



OULUN ENERGIA IN 2024

We Offer Sustainable Energy and Circular Economy Solutions

OULUN ENERGIA



CEO'S STATEMENT

Oulun Energia Group's role in the green transition became increasingly clear

2024 saw a rapid pace of change in the operating environment of the energy and circular economy industry. The change in the operating environment is due to the ambitious climate targets set by the EU and Finland, which require the energy and circular economy industry to reduce its emissions and rapidly reform the energy system. Regulation concerning the industry is increasing, and the needs of our customers are also rapidly changing. To address this, we initiated a strategic planning process in spring 2024 and conducted redundancy consultations with our employees.

The year brought significant changes and even periods of uncertainty. However, I am proud that, together with our employees, we were able to swiftly recognise the challenges in our operating environment and transformed them into opportunities. In the autumn, we introduced our ambitious growth strategy and our renewed organisation, designed to best support the realisation of our goals. At the core of our new strategy is seeking strong growth from the green transition.

Oulun Energia aims to lead by example, driving the transition to a more sustainable energy system that reduces carbon dioxide emissions from energy production. In 2024, we maintained strong investments in renewable electricity production and the electrification of district heating. We also actively pursued

new growth opportunities and projects of even national significance. We are designing an industrial-scale hydrogen production plant in Laanila, Oulu. Another groundbreaking project is underway at our subsidiary, Syklo, where construction has begun on Finland's largest plastics recycling plant and a bio-composite plant in Hyvinkää.

We are living in uncertain times regarding the security environment. As a critical operator for security of supply, it is essential for us to invest adequately in security and resilience planning. We already uphold a strong level of security and resilience planning, and its primary focus must be on proactive measures.

The energy and circular economy industry is now facing one of its most interesting challenges in decades – if not ever. We have the opportunity to shape history by creating an energy and circular economy system that future generations can be proud of.

I would like to thank our customers for their trust in us, as well as our owner, the City of Oulu, our numerous local suppliers, and especially our dedicated and professional employees for an eventful year in 2024.

Arto Sutinen
CEO

Oulun Energia in Brief

Oulun Energia is one of the largest energy companies in Finland. We offer sustainable energy and circular economy solutions. Our core operations include the production of energy and electricity, electricity network services for consumers and businesses, as well as various heating and energy solutions. Through our subsidiary Syklo Oy, we also provide circular economy services to businesses. We take responsibility for people and the environment. Our goal is to achieve carbon neutrality by 2030.

The parent company of the Oulun Energia Group is Oulun Energia Oy, which is entirely owned by the City of Oulu. The parent company, in turn, owns all its subsidiaries: Oulun Energia Sähköverkko Oy, Turveruukki Oy, Syklo Oy, Kiinteistö Oy Oulun Solistinkatu 4, Solarpower Paarmala Oy, and Huoltovoima Oy.

In addition, Oulun Energia Oy is a significant owner in the following companies: Oomi Palvelut Oy, Kolsin Voima Oy, Voimapato Oy, and Pasaati Holding Oy.

Key Figures 2024

NET SALES, MEUR

286.5

OPERATING PROFIT, MEUR

50.8

EMPLOYEES

at the end of 2024

244

CUSTOMERS

Electric power network

119,921

District heating

11,146

RENEWABLE
ENERGY
PRODUCTION

77%

AMOUNT OF

Electricity produced

984 GWh

Heat produced

2,316 GWh

Business Areas

Energy Production

Our job is to produce electricity and heat for the region's residents and businesses.

Energy Services

We are responsible for the transmission and distribution of heat within our own distribution network in Oulu and for providing energy services for our customers.

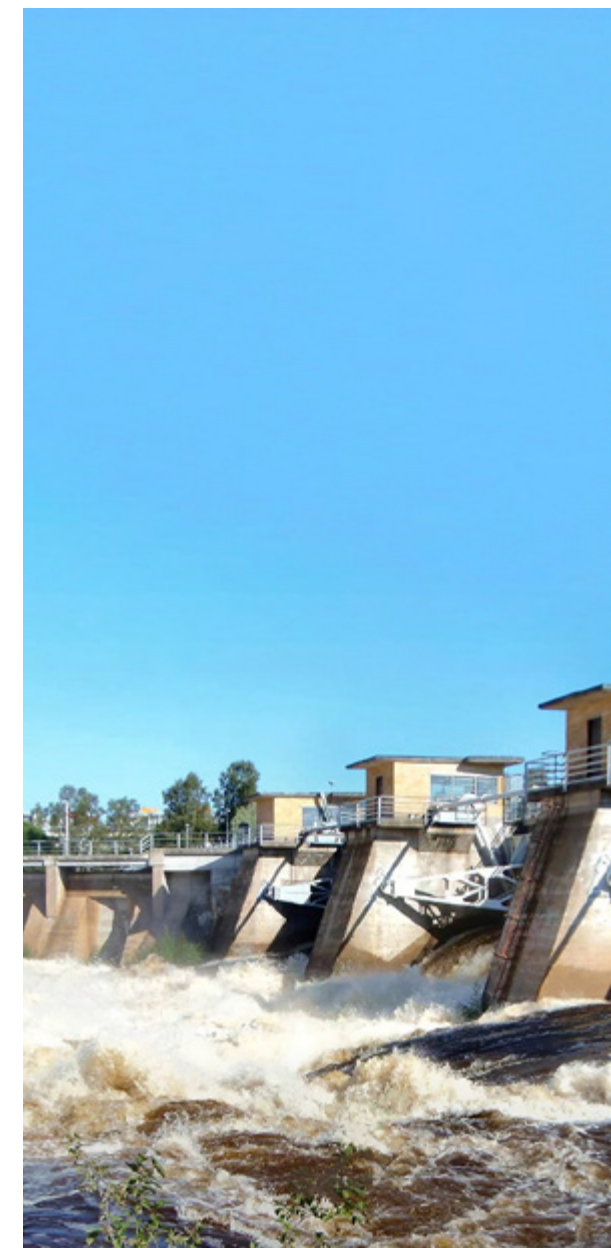
Circular Economy Services

We provide effective solutions to help businesses advance sustainable development and create new higher-value products from waste, such as biocomposites and recycled plastic pellets.

Electricity Network Services

We are responsible for the transmission and distribution of electricity in our own distribution network, which covers the Oulu central urban area, Kiiminki, and Yli-li.

Oulun Energia's Power Plants in 2024



**Merikoski
Power Plant**

**Produces
electricity**

Completed: **1948**
Electric power: **40 MW**



Toppila 2

**Produces electricity
and district heating**

Completed: **1995**
Main fuel: **biomass**
Fuel power: **315 MW**
Electric power: **90 MW**
District heat power: **220 MW**



**Laanila
Ecopower Plant**

**Produces steam for
industry, as well as
heat and electricity**

Completed: **2012**
Fuel power: **53 MW**
Fuel: **non-recyclable waste**

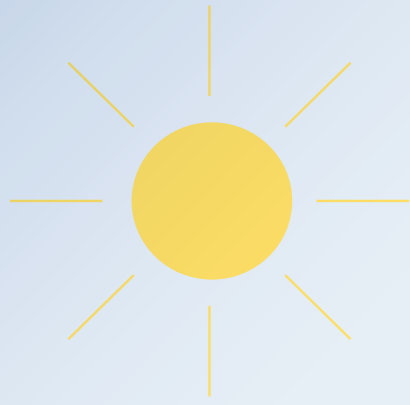


**Laanila
Biopower Plant**

**Produces electricity
and district heating,
as well as process
steam for industry**

Completed: **2020**
Main fuel: **biomass**
Fuel power: **215 MW**
Electric power: **70 MW**
District heat power: **175 MW**

Oulun Energia's Strategy

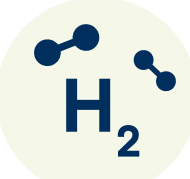


Our mission
We are strengthening Northern vitality by recycling materials and good energy

Our values
Together • Sustainably • Passionately

Our vision
We are building a future that future generations can be proud of

Significant growth driven by the green transition



We are successful in improving profitability

We are boldly growing

Key priorities for the 2024-26 strategy period

Productivity

Growth

Capabilities

Operational activities

Growth opportunities

Energy system

Customers

Flexibility and optimisation

Data and AI

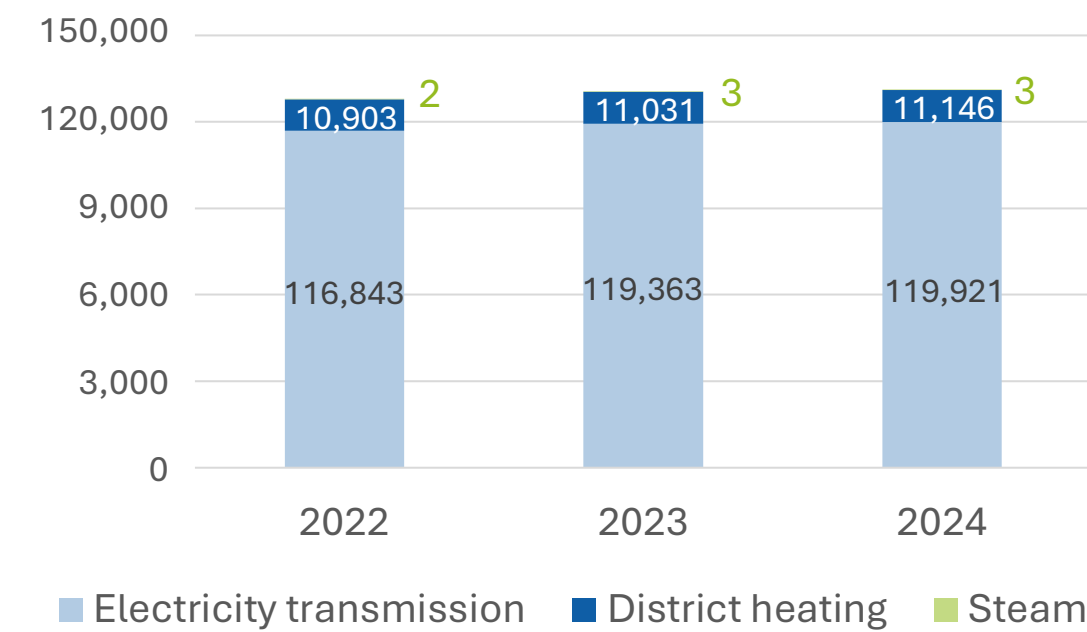
Capital allocation

Expertise and culture

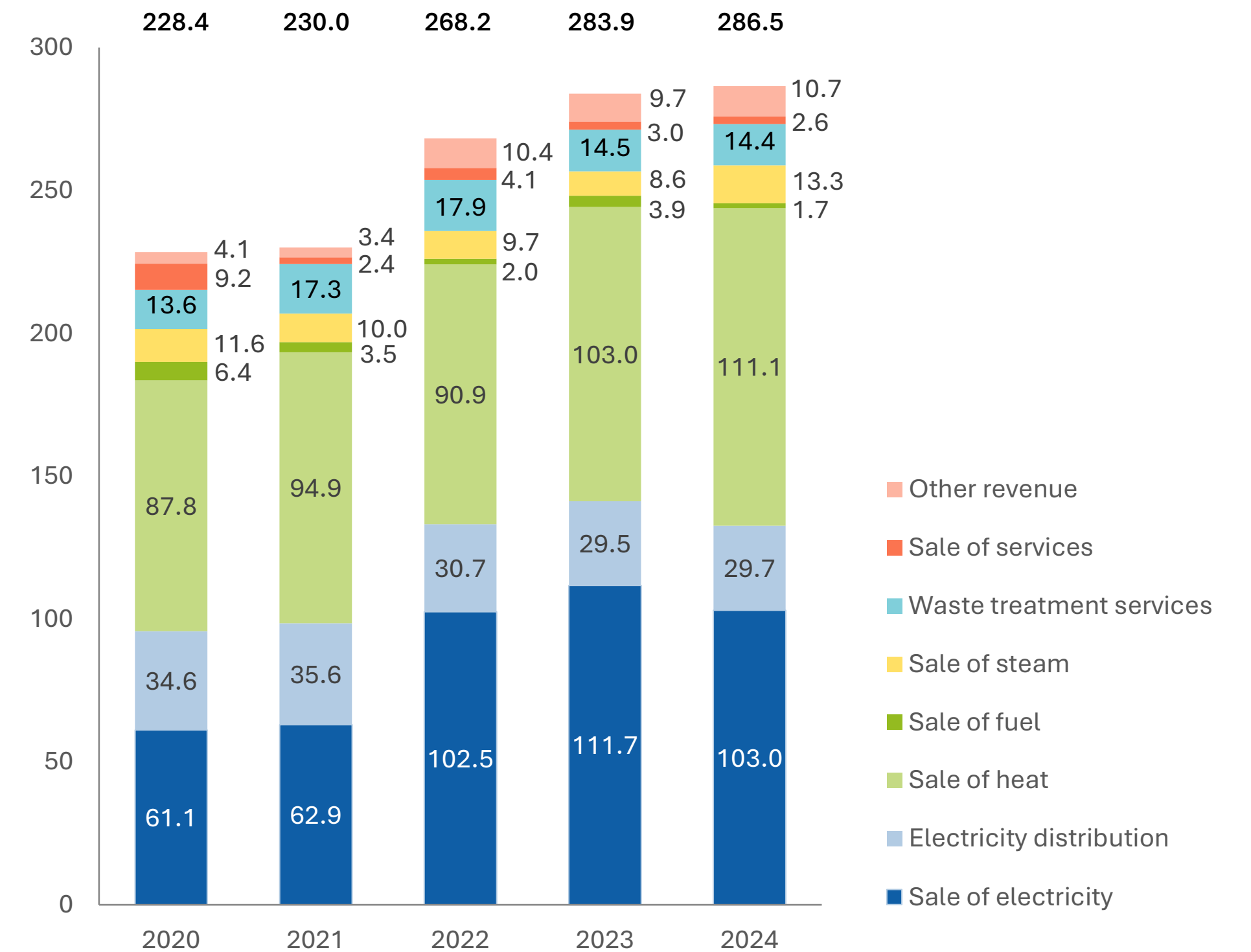
Financial Development

KEY FIGURES	2024	2023
Net sales (MEUR)	286.5	283.9
Operating profit (MEUR)	50.8	61.3
Investments (MEUR)	70.4	60.0
Net sales/person (MEUR)	1.06	1.09
Operating profit/person (MEUR)	0.21	0.24
Employees at the end of 2024	244	253

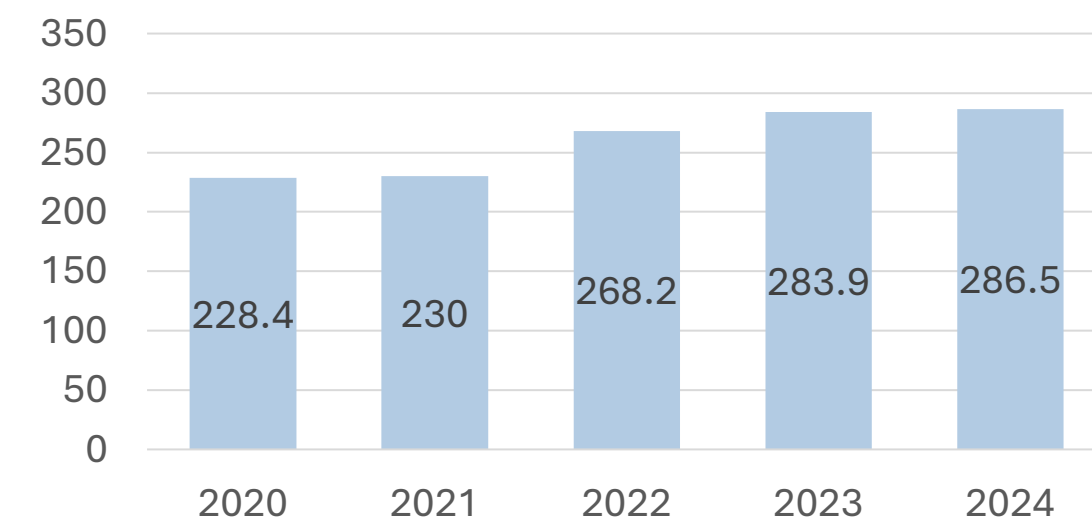
NUMBER OF CUSTOMERS



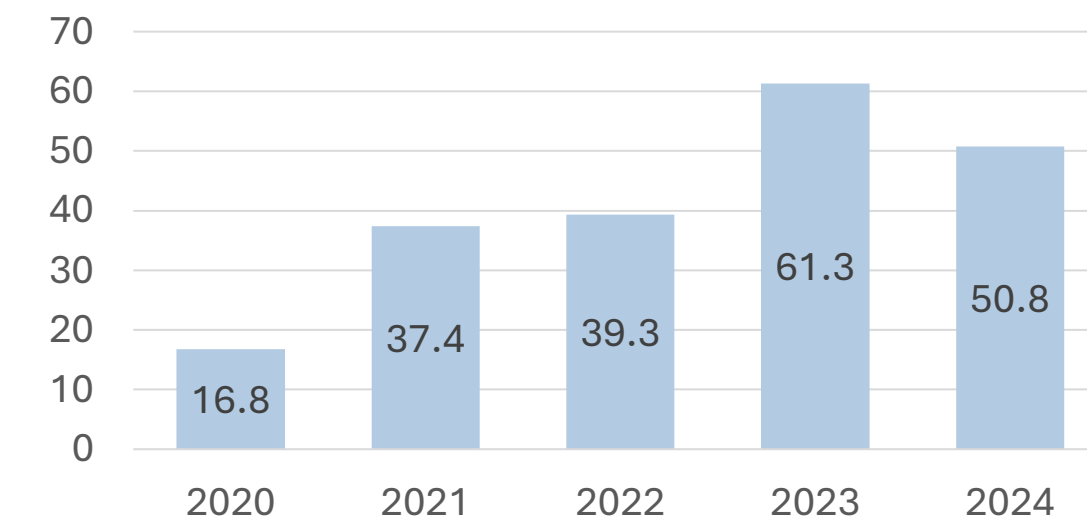
DISTRIBUTION OF SALES REVENUE *, MEUR



NET SALES, MEUR



OPERATING PROFIT, MEUR



* Total for Oulun Energia Oy, Oulun Energia Sähköverkko Oy, Syklo Oy, and Turveruukki Oy. Internal business operations eliminated.

Highlights in 2024



Our subsidiary Syklo started planning Finland's largest plastic recycling plant in Hyvinkää

In 2024, a decision was made to advance the project in stages. Earthworks began, and equipment procurement was tendered. The 50,000-tonne capacity plastic recycling plant, once completed, will increase Finland's plastic recycling capacity by up to 50 percent.

[→ Read more on our website](#)



Oulun Energia started planning a hydrogen production plant in Laanila, Oulu

In February 2024, Oulun Energia announced plans to build an industrial-scale hydrogen production plant in Oulu. Preliminary planning began, and the environmental impact assessment (EIA) process was initiated.

[→ Read more on our website](#)



Oulun Energia invested in our own solar power park in Paarmala, Raahe

We began constructing our own 5 MW solar power park in Paarmala, Raahe. This investment aligns with our strategic goal to increase renewable energy and achieve carbon neutrality by 2030.

[→ Read more on our website](#)



We renewed our strategy

In response to changes in the operating environment, we published our new strategy in autumn 2024, focusing on seeking strong growth from the green transition.

[→ Read more on our website](#)



Our subsidiary Turveruukki sold two peatland areas to the Finnish Natural Heritage Foundation

Oulun Energia's subsidiary Turveruukki Oy sold two former peat production areas in Ranua to the Finnish Natural Heritage Foundation, which will restore the areas to wetland ecosystems as part of the Suokeidas project in collaboration with the John Nurminen Foundation.

HIGHLIGHTS IN 2024

Syklo Oy started the construction of Finland's largest plastic recycling plant in phases

In February 2024, it was announced that the circular economy company Syklo Oy is planning to construct Finland's largest plastic recycling plant in Hyvinkää. The 50,000-tonne plastic recycling plant will increase Finland's plastic recycling capacity by up to 50 per cent and will enable annual savings of up to 25 million euros for the Finnish national economy as a result of the reduction in the EU Plastic Tax. The plant will also reduce Finland's estimated greenhouse gas emissions by up to 160,000 tonnes (CO₂eq) annually, provided that all the plastic recycled by the plant comes is diverted from incineration. The project's strategic partner is the Scottish Impact Recycling.

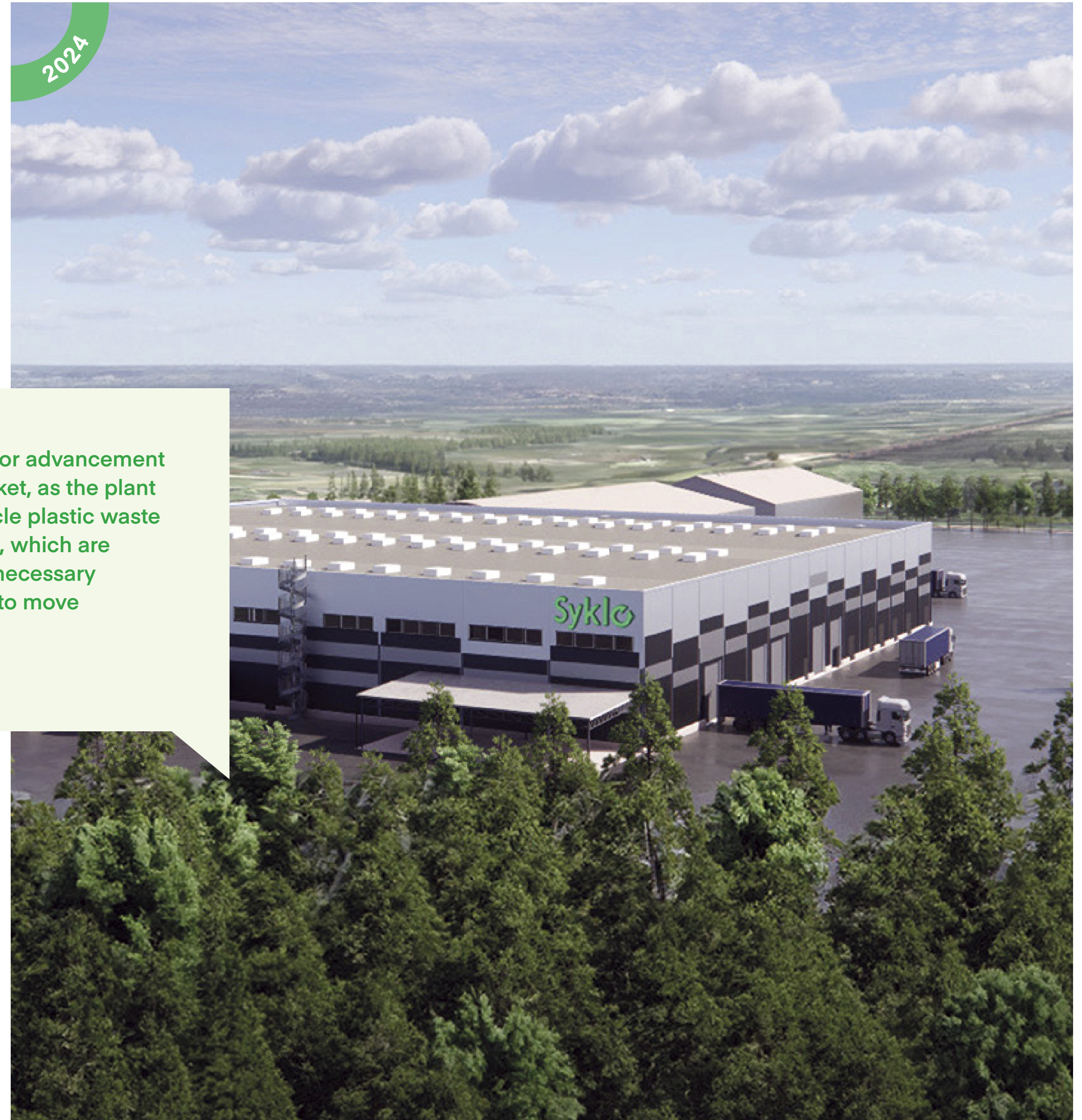
The construction of the plastic recycling plant will be advanced in phases. In the year 2024 the earthworks begun and an environmental permit was received.



The plastic recycling plant represents a major advancement for the entire Finnish circular economy market, as the plant will have the capacity to separate and recycle plastic waste streams containing high levels of impurities, which are currently incinerated. We are eager for the necessary permits to be approved swiftly, allowing us to move forward with the next phase of the project.

Teemu Koskela, Managing Director at Syklo Oy

Syklo's goal is to grow into a national and international circular economy partner that will reform the circular economy market by highlighting challenges related to the industry, offering solutions to them, and shaping the industry's thinking in a more sustainable direction. The Hyvinkää plastic recycling plant is just the beginning, and our future plans include expanding to the Nordic and Baltic countries, and later to the rest of Europe.





HIGHLIGHTS IN 2024

Oulun Energia plans a 100 MW hydrogen plant in Oulu, Finland

Oulun Energia is planning to build a 100 megawatts (MW) hydrogen production plant in Oulu, northern Finland. When completed, the plant would be a big step towards clean energy production and thus a natural part of Oulun Energia's goal of achieving carbon neutrality by 2030. Partner for the project planning is the Finnish P2X Solutions, which is currently constructing a hydrogen production plant in Harjavalta, western Finland.

According to the preliminary plan, the whole project planned in Laanila industrial area would include an electrolysis plant with a capacity of up to 100 megawatts, a carbon capture plant, a hydrogen and carbon dioxide storage, and a further processing plant whose final product could be methane or methanol, for example.

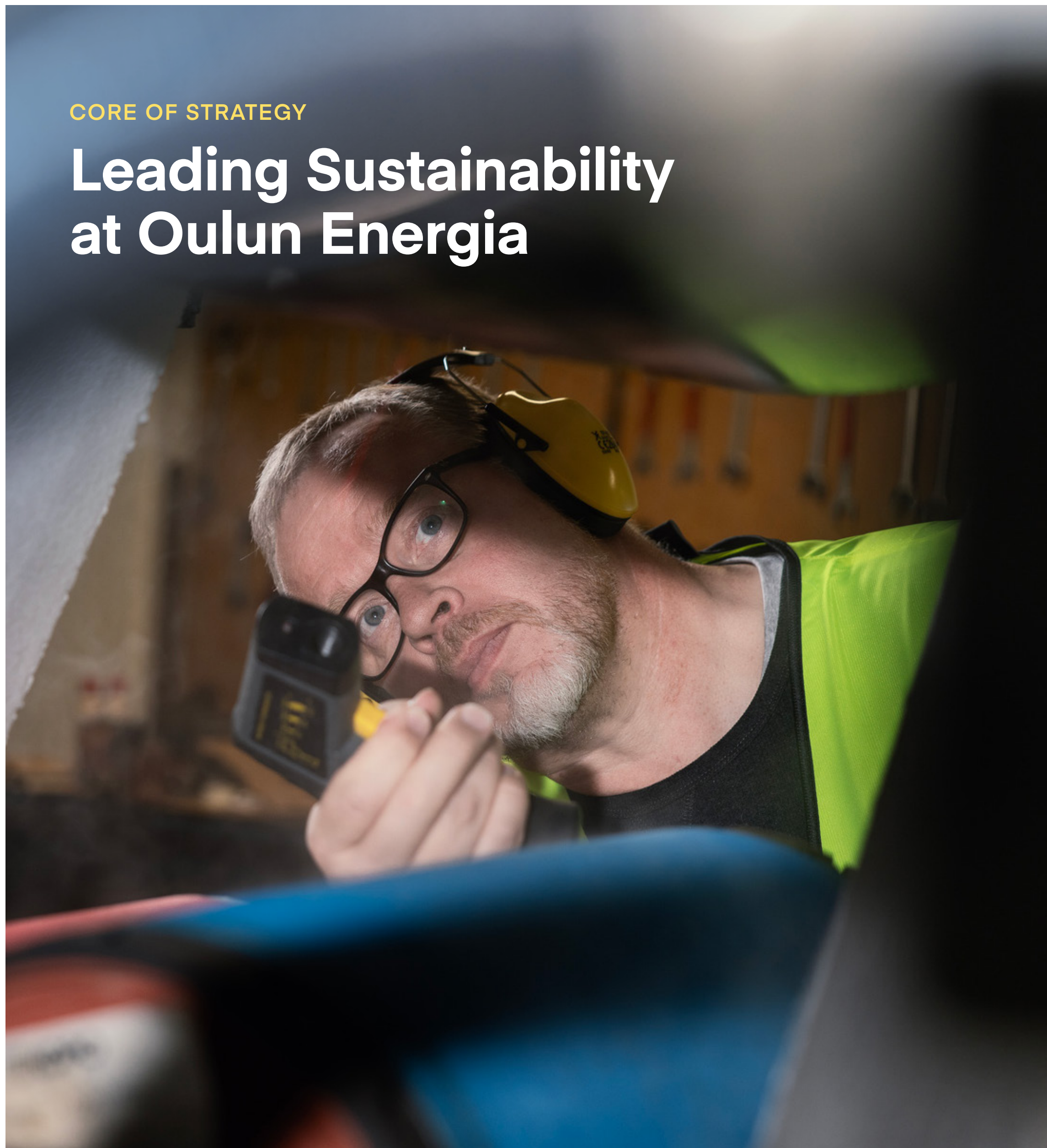
This will be Oulun Energia's first hydrogen project and significant even on the scale of Europe. The project will increase the vitality of the Oulu region and the development opportunities for industry as well as create new businesses and jobs.

Project development started in spring 2024, led by project development partner P2X Solutions. The preliminary planning of the hydrogen production plant has advanced according to schedule.

The planned location for the hydrogen production plant is the Laanila industrial area, where Oulun Energia already operates two combined heat and power plants. Oulun Energia started an Environmental Impact Assessment (EIA) procedure by the end of year 2024 to evaluate the placement of the hydrogen production plant in Laanila. The EIA procedure assesses the project's potential impacts during both construction and operation, including effects on air quality, noise levels, waterways, traffic, landscape, soil, as well as human health, living conditions, and comfort, among other things. The purpose of the EIA is to produce information that supports project decision-making and to enhance citizens' access to information and opportunities for input.

CORE OF STRATEGY

Leading Sustainability at Oulun Energia



Sustainability is at the core of our strategy. We are implementing the green transition and striving to foster a corporate culture where sustainability is at the core of our operations. We set ambitious goals and continuously challenge ourselves to improve and advance our sustainability efforts. We maintain active dialogue with our stakeholders and strive to meet their expectations.

Oulun Energia Group's parent company, Oulun Energia Oy, has its board of directors approve the Group's sustainability strategy, programme, and group-level targets. The programme and targets also align with the sustainability policies set by the City of Oulu, the owner of Oulun Energia Oy. The board of directors approves Oulun Energia's Code of Ethics and key policies. It also approves the Annual and Sustainability Report before publication.

We are preparing to meet sustainability reporting requirements

Oulun Energia is developing reporting based on the EU Corporate Sustainability Reporting Directive (CSRD), even though the requirements for sustainability reporting are not yet fully clear due to the Omnibus initiative.

We have taken steps to ensure reporting readiness in compliance with the CSRD. The foundation of CSRD reporting is the double materiality assessment, which

we conducted in spring 2024. We identified significant impacts, risks, and opportunities across all ESRS standards for Oulun Energia. These were E1 Climate change, E2 Pollution, E3 Water and marine resources, E4 Biodiversity and ecosystems, E5 Resource use and circular economy, S1 Own workforce, S2 Workers in the value chain, S3 Affected communities, S4 Consumers and end-users, and G1 Business conduct. We identified security of supply and local impact as community-specific additional information.

Following the double materiality assessment, we also conducted a gap analysis to evaluate the maturity of our current sustainability reporting, processes, and management against the requirements of the CSRD. We will continue our preparations for CSRD reporting throughout 2025. During this time, we will conduct a taxonomy eligibility and compliance assessment and refine our climate change transition plan. In early 2025, we will also provide sustainability reporting training for the Board of Directors, management, and personnel involved in the reporting process.

Our Responsibility Program

The main themes of our responsibility program have remained the same as in 2023. During 2025, we will take a closer look at the content of our program in relation to the results of the double materiality analysis, alongside the development of sustainability reporting.

Focus Area	Themes	Progress in 2024
<p>We are tackling global environmental challenges The energy sector is key to creating a sustainable and emission-free future society.</p>	<ul style="list-style-type: none"> • Carbon neutrality • Promoting the circular economy • Biodiversity 	<ul style="list-style-type: none"> • We reduced our carbon dioxide emissions by 28 percent compared to 2023. • The share of renewable energy sources in our energy mix increased to 77 percent (2023: 74). • The use of peat decreased by 58 percent. • We built the Onni urban pollinator meadow and new wetlands covering an area of 97 hectares.
<p>We care for people We take social responsibility by caring for our employees, customers, and partners.</p>	<ul style="list-style-type: none"> • Employee well-being • Responsible partner • Customer-centric 	<ul style="list-style-type: none"> • The accident frequency rate was 7.0 (4.1). • Overall job satisfaction in the main survey of the spring was 75/100, the Liekki index was 74, and the eNPS, or employee net promoter score, was 7 on a scale of -100 to +100. • The daily customer service recommendation index (NPS) was high in both energy services at 78 (71) and electricity network services at 70 (70). • Our delivery reliability remained at a good level. The average outage time caused by faults in the electricity network was 14.8 (9.9) minutes, and the outage time caused by planned interruptions was 2.4 (2.7) minutes per customer. Due to district heating disruptions, our customers were without heat for an average of 0.08 (0.13) minutes, and due to planned heat distribution interruptions, for an average of 2.6 (3) minutes.
<p>We are strengthening regional vitality It is our job to do our part to support the success of the people and businesses of the Oulu region and to produce energy in a way that makes the region even more attractive in the future.</p>	<ul style="list-style-type: none"> • Investments in the region and income for the city • Support for sports clubs and environmental projects • Cooperation with educational and research institutions • Ensuring security of supply 	<ul style="list-style-type: none"> • Investments amounted to 70.4 million euros (60.0). • Distributions to the City of Oulu were 24.5 million euros (23.5). • A total of 250,766 euros (260,000) was allocated to sponsorships and grants. • At the end of the year, we employed a total of 244 (251) employees. • 95 (97) percent of the biofuels we use are sourced from Finland.



We are increasing our carbon handprint

Our carbon handprint reflects the positive environmental impact of our products, helping to reduce our customers' carbon footprint.



We are reducing our carbon footprint

By lowering the greenhouse gas emissions from our operations, we reduce the carbon footprint of our products.

Aiming for carbon neutrality by 2030

We are reducing our carbon footprint and offsetting our remaining emissions.

We are advancing the production of recycled materials

We are reducing carbon dioxide emissions from heating

We are reducing carbon dioxide emissions from industry and transport through hydrogen production

We are increasing the use of renewable electricity

We are electrifying district heating and utilising surplus heat

We are increasing the share of renewable woody biomass

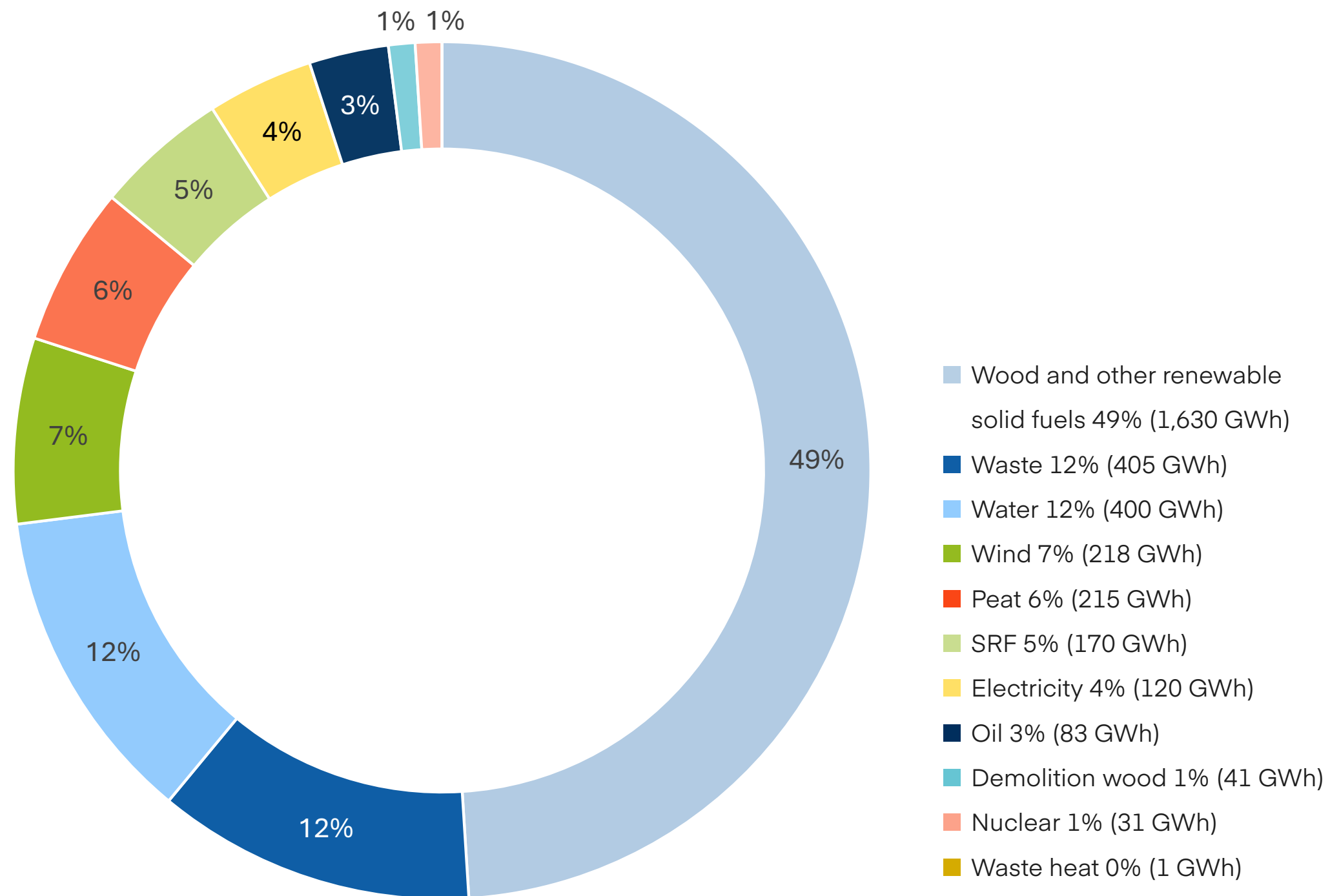
We are minimising the need for incineration by developing flexible solutions

We are improving energy efficiency

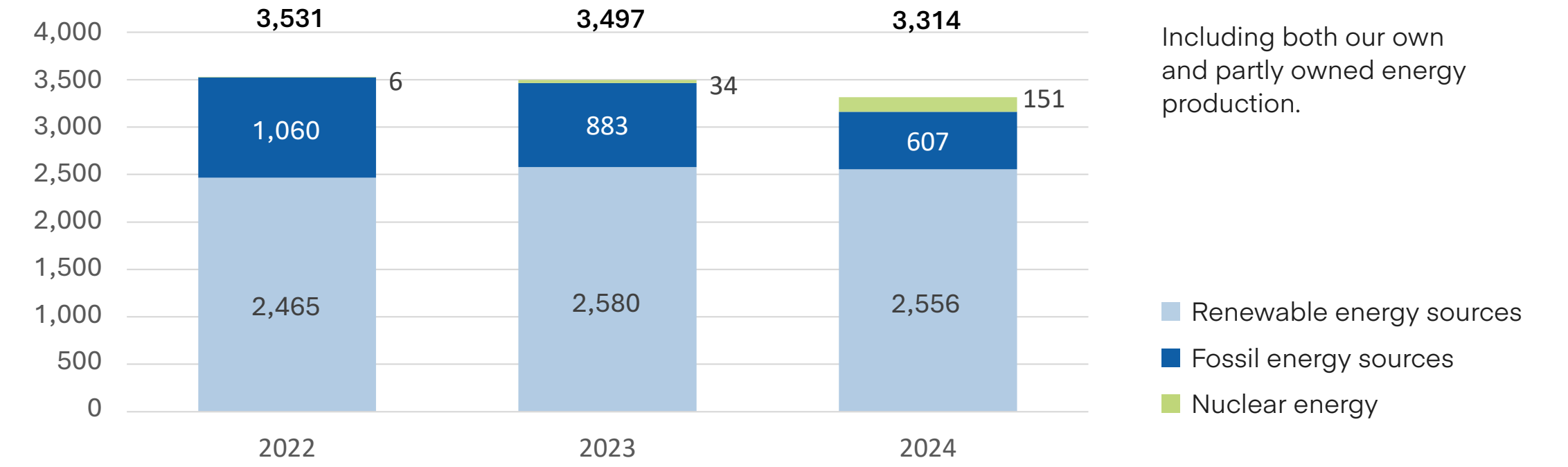
Energy Source Figures

In 2024, we reduced our carbon dioxide emissions by 28 percent compared to the previous year, and the share of renewable energy sources was 77 percent.

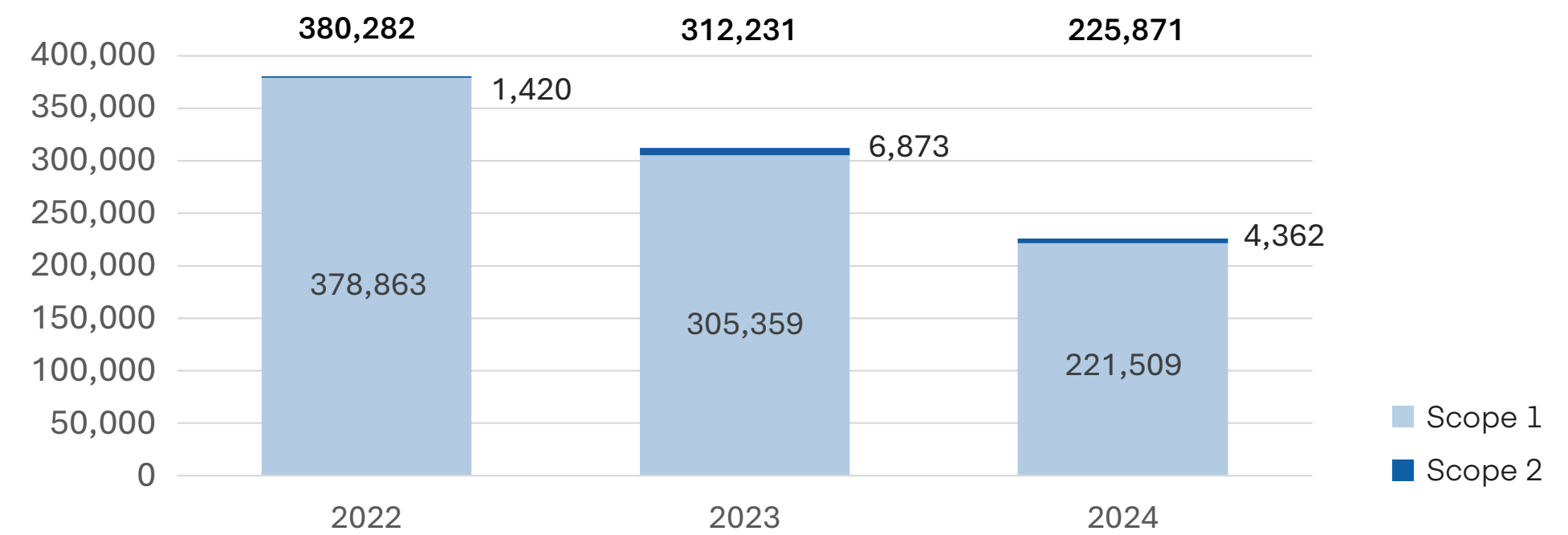
ENERGY SOURCES FOR ENERGY PRODUCTION, OWN AND PARTLY OWNED PRODUCTION, GWh



ENERGY SOURCES CATEGORISED INTO RENEWABLE AND FOSSIL SOURCES, GWh



OUR OWN CO₂e EMISSIONS, tons





The first streetlights were lit on 8 December 1889.

SOLID FOUNDATION

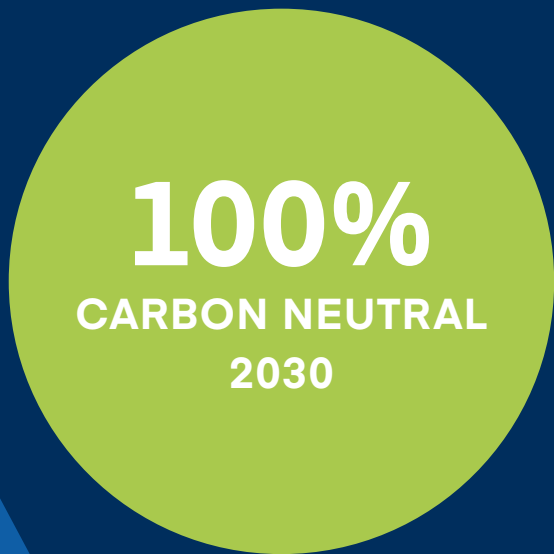
In the past decades, we have laid a solid foundation for energy production and for heat and electricity to have a safe journey to the people.

THE NEW WAY

In the 2020s, the energy transition challenges us in a new way.

INVESTING FOR THE FUTURE

We are heavily investing and will continue to invest in the circular economy and in new energy solutions.



Our most significant investments and development activities

<p>1948 Merikoski Power Plant</p>	<p>1969 District heating</p>	<p>Since 1977 Toppila Power Station produces heat and electricity from local energy</p>	<p>Since 2012 Laanila Ecopower Plant processes energy from waste</p>	<p>2020 Laanila Biopower Plant Waste sorting plant to Rusko</p>	<p>2022 A national pioneer in the circular economy Carbon neutral district heating</p>	<p>2024 New investments in wind and solar power The construction of Finland's largest plastic recycling plant started The plans to build a 100 MW hydrogen plant was released</p>
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