

2/2023



Interim report



SAVON
VOIMA

Weakened prospects in the operating environment a challenge for profitability

January–August 2023 in brief

- The net sales of the Group were EUR 147.7 million and decreased by 0.5 per cent compared to the corresponding period the previous year. The decrease in net sales was mainly due to a decrease in the volume of energy supplied in heat sales and distribution of electricity, and the market price of electricity that was lower than the previous year.
- The Group's operating profit was EUR 33.9 million and decreased by 2.7 per cent compared to the corresponding period the previous year. The operating profit increased by the share of associated companies' result.
- The volume of electricity distributed decreased by 8.8 per cent from the year before and was 1,192 GWh. Heat sales decreased by 4.1 per cent and were 673 GWh. The decrease in volumes was due to customers' energy saving measures and the fact that the start of the year was warmer than the comparison period.
- The volume of electricity produced was 360 GWh, which was an increase of 8.3 per cent compared to the previous year. The growth was due to an increase in the production of hydroelectric power, which resulted from the improved water situation and the start-up of the regular operations of Olkiluoto 3 in the spring.
- The security of supply for electricity distribution was excellent in January–August, as the service rate was 99.99 per cent. The average fault reset time was 47 minutes.

- In the review period, Group investments amounted to EUR 40.5 million.
- In August, Arto Sutinen, CEO of Savon Voima Group, announced his resignation to the Board of Directors of Savon Voima. He will leave his post at the end of November.

Estimate for the end of the year

- The investments for the entire year are anticipated to be EUR 69 million. Of the investments, EUR 47 million target the electricity grid.
- Due to the increasingly strained situation in the domestic fuel market, the price increase in wood-based fuels has continued, and the availability of the by-products of the forest industry has suffered from shortages. The challenging availability of biomass fractions increases prices even more, which has a negative impact on the profitability of heat production.
- All business operations are also subject to the increase in costs in general, which has a negative impact on the profitability of business operations.
- We expect the instability and unpredictability of the energy market to continue.
- Savon Voima Group's result for 2023 is expected to be weaker than in the previous year, but the forecast includes significant uncertainty factors related to challenging market conditions and regulation risks.

Development of Savon Voima in numbers

GROUP KEY FIGURES	1–8/2023	1–8/2022	1–12/2022
Net sales, EUR 1,000	147,717	148,493	231,713
Operating profit, %	22.9%	22.2%	21.2%
Equity ratio, %	44.2%	42.0%	41.9%
Liquidity, Qr	1.2	1.2	1.1
Investments, EUR million	40.5	35.0	56.6
Return on investment, %	5.1%	5.4%	5.0%
Staff on average	215	210	209
ENERGY VOLUMES (GWh)	1–8/2023	1–8/2022	1–12/2022
Sale of heat and steam	673	702	1,136
Electricity distribution	1,192	1,307	1,764
Electricity production, production shares	148	105	169
Electricity production, Group plants	212	227	350

CEO's review

This year, the Finnish energy system has demonstrated its flexibility. At the beginning of the year, that is, during the period of high prices, customers were flexible as expected. Now, customers' electricity consumption seems to have continued at a lower level than in previous years, even though the energy crisis has receded. As the production of electricity increased thanks to wind power and factors such as the start-up of the regular operations of the nuclear reactor Olkiluoto 3, the prices of energy commodities decreased during the spring. The energy market with its price fluctuations seems to have changed permanently to be more volatile. The market price of electricity can be high or even negative within the same day. To tackle the challenge of power variation, the system needs a market-based capacity market and increased flexibility in consumption.

The new government programme includes an item on a necessary capacity market. On the other hand, the price cap regulation that has been floated would inevitably lead to power shortages and a decline in the market-based investment environment of clean production. During the summer, Savon Voima renewed its strategy taking into account the changes in the operating environment. The carbon neutrality target for 2030 remained in force, but investments should be accelerated. A slumping national economy, inflation, a decreased need for heating and increased interest rates all have a negative impact on the company's forecasts. The future investment programme will have to be adjusted in accordance with the forecasts, and a productivity programme will have to be launched to tackle the cost challenge. The achievement of climate goals requires accelerating investments in networks and production, but that would in turn require the rapid introduction of industrial investments that would increase the nation's electricity consumption.

The availability of Savon Voima's energy production and networks remained at a historically good level at the start of the year and in the summer season. The construction programme for a weatherproof electricity grid proceeded as planned. The revised grid has two-way operations in the

energy transition, and a record number of photovoltaic systems have been connected to it. As part of overall sustainability, the circular economy projects progressed. The construction project for the biochar plant owned by Taaleri and operated by Savon Voima has progressed to the competitive tendering phase, and construction work in the Iiksenvaara power plant area is scheduled to start in October. The joint project of Savon Voima and P2X Solutions for the construction of a green hydrogen production plant has progressed to the assessment of environmental impacts. Both projects are examples of sector integration where the electrification of another sector is linked by energy flows to the power plant infrastructure, which results in things such as waste heat being utilised in meeting the heating needs of society.

Operating environment

The prices of fuels, spare parts and materials have remained at a high level during the review period. Restrictions in the forest industry's production have cut the volume of wood-based by-products directed at energy production, which has increased the demand for forest biomass and raised the price level even more. The availability of spare parts and components has not caused problems for energy production, but long delivery times for different components have increased the need for advance preparation.

The savings in energy consumption have been reflected in both the distribution volumes of the electricity grid and the consumption of district heat. In addition, during the review period, the distribution and delivery volumes were affected by the fact that the start of the year was warm.

The wholesale electricity price in Finland was EUR 57.64 per MWh in January–August, which was 57 per cent lower than a year ago. The average system price was EUR 61.29 per MWh, which was 52 per cent lower than in the corresponding period in 2022. There are several reasons for the price drop. Gas and coal prices have returned to the 2021 levels and the water situation in the Nordic countries has returned to normal. In addition, electricity production has increased, but electricity consumption has decreased.

Electricity production is increasing due to increased wind power production and Olkiluoto 3.

The price of emission allowances rose sharply in January–February and, at the end of February, it peaked at EUR 100 per tonne of carbon dioxide. Since then, there has been a slight downward trend in the price of emission allowances. The average price in January–August was EUR 88.80 per tonne of carbon dioxide. In late August, the price was EUR 85.76 per carbon dioxide tonne, which is 7 per cent higher than twelve months earlier.

Sustainability

Electricity grid projects take into account a wide range of environmental impacts affecting things such as groundwater areas and protected areas and species. In addition, special measures are required if the renovation site is located in the vicinity of valuable cultural environments and protected archaeological sites. In June, two sites on the planned construction route of the Karttula–Pihkainmäki weatherproof electricity grid were inspected. Over the years, relics related to Stone Age settlements have been found on these two sites. The areas where the relics were found were inspected before the cable for the grid was installed so that the construction work would not endanger the archaeological cultural heritage of the project site. In addition, at the beginning of the year, jumping poles for flying squirrels were erected in the bedding for the new 110 kV power line built in Siilinjärvi. This was in accordance with the special permit granted for the area.

During the summer, the edge dams of the Joroisten Maavesi hydropower plant's canal were renovated, and a natural watercourse for fish to swim upstream was built in the Vasaralankoski rapids, near the hydropower plant. The watercourse allows migratory fish to rise past the hydropower plant and supports the living conditions of migratory fish in the area.

Since the legislation on the electricity market was reformed at the turn of the year to promote the green transition,

housing companies are now allowed to establish local energy communities and distribute the electricity produced in their housing companies with renewable energy sources, such as solar power, to benefit the residents of the housing company. Savon Voima Verkko prepared for the reform by launching the system reforms required to benefit from the reform well in advance the previous year. The first energy community in the distribution area of Savon Voima Verkko was established in Iisalmi in May.

Earlier in the year, Savon Voima decided to donate, together with three other companies from Northern Savonia, a total of EUR 600,000 for the establishment of a professorship in computational engineering at the University of Eastern Finland. The donation supports the training in the field of technology (MSE) launched at the University of Eastern Finland and ensures the realisation of the professorship for the next five years. The first round of donations will be paid at the beginning of 2024. The aim is to implement cutting-edge research and education for the benefit of industry in Eastern Finland and, over a longer period of time, to supplement the competence base required for the development of the area.

District heat and power generation

Of the energy sources used for electricity and heat production, 73.6 percent (72.0 per cent) were renewable in the January–August period. Earlier in the year, scarce wood-based fuels increased the proportion of peat used in relation to the budget. Peat accounted for 23 per cent of the fuels used and oil for about 3 per cent.

By the end of August 2023, the carbon dioxide emissions from district heat and electricity production included in the emissions trading scheme amounted to 73,930 (92,000) tonnes for Savon Voima Oyj.

District heat sales in January–August were 8.4 per cent lower than budgeted. District heat sales were particularly affected by the mild start to the year. Total heat sales amounted to 673 GWh, which is 4.1 per cent lower than in the same period last year.

The high demand for wood-based fuels has continued throughout the review period. Restrictions on the production of the forest industry have already affected the volume of available forest industry by-products, which has in turn further increased the share of forest biomass in the use of renewable fuels. In order to ensure security of supply for the upcoming heating season, more forest biomass has been purchased for storage than in previous years.

The availability of power plants and heating plants was good at the beginning of the year and the maintenance shutdowns in the summer were largely implemented as expected. However, due to the unexpected need for renovations detected in the steam turbine revisions of Joensuu and Iisalmi, the start-ups of these turbines will be delayed by about three weeks. The investment projects have been implemented according to the planned schedule. The most significant investment in district heating and electricity production this summer has been the new fuel reception and sampling robot at the Iisalmi power plant. The investment is being used to prepare for the discontinuation of the use of peat and to improve the efficiency of operations.

In August, Savon Voima and Inora Oy published a cooperation agreement under which Savon Voima will provide a service for steam energy production at the Inora Oy plant in Iisalmi. The parties are also committed to developing the energy efficiency and environmental friendliness of Inora Oy's production process. Savon Voima also concluded a follow-up agreement for the supply of steam and liquefied petroleum gas for Sakupe Oy's Siilinjärvi laundry.

The construction project for Joensuu Biocoal Oy's production plant producing torrefied biomass on the power plant plot owned by Savon Voima in Joensuu was started in August with the tendering process for the project. Savon Voima will supply Joensuu Biocoal Oy with the buildings required by the process, as well as comprehensive operating and maintenance services during the production phase. Construction work in the power plant area will start at the turn of September and October. Another significant cooperation project in Joensuu, P2X Solution's green hydrogen production plant linked to Savon Voima's power plant, has progressed

to the stage of assessing its environmental impacts.

The volume of electricity produced in January–August was 360 GWh, which was 8.3 per cent more than in the corresponding period last year. 80 GWh of hydroelectric power were produced, which was 22.7 per cent more than in the same period last year. The water situation has been better than in the previous year. The joint production of electricity and heat (CHP production) totalled 132 GWh, which was 18.6 per cent lower than in 2022. The early part of the year was milder than the previous year and the market price of electricity has been clearly weaker than the previous year. The production of generation shares of electricity was 148 GWh, which was 40.9 per cent more than in the corresponding period last year. The increase in production shares was due to the start-up of Olkiluoto 3.

Electricity distribution network business

In the early part of the year, the amount of electricity distributed was in line with the budget. A total of 1,192 GWh was distributed, which was 8.8 per cent less than the corresponding period last year (1,307 GWh). The decrease in the distribution volumes was due to customers' successful energy saving measures, increased small-scale electricity production and weather that was warmer than the same period last year.

The security of supply for electricity distribution was excellent in January–August as the service rate was 99.99 per cent. In January–August, the energy-weighted average fault reset time of the electricity grid was 47 minutes (1 h 12 min) per customer. There were fewer permanent defects in the spring than average. The effective fault management of the disturbances caused by the two low-pressure storms in early May and August helped achieve this excellent result. Thunderstorms caused disturbances in the summer period. In August, the local downbursts of thunderstorms caused disturbances in the distribution area south of Kuopio, in particular.

The project to replace the electricity meters that had reached the end of their service life was launched in June

in Joroinen, expanding to several other municipalities in the area in July. New smart electricity meters will be installed at more than 20,000 locations during the autumn and next year. In order to maintain the balance of the electricity system, electricity meters must in future provide data to an accuracy of 15 minutes instead of the former 60 minutes.

The Energy Authority has continued the development of the monitoring methods concerning the next monitoring period. This development was started earlier in the year and a final confirmation on the monitoring methods is expected to happen late this year. Savon Voima Verkko has been actively involved in the process through working groups.

Network work to improve the security of supply of the electricity grid will continue systematically during the current year. The most significant projects for 2023 are in Sukeva, Valkeiskylä in Vieremä and Karttula-Pihkainmäki. Overall, more than 120 projects to improve the security of supply are under way this year.

The transmission system operator Fingrid is building a new power line between Joroinen and Vaala, in connection with which Savon Voima Verkko Oy will renovate its own electricity grid in several municipalities. The cost estimate is approximately EUR 4.9 million.

In the area of Savon Voiman Verkko, May 2023 was a record month in terms of photovoltaic systems connected to the grid. In total, 871 photovoltaic systems were connected in January–August, while in the corresponding period last year the number was 554.

Personnel

At the end of August, the number of employees was 226 (215) and the number of people employed averaged 215 (210) in January–August. In January–August, 15 (12) people started as new permanent employees. There were no accidents resulting in at least one day's absence in January–August. The target of "zero accidents" reached a new record in August: 1,111 (746) work days without any acci-

dents. Our goal is to annually employ summer workers and interns so that they account for about 10 per cent of our personnel. During summer, we employed 24 (20) summer interns in a variety of positions, from power plant work to customer service.

Estimate for the end of the year

All Savon Voima's business operations are weather-dependent. The net sales and results of the power generation business are also strongly affected by, for example, price fluctuations in the wholesale electricity market and the development of emission allowances and fuel prices.

The economic outlook has weakened since the previous interim report. For Finland's GDP, the forecasts range from zero growth to a moderate reduction for the current year. Inflation is expected to fall more slowly than previously anticipated. Interest rates are generally estimated to have peaked, but the outlook in this respect still involves a lot of uncertainty. 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. Households' purchasing power and companies' liquidity are expected to continue to tighten as a result of the negative development.

The market prices of electricity have decreased and the price fluctuation in the market has levelled off compared to 2022. However, in our view there are significant uncertainties remaining in the energy market. The prices of energy commodities are exceptionally sensitive to both positive and negative changes, causing uncertainty and unpredictability in the market. For example, several simultaneous and unexpected factors caused the market price of electricity in Finland to rise in August to a higher level than in any previous month since March. Significant price fluctuations are expected to continue in the future. Price hedges are used to manage the impact of electricity price fluctuations in accordance with the principles of long-term risk management.

Competition has increased in the domestic fuel market. Prices have continued to rise, especially for biomass fractions.

Despite the declining trend in recent months, the price of emission allowances is at a high level. There is also upward price pressure related to other costs. For the rest of the year, the increase in fuel prices is expected to weaken the profitability of the district heat business, in particular. The increase in the general cost level is expected to weaken the profitability of the entire Group and also affect the outcome of investments.

The unpredictability of political and official regulation also creates uncertainty for the energy sector, increasing the risk level of the sector. For instance, the so-called windfall tax will significantly increase the Group's tax burden in the taxation for 2023, which will in turn make it even more difficult to implement the investments required by the energy transition in a profitability environment that is already weakening in other aspects. In addition, the debate on the taxation of the energy use of wood, for example, creates uncertainty for the future prospects of the sector. The Energy Authority is currently developing control methods to be applied to the electricity distribution business from 2024 onwards. The changes in control methods may further weaken the profitability of the electricity grid business and have a negative effect on the availability and terms of financing.

Risks to the security of electricity supply will be reduced by investing significantly in the prevention of damage caused by weather conditions and building a weather-proof grid. The construction of the grid will continue as planned, despite regulatory uncertainties.

Based on the available information, Savon Voima Group's operating profit for 2023, excluding non-recurring items, is expected to be lower than in the previous year. However, due to the challenging market conditions and the unpredictability of political regulation, the estimate includes significant uncertain elements.

The interim report financial information is unaudited.

Siiinjärvi, September 2023

Savon Voima Oyj
Board of Directors

Group result and balance sheet



NET SALES OF BUSINESSES, non-consolidated (EUR 1,000)	1-8/2023	1-8/2022	1-12/2022
Electricity grid business	64,256	67,570	99,482
District heat	57,866	52,903	82,902
Electricity production	25,571	28,504	50,268
Other business operations	2,574	2,453	3,684
Consolidated entries and eliminations	-2,550	-2,937	-4,623
Savon Voima Group in total	147,717	148,493	231,713
OPERATING PROFIT FROM BUSINESSES, non-consolidated (EUR 1,000)	1-8/2023	1-8/2022	1-12/2022
Electricity grid business	26,628	27,375	36,797
District heat	7,424	8,610	7,926
Electricity production	6,259	10,320	19,018
Other business operations	406	254	294
Consolidated entries and eliminations	-6,841	-13,583	-14,999
Savon Voima Group in total	33,876	32,976	49,036

CONSOLIDATED PROFIT AND LOSS ACCOUNT	1-8/2023	1-8/2022	1-12/2022
NET SALES	147,717	148,493	231,713
Share of associated companies' result	4,745	-294	4,545
Other operating income	3,032	439	1,074
Costs	-57,957	-52,648	-88,171
Depreciations	-44,310	-44,120	-70,378
Other operating expenses	-19,351	-18,894	-29,746
OPERATING PROFIT	33,876	32,976	49,036
Financial income and expenses	-248	1,277	1,743
Profit before non-recurring items, appropriations and taxes	33,627	34,253	50,779
Non-recurring items	0	0	-213
Profit before appropriations and taxes	33,627	34,253	50,567
Income tax	-7,908	-8,742	-12,762
Minority share	-14	0	0
PROFIT FOR THE FINANCIAL YEAR	25,705	25,511	37,805

CONSOLIDATED BALANCE SHEET, ASSETS (€1,000)	31 August 2023	31 August 2022	31 December 2022
FIXED ASSETS			
Intangible assets	382,014	396,018	391,275
Tangible assets	609,020	602,761	603,694
Investments	57,441	45,571	52,096
CURRENT ASSETS			
Inventories	11,065	6,195	8,661
Financial assets	65,753	73,147	93,013
Total	1,125,293	1,123,691	1,148,740

CONSOLIDATED BALANCE SHEET, LIABILITIES (€1,000)	31 August 2023	31 August 2022	31 December 2022
CAPITAL AND RESERVES			
Share capital	969	969	969
Other equity	336,294	310,962	323,926
Minority share	44	0	30
Statutory provisions	4,454	4,162	1,313
LIABILITIES			
Connection fees	156,035	155,354	155,377
Long-term	500,000	519,953	510,000
Deferred tax liabilities	71,634	71,015	72,221
Short-term	55,864	61,276	84,905
Total	1,125,293	1,123,691	1,148,740

Savon Voima Group comprises the parent company Savon Voima Oyj and its subsidiaries Savon Voima Verkko Oy (100%) and Itä-Suomen Biomassa Oy (70%). Itä-Suomen Biomassa Oy has not been consolidated in the consolidated financial statements for 2022, because its operative business started in full on 1 September 2022 and because the consolidation has not been necessary in order to give a true and adequate view of the Group's financial performance or financial position. KymppiVoima Oy, KymppiVoima Hankinta Oy and Väre Oy have been consolidated into the Group as associated companies.