



# **Contents**

Helen in brief	3
Sustainability highlights 2022	4
CEO review Strategy Environmental responsibility	6
Financial responsibility	15

This is Helen's Sustainability Report that concentrates on our sustainability work and its progress during 2022. The report is published in Finnish and summaries of the report in Swedish and English. It can be found as a PDF on the company's website.

Helen has published a separate Annual Review that describes the company's business and personnel matters for the year 2022. The report is published in Finnish, Swedish, and English. It can be found as a PDF on the company's website. → 🖥

Helen Group's Financial Statement for 2022 and Review by the Board of Directors have been published separately on the company's website in Finnish. → 🖥







p. 8 Strategy

**HELEN IN BRIEF** 

SUSTAINABILITY HIGHLIGHTS 2022

**HELEN IN BRIEF** 



# Helen in brief

Helen helps to make everyday life a little easier for over 550,000 customers in Finland.

In addition to electricity, heating, and cooling, we offer solutions for regional and renewable energy, smart buildings, and electric transport.

We are developing a smarter, carbon-neutral energy system that enables everyone to produce, use, and save energy with respect for the environment.

We aim to achieve 100% carbon neutrality in our energy production by 2030. Let's join forces and turn the opportunities of a new energy era into reality.

Carbon-neutral energy production

37%

Direct greenhouse gas emissions reduction

3%

Sustainable biomass

100%

Sustainable Brand Index

2<sup>nd</sup> place

**Employees** 

701

Lost time incident frequency (LTIF)

2,7

Read also Helen's Annual Review.





# **Sustainability highlights 2022**



# Sustainable energy system was built rapidly

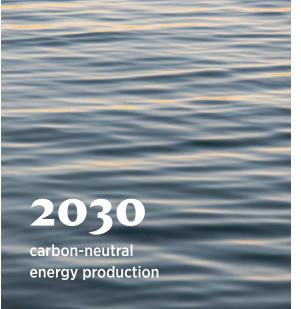
We reported that in the next few years we will build a total of more than 2,000 megawatts of capacity to replace fossil energy production. Investments in a diverse production structure in terms of both electricity and heating guarantee our security of supply and maintenance and the continuation of our green transition towards carbon-neutral energy production. One of Helen's biggest construction projects, the Vuosaari bioenergy heating plant, started heat production in December as planned.



# Biodiversity as part of sustainability

We published the first biodiversity strategy in Helen's history, with a target of safeguarding biodiversity. With the strategy, we aim to understand the environmental impacts of our energy production throughout the whole life cycle and to seek ways to reduce these impacts.





# Carbon neutrality programme steers the way

We published our carbon neutrality programme that describes how we reduce carbon dioxide emissions and dependence on imported fossil fuels and increase energy self-sufficiency to achieve our target of carbonneutral energy production in 2030.



#### Year of wind power

During 2022, wind power began to take shape as one of the cornerstones of our sustainable energy system. The 20 wind turbines in our Lakiakangas 3 wind farm started regular electricity production in April and the seven turbines in Juurakko, correspondingly, in November. In addition, we reported on three other major wind power investments in the Kalistanneva, Karahka, and Niinimäki wind farms. At Helen, the volume of electricity produced by wind power is also increased by Suomen Hyötytuuli Ltd's investments in the Oosinselkä and Siikajoki wind farms.



# 205 megawatt solar farm

# Significance of solar power rose to a new level

We started the construction of the first industrial-scale solar farm in Nurmijärvi and acquired a 206-megawatt ready-to-build solar farm in Uusikaupunki. We also reported on our plans to build a 10-megawatt farm in Lohja. We took a more active role in the entire value chain of the solar farms from licensing to land tenancy, planning, development, ownership, operation, and maintenance, and we also sell the produced solar power in the same way as wind farms.

#### Global situation impacted our security measures

As a security of supply company, we are prepared for states of emergency. After Russia's attack on Ukraine, we tightened up our security measures and monitoring further, and we kept a particularly close eye on the security situation. We ensured that the management of operations is successful under all circumstances, and we increased training and exercise activities. We also strengthened security measures concerning fuel transport.

# Energy saving at the heart of digital services as well as new products and solutions

Due to the energy crisis, our customers' wish to monitor their own energy usage grew significantly, which was seen, e.g., in the growing user numbers of the Oma Helen service. We made substantial investments in our digital services, which provide support for customers in energy-saving measures. For business and housing company customers, we launched the Yritys Helen service for monitoring a property's energy consumption, as well as the Energy Renovation service operating on a turnkey principle.

390,000

**Oma Helen users** 



**CEO REVIEW** 



# **CEO** review

Year 2022 was truly exceptional. Everything changed but people's need for energy. For us at Helen, this was reflected in the unpredictability of the operating environment and the acceleration of the energy transition. Sustainability continued to have a key role in our strategy, and our sustainability work progressed.

HELEN IN BRIEF

SUSTAINABILITY HIGHLIGHTS 2022

The war of aggression launched by Russia on Ukraine resulted in an energy crisis. Suddenly, the demand for energy was greater than supply, and the market prices increased in an unprecedented way. In this challenging situation, we aimed to support our customers by offering, for example, the Helen Smart Electricity product with a price cap, and in terms of district heat we did not pass the increased costs in full to the customer prices. Despite the turbulent operating environment, we continued our steadfast work towards a sustainable energy system to safeguard the security of supply and maintenance in the transition of the energy sector. As a security of supply company, safeguarding of security of supply is of primary importance to us, and we are prepared for emergency situations.

Sustainability at Helen is part of the management of our business operations. Our sustainability work is directed by the sustainability programme approved by the Management Group. We carry out practical sustainability work every day. An energy company has a big role in the mitigation of climate change, and in this work, we want to be a forerunner. At the end of the year, the Management Group agreed on the focus areas of the development of sustainability for 2023. We will focus on human rights, the management of climate risks, the assessment of taxonomy eligibility, and the development of sustainability of our subsidiaries and partners.

2022 was a year of changes also for our employees. We successfully returned to partial in-office work in the form of a hybrid model and offered our employees the opportunity of working from home within Europe. Significant changes took place in Helen's personnel structure when approximately one-third of our employees transferred to our partner companies through transfers of business.





The transfers of business were part of the transition towards carbon-neutral energy production in accordance with Helen's strategy. The transferred employees continue cooperation with Helen's employees as important partners.

The development of competence and future orientation play a key role in responding to the challenges of the energy transition in the rapidly changing operating environment. In 2022, in addition to continuous support for change management, we focused on developing talent and management.

#### MAJOR INVESTMENTS IN A SUSTAINABLE ENERGY SYSTEM

Our own ambitious climate target is carbon-neutral energy production by 2030. To reach this target, we reported that we are making significant investments in a sustainable and modern energy system. We will build capacity that replaces more than 2,000 megawatts of fossil energy production by 2025. Further information about our emissions reduction path and the related action is available in our carbon neutrality programme, which was published in 2022.

Several of our sustainable energy system projects progressed as planned during 2022. Two major wind farms started regular electricity production, the Vuosaari bioenergy heating plant began heat production in December, and the construction of the seventh heat pump in the Katri Vala heating plant, to be commissioned in spring 2023, progressed successfully. During the year, we reported on four major wind power investments, started the construction of the first industrial-scale solar farm in Nurmijärvi and acquired a readyto-build solar farm in Uusikaupunki.

Our EV charging network grew substantially. We launched on the market our renewed range of heat-related products and services, which introduces geothermal heat as a main heating system in addition to district heat.

A reliable and secure electricity network has a significant role in the energy transition. Electricity consumption in Helsinki is growing strongly as heat production becomes electrified and electricity generation moves elsewhere in Finland. This will double the need for electricity distribution

# Our sustainable energy system projects progressed as planned.



from the main grid to Helsinki already in the next few years. To meet the growing electricity consumption in the Helsinki region, we have worked with the City of Helsinki and the transmission system operator to plan Finland's first 400-kilovolt cable link of the main grid to Helsinki.

#### **BIG STEPS FORWARD IN SUSTAINABILITY WORK**

We were the first Finnish energy company to receive official approval from the Science Based Targets initiative for our emissions reduction targets. Our science-based targets demonstrate our commitment to emissions reduction and climate-smart action, and they increase the transparency of our sustainability work.

In addition to our carbon neutrality measures, we published our biodiversity strategy where we identify the key biodiversity impacts of our operations. In 2023, we will draw up an action plan based on the biodiversity strategy.

In 2022, our total direct greenhouse gas emissions came to 2.69 tCO2e. Our emissions inventory is based on the international Greenhouse Gas (GHG) protocol, which we deployed in 2021. The emissions reported for 2019 and 2020 have been converted to obtain comparable results.

Helen's success in studies measuring sustainability and reputation is an indication of good and longstanding sustainability work. Helen scored highest in the Reputation&Trust survey conducted by T-Media, and in Sustainable Brand Index, Europe's biggest survey focusing on sustainability, Helen ranked second in the industry in Finland last year. According to the Nepa brand tracking survey we were the number one energy company in spontaneous brand awareness, consideration, and aided liking in Finland.

#### **FOCUS ON DATA AND DIGITAL SOLUTIONS**

Data and digital solutions offered new opportunities to support world-class customer experience and promoted smart energy use. The energy crisis awakened people's interest and need to monitor their own energy usage. It is encouraging to see that our customers took part in the energy saving campaign, and we saw a clear reduction in energy consumption in all our contract types. With the Oma Helen app, customers can monitor their own energy use even to the nearest hour. The user numbers of the app grew to almost 390,000 users, which is higher than we dared to expect. We will continue our strong digital development and we want to improve our digital customer experience. During the year, data and Al also had a significant presence in the investments of Helen Ventures, which invests in growth companies in the energy sector.

#### **CONTINUATION OF GREEN TRANSITION MUST BE SECURED**

We have done well even amid the energy crisis, relying on our strengths; our competent and motivated employees, maintaining the security of supply, and the promotion of sustainable and distributed energy production. We are studying among other things the suitability of small modular reactors for heat and electricity production. In addition, hydrogen, which is the latest hot topic of discussion in the energy sector, will also be opening new business opportunities for us.

We have earned our position as a pathfinder and innovator, and we will continue this path.

#### Olli Sirkka

CEO, from 16 January 2023



# Specification of our strategy speeds up our journey towards carbon neutrality

HELEN IN BRIEF

SUSTAINABILITY HIGHLIGHTS 2022

A diverse production structure and increasing of energy self-sufficiency are key issues in safeguarding the security of supply and maintenance in the transition of the energy sector and in the uncertain world situation.

It is important to us to continue building a forward-looking and sustainable energy system to secure carbon-neutral energy production by 2030. We are a forerunner that helps to make everyday life easier and simpler for more than 550,000 customers.

We progressed towards sustainable energy production at an accelerating pace. We continued building a carbon-neutral energy system that enables everyone to produce, use and save energy with respect for the environment. At the same time, our operating environment was even more unpredictable and difficult to forecast than before.

# OUR DIRECTION IS STEADFAST IN A CHANGING OPERATING ENVIRONMENT

In 2022, we specified our strategic targets in view of the constant change of our operating environment. However, our direction remained unchanged.





As a result of the specification of the strategy, we summarised our strategic goals into three targets:

**Sustainable energy system:** We aim for a secure, digitally smart energy system that takes biodiversity into account.

**Digital forerunner:** For us, data is a raw material that we can use for processing intelligence for our energy system and create value for customers. Our high level of expertise and our creativity enable the utilisation of data and innovations.

**Profitable market leader:** We strive to gain the position of a profitable market leader without compromising on customer experience. Profitability increasingly guides the planning of our operations, and we seek a balance between profitability and growth even more closely than before.

We specified our strategic targets in view of the constant change of our operating environment.





10



### WE PUBLISHED OUR CARBON NEUTRALITY PROGRAMME

In 2022, we published our carbon neutrality programme, stating on our emissions reduction path and on the actions that will take us to our target, reduce our dependence on imported fossil energy and increase our energy self-sufficiency on an accelerated schedule.

#### **OUR EMISSIONS REDUCTION SCHEDULE**

#### 2023: at least 40% on the 1990 level

We will close the Hanasaari power plant and halve the use of coal. We will replace production with waste heat, sustainable bioenergy, energy storage, and nuclear, wind, and solar power.

#### 2024: at least 60% on the 1990 level

We will move towards distributed heat production and a sustainable energy system. We will replace production with waste heat, sustainable bioenergy, energy storage, and nuclear, wind, and solar power.

#### 2025: at least 80% on the 1990 level

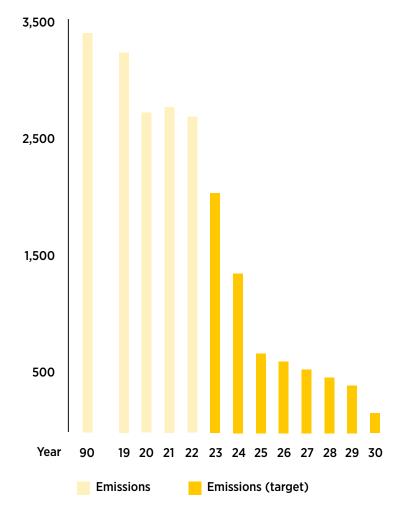
Our heat production will mainly consist of heat pumps utilising waste and environmental heat, electric boilers, energy storage, and sustainable bioenergy. We will produce electricity mainly with wind, nuclear, hydro, and solar power.

#### 2030: at least 95% on the 1990 level

We will further increase wind and solar power and the amount of non-combustion heat production especially with heat pump solutions. We will offset the remaining emissions.

# Development of direct greenhouse gas emissions (Scope 1)

CO2 emissions, ktCO2e



SUSTAINABILITY REPORT 2022

# We are transforming our energy production

We are aiming for a carbon-neutral energy system. We are constantly developing more efficient ways to produce, store and recycle energy. The target of our operations, development work and business strategy is to transition to carbon-neutral energy production by 2030, and we have held on to this target even in the turbulent operating environment.

In 2022, we produced a total of 4,800 (2021: 5,484) gigawatthours of electricity, which is 12 per cent less than in the previous year. Due to the warm winter, heat production fell by 9 per cent to 6,852 (2021: 7,490) gigawatt-hours. Cooling production totalled 207 (2021: 200) gigawatt-hours.

The share of renewable energy in our production grew to 21 (2021: 16) per cent. We produce renewable electricity with hydro, wind, and solar power and heat with biomass, as well as with heat pumps from various waste energy flows.

In our production, we used a total of 9,322 (2021: 10,756) gigawatt-hours of fuels. The cessation of natural gas imports because of Russia's war of aggression against Ukraine and the price of natural gas that rose to record-high levels depressed our gas-based co-production to a minimum. To safeguard heat production for Helsinki residents, we had to increase the use of coal and oil by one-third, and we consumed about 12 per cent more pellets than in the previous year.





### WE ARE PROGRESSING TOWARDS A SUSTAINABLE ENERGY SYSTEM

We were the first Finnish energy company to receive the approval of the Science Based Targets initiative for our emissions reduction targets concerning the entire Helen Group.

Our emissions inventory is based on the international Greenhouse Gas (GHG) protocol, which we deployed in 2021. The emissions reported for 2019 and 2020 have been converted to obtain comparable results. In 2022, our total direct greenhouse gas emissions came to 2.69 million tCO2e.

Despite the challenging operating environment, we continued to build a sustainable and distributed energy system by investing in low-emission and carbon-neutral production with a total of EUR 221 million. Currently, we promote our carbon neutrality target with a total of 23 projects. In addition, six future projects are in the preliminary planning phase.

#### We are strengthening the electricity network structures

As a result of the energy transition, the electricity system has an even bigger role in heat production, which requires extensive changes and investments in the electricity network. Over the next 10 years, we will invest EUR 450 million in the electricity network to enable the energy transition, to meet the growing electricity demand and to maintain security of supply.

#### Major investments in wind power

The 20 turbines of the Lakiakangas 3 wind farm started regular electricity production in April. We acquired the Kalistanneva, Juurakko and Karahka wind farms in partnership with the Ålandsbanken Wind Power Fund. In November, we agreed on the construction of the Niinimäki wind farm in Pieksämäki together with Ålandsbanken Wind Power Fund and OX2.

#### Solar energy is growing rapidly

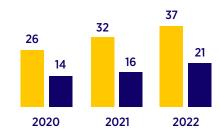
We increased solar energy production by building the first industrial-scale solar farm in Nurmijärvi. In December, we bought the ready-to-build, 206 megawatt-peak solar farm in Uusikaupunki. The plant is one of the largest solar farms under construction in Finland.

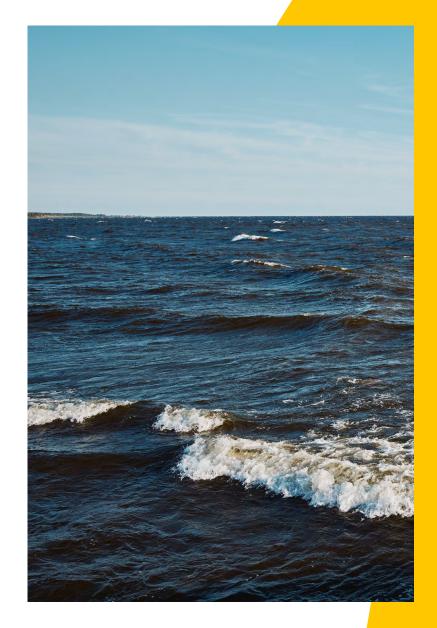
#### **Utilising waste heat**

We decided to invest in a heat pump plant to be built in Southern Helsinki, and together with LämpöYkkönen Ltd we launched Geonova Ltd, a company that focuses on geothermal heat and heat pump solutions. The installation work on the seventh heat pump in the Katri Vala heating and cooling plant was started. After the completion of an extensive study, our seawater heat recovery project moved to the development phase with our alliance partners Acciona and YIT.

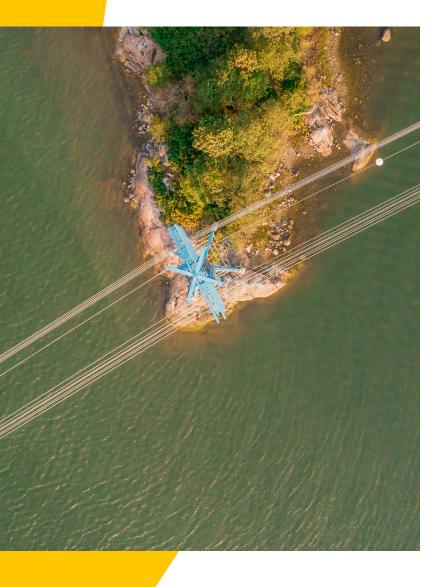
# Carbon-neutral and renewable energy production, %

Carbon-neutral energyRenewable energy





SOCIAL



#### Bioheat replaces coal use

The Vuosaari bioenergy heating plant started producing heat in December. The district heat output of the plant is more than 260 megawatts, corresponding to about a guarter of Helen's total district heat production. The Vuosaari bioenergy heating plant is a great addition to Helen's diverse energy mix, reducing carbon dioxide emissions by 700,000 tonnes per year.

#### WE OFFER SMART ENERGY SOLUTIONS FOR OUR **CUSTOMERS**

In 2022, our household customers' interest in monitoring their own energy usage grew significantly, which is seen, e.g., in the growing user numbers of the Oma Helen service. We launched a new digital service for business and housing company customers, Yritys Helen, which enables monitoring of a property's energy consumption

even at the hourly level. We also published the Energy Renovation service for housing companies, operating on a turnkey principle.

#### WE ARE COMMITTED TO SAFEGUARDING BIODIVERSITY

In our biodiversity strategy completed in 2022, we identified the key environmental impacts of our operations and chose bioenergy procurement, hydropower production and the development of the energy infrastructure as the focus areas of our measures.

Our target is to understand the environmental impacts of our energy production through the entire life cycle and to adapt our activities to maintain biodiversity. In accordance with our biodiversity strategy, we are striving for a net-positive impact where our operations have more positive than negative environmental impacts overall.

**Despite the challenging** operating environment, we continued to build a sustainable energy system.



SUSTAINABILITY HIGHLIGHTS 2022



# We want to offer a safe and inspiring workplace

Corporate social responsibility is a wide concept, which refers to all the impacts that a company's operations have on different groups of people and communities. At Helen, corporate social responsibility is one of the sustainability areas that is subject to the most significant development work.

We want to offer all our employees a safe and inspiring workplace where our personnel can grow and develop their competence in view of the needs of the future of the energy sector. In 2022, we focused, e.g., on developing leadership and competences.

At the end of 2022, Helen employed a total of 701 (2021: 1,015) professionals in various fields. Our employees work in the areas of modern energy solutions, electricity, heating and cooling, sales and customer service, electricity distribution, and business development. Most of the work related to our operations is performed by permanent employees. In addition, we also work in partnership with various service providers and partners.

In 2022, there were significant changes in our personnel structure when approximately one-third of Helen's employees transferred to service providers as part of our strategy of transitioning towards carbonneutral energy production.

Systematic, organised, and long-term occupational safety work is a key part of our corporate culture and cooperation with our partners. We maintain and promote the health, safety, and work capacity of employees in cooperation with management, personnel, occupational health service, and the occupational safety and health

cooperation organisation. We always act in accordance with laws and regulations, provisions and agreements concerning our industry and our own safety guidelines, and expect our partners to do the same. In 2022, the accident frequency rate resulting in absence from work was 2.7 (2021: 4.5) with respect to the employees of Helen Ltd and Helen Electricity Network Ltd.

HELEN IN BRIEF

We treat all our employees equally, we actively oppose all discrimination, and we do not accept harassment or inappropriate conduct in any shape or form.

For us, it is important to develop the competence of our employees and their orientation to the future to be able to meet the challenges of the energy transition. The changed operating environment requires more from leadership than previously, and we need long-term work to develop leadership and to guarantee Helen's competitivity also in the future.

With responsible supply chain management, we enable stable and reliable energy production and distribution when progressing towards a carbonneutral energy system. The corporate responsibility requirements concerning our suppliers call for, e.g., legitimate and ethical business operations, respect for human rights, and guaranteeing a safe and healthy workplace.





# **Sound business** operations enable financial responsibility

Financial responsibility is a basic requirement for our operations, enabling target-oriented sustainability work in environmental and social issues.

Well-managed finances guarantee continuation of investments in the green transition, maintenance of modern production plants, and investments in research and development activities, which are a precondition for the development of new, emissionfree production methods. That way, we can reduce our and the society's environmental footprint.

We are a major player and employer in the energy sector. With our operations, we create value for our customers and for society, as well as for our owner, the City of Helsinki. Cash flows are generated from sales proceeds from customers, expenses to service and goods suppliers, dividends to the owner, investments, wages and salaries, and taxes.

Helen operates more extensively in the financial market to raise long-term financing for investments and short-term working capital financing for fluctuations in cash management. Financing is linked increasingly to our sustainability targets. An example of this is the sustainability-linked loan signed with the Nordic Investment Bank (NIB) with a value of EUR 150 million. The loan is related to our climate targets to reduce the carbon intensity and greenhouse gas emissions of our operations.

In 2022, we received a total of EUR 18,7 million (2021: EUR 0.7 million) in government grants. For example, we were granted about EUR 14.5 million of energy investment aid



**CEO REVIEW** 

#### Customers

Net sales EUR 1,785.3 million

Helen



HELEN IN BRIEF

#### Owner

SUSTAINABILITY HIGHLIGHTS 2022

Dividends EUR 19.1 million

#### Society

Taxes and tax-like payments EUR 181.0 million



#### **Employees**

Wages and remuneration EUR 63.6 million



#### Suppliers of goods and services

Purchases EUR 1.177.0 million

STRATEGY

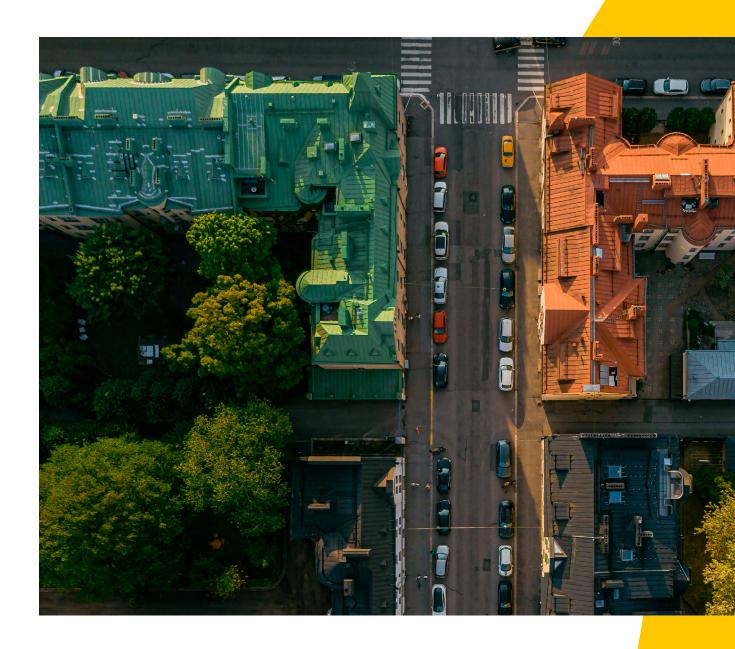


from the Ministry of Economic Affairs and Employment for the Eiranranta heat pump plant. The plant will reduce our carbon dioxide emissions by about 85,000 tonnes per year by replacing production based on the burning of fossil fuels in the winter season and by producing district cooling in the summer.

Our operations also have indirect financial impacts on society. We have an indirect impact on the tax revenues of the state and several municipalities by employing more than 700 people. Our employees pay income tax and spend their earnings by purchasing services in different parts of Finland.

#### **TAX FOOTPRINT**

The tax footprint describes our impact on society. The tax footprint means the tax revenue and parafiscal charges generated for society by the company's business operations. Payment and collection of taxes and parafiscal charges and accounting for them supports the functioning of society and organising of services provided by it. Our open and constructive partnership with the tax authorities is based on mutual trust. We always aim to ensure that the information we publish on taxes is extensive and correct. Helen Ltd and its subsidiaries pay all their taxes in Finland. In 2022, the Helen Group paid a total of EUR 181.0 million (2021: EUR 154.8 million) in taxes and parafiscal charges.





**Helen Ltd** 

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