.

Savon Voima and P2X Solutions signed a letter of intent to build an industrial-scale production plant for green hydrogen and electrofuels in Savon Voima's Joensuu power plant area. Once built, the plant would produce green hydrogen with electricity produced from renewable energy at a capacity of 30–50 MW and, as a side stream, produce 15–20% of the district heat needed in Joensuu, capturing 100,000 tonnes of carbon dioxide annually.

During the year, we took significant actions to promote our carbon neutrality target. The bioenergy programme was maintained, and around 98% of the heat sources in Savo were domestic and local energy sources. As examples, Pakkasmarja Oy in Suonenjoki, the ski arena in Leppävirta and our Iisalmi plant started to recover waste heat from their processes as an energy source for district heating. In the bioconversion, our largest unit, the Joensuu power plant, was converted towards carbon neutrality to a significant extent. We signed a climate cooperation agreement with the City of Pieksämäki with the aim of achieving carbon neutrality. We made a commitment to preserving and increasing biodiversity as part of Finnish Energy's biodiversity programme. Savon Voima also

received certificates for its information security, environmental management and energy efficiency systems in summer 2022.

Savon Voima Verkko Oy has been building a fibre-optic network as part of the weatherproofing investments. The fibre-optic network covers the most important urban areas and the backbone network in the network area. Agreements concluded with two telecommunications operators will open up these fast connections for the use of the local residents and businesses. Approximately 715 (950) km of electricity network was built to be weatherproof. There were few storms that caused major disruptions during the year, and approximately 93% of their impact was on parts of the network that have not yet been renovated to be weatherproof.

Savon Voima is involved in Finland's largest wind power project through Kymppivoima Oy. The annual energy production of the wind farm will be over 1.3 terawatt-hours. Construction was in progress in 2022, and the project is expected to be completed at the end of 2024.

We achieved our goals of zero accidents, zero environmental damage and zero data breaches. In 2022, there were no accidents leading to absence, marking our second year in a row on the zero accidents path. Investment in a culture of proactive observation and safety management in our operating methods has yielded results. The group's objective is to work at least 1,000 days without accidents, a goal to be met on 23 May 2023. At the end of the year, the number of days without an accident was 869.

Savon Voima Group's net sales were EUR 231.7 (228.5) million. The group's operating profit was EUR 49.0 (48.1) million and

operating margin EUR 119.4 (113.3) million. Savon Voima Joensuu Oy merged with the parent company with the aim of making administration more efficient and achieving business savings. The group's results were affected by the fact that Savon Voima's customers achieved savings of about 10% in their energy use in the autumn and the distribution system operator decided not to invoice the network service fees for December, amounting to approximately EUR 3.6 million.

The objective of the owner municipalities in Savo is to achieve a reasonable and stable profit and to increase the value of the company. In accordance with the will of the owners, we are preparing to launch water management services. The group's administration is organised with water management in mind in all aspects.

It was quite a year, and I would like to thank our employees, partners and owners. I would also like to thank our customers for their trust in our operations throughout our long history.

Personally, I would like to thank Finnish Energy's personnel and members for my chairmanship in 2021–2022. My membership in the Board of the Confederation of Finnish Industries also ended after the same period. It has been an honour and a privilege to be have a front-row seat during these epochal times.

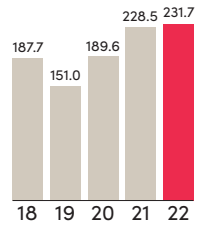
Siilinjärvi, 21 January 2023



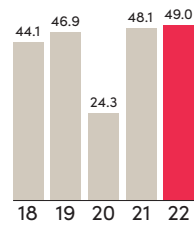
Arto Sutinen

## Savon Voima Group

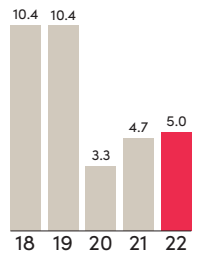
Net sales (MEUR)



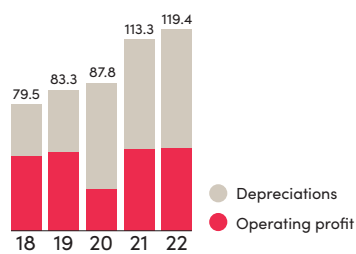
Operating profit (MEUR)



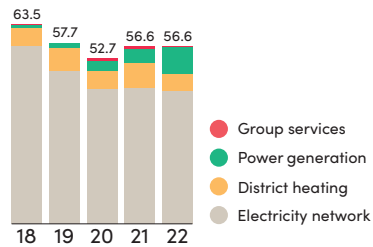
Return on investment (%)



Operating margin (MEUR)



Investments (MEUR)



### PERSONNEL

**209**

on average during the year

### AVERAGE AGE

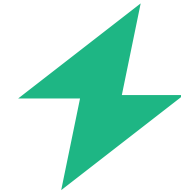
**44.1 yr**

permanent staff on 31 Dec.

## Savon Voima Verkko Oy

NET SALES (MEUR)	OPERATING PROFIT (MEUR)	INVESTMENTS (MEUR)
<b>99.5</b> (109.1)	<b>36.8</b> (45.0)	<b>42.4</b> (43.3)
ELECTRICITY NETWORK (km)	DISTRIBUTION VOLUME (GWh)	CUSTOMERS
<b>27,800</b> 230 m/customer	<b>1,764</b> (2,099)	<b>120,902</b>
UNDERGROUND CABLING	SOLAR POWER SYSTEMS (pcs)	
Medium-voltage network <b>19%</b> Low-voltage network <b>46%</b> ..... Total <b>34%</b>	<b>976</b> (+ 46%) systems connected to the electricity network in 2022	

**81,500**  
in a weatherproof electricity network



## District heating and power generation

NET SALES (MEUR)		OPERATING PROFIT (MEUR)		INVESTMENTS (MEUR)	
DISTRICT HEATING 82.9 (87.0) .....		DISTRICT HEATING 7.9 (17.3) .....		DISTRICT HEATING 5.6 (8.0) .....	
POWER GENERATION 50.3 (33.1)		POWER GENERATION 19.0 (9.2)		POWER GENERATION 8.4 (4.4)	
DISTRICT HEATING NETWORK (km) 623		DISTRICT HEATING CUSTOMERS 5,823		HEAT ENERGY SALES (GWh) 1,136 (1,222)	
				POWER GENERATION VOLUME (GWh) 519 (520)	

Previous year's value in brackets

**1 JANUARY**



**Itä-Suomen Biomassa Oy started operations**

Joensuu Biocoal Oy decided to build a new biochar plant at Savon Voima's Joensuu power plant. Biochar production is expected to start in the power plant area in 2024. With the investment decision, the operations of the joint biomass procurement company of Savon Voima and Joensuu Biocoal Oy, Itä-Suomen Biomassa Oy, were launched. Savon Voima is the main owner of the company with a 70% holding.

**2 FEBRUARY**

**Datahub system introduced**

The energy sector introduced a national datahub for centralised information exchange. The four-year project at Savon Voima was successfully completed.



**Better weatherproofing in Varkaus**

We announced the renovation of the Kinnari electricity network in Varkaus, where the medium-voltage network will be completely rebuilt. Having reached the end of its service life, the low-voltage network will be mostly upgraded, stabilising the electricity distribution to about 400 sites.

**3 MARCH**

**Optical fibre and weatherproofing**

As a result of cooperation agreements, the operators will rent the free capacity of Savon Voima's fibre-optic cables and continue to offer it to local consumers and business customers interested in fibre-optic connections.

**We stopped using Russian biomass and peat**

Savon Voima decided to stop receiving and procuring fuel from Russia due to Russia's military action against Ukraine.

**4 APRIL**



**Recognition for occupational safety**

The excellent level of our occupational safety received II-level recognition in the annual level classification of the Zero Accident Forum.

**Utilisation of waste heat**

In Suonenjoki, Pakkasmarja's waste heat is transferred to our district heating network, while in Leppävirta, the waste heat from the ice rink and ski arena is used to heat properties in the Vokkola area.

**5 MAY**

**We published our electricity network development plan**

A public feedback channel on the plan to develop the security of supply of the electricity network was opened on our website.

**6 JUNE**



**Brown trout planted in Joroinen**

In a joint effort between Savon Voima and Savo-Karjalan Ympäristötutkimus Oy, approximately 8,000 young brown trout were planted in the Huutokoski rapids in Joroinen.

**Halting biodiversity loss with Finnish Energy**

On 9 June, Finnish Energy published a biodiversity map that contains targets for halting biodiversity loss and aims to make the energy sector's net impact on nature positive by 2035. We are involved in the sector's goals.

**Improved communications during power outages**

Previously sent by post, advance notifications of power outages caused by the construction or maintenance of the electricity network are now sent by text message and email. This change improves timely communication.

**7 JULY**

**Weatherproof network in Syvänniemi**

The first phase of the extensive weatherproof electricity network project in Karttula, Syvänniemi and Pihkainmäki started, involving the replacement of an overhead trunk line with underground cabling from the southern side of Karttula to Syvänniemi, all the way to Mustalahti.

**Heat from the open air in Iisalmi**

The Iisalmi power plant's new heat pump solution generates district heat from the power plant's waste heat in winter and from the open air in the summer. The heat pump can cover up to almost 10% of the demand for district heat during the summer.

**8 AUGUST**

**ISO certificates for information security and environmental management systems**

The independent certification company Inspecta Sertifiointi granted Savon Voima the ISO/IEC 27001:2013 information security certificate and ISO 14001: 2015 environmental certificate. The certificates are a sign of years of work for information security and the environment.

**Green hydrogen in Joensuu**

Savon Voima and P2X Solutions announced an enquiry into the construction of an industrial-scale production plant for green hydrogen and electrofuels in Savon Voima's Joensuu power plant area.

**9 SEPTEMBER**



**Testing bird spirals to protect birds**

In Maaninka, bird spirals were used for the first time in Savon Voima Verko's distribution area to mark the 110-kilovolt power line crossing the water system. The spirals protect birds and improve the stability of the electricity network.

**Environmental cooperation with Pieksämäki announced**

Savon Voima and the City of Pieksämäki are planning to initiate climate cooperation with the aim of supporting Pieksämäki's carbon neutrality objective by means of emission-free and smart energy solutions.

**10 OCTOBER**

**Investment in biofuel quality monitoring at the Iisalmi power plant**

We invested in the energy efficiency of the Iisalmi power plant by optimising the logistics and combustion process with a new sampling solution.

**Basic charge for December not invoiced**

Following Fingrid's decision not to collect its grid fees, Savon Voima Verko announced that it would transfer the benefits directly to its customers and did not invoice the basic charges for the network service in December 2022 on the electricity distribution bills of its customers.

**11 NOVEMBER**

**Strongly towards electricity savings**

At the beginning of the winter, we communicated across multiple channels to encourage electricity savings and inform people about possible power shortages. Among other things, we published an additional customer magazine focusing on electricity savings and power shortages.

**12 DECEMBER**



**Savon Voima Joensuu merged with the parent company**

Savon Voima Joensuu Oy merged with Savon Voima Oyj on 31 December 2022. The goal of the merger is to reorganise the group structure, reduce unnecessary administration, streamline operations and achieve business-related cost savings.



**savonvoima.fi/tiedotteet**

Read all our press releases from 2022.

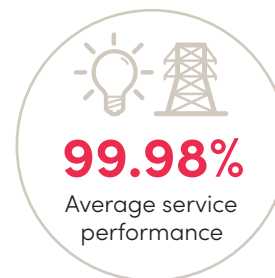


# Electricity network

Savon Voima Verkko is responsible for the distribution of electricity and other network services to over 120,000 households and companies in North Savo and parts of South Savo and Central Finland. Our electricity network is 27,800 km long, about 230 m per customer. In terms of the number of customers, we are the 6th-largest distribution system operator in Finland.

## Key events in 2022

- Due to the energy crisis, network operations prepared for possible power shortages and rotating power outages.
- Energy distributed to customers decreased from 2021 by a total of 125 GWh, or 6.9%. The total electricity distribution volume in the network was 1,764 GWh.
- During the year, we invested EUR 42.4 million in our area's network and continued building a weatherproof network. The weatherproof network covers about 69% of our customers.
- A record number of solar power systems were connected to the electricity network: 976 systems, an increase of 43% from the previous year.
- Since Fingrid did not collect its grid fees, we decided to transfer the benefits directly our customers, and did not invoice the basic charges for the network service in December on the customers' electricity distribution bills. This EUR 3.6 million decision was partly self-financed.
- During the year, major disruptions and storms were avoided, and a lot of preventive work was carried out, including clearing in the summer and helicopter operations in winter. The service rate during the year was excellent at 99.98%.



Electricity network	2022
Sites – consumption	118,310
Sites – production	3,252
110 kV	519 km
45 kV	124 km
110/20 kV stations	36
45/20 kV stations	4
20 kV network	12,027 km
0.4 kV network	15,195 km
20/0.4 distribution substations	10,723

Distribution volume (MWh)	2022
0.4 kV	1,372,429
20 kV	199,232
110 kV	104,300
Distribution volume to other networks	64,023

Degree of cabling	2022
Medium-voltage network	19%
Low-voltage network	46%
Underground cabling total	34%

Investments (MEUR)	2022
Medium-voltage network	16.9
Low-voltage network	8.8
Transforming stations	10.0
Electric stations	3.0
Distribution network	1.6
Compensation for land use	1.4
Measuring instruments	0.6
Other	0.2
<b>Total</b>	<b>42.4</b>

Key figures, electricity quality	2022	2021
17. Fault outage (h/customer, year)	1.858	3.741
19. Maintenance outage (h/customer, year)	0.51	0.807
<b>Total</b>	<b>2.37</b>	<b>4.55</b>
18. Fault outage (pcs/customer, year)	8,354	8,339
20. Maintenance outage (pcs/customer, year)	0.24	0.209
<b>Total</b>	<b>8.59</b>	<b>8.60</b>
26.a Fault outage (pcs/year)	2,326	2,276
26.b Maintenance outage (pcs/year)	962	848
26.c High-speed automatic reclosing (pcs/year)	1,010	1,102
26.d Delayed automatic reclosing (pcs/year)	2,186	1,475
<b>Total</b>	<b>6,484</b>	<b>5,701</b>

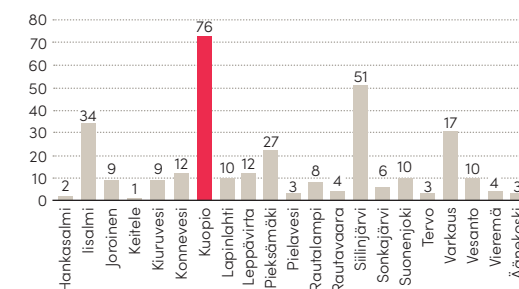
### Key to electricity quality indicators:

17. and 19. = Energy-weighted average outage time (h/customer, year)  
18. and 20. = Energy-weighted average number of outages (pcs/customer, year) • 26. = Numbers of interruptions per year in the medium-voltage network (pcs/year)

## New electricity connections

Residential building  
**115**  
Recreational building  
**72**  
Other  
**124**  
Total  
**311**

## New electricity connections by municipality





# District heating and power generation

We are one of Finland's largest producers of district heating. We offer heating in 21 district heating networks in 13 municipalities. We have about 623 km of district heating networks. In 2022, the share of renewable energy sources in our heat production was 93%. Almost one-fifth of the heat we deliver comes from waste heat and other side streams.

## Key events in 2022

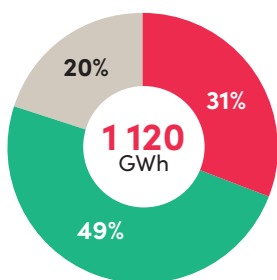
- A warmer year than average impacted our sales, and the volume of district heat and steam delivered was 1,136 GWh (1,222 GWh).
- In March, we decided to stop receiving and procuring fuel from Russia due to Russia's military action against Ukraine. With the decision, the fuel was replaced with alternatives available nearby, taking into account security of supply.
- In the beginning of 2022, we implemented a pricing reform for district heating customers, switching to seasonal pricing in six district heating networks. As a result, the summer prices decreased in these networks.
- In the summer, we announced a letter of intent with P2X for starting hydrogen production in Joensuu.
- In autumn 2022, the bioconversion of the Joensuu power plant's power boiler was completed, enabling heat production with fully renewable fuels.
- The Iisalmi, Pieksämäki and Joensuu power plants were accepted as producers of guarantees of origin for district heat.

Our power generation business produces electricity for the electricity market at Savon Voima's 11 hydroelectric power plants and at the Iisalmi, Pieksämäki and Joensuu combined heat and power plants. We are making strong progress towards carbon-neutral production. Our power generation will be completely carbon-neutral by 2027.

## Key events in 2022

- A total of 519 GWh (520 GWh) of electricity was produced, which was 0.3% less than in the year before. Of this, our own production was 350 GWh (368 GWh).
- Slightly less electricity was produced than in the previous year due to the decrease in hydroelectric power generation. The decrease was due to the inferior water and snow conditions.
- Hydroelectric power generation decreased by 15 GWh from the previous year, meaning approximately 15%.
- In 2022, the average price of electricity in the price area of Finland was EUR 154.04/MWh (72.30). The price was the highest ever measured. The high market price increased the profitability of power generation.

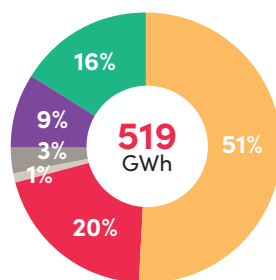
Origin of district heat sold



- Separate production of heat
- Combined heat and power generation (CHP)
- Heat recovery and waste heat from industry

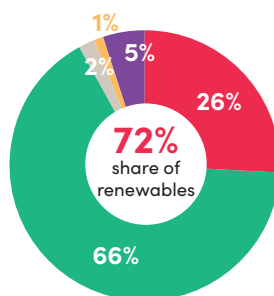
Origin of electricity produced

Own production and production shares



- CHP (own)
- Nuclear power
- Hydropower
- Wind power
- CHP
- Hydropower (own)

Energy sources of our own CHP, heat and steam production



- Peat
- Wood-based fuels
- Heavy and light fuel oil and gas
- Bio-oil and biogas
- Purchase of heat

## A vision to reduce carbon dioxide emissions in energy production

1990–2019

- ✓ Bioenergy programme
- ✓ Decrease of imported fuels from 70% to 3%

2019

- ✓ Introduction of two-way district heat by district heating network

2020

- ✓ Peat share 35%, peat being replaced by wood
- ✓ Cooperation with Taaleri Plc: a contract for building a biocoal plant in Joensuu
- ✓ Of the Siilinjärvi area, nearly 100% is heated using waste heat from industrial processes

2026

- ✓ Use of peat ends
- ✓ Share of fossil fuels less than 2.5%
- ✓ Power generation completely carbon-neutral
- ✓ Possible utilisation of hydrogen production and waste heat

2021–2024

- ✓ Two-way district heating system for Leppävirta
- ✓ Promoting the capture and recovery of waste heat
- ✓ Safe and weatherproof electricity network
- ✓ Heat pump investments for power plant municipalities
- ✓ Bioconversion of CHP power plants in Joensuu, Iisalmi and Pieksämäki 2022–2024
- ✓ Report on the utilisation of waste heat from hydrogen production in Joensuu

2030

Electricity and district heat production completely carbon neutral

# Customer service

We serve our customers by telephone, chat and email. In addition, we have a joint service point with Kuopion Energia in Haapaniemi, Kuopio. We handle over 200,000 customer contacts annually, and our customers rated our service 4.07 out of 5 last year. Savon Voima also offers customer, invoicing and electricity market information exchange services to other operators in the energy and infrastructure sectors.

## Key events in 2022

- A big effort for our customer service was completing the customer information system project required by the national datahub implemented in February and the adoption of new operational processes relating to the exchange of information on the retail market. At the same time, other customer relationship management tools were developed to improve the handling of customer contacts.
- Customer service processes were automated and we developed customer communications, such as text message services regarding disturbances and safe connections. Notices previously sent by post about maintenance outages were also fully replaced by text messages in order to reach customers more quickly and efficiently.
- Those working in customer service received training in dealing with aggressive customers.



We took care of a total of **220,000** customer contacts.



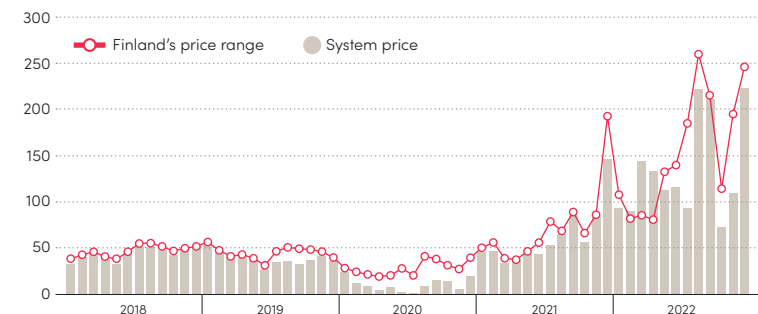
Our customers rated our customer service **4.07 out of 5**.



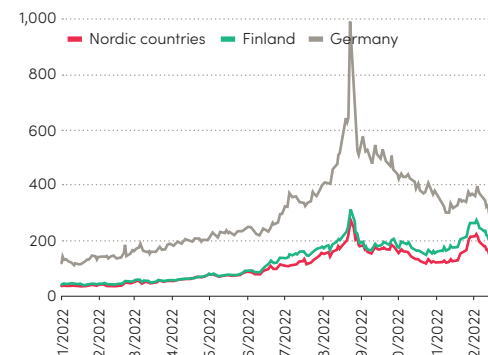
**83%** of our customers felt that they could settle their affairs at once.

## Development of market prices for electricity

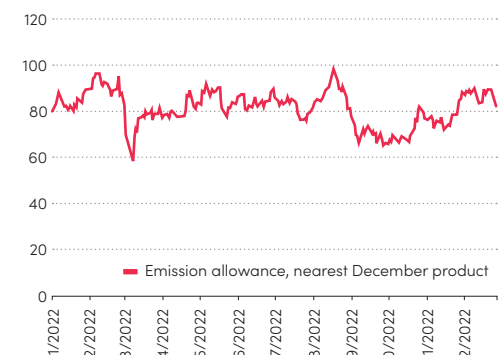
Development of monthly spot prices (EUR/MWh)



Development of prices for electricity derivatives (EUR/MWh)



Development of the price of emission allowance (EUR/tCO<sub>2</sub>)





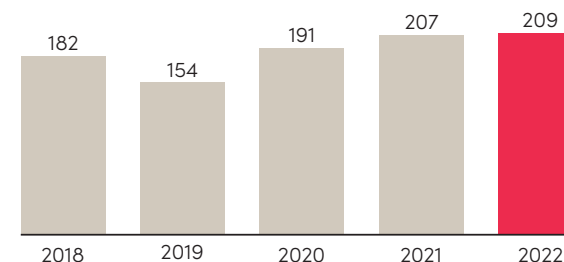
# Personnel

We are a team of over 200 experts, consisting of professionals in the energy sector, customer service and other support activities. We develop new, sustainable solutions and services for our customers' smooth daily life, clean energy production and the needs of an increasingly electrified society. People enjoy working for us: in 2022, the average length of service was 13.4 years.

## Key events in 2022

- We recruited a record number of new employees for employment relationships of indefinite duration while exceptionally many people also retired.
- We started working according to a new hybrid work handbook created together, enabling people to combine remote, on-site and multi-site work more flexibly than before.
- Occupational safety was at an excellent level, with zero accidents at work resulting in incapacity for work during the year. After two years without accidents, we are close to our goal of 1,000 days without accidents at work.
- We raised our level of preparedness in many respects. For example, we developed cybersecurity and emergency stocks and increased disturbance and preparedness exercises for personnel.
- At the end of 2022, Savon Voima Joensuu Oy, our Joensuu subsidiary, was merged with the parent company.
- The personnel survey indicated that the employee engagement index had developed from the previous year. The survey results were reviewed in various thematic workshops by teams, and several measures desired by the personnel were introduced, such as the employee bicycle benefit.

## Average personnel



**23%**

Women's share of the personnel



**13.4 yr**

Average years of experience



**44 yr**

Average age of personnel



**20**

Trainees and students in 2022

Sickness absences and accidents	2022	2021
Sickness absences (%)		
Of theoretical regular working hours	2.6	2.4
Those with no absences (%)		
Percentage of total staff with no sickness absences during the review period	26.8	44.4
Number of accidents		
Accidents at work resulting in more than one day's absence	0	0
Frequency of accidents		
Number of accidents at work resulting in at least one day of incapacity for work per one million working hours (does not include accidents on the way to and from work) = number of accidents at work x 1,000,000/working hours	0	0



[savonvoima.fi/kestavakehitys](https://savonvoima.fi/kestavakehitys)

Read more about staff-related events in our sustainable development report.

# Materiality analysis

In autumn 2022, Savon Voima implemented the first materiality analysis in its history. Based on the work, we created our sustainable development themes, which summarise Savon Voima's key aspects of responsible operations.

The materiality analysis included preparations by an external consultant, two in-house workshops attended by various experts in addition to the management team, as well as a stakeholder survey and in-depth stakeholder interviews by telephone. The online stakeholder survey was taken by more than 900 people from our stakeholder groups – customers, authorities, owners, partners and media. Clearly the most responses came from customers. A separate stakeholder survey was conducted for personnel.

On the basis of the materiality analysis, we will further develop our corporate responsibility work and, during 2023, we will create a sustainability programme for Savon Voima, enabling us to manage our sustainable development work in the future and determine the need to update the materiality analysis, for example. We also continuously monitor legislation and good practices relating to sustainable development.

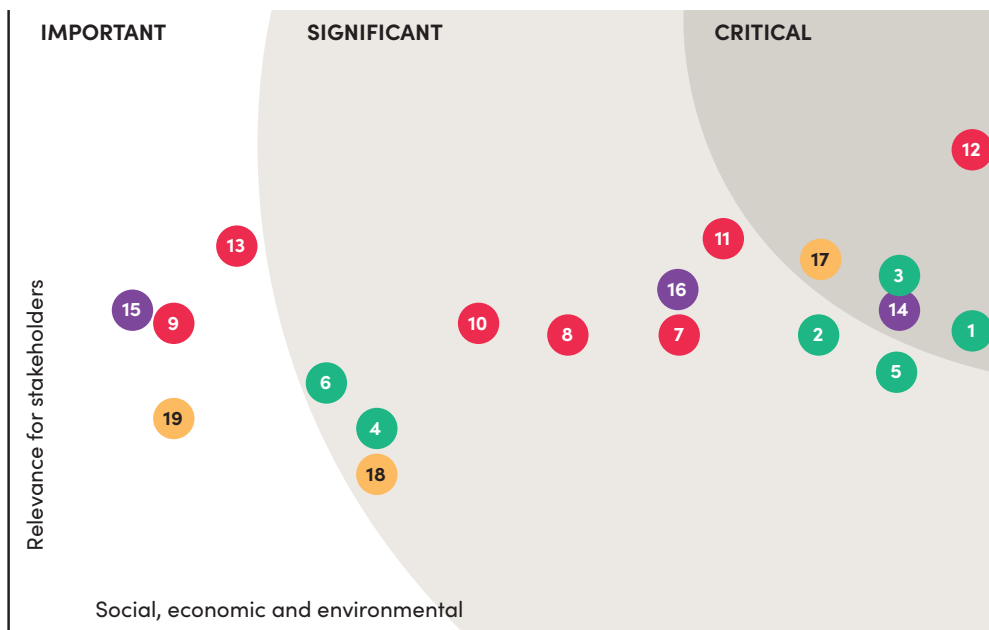
## Savon Voima's sustainable development themes

In the materiality analysis, six themes were created relating to the sustainable development areas of Savon Voima's operations. These themes cover Savon Voima's environmental responsibility, social and societal responsibility, economic responsibility and good governance.

	<b>Developing a carbon-neutral energy system</b> <ul style="list-style-type: none"> <li>Carbon-neutral power generation and district heating</li> <li>Electricity network enabling green energy solutions (e.g. solar panels, electric cars and demand response solutions)</li> <li>Promoting the circular economy and energy efficiency</li> </ul>
	<b>Impacts on nature and supporting diversity</b> <ul style="list-style-type: none"> <li>Impacts of electricity networks on biodiversity</li> <li>Environmental impacts of energy production (e.g. migratory fish, use of fuels)</li> <li>Resource efficiency (e.g. use of raw water and network materials)</li> </ul>
	<b>Good governance, ethics and transparency</b> <ul style="list-style-type: none"> <li>Good governance and compliance</li> <li>Continuous improvement of sustainability and responsible supply chains in procurement and construction</li> <li>Open dialogue with stakeholders</li> </ul>
	<b>Healthy personnel</b> <ul style="list-style-type: none"> <li>Safe workplace</li> <li>Promoting well-being at work</li> <li>Equality and non-discrimination</li> <li>Supporting the skills of employees</li> </ul>
	<b>Good customer experience</b> <ul style="list-style-type: none"> <li>High-quality customer service and data protection</li> <li>Ensuring operational reliability and security of supply</li> <li>Enabling energy efficiency and savings for customers</li> </ul>
	<b>Securing the vitality of the operating area</b> <ul style="list-style-type: none"> <li>Investments, promotion of regional development and local energy source acquisition</li> <li>Predictable profits and other income recognition for owners and shared value creation for stakeholders</li> <li>Innovations and cooperation in research and education</li> </ul>



# Materiality matrix



In the materiality analysis, Savon Voima's stakeholders were asked to assess the importance of the sustainable development themes created. In addition, the impact of the themes on the business was assessed within the company. Ensuring *operational reliability and security of supply* became by far the most critical theme. Other critical themes include *Promoting the circular economy and energy efficiency*; *Carbon-neutral power generation and district heating*; *Investments, promotion of regional development and local energy source acquisition*; and *Good governance and compliance*. These themes form the core of Savon Voima's sustainable development.

## Developing a carbon-neutral energy system

- 1 Carbon-neutral power generation and district heating
- 2 Electricity network enabling green energy solutions (e.g. solar panels, electric cars and demand response solutions)
- 3 Promoting the circular economy and energy efficiency

## Impacts on nature and supporting diversity

- 4 Impacts of electricity networks on biodiversity
- 5 Environmental impacts of energy production (e.g. migratory fish, use of fuels)
- 6 Resource efficiency (e.g. use of raw water and network materials)

## Healthy personnel

- 7 Safe workplace
- 8 Promoting well-being at work
- 9 Equality and non-discrimination
- 10 Supporting the skills of employees

## Good customer experience

- 11 High-quality customer service and data protection
- 12 Ensuring operational reliability and security of supply
- 13 Enabling energy efficiency and savings for customers

## Good governance, ethics and transparency

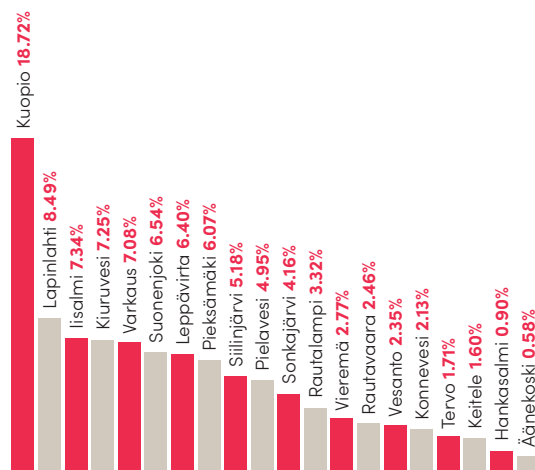
- 14 Good governance and compliance
- 15 Continuous improvement of sustainability and responsible supply chains in procurement and construction
- 16 Open dialogue with stakeholders

## Securing the vitality of the operating area

- 17 Investments, promotion of regional development and local energy source acquisition
- 18 Predictable profits and other income recognition for owners and shared value creation for stakeholders
- 19 Innovations and cooperation in research and education

# Savon Voima's tax footprint

## Ownership structure of Savon Energiaholding Oy as of 1 January 2023



**Savon Voima Group is owned by 20 municipalities in the regions of North Savo, Central Finland and South Savo through Savon Energiaholding Oy. Through our ownership base and values, we bear social and economic responsibility, which is also reflected in taxes. We only operate in Finland and pay all our taxes to Finland.**

In 2022, the Savon Voima Group consisted of Savon Voima Oyj and its wholly owned subsidiaries Savon Voima Joensuu Oy and Savon Voima Verkko Oy. The Joensuu subsidiary was merged with the parent company at the end of 2022. In addition, the Savon Voima Group includes Itä-Suomen Biomassa Oy with a 70% holding; established for fuel procurement, the company is co-owned by Joensuu Biocoal Oy. With regard to the network business, the group structure is

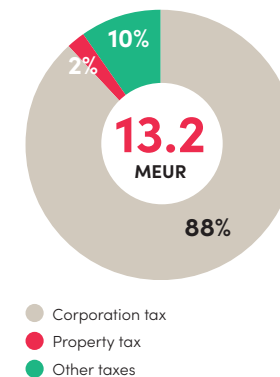
the result of the mandatory provisions of the Electricity Market Act to legally and functionally separate the electricity distribution network operations. The group structure is of no economic benefit to Savon Voima.

We are a major player in our region in terms of security of supply. Our operations have a direct impact on the surrounding society, contributing to well-being and economic development in the region. Financial responsibility therefore includes ensuring and developing the adequacy of our own resources so that our basic task is not compromised. We are also a significant developer in our operating area, contributing to the prevention of the grey economy and tax evasion by complying with the provisions of the Act on the Contractor's Obligations and Liability when Work is Contracted

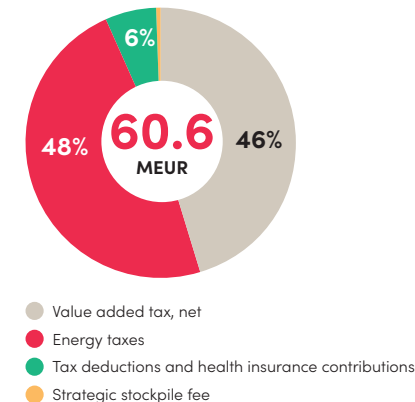
## Savon Voima Group's taxes (EUR thousand)

Background information	2022	2021	2020
Net sales	231,713	228,460	189,627
Earnings before tax	50,567	44,592	18,153
Average personnel	209	207	191
Tax paid by the company	2022	2021	2020
Corporation tax	11,667	10,989	4,536
Property tax	298	305	346
Other taxes	1,266	1,708	9,067
<b>Total</b>	<b>13,231</b>	<b>13,001</b>	<b>13,972</b>
Tax collected by the company	2022	2021	2020
Value added tax, net	27,619	30,856	28,042
Energy taxes	29,138	31,526	31,000
Tax deductions and health insurance contributions	3,679	3,234	3,141
Strategic stockpile fee	213	227	212
<b>Total</b>	<b>60,648</b>	<b>65,844</b>	<b>62,395</b>

## Tax paid by the company 2022



## Tax collected by the company 2022



Out and also by requiring it from all our service providers.

The energy sector is highly regulated, and many operations are subject to licence. In addition to our own values, our operations are guided by legislation in the energy sector, which sets requirements for things like electrical safety and fair promotion of the energy market. Savon Voima pays various annual fees related to control, permits and decisions. In 2022, such payments reached EUR 448,000.





## Report of the Board of Directors and financial statements for 2022

# Report of the Board of Directors

FINANCIAL YEAR 1 January–31 December 2022

## Savon Voima Group

Savon Voima Oyj is a wholly owned subsidiary of Savon Energiholding Oy, which is owned by 20 municipalities. On 31 December 2022, the Savon Voima Group consisted of the parent company Savon Voima Oyj and its subsidiaries Savon Voima Verkko Oy and Itä-Suomen Biomassa Oy. Savon Voima Joensuu Oy merged with its parent company on 31 December 2022. Associated companies include Kymppivoima Oy (17.1%), Kymppivoima Hankinta Oy (25.0%) and Väre Oy (46.2%).

Savon Voima Group's business operations include the electricity distribution network operations carried out by Savon Voima Verkko Oy in the electricity network owned by the company itself, the production of district heating and electricity, the distribution of district heat and the sale of district heat. Operations related to district heating and power generation were carried out in 2022 by both the group's parent company Savon Voima Oyj and its wholly owned subsidiary Savon Voima Joensuu Oy.

## Consolidated earnings and financial position for 2022

FINANCIAL PERFORMANCE (MEUR)	2022	2021	2020
Net sales	231.7	228.5	189.6
Depreciation and reduction in value	70.4	65.2	63.5
Operating profit	49.0	48.1	24.3
Profit before appropriations and taxes	50.8	44.8	18.3
Profit for the financial year	37.8	32.0	11.6
KEY FIGURES (% of net sales)	2022	2021	2020
Operating profit	21.2	21.1	12.8
Profit before appropriations	21.9	19.6	9.6
OTHER KEY FIGURES	2022	2021	2020
Return on equity (%)	8.1	7.2	2.8
Return on investment (%)	5.0	4.7	3.3
Equity ratio (%)	41.9	38.7	37.6
Liquidity, quick ratio	1.1	1.3	1.2
Investments total (MEUR)	56.6	56.6	52.7
Investm. in electricity distribution (MEUR)	42.4	43.3	43.1
Investments in power generation (MEUR)	8.4	4.4	3.3
Investments in district heating (MEUR)	5.6	8.0	5.6
Increase in connection fees (MEUR)	0.9	1.3	11.3

Savon Voima Group's net sales in 2022 were EUR 231.7 million. The group's net sales in 2021 were EUR 228.5 million, which means that net sales grew by approximately 1.4% in 2022. The growth in net sales was contributed to by the increased net sales of power generation due to the increased market prices of electricity.

The volume of the group's power generation decreased slightly (0.3%) from the previous year, as the volume of hydroelectric power generation decreased due to the inferior water supply situation. In accordance with the group's risk management policy, power generation was mainly subject to advance price hedging. Price fixings decreased the group's net sales by approximately EUR 34 million. The average hedging rate was 75% and, due to fluctuations in production volumes during the year, it was at times more than 100% fixed in price. The net sales of district heating fell compared to the previous year, as 2022 was warmer than average. The net sales of the electricity distribution network business also decreased, as customers' electricity use decreased as a result of both warmer weather and energy savings. The net sales of the electricity distribution network business were also adversely affected by the fact that customers were not invoiced for the basic charges for the network service in December, totalling approximately EUR 3.6 million. The decision was based on the announcement by the transmission system operator Fingrid Oyj not to collect the grid fees from the distribution system operators during a total of four months in 2022 and 2023. The sum of the grid fees not collected corresponded almost entirely to the one-month basic charges of households in Savon Voima Verkko's operating area, so we decided to transfer the full cost benefit directly to customers already in the invoicing for December 2022.

The group's operating profit was EUR 49.0 million. The operating profit increased by 1.9%. In particular, the sharp rise in fuel and emission allowance prices due to the war in Ukraine had a negative impact on the group's operating profit. On the whole, however, the group's operating profit increased slightly from the previous year, since the profitability of power generation improved due to high market prices. The group's operating profit was also increased by the positive result of the associated company Väre Oy, of which Savon Voima's share according to the 46.2% holding was EUR 5.1 million. In 2022, the electricity sales company Väre made the first positive result in its operating history. The accumulated losses in the previous financial years totalled EUR 13.8 million, of which Savon Voima's share

totalled EUR 6.4 million. In 2021, Savon Voima's share of Väre's losses was EUR 4.7 million.

The profitability of district heating and the electricity network decreased due to the decrease in volume as a result of warmer weather and customers' energy savings. The heavily increased prices of fuel, emission allowances and construction were not included in customer prices, and the prices of the network service or district heating were not raised. Seasonal pricing was introduced in some district heating networks at the beginning of the year, and the energy price of district heating decreased by approximately 30%, depending on the network. The operating profit of the electricity distribution network business was also reduced by the aforementioned decision not to invoice customers for network service fees in December 2022.

The group's operating expenses excluding personnel expenses were EUR 104.0 (98.1) million, an increase of 6.0% from the previous year. The increase in costs was due to the increase in the prices of fuel and emission allowances as a result of the energy crisis caused by the war in Ukraine. The costs were reduced by the lower costs of repairing storm damage to the electricity network and standard compensation costs than in the previous year. The group's personnel expenses in 2022 were EUR 13.9 (13.4) million.

The group's depreciation amounted to EUR 70.4 (65.2) million, an increase of 7.9% from the previous year. The depreciation includes EUR 14.1 million in depreciation of goodwill on consolidation arising from the Joensuu share transaction. A one-time reduction in value of EUR 3.4 million was made for the pyrolysis equipment at the Joensuu power plant, as the income likely to be generated in the future in non-current assets by this system was estimated to be permanently lower than the depreciable acquisition cost.

The group's financial items were EUR 1.7 million net positive. In 2021, the net financing costs were EUR 3.4 million. As a whole, financial items in 2022 were on the yield side since, as a result of the strong rise in market rates of interest, the interest rate derivative provision of EUR 2.0 million on the balance sheet of interest rate derivatives not deemed to be hedging on 31 December 2021 was cancelled. In addition, these interest rate derivatives not deemed to be hedging were prematurely matured during 2022, resulting in an income of EUR 1.0 million in interest expenses. Profit before appropriations and taxes amounted to EUR 50.8 (44.8) million.



The group's taxes were EUR 12.8 (12.6) million. The profit for the financial year was EUR 37.8 million, compared to EUR 32.0 million in 2021.

The group's gross investments in fixed assets totalled EUR 56.6 million. A total of EUR 42.2 million was spent on the construction of the electricity network. EUR 5.6 million was invested in the district heating network and heat production. Investments in power generation amounted to EUR 8.4 million. Other investments amounted to EUR 0.2 million.

Connection fees increased by EUR 0.9 million. The increase came from Savon Voima Verkko Oy's connection fees.

Savon Voima Group's interest-bearing debt financing is centralised in the parent company. During the financial year, the group's loans were amortised by EUR 50.0 million. At the end of the financial period, the group's long-term loans amounted to EUR 510 million and short-term loans to EUR 20 million. To ensure liquidity, an overdraft facility has been added to the consolidated account. In addition, the group has a five-year revolving credit facility and a commercial paper programme for short-term financing needs. There was no credit limit or financial limit on the consolidated account and no commercial paper was issued at the end of the financial year.

At the end of 2022, the group's equity ratio was 41.9%, compared to 38.7% in the previous year. As measured by quick ratio, liquidity was good, 1.1 (1.3). For the purpose of calculating the key figures, connection fees have been treated as an equity-like item.

## Energy markets

The price of wholesale electricity in Finland was 15.40 cents/kWh last year. This is 113% higher than in 2021. Last year, the system price in the Nordic countries was 13.59 cents/kWh, compared to 6.23 cents/kWh in the previous year. Last year's average price was the highest ever. The reason for the high prices was mainly the decrease in Russian natural gas and coal on the European market. This caused fuel prices to rise, which pushed up electricity prices in Central Europe and further in the Nordic countries. Finland's price was also significantly affected by the end of electricity imports from Russia in May. Prices were high throughout Europe, but the average price in Finland was the second-lowest among EU countries after Sweden. In 2022, Finland's electricity consumption amounted to 82 TWh (terawatt hours), 6.2% less than in the year before. Consumption in industry was 36 TWh, 5.5% less than in the previous year. Other consumption was 45 TWh, a reduction of 6.8%.

In 2022, Finland's power generation volume was 69 TWh, which was the same as in the year before. The production of hydro-electric power amounted to 13 TWh, 14.5% less than in 2021. The production of wind power was slightly over 12 TWh, an increase of 41.1%. The production of solar power was 0.4 TWh, an increase of 27.6%. Combined heat and power generation (CHP) was 16 TWh, 19.1% less than in 2021. The production of nuclear power amounted to 24 TWh, an increase of 7.0%. The volume of condensate production increased by 30.1% to 4 TWh.

Finland's net import amounted to 13 TWh, which is 29.6% less than in 2021. Imports from Russia were 4 TWh, 60.2% less than in the year before. Imports from Russia ended in May 2022. Net import from Sweden increased by 1.7% to 15 TWh. Net export to Estonia was 6.8 TWh, an increase of 2.3%.

The price of emission allowances moved laterally throughout the year. The beginning of the war caused a momentary price collapse, but the price quickly returned to its previous level. At the end of trading, the price of the emission allowance (EUA-DEC-22) was EUR 83.98/tCO<sub>2</sub>, compared to EUR 83.81/tCO<sub>2</sub> at the beginning of the year.

According to the statistics of the energy industry, the total emissions of district heating decreased by seven per cent from the previous year. Carbon dioxide emissions from the production of electricity and district heat totalled 8.6 million tonnes in 2022, a decrease of six per cent from the previous year. The heating season in Finland was 0.4 °C warmer than normal and about 1.2 °C warmer than in the previous year. In 2022, the average temperature in Savon Voima's operating area was 0.7 °C higher than in the year before.

## SAVON VOIMA GROUP'S BUSINESS OPERATIONS

### District heating

The net sales of the group's district heating business amounted to EUR 82.9 (87.0) million, a 4.7% decrease from 2021. The decrease in net sales is explained by the decrease in district heat consumption caused by the warmer year. The operating profit from district heating in 2022 was EUR 7.9 (17.3) million. The operating profit was 54% lower than in 2021. The most significant reason for the decrease in operating profit was the increased fuel and emission allowance costs as a result of the crisis in Ukraine.

The year 2022, which was warmer than average, had an impact on the heating needs in the entire operating area. The

realised group-level heat and steam sales in 2022 amounted to 1,136 GWh (1,222), which is 7% less than in 2021.

A total of 1,746 GWh (1,860) of fuels and purchased heat were used, including fuels for power generation and separate sites such as steam and local heat. A total of 1,343 GWh (1,423) of fuels and purchased heat were used in the production of district heat. The share of renewable heat sources in the production of district heat was 73 (72) per cent, the rest of the heat sources being peat, heavy and light fuel oil, and liquefied petroleum gas.

As a result of the crisis in Ukraine, the import of fuels to Finland was disrupted and Savon Voima decided in March to completely abandon the use of fuels imported from Russia. Before the outbreak of the war in Ukraine, forest processed chips, forest industry by-products and small amounts of peat had been imported from Russia to Savon Voima's Joensuu power plant. The share of imports in energy production was fully replaced by domestic fuels, mainly local forest processed chips and peat. The need to use peat was a little higher than planned. However, the share of peat in energy procurement remained at the 2021 level, at approximately 26%. As a result of the end of Russian imports, the degree of domestic origin of the fuels used by Savon Voima increased to 93%. In 2021, the degree of domestic origin was 78%.

The share of oil and liquefied petroleum gas in the production of district heat was a record low, approximately 1.4%. The use of oil and liquefied petroleum gas in energy production was reduced, especially due to the good availability of production facilities. The lack of long sub-zero periods also reduced the need for oil-fired peak-load plants.

The war in Ukraine and the consequent end of energy imports from Russia strongly increased the demand for domestic fuels. With regard to forest processed chips and industrial by-products in particular, competition has intensified, which has been reflected in significant increases in the prices of batches of fuel. Part of the increase in the price of forest fuels is explained by the increase in harvesting and logistics costs, especially in the first half of the year. As regards pellets, availability problems were observed in the early part of the 2022–2023 heating season. Despite intensified competition, fuel supply for district heat production has been secured in all of Savon Voima's district heating network areas. However, the increased fuel costs were not included in the customer prices of district heat during the operating year.

A total of 53 new district heating customer relationships were established during the year. Correspondingly, 16 customers

terminated their contract for district heating during the year. At the end of the year, the total number of customers was 5,823. A total of 4,144 metres of new district heating network was built, and 4,345 metres of old pipelines were renovated. At the end of 2022, the total length of the networks was 623 km.

The most significant new investment completed during 2022 was the bioconversion of the Joensuu power plant, which will enable the power plant boiler to produce energy at full capacity using 100% biomass. In early 2022, Joensuu Biocoal Oy announced its investment decision to build a new biochar plant at Savon Voima's Joensuu power plant. Biochar production in the Joensuu power plant area is expected to start in 2024. With the investment decision, the operations of the joint biomass procurement company of Savon Voima and Joensuu Biocoal Oy, Itä-Suomen Biomassa Oy, were launched.

In Suonenjoki, the utilisation of waste heat from the cold production plant of Pakkasmarja Oy's cold storage was started in the Suonenjoki district heating network with the help of a heat pump. The utilisation of waste heat was also promoted in Piek-sämäki, where Savon Voima produces cold for the city's ice rink and utilises the waste heat generated in the cold production in the district heating network.

## Power generation

In 2022, the net sales in power generation were EUR 50.3 (33.1) million. The realised operating profit was EUR 19.0 (9.2) million. The operating result of power generation improved due to the market prices of electricity, which were higher than in the previous year.

In 2022, the production volume of electricity amounted to 519 GWh (520), 0.3% less than in the corresponding period of the previous year. The volume of our own back pressure production was 266 GWh, which is 1.0% less than in the year before.

During the year, the production volume of hydroelectric power amounted to 84 GWh, 15% less than in 2021. There was less water than in the previous year.

The production shares owned through Kymppivoima Oy produced 168 GWh of electricity, which is 16 GWh more than in the previous year's comparison period. The increase in production was due to the Olkiluoto 3 test run and the higher production volume of Vaskiluoto 2 than in the previous year. Wind power produced 15 GWh of electricity.

Of the investments in power generation, the most significant were the renovation of the Lastukoski regulating dam and the automation renewal of the Atro hydroelectric power plant.

## Electricity distribution network business

The net sales in the financial year were EUR 99.5 million (EUR 109.1 million in 2021) and operating profit EUR 36.8 (45.0) million. The profit for the financial year was EUR 0.0 (0.0) million.

In 2022, major disruptions and storms were avoided. However, damage to the network was caused by smaller low-pressure storms in the autumn and thunderstorms in the late summer. Disruptions were caused by snow loads in February and December and by low-pressure storms (Manu and Virpi) in March and November. In August, a storm caused power outages in the area. In other respects, the year was filled with normal gusts and thunderstorms. Overall, the year was calm with regard to electricity distribution failures.

Weather damage was actively prevented during the year. In the summer, power lines were cleared while, in the winter, a helicopter with a pile hung from it was used to prevent outages caused by snow loads. The average (energy-weighted) fault outage time experienced by customers last year was 1 hour 51 minutes (3 hours 44 minutes), which corresponds to a 99.98% (99.96%) service rate of the hours of the year. The service rate of the network was excellent last year.

In 2022, due to the energy crisis, network operations were also prepared for possible power shortages and rotating power outages. As part of the preparation, there was active communication to customers about power shortages and energy savings. The exceptional year was reflected in the decrease in customers' electricity use as a result of warmer weather and energy savings. A total of 1,764 GWh (2,099) of electricity was distributed, including 1,687 GWh to customers, which was 6.9% less than in the year before.

A total of EUR 42.4 (43.3) million was spent on investments in the electricity network. In 2022, the construction of the weatherproof network in accordance with the investment programme proceeded according to the target. The weatherproof network currently covers approximately 81,500 (78,000) customers.

Savon Voima Verkko's distribution network is approximately 27,800 km long, about 230 m per customer. 160 km of the medium-voltage network and 280 km of the low-voltage network were cabled. Another important part of building a weather-

proof network is moving overhead medium-voltage lines to roadsides. This was carried out for 190 km. The rate of underground cabling is 34% for the whole electricity network, 19% for the medium voltage grid and 46% for the low voltage grid.

The treatment of forest areas next to electric power lines was carried out for 160 km in sensitive parts of the distribution network. 100 km of forests next to power lines were treated.

Last year, construction work on a weatherproof electricity network was carried out in urban areas in particular. Last year, significant urban renovations included cabling in the Kiuruvesi area and the renewal of the electricity network in the Kinnari-Könönpelto area in Varkaus. A total of about 80 kilometres of new cable will be built in and around Kiuruvesi, while the old network is being dismantled. The project will be completed in 2023 and its total investment is approximately EUR 5.6 million. In Varkaus, the medium-voltage network in the Kinnari area will be completely rebuilt. The project includes underground cabling and new technology and automation that will improve the repair speed in fault situations. Also in Kuopio, in the Karttula-Pihkainmäki area, a significant cabling project was started during the year in which an overhead trunk line in the forests from the southern side of Karttula to Syvänniemi will be replaced with an underground cable all the way to Mustalahti. With a total investment of approximately EUR 3 million, the project will be completed in 2023. During the year, the security of supply was also improved by clearing forest areas next to the power lines and planned edge zone projects, which were carried out over a total distance of 240 km.

With regard to the regional network and substations, a new 110 kV line between Siilinjärvi and Eusniemi was started. In Sukeva, a new substation was built to ensure the security of supply in the area, and the renovation of the Pielavesi substation was started on schedule. Both substation projects will be completed in 2023.

At the end of the year, the number of network service customers was 120,902 and the total number of electricity connections was 17,174. 286 (406) new customers were connected to the electricity network, and 315 (336) connections were deactivated. The number of small-scale production sites increased by as much as 43% (mostly solar power) as 976 new sites were connected to the electricity network. Refundable connection fees in 2022 totalled EUR 0.9 (1.3) million.

The amendment to the Electricity Market Act that entered into force on 1 August 2021 affected the entire financial period. The rate of return and the profit base of the methods were signifi-



cantly reduced and the security of supply incentive was completely eliminated. In the methods, the reference level prices of network construction costs were lowered by more than 10% for Savon Voima Verkko and, at the same time, uncertainties in the global political situation increased the construction costs due to the purchase prices of individual supplies by more than 25%. As a result, the balance sheet value of the realised investments cannot be fully credited to the tied-up capital of the network business.

## RESULT OF THE PARENT COMPANY AND SUBSIDIARIES

Savon Voima Oyj runs the group's power generation and district heating business in North Savo and parts of South Savo. In addition, the company has been responsible for the group's financial management, personnel services, communications, marketing, ICT operations, invoice lifecycle services and customer services as well as environmental and land use services during the financial year. In the financial year 2022, the net sales of the company were EUR 80.7 (73.7) million and operating profit EUR 12.3 (10.3) million. The profit for the financial year was EUR 31.8 (53.2) million.

At the end of the financial year on 31 December 2022, Savon Voima Joensuu Oy, which merged with its parent company Savon Voima Oyj, ran a district heating business in Joensuu and produced power at a combined heat and power (CHP) plant in Joensuu. In the financial year, the net sales of the company were EUR 58.8 (52.9) million and operating profit EUR 14.9 (16.4) million.

Savon Voima Verkko Oy runs electricity distribution network operations in an electricity network owned by the company itself and is a distribution system operator as referred to in the Electricity Market Act in its own area of responsibility. In the financial year, the net sales of the company were EUR 99.5 (109.1) million and operating profit EUR 36.8 (45.0) million.

Itä-Suomen Biomassa Oy procures fuels for its owner companies Savon Voima Oyj and Joensuu Biocoal Oy. The company's actual operations began in 2022, when fuel was only procured for Savon Voima. In the financial year, the net sales of the company were EUR 15.1 million and operating profit EUR 0.0 million.

NET SALES BY COMPANY (MEUR)	2022	2021	2020
Savon Voima Oyj	80.7	73.7	60.4
Savon Voima Joensuu Oy	58.8	52.9	39.5
Savon Voima Verkko Oy	99.5	109.1	96.8
Itä-Suomen Biomassa Oy	15.1	—	—
Group's internal transactions	-22.3	-7.2	-7.1
<b>Savon Voima Group total</b>	<b>231.7</b>	<b>228.5</b>	<b>189.6</b>

OPERATING PROFIT BY COMPANY (MEUR)	2022	2021	2020
Savon Voima Oyj	12.3	10.3	4.1
Savon Voima Joensuu Oy	14.9	16.4	9.5
Savon Voima Verkko Oy	36.8	45.0	30.0
Itä-Suomen Biomassa Oy	0.0	—	—
Consolidated entries and eliminations	-15.0	-23.6	-19.3
<b>Savon Voima Group total</b>	<b>49.0</b>	<b>48.1</b>	<b>24.3</b>

FINANCIAL STATEMENTS, parent company	2022	2021	2020
<b>Financial performance (MEUR)</b>			
Net sales	80.7	73.7	60.4
Planned depreciation	11.6	11.6	11.3
Operating profit	12.3	10.3	4.1
Profit before appropriations	15.6	17.5	-0.1
<b>Profit for the financial year</b>	<b>31.8</b>	<b>53.2</b>	<b>8.1</b>
<b>Key figures (% of net sales)</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>
Operating profit	15.2	14.0	6.8
Profit before appropriations	19.3	23.7	-0.2
Equity ratio	23.5	20.6	16.0
Return on equity	4.6	-1.8	-1.7

## Personnel

The Savon Voima Group has a personnel plan, the implementation of which is regularly reported to the Board of Directors of the parent company, which monitors the implementation and development of the plan.

During the year, the average number of employees was 209 (207) and at the end of the year the number of employees was 205 (206). During the year, 25 new permanent employees were recruited (20; in addition, five fixed-term jobs were turned into permanent ones). 14 (15) permanent employees and 10 (5) retired persons left the service. At the end of the year, the average age of the permanent employees was 44 (45) years and

23 (20) per cent of the employees were women. At the end of the year, the average length of service was 13.4 (15.1) years.

In energy production and electricity network operations, the contingency plans were updated and the personnel participated in preparedness practice. Training in dealing with aggressive customers was also organised, since the energy crisis increased the number of encounters with customers who even threatened to use violence. Leadership was developed through modular managerial training, which was launched in the autumn. Project management skills were strengthened through project management training. A personnel survey was carried out in April/May and the results were discussed in teams at various development events. An area that developed particularly positively from the previous survey was strategy communications. On the whole, the group was seen to have developed in the right direction recently, and the future was seen to be bright.

The group's overall rate of sickness-related absences was 2.6% (2.4%) and the share of those with no absences was 26.4% (44.4%). The latter refers to persons who did not have any sickness-related absences during the review period. The average number of working days lost due to incapacity for work was 6.4 (5.7). There were no accidents that caused at least one day of incapacity for work during the year (in 2021: 0 accidents). The average retirement age was 63.8 years (in 2021: 63.3 years).

A total of 500 (829) hours of training related to occupational safety was given, involving 54 (86) staff members. Regular safety sessions were held for the entire staff, and various safety themes were presented on a monthly basis. The topics of the safety training included training for work involving a risk of falling and traffic safety training for production personnel in addition to the mandatory occupational safety card training.

Personnel key figures, Group	2022	2021	2020
Average personnel	209	207	191
Pers. at the end of the financial year	205	206	213
Salaries paid (EUR thousand)	12,958	12,492	10,313
Total personnel expenses (EUR thousand)	13,892	13,396	10,671
Personnel key figures, Parent company	2022	2021	2020
Average personnel	127	129	131
Pers. at the end of the financial year	127	128	129
Salaries paid (EUR thousand)	7,811	7,634	6,997
Total personnel expenses (EUR thousand)	9,065	8,863	7,824

## Risk management

Risk management is implemented in the Savon Voima Group as part of normal management work and strategic planning. The group's general risk management objectives and principles have been defined. The objective of the group's risk management is to support the achievement of the goals of the business strategy and to prevent undesirable operational deviations.

The political environment and legislation have a significant impact on the conditions for operation in the energy sector. Possible increased regulation, the position of fuels used, the development of emission control mechanisms and the market environment and various tax solutions are factors that can have a detrimental effect on the financial position and profitability of the Savon Voima Group.

The group has plans for significant investments in the coming financial years, especially in relation to the electricity distribution network and reaching the carbon neutrality target. For this reason, the availability of financing and the changes in interest rates are sources of uncertainty for the business. The risks of long-term investments are also increased by the fact that the population development in the group's operating area has been mainly negative, with the exception of individual local variations.

The key financial risks for Savon Voima Group are caused by fluctuations in market prices and volumes as well as potential challenges for counterparties to meet their obligations. Price risks are mainly related to wholesale electricity prices, emission allowance prices and fuel prices.

The price development in the electricity market mainly affects the group's production business. Factors having an impact on the price of electricity in the Nordic market in the short term include the water supply situation, the fluctuation in wind power, temperature, the prices of emission allowances, the price of fuels and the export and import situation between countries. The volume risk is caused by, among other things, fluctuations in the production of electricity and heat and fluctuations in the demand in retail sale. The counterparty risk consists of contracts with third parties.

Savon Voima hedges against the price risks of electricity by concluding electricity derivative contracts for production and loss electricity. For hedging operations, the group has a risk

management policy for energy trade approved by the Board of Directors of the parent company, the implementation of which is monitored systematically.

The energy trade risk management policy is prepared by the group's internal energy trade risk management committee (RMC) and approved by the group's Board of Directors on the proposal of the CEO of Savon Voima. Businesses involved in energy trade implement a risk management policy on a daily basis. RMC, the group's Management Team and the CEO are responsible for the continuous supervision of the implementation. The risk management situation in energy trade, risk positions and their estimated development are reported to the Board of Directors of Savon Voima Oyj on a monthly basis.

Savon Voima Group's interest-bearing debt financing is centralised in the parent company. With the acquisition of the Joensuu heat business carried out in 2020, the group's balance sheet structure changed and the amount of interest-bearing debt increased significantly. As a result, the group's financial and interest rate risks have increased significantly. The availability of financing and the changes in interest rates are sources of uncertainty for the business. For the management of financial risks, the group has a financial policy and financial strategy approved by the Board of Directors of the parent company, the implementation of which is systematically monitored as part of the regular monthly reporting.

In accordance with the financial policy, the long-term objective is to manage the risks related to access to finance and the possible re-financing of maturing financial instruments by arranging the group's financing in a multi-channel manner using financial instruments of different types and maturities.

As the group's interest-bearing liabilities are mainly floating-rate loans, any increase in market interest rates may have a significant impact on the group's profit development. In accordance with the group's financial policy, Savon Voima hedges against changes in market interest rates with interest derivatives that are only used for hedging purposes. A significant part of the group's debt financing is hedged by interest rate swaps.

Due to the inherent seasonal fluctuation of the group's business operations, the timing of cash flow income and expenses is not even for each month and financial year. This gives rise to liquidity risk associated with the business. In addition, as the group's amount of debt has increased, the liquidity risk has increased in the long term as a result of the increase in loan repayments

and interest payments. In addition to the financial policy and investment policy confirmed by the Board of Directors of the parent company and the cash flow forecasts, liquidity risk is managed by maintaining sufficient overdraft and revolving credit facilities and a commercial paper programme at the group's disposal.

Savon Voima Oyj has a 17.1% share in Kymppivoima Oy, a company operating on the Mankala principle. In accordance with the Mankala principle, the owner company is entitled to the electricity produced by the Mankala company in proportion to its ownership of each series of shares. The owner company is responsible, in proportion to its ownership of each series of shares, for the Mankala company's power generation costs, which consist of variable costs, fixed costs, depreciations and financing costs. These financing costs are also affected by interest rate derivative contracts entered into by Kymppivoima Oy. Risks related to the Mankala liabilities are managed through corporate governance and active participation in the management of the Kymppivoima Group.

Operational risks refer to potential losses due to the malfunctioning of internal processes or systems, external factors or human errors. Operational risks are managed in accordance with the specified principles of risk management, such as risk management operating and information systems, process descriptions, operating instructions, regular observation and monitoring rounds, personnel training and preventive maintenance and condition monitoring of equipment and networks.

Due to the nature of the business, IT and information security risks are also a significant risk area. The group has an information security policy approved by the Board of Directors of the parent company, the implementation of which is systematically monitored as part of the regular reporting to the Management Team and the Board of Directors. In 2022, Savon Voima's information security management system was granted the ISO/IEC 27001:2013 information security certificate, which verifies that Savon Voima's information security management system complies with the good practices applicable to it and the requirements set by laws and regulations. In addition, the certificate is a sign of commitment to the continuous development of the system and that Savon Voima systematically identifies, assesses and manages information security risks, such as cyber threats.

In 2022, Savon Voima's environmental management system was granted the ISO 14001:2015 environment certificate, which verifies that Savon Voima's operations meet the requirements

## Key identifiable areas by risk category are the following:

<b>STRATEGIC RISKS</b>	
<b>Risk</b>	<b>Management</b>
Changes in regulation	Monitoring of development through cooperation between Finnish Energy and authorities; analysis of changes, impact assessment and consideration in strategic planning
Energy and environmental risks	Participation in technology projects and representation of interests, monitoring and analysis of the development of the energy market
Functionality of the energy commodity and emission allowance market	Active influencing and preparing for market disturbances
Significant investments	Planning, monitoring and ex post evaluation of investments
Risks related to the reputation of the industry and the company	Proactive and active communication, communication with stakeholders and customers and observation of the general opinion
Risks for regional economy, negative demographic change	Monitoring of development and use of research data in planning
<b>OPERATIONAL RISKS</b>	
<b>Risk</b>	<b>Management</b>
Operational errors	Operating instructions, process descriptions and operating system, risk management information system
Risks in using power plants and the network	Risk manual, operating systems and risk management information system
Information technology and information security risks	Information management strategy and architecture, information security policy, guidelines and control, risk management information system, cyber insurance
<b>FINANCING AND MARKET RISKS</b>	
<b>Risk</b>	<b>Management</b>
Interest rate, liquidity and financial market risks	Financial policy, investment policy, financial strategy, active monitoring and analysis of financial markets, systematic control and reporting
Counterparty risks	Financial policy, investment policy, credit control included in energy trade risk management policy
Mankala responsibilities	Corporate governance, participation in the management of Kymppivoima Oy and supervision by Kymppivoima Oy
Energy trade risks	Risk management policy and control in energy trade
<b>RISKS OF ACCIDENT</b>	
<b>Risk</b>	<b>Management</b>
Personal Injury	Occupational health and safety policy, personal insurance, EHS guidelines and minimum requirements, other guidelines, training, preventive action
Extensive storm damage	Blackout guidelines, preparedness and communication plans, preventive action
Power plant or other damage	Property and business interruption insurance, contingency and communication plans, risk management information system, preventive action
Environmental damage	Environmental policy, risk management information system, protection guidelines, contingency and communication plans, operating systems, insurance, preventive action

set by the standard and that the company is committed to continuous improvement in environmental management. With the help of the certified management model, Savon Voima identifies the environmental impacts of its operations and sets goals and objectives to minimise the environmental impacts. The certificate covers the district heating and power generation operations of both Savon Voima and Savon Voima Verkko, including districting heating and power generation plants, substations and district heating networks.

The risks of damage with the most significant economic impact relate to physical damage to production facilities, damage to the distribution network and system failures. These can also result in the operations being interrupted and third parties becoming accountable. The aim is to prevent damage through high-quality operations, which are ensured by, for example, operating instructions, personnel training and preventive risk management measures. In addition, damage risks are prepared for by means of appropriate property, business interruption, liability and personal insurance, if it is reasonable and appropriate in terms of costs, taking into account the impact of the risks.

Risk management solutions offered by external service providers are used in identifying, evaluating and monitoring risks other than those described above.

## Environmental matters and responsibility

The implementation of the Savon Voima Group's environmental policy is regularly reported to the Board of Directors of the parent company, which monitors the implementation and development of the policy. The Board of Directors is not aware of any environmental risks affecting the financial position of the company that would differ from the risks generally associated with the nature of the industry or with government decisions and future legislation.

In 2022, the environmental management system for district heating and power generation and distribution was granted an ISO 14001 certificate. In accordance with the requirements, the operating model and risk management will be improved by means of internal audits, for example. No significant environmental damage occurred during 2022. A total of 25 oil spills of varying degrees at distribution substations were recorded in the electricity distribution network.

More detailed information on environmental measures can be found in the responsibility section of the annual report.



As part of the development of operations in accordance with the environmental management and information security systems, both internal and service provider audits were carried out. Late in the year, a cybersecurity exercise was held to rehearse the use of operating models for identifying cybersecurity threats, risk management measures and securing business continuity in exceptional situations.

## Emission allowances and trading

Savon Voima Oyj's emission trading covers district heating and power generation in Iisalmi, Pieksämäki and Joensuu.

The realised emissions in Iisalmi and Pieksämäki in 2022 were 44,136 tonnes of carbon dioxide before verification (verified in 2021: 61,766 tCO<sub>2</sub>). Savon Voima Oyj received a total of 12,872 EUA of free emission allowances for the 2022 surrenders. To cover the deficit, emission allowances were purchased for surrender at an average price of EUR 57.22, which resulted in costs of over EUR 1.2 million. For Joensuu, the realised emissions were 107,559 tonnes of carbon dioxide (111,603 tCO<sub>2</sub>) and the costs of emission allowances were EUR 4.6 million.

Due to the challenges in the availability of wood fuels, the use of peat in Joensuu was higher than planned. In order to reduce carbon dioxide emissions, the group aims to phase out the use of peat by 2027, promote forms of heat production not based on combustion and increase energy efficiency.

The hydroelectric power plants of Savon Voima Oyj and the power plants of Iisalmi, Pieksämäki and Joensuu are covered by the Guarantee of Origin system for electricity produced from renewable energy sources. The Guarantee of Origin (GoO) system is based on the EU's Renewable Energy Directive. The guarantee of origin is a certificate of the origin of electricity produced from renewable energy sources. The origin of electricity must be verified if it is sold as renewable. Nationally, the certification of the origin of electricity is based on the Act on Verification and Notification of Origin of Electricity. Guarantees of origin were issued for a total of 260.7 GWh directly for the power generation of the company's own hydroelectric and CHP power plants.

In July 2022, the Guarantee of Origin system for heat also entered into force. The Guarantee of Origin system for heat involves production at the Iisalmi, Pieksämäki and Joensuu power plants. A total of 518.8 GWh of guarantees of origin for renewable heat were granted for the heat produced by these plants.

## Research and development

Savon Voima has been involved in a consortium that has studied the possibilities of utilising geothermal energy in Tampere. The project examined how hydraulic hammer technology and the Deep Geothermal Single Well system are suitable for drilling a geothermal well 3 km deep in Finnish soil. In addition to the Tampere study, Savon Voima also prepared its own preliminary study earlier in Joensuu with the Geological Survey of Finland (GTK). In 2022, however, the joint project in Tampere ended with the result that the project's target of a three-kilometre drilling depth was not achieved and the project costs did not stay within the target. In addition, the project did not receive any further investment aid for a further phase into the depth of 3–7 km.

Savon Voima Group companies are involved in the following research and development projects:

- The development project for the energy technology RDI ecosystem in North Savo, which involves several regional energy companies as well as Savonia University of Applied Sciences and the University of Eastern Finland. Savon Voima is involved in Energy Cluster North Savo, which was established as a result of the project, together with energy sector companies in the region.
- The FarmGas-PS2 project, which aims to promote the use of biogas in North Savo. The development project is led by the Natural Resources Institute Finland (Luke), and Savonia University of Applied Sciences is involved in the implementation. The project duration is 1 June 2021–31 August 2023.
- The joint BIOSCOPE project of the University of Eastern Finland, the European Forest Institute and the Natural Resources Institute Finland, the aim of which is to grow the regional economy of North Karelia by bringing together companies, researchers and international students in a new way.
- Finnish Energy's Electricity Research Pool, which organises and promotes research related to the technology and business development of electricity power engineering, electricity distribution and service production in Finland.
- A project investigating the utilisation of demand response solutions in the development of network operations together with Tampere University. The project will be completed in early 2023.

## Changes in the ownership and management of the company

There were no changes in the ownership of Savon Voima Oyj during the financial year. All members of the Board of Direc-

tors of Savon Voima Oyj were re-elected at the Annual General Meeting held on 8 April 2022, and there were no changes in the composition of the Board of Directors during the financial year.

## General meetings

The Annual General Meeting of Savon Voima Oyj was held on 8 April 2022. The financial statements were approved, the Board of Directors and the CEO were discharged from liability, and a dividend of EUR 14,015,541.50 was resolved to be paid. Ernst & Young Oy was selected as the auditor, with Elina Laitinen, Authorised Public Accountant, as the principal auditor.

## Significant changes in the group structure during the financial year

Savon Voima Joensuu Oy's 70% holding in Itä-Suomen Biomassa Oy, which was entered in the Trade Register on 5 May 2021, was transferred in May 2022 to Savon Voima Oyj, which then became the parent company of Itä-Suomen Biomassa Oy. Itä-Suomen Biomassa Oy started operations in 2022.

Savon Voima Joensuu Oy merged with the parent company Savon Voima Oyj on 31 December 2022. Savon Voima Joensuu Oy was dissolved as a result of the merger.

## Associated company loans and liabilities

Savon Voima Oyj has granted loans to companies belonging to the group. The total amount of the loans is EUR 12.3 million. The loans are repaid as agreed and interest is paid once a year. The interest rate for the loans is determined according to the weighted average cost of capital (WACC) determined for each year by the Energy Authority. In 2022, the interest rate was 3.97%. No premium or margin is added to or deducted from the interest rate. The loans are unsecured.

## Share capital and shares

By a resolution of the Extraordinary General Meeting held on 5 October 2022, Savon Voima Oyj's Articles of Association were amended such that 192,178 Series A shares and 384,356 Series K shares in accordance with the Articles of Association were renamed Series A shares and a new Series B was added to the Articles of Association. The provision concerning the

nominal value of the shares was deleted in the same context.

Savon Voima Oyj's share capital is EUR 968,577.12, which is divided into 576,534 shares.

The company's shares are divided into Series A and B as follows:

- There are 576,534 shares in Series A.
- Series B shares have not been issued so far.

When the company's assets are distributed, Series A shares provide a right to the part of the assets to be distributed that has been accumulated from activities other than water management services. Series B shares provide a right to the part of the assets to be distributed that has been accumulated from water management services.

Shares are not encumbered by consent or redemption clauses.

Administration and management

BOARD OF DIRECTORS

**Chairperson:** Juha Koukka, CEO, M.Sc. (Econ.)  
**Deputy Chairperson:** Vesa Lötjönen, Municipal Manager, MA

- Jari Kääriäinen, Lawyer, LL.M.
- Ossi Martikainen, Farmer, M.Soc.Sc.
- Tarja Tikkanen, Professional Board Member, LL.M.

AUDITOR

Ernst & Young Oy, Authorised Public Accountant Firm,  
Elina Laitinen, Authorised Public Accountant, as the principal auditor

**CEO** Arto Sutinen, M.Sc. (Econ.)

MANAGEMENT TEAM

- Arto Sutinen, CEO, Chairperson
- Lauri Siltanen, electricity network
- Juha Räsänen, energy production and district heating
- Toni Vainikainen, finance, funding and risk management
- Minna Vierimaa, HR, marketing and communications, service centre
- Tuomas Räsänen, ICT and digitalisation

Kirsi Tarvainen serves as the Secretary of the Management Team.

Significant events after the financial year

As of the beginning of 2023, the prices of district heat were increased by an average of 14.1%, as the profitability of business operations deteriorated significantly as a result of higher prices for fuels and emission allowances.

On 27 February 2023, Parliament approved an act on temporary profit tax for the electricity and fossil fuels sector. The act provides for a new temporary tax of 30% on the profits of electricity companies in the tax year 2023. In Savon Voima's business, this tax applies to power generation, the profits of which in 2023 are subject to the temporary profit tax in addition to the normal income tax.

Business development in the financial year 2023

All of the group's businesses are heavily dependent on energy demand fluctuations, which are primarily influenced by winter season temperatures. In addition, the production business depends on the market price for wholesale electricity, which is influenced not only by demand but also by the price development of fuels and emission allowances, and especially by the water and snow situation in Norway and Sweden. Price formation in the Nordic market area is also affected by the opening of new transmission links in the rest of Europe. The predictability of wholesale electricity prices has been further hampered by the strongly increased production of renewable energy, the volume of which is itself dependent on weather factors, and by the uncertainties associated with the volume of imported electricity.

In addition to weather conditions, such as storms causing major disruptions, the result of electricity distribution network business is affected by changes in regulation. The change in the methods for regulating the reasonableness in pricing of electricity carried out by the Energy Authority at the end of 2021 has an impact on the profitability of the investments already made in the electricity network, and it will also weaken Savon Voima Verkko Oy's future opportunities to carry out investments necessary for the maintenance and development of the distribution network. The Energy Authority is currently developing control methods to be applied from 2024 onwards. In addition to the company's net sales and profitability, changes in regulation methods may also have a detrimental effect on the availability or terms of financing.

The temporary profit tax act for the electricity and fossil fuels sector, approved in early 2023, applies to all profits generated by Savon Voima's power generation and will significantly increase the group's tax burden in the tax year 2023.

Economic growth started to slow in 2022. On the basis of market condition surveys, the trend is deteriorating. High inflation and sharply rising interest rates have weakened the purchasing power of households, but the situation of companies is said to have remained stable for the time being.

The economic outlook is characterised by exceptional uncertainty. The Finnish economy is expected to enter a moderate recession, inflation is expected to fall slowly and short-term interest rates are expected to continue to rise. In addition to economic factors, the price and availability of energy as well as the development of the global market together with the tense geopolitical situation may suddenly affect the economic outlook.

Overall, the group's future prospects are affected by increased uncertainty in the energy markets and changes caused by regulation. The most significant short-term uncertainties in profit development relate to the general rise in the cost level caused by the war in Ukraine and inflation, the unpredictability and large price fluctuations in the energy commodity market and the rising market interest rates. The decline in customers' purchasing power may be reflected negatively in the development of the impairment of receivables. Changes in the methods of monitoring the pricing of the distribution network will also affect the group's results and financial position. The group's fluctuation in results between financial years is expected to increase in the future.

The Savon Voima Group's operating profit excluding non-recurring items for 2023 is expected to be at the 2022 level. However, the estimate contains significant uncertainties.

Use of the profits

The distributable funds of Savon Voima Oyj on 31 December 2022 were as follows:

Retained earnings	115,599,948.32
Profit for the financial year	31,793,681.94
	147,393,630.26

The financial situation of the company has not changed significantly since the end of the financial year, and the solvency test referred to in Chapter 13, Section 2 of the Limited Liability Companies Act does not affect the amount of distributable funds. The Board of Directors proposes that a dividend of EUR 24.31 per share, or 576,534 x EUR 24.31, be distributed to Series A shares.

Total	14,015,541.50
To be held as retained earnings	133,378,088.76
	147,393,630.26

# Board of Directors and Management Team



**JUHA KOUKKA** (b. 1968)  
*Chairperson of the Board of Directors,  
CEO, M.Sc. (Econ.)*

2016– Savon Voima Oyj, Chairperson of the Board of Directors  
2016– Savon Energiaholding Oy, Member of the Board of Directors  
2016– Savon Voima Oyj, Member of the Board of Directors



**VESA LÖTJÖNEN** (b. 1959)  
*Vice Chairperson of the Board of Directors,  
Municipal Manager of Siilinjärvi, MA*

2011– Savon Voima Oyj, Chairperson of the Board of Directors  
2010–2011 Savon Voima Oyj, Member of the Board of Directors



**JARI KÄÄRIÄINEN** (b. 1967)  
*Member of the Board of Directors, LL.B., LL.M.,  
Lawyer Asianajotoimisto Kääriäinen Oy*

2020– Savon Voima Oyj, Member of the Board of Directors



**OSSI MARTIKAINEN** (b. 1970)  
*Member of the Board of Directors, Account Manager,  
Regional Council of Pohjois-Savo, M.Soc.Sc.*

2012– Savon Voima Oyj, Member of the Board of Directors  
2010– Savon Energiaholding Oy, Chairperson of the Board of Directors  
2008–2010 Savon Energiaholding Oy, Member of the Board of Directors



**TARJA TIKKANEN** (b. 1960)  
*Member of the Board of Directors,  
Professional Board Member, LL.M*

2011– Savon Voima Oyj, Member of the Board of Directors  
2011– Savon Energiaholding Oy, Member of the Board of Directors



**ARTO SUTINEN**  
*President and CEO*



**LAURI SILTANEN**  
*Head of Business Unit,  
electricity network,  
Savon Voima Verkko Oy*



**JUHA RÄSÄNEN**  
*Head of Business Unit,  
electricity production and  
district heating*



**TUOMAS RÄSÄNEN**  
*ICT and Digitalisation Director*



**TONI VAINIKAINEN**  
*Finance director*



**MINNA VIERIMAA**  
*Director, HR, marketing and  
communications, service  
centre*





## Financial statements of Savon Voima Oyj for the financial year 1 January–31 December 2022

## Consolidated balance sheet 31 December 2022

EUR thousand ASSETS	31 December 2022		31 December 2021	
NON-CURRENT ASSETS				
Intangible assets				
Intangible rights	1,270		1,420*)	
Goodwill	381,040		395,153	
Other capitalised long-term expenses	8,966	391,275	9,229*)	405,802
Tangible assets				
Land and water areas	2,593		1,806	
Buildings and constructions	31,457		35,524*)	
Electricity network	363,095		355,346	
Heat distribution network	52,614		53,372	
Machinery and equipment	119,062		126,489*)	
Data network	1,468		1,707	
Other tangible assets	3,033		2,933*)	
Advance payments and acquisitions in progress	30,372	603,694	24,871	602,048
Investments				
Holdings in participating interests	50,662		43,575	
Other shares and holdings	1,434	52,096	1,434	45,010
Total non-current assets	1,047,066		1,052,860	
CURRENT ASSETS				
Inventories				
Raw materials and consumables		8,661		6,221
Receivables (long-term)				
Other receivables	63		63	
Deferred tax assets	320	383	742	805
Receivables (short-term)				
Sales receivables	31,088		38,605	
Receivables from participating interests	1,850		229	
Other receivables	207		429	
Prepayments and accrued income	2,657	35,801	2,457	41,720
Financial fixed assets				
		5,046		59*)
Cash in hand and at banks		51,784		81,011*)
Total current assets	101,674		129,816	
Total assets	1,148,740		1,182,677	

EUR thousand	31 December		31 December	
CAPITAL, RESERVES AND LIABILITIES	2022		2021	
CAPITAL AND RESERVES				
Share capital	969		969	
Premium fund	1		1	
Revaluation reserve	630		0	
Reserve fund	612		612	
Retained earnings	284,878		266,872	
Profit for the financial year	37,805	324,894	31,982	300,435
Minority share		30		0
Statutory provisions		1,313		3,333
LIABILITIES				
Connection fees		155,377		154,472
Long-term				
Loans from financial institutions	510,000		560,000	
Deferred tax liabilities	72,221	582,221	71,391	631,391
Short-term				
Loans from financial institutions	20,000		20,000	
Advance payments	141		90	
Premiums	18		62	
Accounts payable	29,471		33,539	
Group contribution liabilities to group companies	213		158*)	
Liabilities to participating interests	10,079		8,685	
Other liabilities	13,571		14,158*)	
Accruals and deferred income	11,413	84,905	16,352	93,044
Total capital, reserves and liabilities	1,148,740		1,182,677	

## Consolidated income statement

1 January–31 December 2022

EUR thousand	1 January–31 December 2022		1 January–31 December 2021	
<b>NET SALES</b>	<b>231,713</b>		<b>228,460</b>	
Share of associated companies' result	4,545		-4,018	
Other operating income	1,074		417	
<b>MATERIALS AND SERVICES</b>				
<b>Raw materials and consumables</b>				
Purchases during the financial year	76,713		67,181*)	
Change in inventories	-2,434	74,279	-402*)	66,779
Personnel expenses		13,892		13,433*)
Depreciation and reduction in value		70,378		65,213
Other operating expenses		29,746		31,314*)
<b>OPERATING PROFIT</b>	<b>49,036</b>		<b>48,119</b>	
<b>Financial income and expenses</b>				
Interest and financial income	454		297	
Interest and financial expenses	1,289	1,743	-3,666	-3,369
<b>Profit before appropriations</b>	<b>50,779</b>		<b>44,750</b>	
Group contributions given	-213		-158	
<b>Profit before tax</b>	<b>50,567</b>		<b>44,592</b>	
Income tax	-12,762		-12,611	
Minority share	0		0	
<b>PROFIT FOR THE FINANCIAL YEAR</b>	<b>37,805</b>		<b>31,982</b>	

## Consolidated cash flow statement

1 January–31 December 2022

EUR thousand	2022	2021
<b>Cash flow from operating activities</b>		
Cash receipts from sales	239,319	220,143
Cash receipts from other operating income	1,074	417
Payments made for operating expenses	-119,196	-89,290
Cash flow from operating activities before financial items and taxes	121,197	131,270
Interest and other financial expenses paid for operating activities	-798	-6,124
Interest received from operating activities	-24	130
Dividends received from operating activities	287	142
Direct taxes paid	-18,418	-2,076
<b>Cash flow from operating activities (A)</b>	<b>102,243</b>	<b>123,343</b>
<b>Cash flow from investments</b>		
Investments in tangible and intangible assets	-60,710	-52,964
Proceeds from sale of tangible and intangible assets	19	11
Other investments	0	-2
Capital repayments from associated companies	0	96
Capital paid to associated companies	-2,541	0
<b>Cash flow from investments (B)</b>	<b>-63,232</b>	<b>-52,858</b>
<b>Cash flow from financing activities</b>		
Paid increase in equity	30	0
Increase in connection fees	904	1,266
Short-term loan security deposit	0	23,725
Withdrawals of long-term loan	0	580,000
Repayments of long-term loan	-50,000	-611,300
Group contribution paid	-158	-139
Dividends paid	-14,016	-9,513
<b>Cash flow from financing activities (C)</b>	<b>-63,239</b>	<b>-15,961</b>
<b>Change in cash and cash equivalents (A+B+C)</b>	<b>-24,228</b>	<b>54,524</b>
Cash and cash equivalents 1 Jan.	81,014	26,490
Cash and cash equivalents 31 Dec.	56,786	81,014



## Parent company's balance sheet 31 December 2022

EUR thousand	31 December 2022		31 December 2021	
<b>ASSETS</b>				
<b>NON-CURRENT ASSETS</b>				
<b>Intangible assets</b>				
Intangible rights	1,264		1,253*)	
Goodwill	467,155		0	
Other intangible assets	1,095	469,515	736*)	1,989
<b>Tangible assets</b>				
Land and water areas	1,922		795	
Buildings and constructions	28,619		15,820*)	
Machinery and equipment	105,825		42,182*)	
Other tangible assets	3,033		2,839*)	
Heat distribution network	52,614		18,814	
Data network	254		318	
Advance payments and acquisitions in progress	3,371	195,638	1,531	82,299
<b>Investments</b>				
Holdings in group companies	5,573		525,359	
Holdings in participating interests	46,661		44,120	
Other shares and holdings	1,417	53,651	1,415	570,893
<b>Total non-current assets</b>	<b>718,804</b>		<b>655,182</b>	
<b>CURRENT ASSETS</b>				
<b>Inventories</b>				
Raw materials and consumables	8,546		2,722	
<b>Receivables (long-term)</b>				
Other receivables	60		10*)	
Deferred tax assets	272	332	501*)	511
<b>Receivables (short-term)</b>				
Sales receivables	15,720		8,297	
Receivables from group companies	37,608		67,323	
Receivables from participating interests	785		227	
Other receivables	0		415	
Prepayments and accrued income	2,523	56,635	956	77,217
<b>Financial fixed assets</b>	<b>5,046</b>		<b>59*)</b>	
Cash in hand and at banks	26,498		47,818*)	
<b>Total current assets</b>	<b>97,056</b>		<b>128,326</b>	
<b>Total assets</b>	<b>815,859</b>		<b>783,507</b>	

EUR thousand	31 December 2022		31 December 2021	
<b>CAPITAL, RESERVES AND LIABILITIES</b>				
<b>CAPITAL AND RESERVES</b>				
Share capital	969		969	
Premium fund	1		1	
Revaluation reserve	630		0	
Reserve fund	612		612	
Retained earnings	115,600		76,392	
Loss for the financial year				
Profit for the financial year	31,794	149,605	53,224	131,197
<b>Appropriations</b>				
Accumulated depreciation difference		63,373		19,267
<b>Statutory provisions</b>		1,070		2,124
<b>LIABILITIES</b>				
<b>Long-term</b>				
Connection fees	22,811		12,544	
Loans from financial institutions	510,000		560,000	
Liabilities to group companies	2		2	
Deferred tax liabilities	8,021	540,834	0	572,546
<b>Short-term</b>				
Loans from financial institutions	20,000		20,000	
Advance payments	141		90	
Premiums	18		18	
Accounts payable	10,552		9,362	
Liabilities to group companies	6,613		5,920	
Liabilities to participating interests	10,006		8,685	
Other liabilities	4,569		360	
Accruals and deferred income	9,077	60,977	13,938	58,373
<b>Total capital, reserves and liabilities</b>	<b>815,859</b>		<b>783,507</b>	

## Parent company's income statement

1 January–31 December 2022

EUR thousand	1 January–31 December 2022		1 January–31 December 2021	
<b>NET SALES</b>	<b>80,690</b>		<b>73,715</b>	
Other operating income	1,166		583	
<b>MATERIALS AND SERVICES</b>				
<b>Raw materials and consumables</b>				
Purchases during the financial year	38,374		31,817*)	
Change in inventories	-1,466	36,908	105	31,922*)
Personnel expenses	9,065		8,863	
Depreciation and reduction in value	11,580		11,606	
Other operating expenses	12,025		11,638*)	
<b>OPERATING PROFIT</b>	<b>12,278</b>		<b>10,268</b>	
Financial income and expenses				
Interest and financial income	2,006		10,932	
Interest and financial expenses	1,290	3,296	-3,663	7,269
<b>Profit before appropriations and taxes</b>	<b>15,574</b>		<b>17,537</b>	
Appropriations				
Change in depreciation difference	2,531		2,113	
Group contribution	21,558	24,089	44,578	46,691
Income tax	-7,869		-11,005	
<b>PROFIT FOR THE FINANCIAL YEAR</b>	<b>31,794</b>		<b>53,224</b>	

## Parent company's cash flow statement

1 January–31 December 2022

EUR thousand	2022	2021
<b>Cash flow from operating activities</b>		
Cash receipts from sales	76,043	71,289
Cash receipts from other operating income	1,166	583
Payments made for operating expenses	-56,006	-35,233
Cash flow from operating activities before financial items and taxes	21,202	36,638
Interest and other financial expenses paid for operating activities	-797	-6,121
Interest received from operating activities	1,528	1,646
Dividends received from operating activities	287	142
Direct taxes paid	-15,928	-1,084
<b>Cash flow from operating activities (A)</b>	<b>6,292</b>	<b>31,222</b>
<b>Cash flow from investments</b>		
Investments in tangible and intangible assets	-6,028	-6,506
Proceeds from sale of tangible and intangible assets	19	11
Capital repayments from associated companies	-70	96
Share capital paid to associated companies	-2,541	0
<b>Cash flow from investments (B)</b>	<b>-8,621</b>	<b>-6,398</b>
<b>Cash flow from financing activities</b>		
Increase in connection fees	-16	-71
Short-term loan security deposit	0	23,725
Withdrawals of long-term loan	0	580,002
Repayments of long-term loan	-50,000	-611,300
Receivables from granted interest-bearing loans	0	-500
Group contribution paid	-158	-139
Dividends received	0	9,120
Dividends paid	-14,016	-9,513
Group contribution received	42,791	12,654
<b>Cash flow from financing activities (C)</b>	<b>-21,399</b>	<b>3,979</b>
<b>Change in cash and cash equivalents (A+B+C)</b>	<b>-23,728</b>	<b>28,802</b>
Cash and cash equivalents 1 Jan.	47,821	19,019
Cash and cash equivalents from merger	7,407	0
Cash and cash equivalents 31 Dec.	31,500	47,821

# Notes to the income statement and balance sheet

The Savon Voima Group is part of the Savon Energia-holding Group. The group's parent company is Savon Energiaholding Oy, domiciled in Siilinjärvi. The consolidated financial statements are available at Kapteeninväylä 5, 70900 Toivala, Finland, or at the email address [kirjanpito@savonvoima.fi](mailto:kirjanpito@savonvoima.fi).

## ACCOUNTING PRINCIPLES

### Scope of the consolidated financial statements

In addition to the parent company Savon Voima Oyj, the consolidated financial statements include the subsidiaries Savon Voima Verkko Oy, Savon Voima Joensuu Oy (merged with its parent company on 31 December 2022), Itä-Suomen Biomassa Oy and Savon Energia Oy. The last-mentioned company has no operations. It also includes the associated companies Kymppivoima Oy, Kymppivoima Hankinta Oy and Väre Oy.

### Changes in the group structure

Savon Voima Joensuu Oy's 70% holding in Itä-Suomen Biomassa Oy was transferred to Savon Voima Oyj through a share transaction on 5 May 2022.

Savon Voima Joensuu Oy was merged with the parent company Savon Voima Oyj on 31 December 2022, and Savon Voima Joensuu Oy was dissolved as a result of the merger.

### Comparability

The accounting policies remained the same in 2022 as they were in 2021. In 2022, the balance sheet of the parent company comprises the balance sheet items of the merged Savon Voima Joensuu Oy.

The account scheme has been changed as of 1 January 2022. The reference data has been changed to correspond to the new account scheme. Amended items are marked with \*) in the balance sheet for illustrative purposes.

### Accounting principles applied to the consolidated financial statements

The consolidated financial statements have been drawn up using the acquisition cost method. Business transactions within the group and the internal margin included in non-current assets, as well as inter-company receivables and liabilities, have been eliminated.

In the consolidated balance sheet, the difference between the acquisition cost and equity of the subsidiaries has been allocated according to the group's share of ownership to the fixed assets and liabilities that are considered to be the basis of the consolidation



asset. The unallocated consolidation asset, i.e. the consolidated goodwill, is depreciated in 5–30 years in general. The 30-year depreciation period is applied to the group's goodwill arising from the acquisition of Savon Voima Joensuu Oy on 10 January 2020, which has high long-term income expectations. Savon Voima Joensuu Oy, which merged with its parent company at the end of the financial year on 31 December 2022, has a strong market position in its area, a high level of competence and good quality production assets. The business of Savon Voima Joensuu Oy plays an important strategic role in the operations of the parent company and the group. In the opinion of the management, the chosen period of 30 years is realistic and in accordance with the principle of prudence.

Associated companies are included in the consolidated financial statements using the equity method. In the case of Kymppivoima Oy, the consolidation has been carried out with portions per series of shares because, according to Kymppivoima Oy's articles of association, the company's shareholders are responsible for the purchase costs of electricity in proportion to their ownership of each series of shares, are entitled to receive the acquired energy in proportion to their ownership of each series of shares and are entitled to the company's net assets and profits in proportion to their ownership of each series of shares when distributing assets other than in the dissolution of the company. If, in the event of the liquidation of the company, the debts and liabilities exceed the assets received from the liquidation, the shareholders of the relevant series of shares are responsible for the debts and liabilities exceeding the assets in proportion to their ownership of each series of shares.

The balance sheet includes deferred tax liabilities in their entirety and deferred tax assets as the estimated probable assets.

### Goodwill

The merger asset created in Savon Voima Joensuu Oy's subsidiary merger on 31 December 2022 has been allocated in Savon Voima Oy's balance sheet to the fixed asset items transferred in the merger that have been deemed to have caused the asset. The unallocated merger asset is presented as goodwill, which will be depreciated in 27 years. The depreciation period is based on an estimate of the expected return.

### Revaluations

The financial statements include a revaluation of EUR 787,093.61 in accordance with Chapter 5, Section 17 of the Accounting Act in respect of land areas owned by the company. As a result of the revaluation, long-term deferred tax liabilities of EUR 157,418.72 have been entered in the balance sheet as liabilities. The revaluation is included in the balance sheet item "Land and water areas" under

fixed tangible assets. The amount of revaluation of the land and water areas is based on the opinions of an independent external real estate expert on the likely transfer price of the land. The revaluations are dimensioned such that the book value of the revalued land is 90% of its fair value. The revaluation has been made on all land areas for which the prerequisites for revaluation in accordance with the Accounting Act have been deemed to be met.

### Inventories

The acquisition cost of inventories is assessed at the weighted average price.

### Financial securities

Financial assets and financial securities are valued at their fair value so that, in terms of shares, the value is the rate of exchange at the balance sheet date, while fund investments are valued at the redemption price at the balance sheet date and commercial papers at their nominal value.

### Calculation principles related to derivative instruments and hedging measures

The valuation of derivatives complies with the basic rule of Chapter 5, Section 2 of the Accounting Act.

The objective of risk management in the Savon Voima Group is to support the achievement of the targets of the business strategy. Electricity price risk is the company's key business risk to be hedged. The price development in the electricity market mainly affects the group's production business and electricity distribution network business. Factors having an impact on the price of electricity in the Nordic market in the short term include the water supply situation, the fluctuation of wind power production, temperature, the prices of emission allowances for carbon dioxide, the price of fuels and the export and import situation between countries.

The group hedges against electricity price risks by drawing up electricity derivative contracts for power generation and the purchase of loss electricity for the electricity distribution network business. The price risk of carbon dioxide emission allowances is hedged against with emission allowance derivative contracts and by taking into account the costs of emission allowances in production planning. For hedging operations, the company has a risk management policy for energy trade and procurement approved by the Board of Directors, the implementation of which is monitored systematically.

The fair values of derivative instruments and the values of underlying instruments are presented in note 24. Value changes of deriva-

tive contracts drawn up for hedging purposes have not been dealt with through profit or loss, but their realised profits/losses are recorded in the income statement and balance sheet for the same period with the physical contracts they are hedged with. In accordance with the above-mentioned risk policy, we do not engage in speculative derivatives trade. The premiums of hedging options are recorded in the income statement for the same period as the physical contracts they are hedged with.

Savon Voima hedges against interest rate risk associated with long-term floating-rate loans by using interest rate derivatives. The group's financial policy sets guidelines for interest derivatives used. Derivatives are used for hedging purposes only. Significant interest rate risks are hedged by cash flow hedges. As a rule, hedging against interest rate risks is done using derivatives with interest rate determination and payment terms that are inversely as similar as possible to the current and future floating-rate loans and that are otherwise as identical as possible to the critical terms of the hedged item, so that the derivatives used are genuinely and effectively hedging. Interest rate derivatives that are deemed to be genuinely hedging and whose terms correspond to the terms of current variable interest loans are stated as liabilities in note 23. The negative fair value change of those derivatives, which are not deemed to be effectively and genuinely hedging, is recognised in the financial items of the income statement and in the statutory provisions of the balance sheet; there were no such derivatives on the closing date.

### Financial internal rate of interest

The internal rate of interest for financing used in the Savon Voima Group companies is determined according to the average cost of capital (WACC) determined for each year by the Energy Authority, which in 2022 was 3.97%. No premium or margin is added to or deducted from this value.

### Company stocks

The company's shares are divided into two series, Series A and B, as follows:

There are 576,534 shares in Series A.  
Series B shares have not been issued so far.

When the company's assets are distributed, Series A shares provide a right to the part of the assets to be distributed that has been accumulated from activities other than water management services. Series B shares provide a right to the part of the assets to be distributed that has been accumulated from water management services.

	GROUP		PARENT COMPANY	
EUR thousand	2022	2021	2022	2021
<b>1. NET SALES BY BUSINESS AREA</b>				
Electricity distribution	96,753	105,295		
Electricity sales*	48,726	32,319	28,409	19,456
District heating sales	81,643	86,114	43,824	46,399
Installation and service sales	2,628	2,437	8,125	7,603
Connection fee income	1,031	1,315	316	247
Other operations	932	980	16	10
<b>Total</b>	<b>231,713</b>	<b>228,460</b>	<b>80,690</b>	<b>73,715</b>

\*) Savon Voima Oyj's electricity sales consist of electricity produced by both its own and jointly owned power plants.

<b>2. OTHER OPERATING INCOME</b>				
Rental income	259	263	424	426
Grants and compensations received	176	-4	176	0
Guarantees of origin	427	106	427	106
Other	212	52	140	51
<b>Total</b>	<b>1,074</b>	<b>417</b>	<b>1,166</b>	<b>583</b>
<b>3. PERSONNEL EXPENSES</b>				
Wages and salaries	12,958	12,492	7,811	7,634
Pension insurance expenses	2,169	2,071	1,244	1,236
Other indirect employee costs	375	388	248	265
<b>Total</b>	<b>15,502</b>	<b>14,952</b>	<b>9,303</b>	<b>9,135</b>
Activated wages and salaries	-1,609	-1,556	-238	-273
Wages and salaries in the income statement	13,892	13,396	9,065	8,863
Management's salaries				
CEOs and their deputies	477	317		
Board members	129	107		
Management's salaries in total	606	424	414	310

Pension commitments of the Boards of Directors and CEOs:  
The retirement age of CEOs of the group companies is 65–67 years.

<b>Average number of employees</b>				
White-collar workers	140	136	86	86
Blue-collar workers	69	71	41	43
<b>Total</b>	<b>209</b>	<b>207</b>	<b>127</b>	<b>129</b>
Number of employees at the end of the year	205	206	127	128

#### 4. DEPRECIATIONS

The values of fixed assets are based on the original acquisition costs minus accrued planned depreciations. Depreciations have been calculated on a straight-line basis over the economic life of the acquisition cost. No depreciations have been made for land areas. The depreciation period for the consolidated goodwill arising from the acquisition of Savon Voima Joensuu Oy is 30 years. The depreciation period for the goodwill arising from the merger of Savon Voima Joensuu Oy into the parent company is 27 years. The depreciation period is based on an estimate of the expected return. The acquisition cost of machinery and equipment included in movable fixed assets that were introduced in 2021 and 2022 and are under the scope of application of Section 30 of the Act on the Taxation of Business Income have been depreciated by double the regular depreciation amount.

#### Planned depreciation periods by balance sheet item

Buildings and constructions 15–40 years, heat distribution network 14–40 years, electricity network 20–25 years, machinery and equipment 3–25 years, other long-term expenses 3–50 years, consolidated goodwill 5–30 years

	GROUP		PARENT COMPANY	
EUR thousand	2022	2021	2022	2021
<b>Planned depreciations by balance sheet item</b>				
Long-term expenses	2,549	2,242	578	337
Buildings and constructions	4,067	5,111	2,132	3,204
Electricity network – depreciations	22,671	21,413	0	0
– reductions in value	589	407	0	0
Heating network	3,448	3,353	1,796	1,755
Data network	503	419	65	5
Machinery and equipment – depreciations	18,750	17,902	6,852	6,287
– reductions in value*	3,389	0	0	0
Other tangible assets	147	0	129	0
Goodwill	14,113	14,113	0	0
Intangible rights	154	253	28	18
<b>Total</b>	<b>70,378</b>	<b>65,213</b>	<b>11,580</b>	<b>11,606</b>

\*) The group's machinery and equipment include a reduction in value on Savon Voima Joensuu Oy's pyrolysis equipment.

<b>5. AUDITOR'S FEES</b>				
Audit fees	114	72	54	33
Other fees	10	1	10	0
<b>Total</b>	<b>124</b>	<b>73</b>	<b>64</b>	<b>33</b>

<b>6. FINANCIAL INCOME AND EXPENSES</b>				
Income from interests in group companies			0	9,120
Return on investments	287	142	287	142
Total income from investments held as non-current assets	287	142	287	9,262
<b>Interest income</b>				
From group undertakings			1,613	1,574
From others	167	156	107	97
<b>Total</b>	<b>167</b>	<b>156</b>	<b>1,720</b>	<b>1,671</b>
<b>Total financial income</b>	<b>454</b>	<b>297</b>	<b>2,006</b>	<b>10,932</b>
<b>Interest expenses</b>				
To group undertakings			0	0
To others*	-608	-3,834	-607	-3,831
Other financial expenses*	1,896	168	1,896	168
<b>Total financial expenses</b>	<b>1,289</b>	<b>-3,666</b>	<b>1,290</b>	<b>-3,663</b>
<b>TOTAL FINANCIAL INCOME AND EXPENSES</b>	<b>1,743</b>	<b>-3,369</b>	<b>3,296</b>	<b>7,269</b>

\* The change in interest and financial expenses is due to the cancellation of the reserve of interest rate derivatives and the sale of non-hedging derivatives.

<b>7. APPROPRIATIONS</b>				
Change in depreciation difference			2,531	2,113
Group contributions received			21,770	44,736
Group contributions given	-213	-158	-213	-158
<b>Total appropriations</b>	<b>-213</b>	<b>-158</b>	<b>24,089</b>	<b>46,691</b>

	GROUP		PARENT COMPANY	
EUR thousand	2022	2021	2022	2021
<b>8. INCOME TAX</b>				
Income taxes from actual operations	11,667	10,989	7,447	10,792
Change in deferred tax liability	672	1,502	0	0
Change in deferred tax assets	422	119	422	213
Total	<b>12,762</b>	<b>12,611</b>	<b>7,869</b>	<b>11,005</b>
<b>9. FIXED ASSETS BY BALANCE SHEET ITEM</b>				
<b>Intangible rights</b>				
Acquisition cost 1 Jan.	19,795	19,460*)	1,317	1,267*)
Additions during the financial year	3	341*)	3	56*)
Additions through merger			36	0
Disposals during the financial year	0	-6	0	-6
Acquisition cost 31 Dec.	19,798	19,795*)	1,356	1,317*)
Accumulated depreciation 1 Jan.	-18,375	-18,122*)	-64	-46*)
Depreciation during the financial year	-154	-253*)	-28	-18*)
Accumulated depreciation 31 Dec.	-18,529	-18,375*)	-92	-64*)
Book value 31 Dec.	1,270	1,420*)	1,264	1,253*)
Accumulated depreciation difference 1 Jan.			10	1*)
Depreciation difference transferred in merger			5	0
Change in depreciation difference			0	9*)
Accumulated depreciation difference 31 Dec.			15	10*)
<b>Goodwill</b>				
Acquisition cost 1 Jan.	423,378	423,378	0	0
Additions during the financial year*	0	0	467,155	0
Acquisition cost 31 Dec.	423,378	423,378	467,155	0
Accumulated depreciation 1 Jan.	-28,225	-14,113	0	0
Depreciation during the financial year	-14,113	-14,113	0	0
Accumulated depreciation 31 Dec.	-42,338	-28,225	0	0
Book value 31 Dec.	381,040	395,153	467,155	0
*) The increase was due to the merger loss arising from the merger with Savon Voima Joensuu Oy.				
<b>Other intangible assets</b>				
Acquisition cost 1 Jan.	31,243	29,338*)	11,172	10,744*)
Additions during the financial year	2,285	1,905*)	887	428*)
Additions through merger			51	0
Acquisition cost 31 Dec.	33,528	31,243*)	12,110	11,172*)
Accumulated depreciation 1 Jan.	-22,013	-19,772*)	-10,436	-10,099*)
Depreciation during the financial year	-2,549	-2,242*)	-578	-337*)
Accumulated depreciation 31 Dec.	-24,562	-22,013*)	-11,015	-10,436*)
Book value 31 Dec.	8,966	9,229*)	1,095	736*)
Accumulated depreciation difference 1 Jan.			193	168*)
Depreciation difference transferred in merger			44	0
Change in depreciation difference			74	25*)
Accumulated depreciation difference 31 Dec.			311	193*)

	GROUP		PARENT COMPANY	
EUR thousand	2022	2021	2022	2021
<b>Land and water areas</b>				
Acquisition cost 1 Jan.	1,806	1,790	795	795
Additions during the financial year	0	16	0	0
Additions through merger			340	0
Disposals during the financial year	0	0	0	0
Acquisition cost 31 Dec.	1,806	1,806	1,135	795
Revaluations	787	0	258	0
Revaluations through merger			529	0
Book value 31 Dec.	2,593	1,806	1,922	795
<b>Buildings and constructions</b>				
Acquisition cost 1 Jan.	96,900	95,597*)	56,791	56,417*)
Additions during the financial year	0	1,303*)	0	374*)
Additions through merger	0	0	14,930	0
Acquisition cost 31 Dec.	96,900	96,900*)	71,721	56,791*)
Accumulated depreciation 1 Jan.	-61,376	-57,250*)	-40,970	-38,734*)
Depreciation during the financial year	-4,067	-4,126*)	-2,132	-2,236*)
Accumulated depreciation 31 Dec.	-65,443	-61,376*)	-43,102	-40,970*)
Book value 31 Dec.	31,457	35,524*)	28,619	15,820*)
Accumulated depreciation difference 1 Jan.			-4,449	-3,802*)
Depreciation difference transferred in merger			1,069	0
Change in depreciation difference			-668	-647*)
Accumulated depreciation difference 31 Dec.			-4,048	-4,449*)
<b>Electricity distribution network</b>				
Acquisition cost 1 Jan.	641,651	601,583	152	152
Additions during the financial year	31,009	40,068	0	0
Acquisition cost 31 Dec.	672,659	641,651	152	152
Accumulated depreciation 1 Jan.	-286,305	-264,481	-152	-152
Impairments	-589	-407	0	0
Depreciation during the financial year	-22,671	-21,417	0	0
Accumulated depreciation 31 Dec.	-309,565	-286,305	-152	-152
Book value 31 Dec.	363,095	355,346	0	0
Accumulated depreciation difference 1 Jan.			0	0
Change in depreciation difference			0	0
Accumulated depreciation difference 31 Dec.			0	0
<b>Heat distribution network</b>				
Acquisition cost 1 Jan.	94,608	91,424	56,914	55,004
Additions during the financial year	2,690	3,184	1,557	1,911
Additions through merger	0	0	34,039	0
Acquisition cost 31 Dec.	97,297	94,608	92,511	56,914
Accumulated depreciation 1 Jan.	-41,236	-37,883	-38,101	-36,346
Depreciation during the financial year	-3,448	-3,353	-1,796	-1,755
Accumulated depreciation 31 Dec.	-44,683	-41,236	-39,897	-38,101
Book value 31 Dec.	52,614	53,372	52,614	18,814
Accumulated depreciation difference 1 Jan.			-2,839	-2,714
Depreciation difference transferred in merger			15,551	0
Change in depreciation difference			-171	-125
Accumulated depreciation difference 31 Dec.			12,541	-2,839

	GROUP		PARENT COMPANY	
EUR thousand	2022	2021	2022	2021
<b>Data network</b>				
Acquisition cost 1 Jan.	4,513	3,817	324	0
Additions during the financial year	264	696	0	324
Acquisition cost 31 Dec.	4,777	4,513	324	324
Accumulated depreciation 1 Jan.	-2,806	-2,387	-5	0
Depreciation during the financial year	-503	-419	-65	-5
Accumulated depreciation 31 Dec.	-3,309	-2,806	-70	-5
Book value 31 Dec.	1,468	1,707	254	318
Accumulated depreciation difference 1 Jan.			76	0
Change in depreciation difference			-4	76
Accumulated depreciation difference 31 Dec.			72	76
<b>Machinery and equipment</b>				
Acquisition cost 1 Jan.	344,673	339,211*)	164,384	161,113*)
Additions during the financial year	14,716	5,526*)	2,565	3,335*)
Additions through merger			67,934	0
Disposals during the financial year	-53	-64*)	-53	-64
Acquisition cost 31 Dec.	359,336	344,673*)	234,831	164,384*)
Accumulated depreciation 1 Jan.	-218,184	-199,515*)	-122,203	-115,145*)
Accumulated depreciation of disposals	49	64*)	49	64*)
Impairments*	-3,389	0		
Depreciation during the financial year	-18,750	-18,733*)	-6,852	-7,122*)
Accumulated depreciation 31 Dec.	-240,274	-218,184*)	-129,006	-122,203*)
Book value 31 Dec.	119,062	126,489*)	105,825	42,182*)
Accumulated depreciation difference 1 Jan.			25,999	27,409*)
Depreciation difference transferred in merger			29,897	0
Change in depreciation difference			-1,720	-1,410*)
Accumulated depreciation difference 31 Dec.			54,177	25,999*)
*) The group's machinery and equipment include a reduction in value on Savon Voima Joensuu Oy's pyrolysis equipment.				
<b>Other tangible assets</b>				
Acquisition cost 1 Jan.	7,386	7,282*)	7,025	6,921*)
Additions during the financial year	247	104*)	247	104*)
Additions through merger			76	0
Acquisition cost 31 Dec.	7,633	7,386*)	7,348	7,025*)
Accumulated depreciation 1 Jan.	-4,453	-4,302*)	-4,186	-4,053*)
Depreciation during the financial year	-147	-151*)	-129	-133*)
Accumulated depreciation 31 Dec.	-4,600	-4,453*)	-4,315	-4,186*)
Book value 31 Dec.	3,033	2,933*)	3,033	2,839*)
Accumulated depreciation difference 1 Jan.			277	317*)
Depreciation difference transferred in merger			70	0
Change in depreciation difference			-42	-40*)
Accumulated depreciation difference 31 Dec.			306	277*)

	GROUP		PARENT COMPANY	
EUR thousand	2022	2021	2022	2021
<b>Advance payments and work in progress</b>				
Acquisition cost 1 Jan.	24,871	21,437	1,531	2,117
Additions during the financial year	25,457	20,951	2,458	1,399
Additions through merger			666	0
Disposals during the financial year	-19,956	-17,517	-1,285	-1,985
Acquisition cost 31 Dec.	30,372	24,871	3,371	1,531
Book value 31 Dec.	30,372	24,871	3,371	1,531
<b>Shares and holdings</b>				
Acquisition cost 1 Jan.	45,010	49,122	570,893	571,067
Additions during the financial year	2,541	2	2,612	0
Additions through merger			2	0
Disposals during the financial year	0	0	0	-77
Disposals through merger			-519,856	0
Capital repayments	0	-96	0	-96
Profit for the financial year for the associated companies	4,545	-4,018		
Acquisition cost 31 Dec.	52,096	45,010	53,651	570,893
Book value 31 Dec.	52,096	45,010	53,651	570,893
<b>Total balance sheet items</b>				
Acquisition cost 1 Jan.	1,735,833	1,683,439	871,299	865,596
Additions during the financial year	79,211	74,095	10,328	7,931
Additions through merger			118,077	0
Disposals during the financial year	-20,009	-17,587	465,817	-2,132
Disposals through merger			-519,856	0
Capital repayments	0	-96	0	-96
Reconciliation of balance sheet value	4,545	-4,018		
Acquisition cost 31 Dec.	1,799,580	1,735,833	945,665	871,299
Accumulated depreciation 1 Jan.	-682,973	-617,824	-216,117	-204,575
Accumulated depreciation of disposals	49	64	49	64
Impairments	-3,978	-407	0	0
Depreciation during the financial year	-66,401	-64,806	-11,580	-11,606
Accumulated depreciation 31 Dec.	-753,302	-682,973	-227,648	-216,117
Revaluations	787	0	258	0
Revaluations through merger			529	0
Book value 31 Dec.	1,047,066	1,052,860	718,804	655,182
Accumulated depreciation difference 1 Jan.			19,267	21,380
Depreciation difference transferred in merger			46,637	0
Change in depreciation difference			-2,531	-2,113
Accumulated depreciation difference 31 Dec.			63,373	19,267
<b>10. DEFERRED TAX ASSETS</b>				
Of statutory provisions	254	655	205	414
Of advances for expenses	66	87	66	87
Total	320	742	272	501



EUR thousand	GROUP		PARENT COMPANY	
	2022	2021	2022	2021
<b>11. RECEIVABLES FROM GROUP COMPANIES</b>				
Short-term receivables				
Sales receivables			22	40
Loan receivables*			12,310	17,733
Prepayments and accrued income			3,506	4,813
Group contribution receivables			21,770	44,736
Total			<b>37,608</b>	<b>67,323</b>
*) Main loan terms: maximum amount approved by the Board of Directors, repayment on agreement, interest rate determined in accordance with the financial internal rate of interest.				
<b>12. OTHER RECEIVABLES</b>				
Other receivables	207	429	0	415
Total	<b>207</b>	<b>429</b>	<b>0</b>	<b>415</b>
<b>13. KEY ITEMS INCLUDED IN ACCRUED INCOME</b>				
Emission allowances	0	131	0	131
Interests	205	0	205	0
Income tax and other tax	1,611	78	1,572	0
Other accrued income	841	2,248	746	825
Total	<b>2,657</b>	<b>2,457</b>	<b>2,523</b>	<b>956</b>
<b>14. FINANCIAL FIXED ASSETS</b>				
Replacement price	5,046	59	5,046	59*)
Book value	5,046	59	5,046	59
<b>15. CHANGES IN EQUITY</b>				
Restricted equity				
Share capital 1 Jan. and 31 Dec.	969	969	969	969
Premium fund 1 Jan. and 31 Dec.	1	1	1	1
Revaluation reserve 1 Jan. and 31 Dec.	630	0	630	0
Reserve fund 1 Jan. and 31 Dec.	612	612	612	612
Total restricted equity	2,211	1,582	2,211	1,582
Unrestricted equity				
Other equity 1 Jan.	298,854	276,308	129,615	85,905
Distribution of dividends	-14,016	-9,513	-14,016	-9,513
Adjustments of previous financial years	39	77	0	0
Profit for the financial year	37,805	31,982	31,794	53,224
Total unrestricted equity	322,683	298,854	147,394	129,615
Total equity 31 Dec.	324,894	300,435	149,605	131,197
Proportion entered under other equity from accumulated depreciation difference	256,800	249,787		
<b>16. CALCULATION OF DISTRIBUTABLE EQUITY</b>				
Total unrestricted equity			147,394	129,615
Distributable assets			<b>147,394</b>	<b>129,615</b>
<b>17. STATUTORY PROVISIONS AND DEFERRED TAX LIABILITIES</b>				
Improvement of impregnation plots	243	243		
Losses on the sale of properties	104	104	104	104
Interest rate derivatives	0	2,020	0	2,020
Spoil area	966	966	966	0

EUR thousand	GROUP		PARENT COMPANY	
	2022	2021	2022	2021
Deferred tax liabilities:				
Appropriations	64,200	71,391	0	0
Consolidation measures	7,864		7,864	0
Allocation and temporary differences	157		157	
Total	<b>73,534</b>	<b>74,724</b>	<b>9,092</b>	<b>2,124</b>
<b>18. LIABILITIES TO GROUP COMPANIES</b>				
Short-term liabilities				
Accounts payable			5,989	37
Accruals and deferred income			411	5,884
Group contribution liabilities	213	158	213	158*)
Total	<b>213</b>	<b>158</b>	<b>6,613</b>	<b>6,078</b>
<b>19. LIABILITIES TO PARTICIPATING INTERESTS</b>				
Short-term liabilities				
Accounts payable	7,131	8,250	7,058	8,250
Other short-term liabilities	2,948	435	2,948	435
Total short-term liabilities	<b>10,079</b>	<b>8,685</b>	<b>10,006</b>	<b>8,685</b>
<b>20. KEY ITEMS INCLUDED IN DEFERRED LIABILITIES</b>				
Derivatives brokerage	3,319	3,861	3,319	3,861
Wages and salaries including social costs	4,041	3,872	3,335	2,439
Interests	94	173	94	173
Income tax	1,786	7,004	1,786	6,909
Fuels	1,384	191	0	191
Other deferred liabilities	788	1,251	542	364
Total	<b>11,413</b>	<b>16,352</b>	<b>9,077</b>	<b>13,938</b>
<b>21. CONTINGENT LIABILITIES</b>				
General pledges for below debts				
Loans from financial institutions	510,000	580,000	510,000	580,000
Real estate mortgages	0	0	0	0
Corporate mortgages	0	0	0	0
Leasing liabilities				
Payable during current financial year	379	318	379	318
Payable at a later date	515	392	515	392
Total leasing liabilities	<b>894</b>	<b>710</b>	<b>894</b>	<b>710</b>
Rent liabilities				
Payable during current financial year	971	930	971	930
Payable at a later date	2,024	2,853	2,024	2,853
Total rent liabilities	<b>2,995</b>	<b>3,783</b>	<b>2,995</b>	<b>3,783</b>
Guarantees				
Guarantees on behalf of participating interests	15,338	24,763	15,338	24,763
Bank guarantee liabilities	720	720	720	670
Total guarantees	<b>16,058</b>	<b>25,483</b>	<b>16,058</b>	<b>25,433</b>
Liability to adjust VAT on property investments	47,130	49,721	6,936	5,195

**22. OTHER RESPONSIBILITIES IN ENERGY PRODUCTION COMPANIES**

Savon Voima Oyj has a 17.1% holding in Kymppivoima Oy, which operates on the Mankala principle. In accordance with the Mankala principle, Savon Voima Oyj is entitled to electricity produced by Kymppivoima Oy in proportion to its ownership of each series of shares. Savon Voima Oyj is responsible, in proportion to its ownership of each series of shares, for Kymppivoima Oy's electricity purchase costs, which consist of variable costs, fixed costs, depreciations and financing costs. The financing costs are also affected by interest rate derivative contracts entered into by Kymppivoima Oy. Savon Voima Oyj's share of Kymppivoima Oy's loans calculated in proportion to its ownership of each series of shares is EUR 34.7 million: EUR 30.7 million for hedges on loans and EUR 4.2 million for the market value of the hedges.

In a special issue by Kymppivoima Oy in December 2021, Savon Voima Oyj subscribed for the company's XXI series of shares, the subscription payment for which will be made at the dates and amounts separately announced by Kymppivoima Oy's Board of Directors. EUR 2,481,080.00 was paid for the subscribed shares in 2022 and an estimated EUR 14,374,956.15 will be paid in 2023–2024.

In a special issue by Kymppivoima Oy in April 2022, Savon Voima Oyj subscribed for the company's XXII series of shares, the subscription payment for which will be made at the dates and amounts separately announced by Kymppivoima Oy's Board of Directors. EUR 60,060.00 was paid for the subscribed shares in 2022 and an estimated EUR 59,990.00 will be paid in 2023.

	GROUP		PARENT COMPANY	
EUR thousand	2022	2021	2022	2021

**23. INTEREST RATE DERIVATIVES** with terms and cash flows consistent with the loans**Interest rate swap contract 1 + interest rate option 1**

Notional value corresponding to the principal of the loan 31 Dec.	253,755	261,720	253,755	261,720
– Contract expiration date 10 Jan. 2023				
– Floating interest rate Euribor 6 months				
– Fixed interest rate 0.0984%				
Fair value of derivatives contract	180	–380	180	–380

**Interest rate swap contract 2 + interest rate option 2**

Notional value corresponding to the principal of the loan 31 Dec.	256,410	261,720	253,755	261,720
– Contract expiration date 6 Feb. 2023				
– Floating interest rate Euribor 6 months				
– Fixed interest rate 0.0890%				
Fair value of derivatives contract	498	–254	498	–254

**Interest rate swap contract 3**

Notional value corresponding to the principal of the loan 31 Dec.	256,410	256,410	256,410	256,410
– Contract expiration date 31 Dec. 2027				
– Floating interest rate Euribor 6 months				
– Fixed interest rate –0.0360%				
Fair value of derivatives contract	30,127	2,012	30,127	2,012

**Interest rate swap contract 4**

Notional value corresponding to the principal of the loan 31 Dec.	153,846	153,846	153,846	153,846
– Contract expiration date 31 Dec. 2027				
– Floating interest rate Euribor 6 months				
– Fixed interest rate –0.0464%				
Fair value of derivatives contract	18,162	1,319	18,162	1,319

**Interest rate swap contract 5**

Notional value corresponding to the principal of the loan 31 Dec.	102,564	102,564	102,564	102,564
– Contract expiration date 31 Dec. 2027				
– Floating interest rate Euribor 6 months				
– Fixed interest rate –0.0450%				
Fair value of derivatives contract	12,221	886	12,221	886

	GROUP		PARENT COMPANY	
EUR thousand	2022	2021	2022	2021
<b>Interest rate swap contract 6</b>				
Notional value corresponding to the principal of the loan 31 Dec.	151,232	151,232	151,232	151,232
– Contract expiration date 31 Dec. 2032				
– Floating interest rate Euribor 6 months				
– Fixed interest rate 0.2780%				
Fair value of derivatives contract	14,659	2,554	14,659	2,554
<b>Interest rate swap contract 7</b>				
Notional value corresponding to the principal of the loan 31 Dec.	83,668	83,668	83,668	83,668
– Contract expiration date 31 Dec. 2032				
– Floating interest rate Euribor 6 months				
– Fixed interest rate 0.6385%				
Fair value of derivatives contract	7,717	90	7,717	90
<b>Interest rate swap contract 8</b>				
Notional value corresponding to the principal of the loan 31 Dec.	60,000		60,000	
– Contract expiration date 31 Dec. 2032				
– Floating interest rate Euribor 6 months				
– Fixed interest rate 1.1630%				
Fair value of derivatives contract	3,983		3,983	
<b>Interest rate swap contract 9</b>				
Notional value corresponding to the principal of the loan 31 Dec.	84,000		84,000	
– Contract expiration date 31 Dec. 2041				
– Floating interest rate Euribor 6 months				
– Fixed interest rate 1.1920%				
Fair value of derivatives contract	5,293		5,293	
<b>Interest rate swap contract 10</b>				
Notional value corresponding to the principal of the loan 31 Dec.	72,000		72,000	
– Contract expiration date 31 Dec. 2041				
– Floating interest rate Euribor 6 months				
– Fixed interest rate 0.9420%				
Fair value of derivatives contract	5,562		5,562	
<b>Interest rate floor contract 1</b>				
Notional value corresponding to the principal of the loan 31 Dec.	153,846		153,846	
– Contract expiration date 28 June 2024				
– Interest set at min. 0%				
Fair value of derivatives contract	1		1	
<b>Interest rate floor contract 2</b>				
Notional value corresponding to the principal of the loan 31 Dec.	256,410		256,410	
– Contract expiration date 28 June 2024				
– Interest set at min. 0%				
Fair value of derivatives contract	2		2	
<b>Interest rate floor contract 3</b>				
Notional value corresponding to the principal of the loan 31 Dec.	102,564		102,564	
– Contract expiration date 30 June 2024				
– Interest set at min. 0%				
Fair value of derivatives contract	3		3	

The market values of interest rate derivatives are based on market prices on the closing date (according to the bank). Interest rate swap contracts that are not hedging are dealt with through profit or loss in accordance with Chapter 5, Section 2 of the Accounting Act if the fair value is negative. There are no non-hedging interest rate swap contracts on the closing date.

**24. ELECTRICITY DERIVATIVES**

Electricity price risk is hedged with electricity derivative contracts. The main objective of hedging is to reduce the impact of electricity price changes on the results. The hedging strategy covers several years within the scope of risk-taking authorities. The hedging strategy is constantly assessed as the market situation changes. The group uses derivatives to hedge power generation, the purchase of electricity for heat production and the purchase of loss electricity for the electricity distribution network business. Electricity derivatives are acquired for hedging purposes. The hedges have been found to be effective, and for this reason, the derivatives are presented in the notes to the financial statements.

**Open total positions of forwards 31 Dec. 2022**

MtM	PRODUCTION (kEUR)	BROKERAGE (kEUR)	EMISSION ALLOWANCES (kEUR)	LOSS ELECTRIC- ITY (kEUR)	TOTAL (kEUR)
Forwards	-35,699	23,659	68	6,333	-5,639
<b>Total</b>	<b>-35,699</b>	<b>23,659</b>	<b>68</b>	<b>6,333</b>	<b>-5,639</b>

**Derivatives brokerage**

For derivatives brokerage, Savon Voima's risk is limited to the counterparty. The counterparty risk is managed with credit insurances or other guarantee adjustments, such as bank guarantees. Customers of derivatives brokerage report their electricity position and efficiency of hedging in their financial statements, and those numbers are not included in Savon Voima's financial statements. Derivatives brokerage contracts have terms that prevented their unilateral transfer to Väre Oy in connection with the business transfer, and they will therefore remain with Savon Voima Oyj until the maturity of the contracts, unless an earlier transfer of contract is agreed with counterparty.

Year	Brokerage MWh
2023	192,720
2024	122,976
<b>Total</b>	<b>315,696</b>

**Hedging of power generation**

In the hedging of production, 55% of system price risk (SYS) and 55% of area price risk (EPAD) are hedged in 2023. Correspondingly, 18% (SYS) and 18% (EPAD) are hedged for 2024. The hedging is done effectively by bilateral contracts with system and area price differential products and products containing both components at Finnish prices. The company has estimated the power generation amounts and drawn up derivatives contracts for hedging power generation in accordance with the following table.

Hedging of power generation	2024	2023
MWh, SYS	594,931	598,393
MWh, EPAD	594,931	598,393
SYS hedging MWh	109,566	330,385
SYS hedging %	18%	55%
EPAD hedging MWh	105,252	330,285
EPAD hedging %	18%	55%

Number of electricity derivatives contracts, Production hedging	2022	2021
Amount MWh	762,606	856,850
Acquisition value kEUR	36,443	20,595
MtM kEUR	-35,699	-18,152

Emission allowance derivatives, Heat and power production	2022	2021
Amount MWh	20,000	40,000
Acquisition value kEUR	1,578	935
MtM kEUR	68	2,291

Hedging of electricity for heat production	2022	2021
Amount MWh	0	3,504
Acquisition value kEUR	0	112
MtM kEUR	0	84

Hedging of loss electricity in the distribution network	2022	2021
Amount MWh	146,633	125,492
Acquisition value kEUR	5,905	3,568
MtM kEUR	6,333	2,466

**25. ADDITIONAL INFORMATION ON ELECTRICITY TRADE BUSINESS REQUIRED BY THE ELECTRICITY MARKET ACT**

According to the Electricity Market Act, a company operating in the electricity market must separate its electricity trade business from other business activities carried out by the company. Electricity network operations have been separated into a separate limited liability company. The notes to the consolidated financial statements present the profit and loss account and the balance sheet of the network business. Other electricity trade business has been carried out in the parent company Savon Voima Oyj and Savon Voima Joensuu Oy. Other electricity business activities consist of power generation and wholesale as well as other activities closely related to the production and sale of electricity. The unbundling of the income statement is almost completely based on direct allocation of profits and costs to various business operations in the accounting. The financial items have been allocated on the basis of a distribution principle based on the scope of business operations. To the extent possible, balance sheet items have been allocated directly to asset and capital items. Common items have been allocated according to the matching principle or on the basis of a distribution principle based on the size of the business. The distribution principles for non-directly allocated items were revised during the financial year 2022. The reference data has been adjusted to correspond to the revised criteria. Savon Voima Joensuu Oy was merged with the parent company Savon Voima Oyj on 31 December 2022. The balance sheet values of Savon Voima Joensuu Oy's electricity trade business have been combined with the balance sheet values of the parent company.

BALANCE SHEET OF THE ELECTRICITY TRADE BUSINESS, assets	GROUP		PARENT COMPANY	
EUR thousand	31 Decem- ber 2022	31 Decem- ber 2021	31 Decem- ber 2022	31 Decem- ber 2021
<b>NON-CURRENT ASSETS</b>				
<b>Intangible assets</b>				
Intangible rights	10	10	10	10
Goodwill	166,189		166,189	
<b>Tangible assets</b>				
Land and water areas	1,866	1,079	1,866	739
Buildings and constructions	3,510	16,902	3,510	15,866
Machinery and equipment	40,598	23,501	40,598	5,682
Other tangible assets	2,125	2,100	2,125	2,100
Advance payments and acquisitions in progress	2,695	2,310	2,695	368
	<b>50,793</b>	<b>45,892</b>	<b>50,793</b>	<b>24,755</b>
<b>Investments</b>				
Holdings in group companies	0	140,707	0	140,707
Holdings in participating interests	46,661	44,120	46,661	44,120
Other shares and holdings	609	609	609	609
	<b>47,270</b>	<b>185,436</b>	<b>47,270</b>	<b>185,436</b>
<b>Total non-current assets</b>	<b>264,262</b>	<b>231,339</b>	<b>264,262</b>	<b>210,201</b>
<b>CURRENT ASSETS</b>				
<b>Inventories</b>				
Raw materials and consumables	1,779	1,344	1,779	270
<b>Receivables (long-term)</b>	177	265	177	206
<b>Receivables (short-term)</b>				
Receivables from group companies	0	13,845	0	14,402
Receivables from participating interests	726	70	726	70
Other receivables	0	112	0	112
Prepayments and accrued income	916	405	916	259
	<b>1,642</b>	<b>14,433</b>	<b>1,642</b>	<b>14,843</b>
Financial fixed assets	1,832	16	1,832	16
Cash in hand and at banks	10,253	8,097	10,253	1,493
<b>Total current assets</b>	<b>15,683</b>	<b>24,156</b>	<b>15,683</b>	<b>16,828</b>
<b>Total assets</b>	<b>279,946</b>	<b>255,495</b>	<b>279,946</b>	<b>227,029</b>

BALANCE SHEET OF THE ELECTRICITY TRADE BUSINESS, capital, reserves and liabilities	GROUP		PARENT COMPANY	
EUR thousand	31 Decem- ber 2022	31 Decem- ber 2021	31 Decem- ber 2022	31 Decem- ber 2021
<b>CAPITAL AND RESERVES</b>				
Share capital	969	969	969	969
Premium fund	1	1	1	1
Revaluation reserve	630	0	630	0
Reserve fund	612	612	612	612
	<b>2,211</b>	<b>1,582</b>	<b>2,211</b>	<b>1,582</b>
Unrestricted equity				
Retained earnings from previous years	27,351	46,842	27,351	20,677
Result for the financial year	8,713	9,209	8,713	10,448
	<b>36,064</b>	<b>56,051</b>	<b>36,064</b>	<b>31,125</b>
<b>Total capital and reserves</b>	<b>38,275</b>	<b>57,633</b>	<b>38,275</b>	<b>32,706</b>
<b>Appropriations</b>				
Accumulated depreciation difference	30,287	0	30,287	12,430
Statutory provisions	334	705	334	471
<b>LIABILITIES</b>				
<b>Long-term</b>				
Loans from financial institutions	181,430	151,572	181,430	151,572
Deferred tax liabilities	2,912	0	2,912	0
<b>Short-term</b>				
Loans from financial institutions	7,115	5,413	7,115	5,413
Accounts payable	3,268	10,546	3,268	3,336
Liabilities to group companies	0	7,193	0	4,720
Liabilities to participating interests	10,006	8,685	10,006	8,685
Accruals and deferred income	5,410	13,648	5,410	7,634
Other short-term liabilities	907	99	907	61
Total short-term	26,707	45,584	26,707	29,850
<b>Total liabilities</b>	<b>211,049</b>	<b>197,157</b>	<b>211,049</b>	<b>181,422</b>
<b>Total capital, reserves and liabilities</b>	<b>279,946</b>	<b>255,495</b>	<b>279,946</b>	<b>227,029</b>

**26. INCOME STATEMENT OF THE ELECTRICITY TRADE BUSINESS**

INCOME STATEMENT OF THE ELECTRICITY TRADE BUSINESS	GROUP		PARENT COMPANY	
EUR thousand	1 Jan.–31 Dec. 2022	1 Jan.–31 Dec. 2021	1 Jan.–31 Dec. 2022	1 Jan.–31 Dec. 2021
<b>NET SALES</b>	49,614	32,815	29,298	19,952
Other operating income	762	134	707	144
Materials and services				
<b>Raw materials and consumables</b>				
Purchases during the financial year	23,510	17,138	15,370	10,658
Personnel expenses	1,752	1,609	969	1,030
Depreciation and reduction in value	2,253	2,186	1,495	1,485
Other operating expenses	3,844	2,853	2,586	1,910
<b>OPERATING PROFIT</b>	<b>19,018</b>	<b>9,162</b>	<b>9,584</b>	<b>5,014</b>
<b>Financial income and expenses</b>				
Interest and financial income	730	2,960	729	2,959
Interest and financial expenses	253	-1,063	468	-991
<b>PROFIT BEFORE APPROPRIATIONS</b>	<b>20,000</b>	<b>11,059</b>	<b>10,781</b>	<b>6,981</b>
Appropriations				
Change in depreciation difference	0	0	89	350
Group contribution	0	0	0	5,277
<b>PROFIT BEFORE TAX</b>	<b>20,000</b>	<b>11,059</b>	<b>10,869</b>	<b>12,608</b>
Income tax	-4,281	-1,851	-2,156	-2,160
<b>PROFIT FOR THE FINANCIAL YEAR</b>	<b>15,719</b>	<b>9,209</b>	<b>8,713</b>	<b>10,448</b>



## 27. SAVON VOIMA VERKKO OY'S BALANCE SHEET 31 Dec. 2022

EUR thousand	31 Decem- ber 2022		31 Decem- ber 2021	
ASSETS				
NON-CURRENT ASSETS				
Intangible assets				
Intangible rights	6		126*)	
Other intangible assets	7,870	7,876	8,431*)	8,557
Tangible assets				
Land and water areas	671		671	
Buildings and constructions	2,838		3,040	
Electricity network	13,237		14,860	
Machinery and equipment	363,062		355,350	
Data network	1,214		1,389	
Advance payments and acquisitions in progress	27,002	408,023	18,493	393,802
Investments				
Other shares and holdings	17	17	17	17
Total non-current assets		415,916		402,376
CURRENT ASSETS				
Inventories				
	115	115		
Receivables (long-term)				
Deferred tax assets	49		49	
Other receivables	3	52	3	52
Receivables (short-term)				
Sales receivables	16,433		22,430	
Group receivables	465		1,216	
Receivables from group companies	0		14	
Prepayments and accrued income	133	17,032	1,345	25,006
Cash in hand and at banks		22,897		22,917
Total current assets		40,096		47,974
Total assets		456,012		450,350

EUR thousand	31 Decem-ber 2022		31 December 2021	
CAPITAL, RESERVES AND LIABILITIES				
CAPITAL AND RESERVES				
Share capital	500		500	
Other reserves				
Reserve for invested unrestricted equity	5,000		5,000	
Retained earnings	571		570	
Profit for the financial year	1	6,071	1	6,071
Appropriations				
Accumulated depreciation difference		257,626		243,682
Statutory provisions		243		243
LIABILITIES				
Long-term				
Connection fees		132,566		131,645
Total		132,566		131,645
Short-term				
Advance payments received	0		44	
Accounts payable	12,013		15,599	
Liabilities to group companies	37,578		39,930	
Other short-term liabilities	8,998		11,992	
Accruals and deferred income	918	59,506	1,145	68,709
Total liabilities		192,072		200,354
Total capital, reserves and liabilities		456,012		450,350

## 28. SAVON VOIMA VERKKO OY'S INCOME STATEMENT 1 Jan.–31 Dec. 2022

EUR thousand	1 Jan.–31 Dec. 2022		1 Jan.–31 Dec. 2021	
<b>NET SALES</b>	<b>99,482</b>		<b>109,062</b>	
Other operating income	42		64	
<b>MATERIALS AND SERVICES</b>				
<b>Raw materials and consumables</b>				
Purchases during the financial year	12,884		14,161*)	
Personnel expenses	1,606		1,461*)	
Depreciation and reduction in value	28,880		27,487	
Other operating expenses	19,357		21,030*)	
<b>OPERATING PROFIT</b>	<b>36,797</b>		<b>44,987</b>	
<b>Financial income and expenses</b>				
Interest and financial income	57		55	
Interest and financial expenses	-991	-934	-1,284	-1,229
<b>Profit before appropriations and taxes</b>	<b>35,863</b>		<b>43,759</b>	
<b>Appropriations</b>				
Change in depreciation difference	-13,944		-17,864	
Group contributions given	-21,770		-25,791	
Income tax	-149		-102	
<b>PROFIT FOR THE FINANCIAL YEAR</b>	<b>1</b>		<b>1</b>	

## 29. SHARES AND HOLDINGS

Name	Pcs	Group's share %	Parent company's share %	Book value (kEUR)
<b>Group companies</b>				
Savon Voima Verkkö Oy	1,000	100	100	5,500
Itä-Suomen Biomassa Oy	70	70	70	70
Savon Energia Oy	100	100	100	3
<b>Associated companies</b>				
Kympivoima Oy, Helsinki	472,432	17.1	17.1	26,984
Kympivoima Hankinta Oy, Helsinki	2,500	25.0	25.0	40
Väre Oy, Kuopio	4,619,375	46.2	46.2	19,637
<b>Other significant holdings</b>				
Varkauden Aluelämpö Oy	19,900	19.9	19.9	615

# Signatures of the Board of Directors and auditor's note

## Signatures to the financial statements and annual report

Siilinjärvi, 30 March 2023

Tarja Tikkanen

Juha Koukka  
*Chairperson of the Board of Directors*

Vesa Lötjönen

Jari Kääriäinen

Ossi Martikainen

Arto Sutinen  
*CEO*

(The financial statements were signed electronically.)

## Auditor's note

A report on the audit of accounts was submitted today.

Siilinjärvi, 30 March 2023

Ernst & Young Oy  
Authorised Public Accountant Firm

Elina Laitinen  
Authorised Public Accountant

(The auditor's note was signed electronically.)

# AUDITOR'S REPORT (Translation of the Finnish Original)

To the Annual General Meeting of  
Savon Voima Oyj

## Report on the Audit of Financial Statements

### Opinion

We have audited the financial statements of Savon Voima Oyj (business identity code 0171351-2) for the financial year 1 January–31 December 2022. The financial statements comprise the balance sheets, income statements, cash flow statements and notes for the group as well as the parent company.

In our opinion, the financial statements give a true and fair view of the group's and the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

### Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the *Auditor's Responsibilities for the Audit of Financial Statements* section of our report. We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Responsibilities of the Board of Directors and the CEO for the Financial Statements

The Board of Directors and the CEO are responsible for the preparation of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply

with statutory requirements. The Board of Directors and the CEO are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the CEO are responsible for assessing the parent company's and the group's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

### Auditor's Responsibilities for the Audit of Financial Statements

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

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

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omis-

sions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of the Board of Directors' and the CEO's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit

findings, including any significant deficiencies in internal control that we identify during our audit.

### Other Reporting Requirements

#### Other Information

The Board of Directors and the CEO are responsible for the other information. The other information comprises the report of the Board of Directors.

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

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. Our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations requirements.

If, based on the work we have performed, we conclude that there is a material misstatement of the report of the Board of Directors, we are required to report this fact. We have nothing to report in this regard.

Siilinjärvi, 30 March 2023

Ernst & Young Oy  
Authorised Public Accountant Firm

Elina Laitinen, Authorised Public Accountant









**SAVON VOIMA OYJ**

P.O. Box 1024 (Kapteeninväylä 5), 70901 Toivala  
exchange +358 17 223 111, customer service +358 17 224 400  
Domicile Siilinjärvi, Business ID 0171351-2  
[www.savonvoima.fi](http://www.savonvoima.fi)

