**ELENIA AND SUSTAINABILITY** 

2022





## ELENIA AND SUSTAINABILITY

## 

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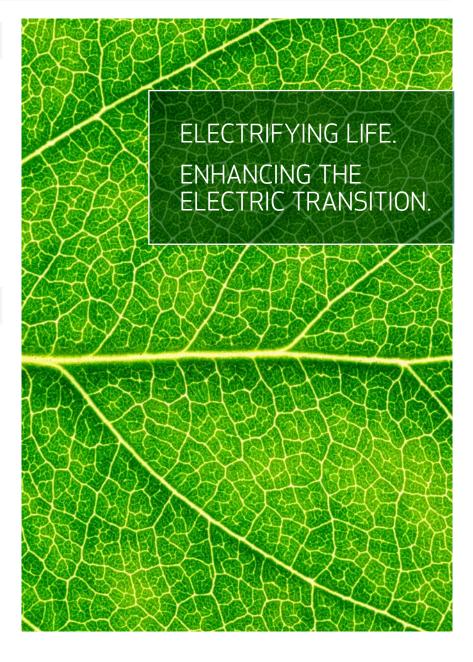
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In addition to this sustainability report, Elenia's reporting includes also the Annual Review 2022.



Elenia Group consists of Elenia Oy, which focuses on customer service in the energy industry, and its wholly-owned subsidiary Elenia Verkko Oyj, which is a distribution system operator. Elenia Group's headquarters are in Tampere.

**Elenia Verkko Oyj** distributes electricity to a total of 438,000 customers in the regions of Kanta-Häme, Päijät-Häme, Pirkanmaa, Central Finland, South Ostrobothnia and North Ostrobothnia. The total length of Elenia's electricity networks is 76,700 kilometres. The Group has invested over EUR 1 billion in ensuring the continuity of electricity distribution over the past decade, which has generated over 10,000 person-years of work for Elenia and its partners. Elenia has an extensive network of partners that plays a key role in the company's services and operations, both in terms of the construction and modernisation of the electricity network and in technology solutions.

**Elenia Oy** offers energy companies comprehensive customer service, including conventional customer service, as well as service processes and information systems that are associated with the provision of customer service. The company's customers include Auris Energia, Alva-yhtiöt, Etelä-Savon Energia, Järvi-Suomen Energia, Lahti Energia, Loimua, Suur-Savon Sähkö and Tampereen Sähkölaitos.

Elenia is owned by the State Pension Fund of Finland, Allianz Capital Partners (ACP) on behalf of the Allianz Group together with Allianz subsidiaries and investment vehicles managed or advised by ACP and Macquarie Super Core Infrastructure Fund

## Elenia Verkko Oyj

**REVENUE** 

308.5M€

PERSONNEL\*

75

MARKET SHARE

12%

**CUSTOMERS** 

438,000

**ELECTRICITY NETWORK** 

76,700 km

UNDERGROUND CABLING RATE

61.7%

GLOBAL GRESB SUSTAINABILITY ASSESSMENT RATING



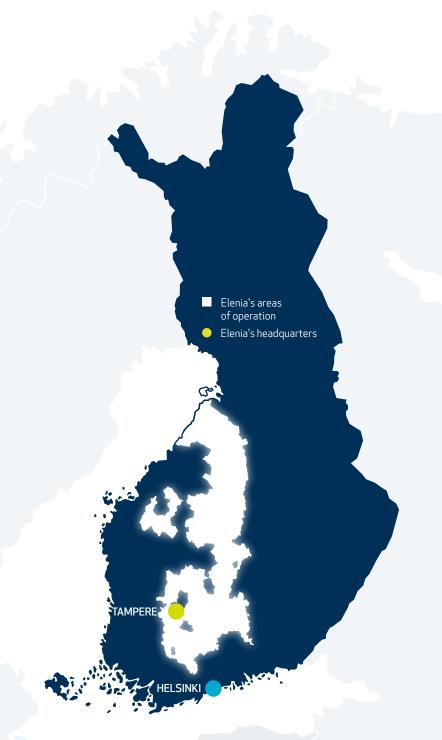
## Elenia Oy

REVENUE

8.9M€

PERSONNEL\*

230



<sup>\*</sup> Total number of personnel on average for the financial year



## Sustainability 2022

## **HIGHLIGHTS**

- The customer experience satisfaction with our services was higher than ever before.
- Engagement and consultation of customers regarding the network development plan, Elenia Avoin.
- Campaigning on electricity saving; the electricity savings of customers reached nearly 10 per cent.
- Strengthening the security of supply and preparing for electricity shortages.
- LTIF was halved from the previous year reaching the all-time low at 4.5.
- A record year for connecting clean renewable energy to the network.
- Next-generation smart electricity meters installed for over 100,000 customers by early 2023.

## **KEY DEVELOPMENT NEEDS**

- Strengthening employee equality, diversity, and inclusion.
- Strengthening the occupational safety culture, TUISKU project for personnel and partners.
- Promoting the security of supply, electrification, and the connection of renewable electricity to the network.
- Increasing stakeholder engagement to strengthen trust.
- Promoting the development of the Finnish energy system.
- Reduction of emissions in accordance with the emission reduction roadmap.
- Engaging partners' commitment to shared climate responsibility.
- Maintaining biodiversity.



The year 2022 was a historic turning point for Finland, Europe and the world. Beginning in February, Russia's invasion in Ukraine fundamentally changed the security and energy environment in Europe. The war led to an economic and energy crisis that has shaken society, the energy sector and people all across Europe, including Finland.

The importance of the security of supply has risen to a new level. As a provider of electricity network services, Elenia's most important task is to do our part to ensure smooth daily life in Finnish society. We have a long track record of increasing the security of the supply of elec-

tricity by spending over one billion euros to modernise our ageing electricity network and make it weatherproof and secure, ensuring that people have access to electricity in all circumstances. In response to the energy crisis, we have also enhanced our preparedness for electricity shortages to ensure that we are ready to operate in potential circumstances where the production and import of electricity would not be enough to meet Finland's energy needs.

The critical factors with regard to the sufficiency of electricity include the functioning of electricity production in Finland and the Nordics, the weather conditions in the Nordic region, and the extent to which peak consumption periods can be balanced by electricity saving measures.

The sharp rise in electricity prices has caused concern for households, businesses, and society as a whole. This has been reflected in a substantial increase in contacts to our customer service. The customers' distress and difficult situation affects us in many ways as they seek advice and assistance on how to cope with the situation. We have responded by introducing various solutions that provide flexibility with regard to the payment of invoices.

From the perspective of the security of supply, cyber security has emerged as a significant issue. We have prepared for cyber risks by identifying various potential threats and conducting tests and exercises.

In addition to being affected by the energy crisis, our operations in 2022 were influenced by the exceptional changes made by the Energy Authority in autumn 2021 to the previously confirmed regulatory model, which disrupted the predictability of investment planning regarding the electricity network. The sudden changes made in the middle of a regulatory period forced us to cut our investments for 2022–2023 by over EUR 100 million. These reductions postpone he renewal of the ageing electricity network and the development of electricity network services. Abrupt changes create uncertainty to the

operating environment and jeopardise well-planned and efficient operations.

## Continued sustainability efforts in the midst of a crisis

Even in a time of a severe crisis and changes, we continued our day-to-day efforts aimed at achieving our sustainability targets. The goal of our sustainability programme is to strengthen our customers' trust in Elenia and ensure smooth daily life in society through the provision of reliable electricity network services.

With our customer promises, we want to ensure satisfaction with our services in all circumstances. We build customer satisfaction and trust through our practical actions. For example, we support our customers in their daily life by offering flexible payment arrangements. Our ongoing renewal of electricity metering systems will continue until 2025 and involves the installation of new smart electricity meters for our customers providing improved opportunities for using electricity efficiently and at lower prices.

For Elenia, part of sustainability is looking after the safety and well-being of our personnel and ensuring the safety of everyone who works for Elenia or passes an Elenia construction site. We manage the development of occupational safety by means of TEKO – Safely Back Home programme for the contractors of electricity network construction and maintenance. The related TUISKU project is a significant joint effort with our partners to develop safety management and safety-related attitudes. We all bear responsibility for our own safety and the safety of others.

We also recognise our responsibility for combating climate change. In 2021, we made a commitment to the science-based climate targets. Our target is to reach net zero greenhouse gas emissions by 2050. To achieve this ambitious target, we have begun a systematic effort,

guided by our emission reduction roadmap, to reduce emissions throughout our value chain in collaboration with our partners. In our own operations, the most significant source of emissions is network losses. The current conditions in the electricity markets have made the situation more challenging, but we are nevertheless making determined progress towards our goal.

## Towards a zero-carbon electrifying society

While electricity is being saved in various ways, our view is that a sustainable energy system will be based on electricity and the phasing out of fossil fuels.

Our vision target is that by 2035 the amount of renewable energy fed into Elenia's network will equal the network's total electricity consumption annually. The amount of renewable energy has grown continuously. By the end of 2022, over 1,000 megawatts of wind and solar power had been connected to Elenia's network.

To reap the full benefits of the growth of solar and wind power, the energy system needs smart grid solutions for balancing electricity production and consumption. We promote the transition to renewable energy sources by developing smart grids and new services.

The energy crisis is a challenge to society, households and Elenia. At the same time, it creates opportunities and increased pressure for changes towards a more sustainable, zero-carbon energy market.

In 2022, Elenia celebrated 10 years of sustainable services and continuous renewal for the benefit of our customers, stakeholders and society. In times of uncertainty, our clearly defined vision targets set the direction for our development, and the significance of our goal-driven sustainability efforts is growing continuously.

## Tapani Liuhala

CFO

## Operating environment

We analyse the operating environment to determine how to renew our operations and services in response to the needs of society, customers and stakeholders, and do our part to maintain Finland's security of supply.













### **POLITICS**

#### Russia's invasion in Ukraine has unsettled Europe by creating a security, economic and energy crisis.

- In Finland, the public debate is focused on the sufficiency and high prices of electricity.
- Demands for reasonable pricing dominate the political debate.
- There is increased emphasis on selfsufficiency in electricity production, the security of supply and energy security.
- The role of electricity network services in the pursuit of fossil-free energy solutions is highlighted.

## **ECONOMY**

- Electricity saving campaigns temporarily decrease the total consumption of electricity.
- The electrification of society will increase electricity consumption in the long term.
- The rising price of network losses creates cost pressure for electricity network services.
- Construction and maintenance costs are increased by the rising prices of materials, labour and fuel.
- Rising inflation and interest rates have wide-ranging impacts on the economy.
- The sudden change in regulation for the period 2022–2023 has led to cuts in electricity network investments.
   Specifications for the 6th and 7th regulatory periods are currently in progress.
- The energy crisis accelerates the transition to clean energy.
- Urbanisation and the concentration of the population in regional centres reduce vitality in large parts of Finland.

## SOCIETY

- The global security crisis is comprehensively transforming the energy sector.
- The security of supply has become even more important than before.
- The production and pricing of electricity and energy are in a period of dramatic transformation.
- Economic and social inequality are increasing, as are payment difficulties among customers.
- The role of the electricity system as an enabler of a well-functioning society is growing due to the electrification of transport.
- The customer base is becoming more diverse, and the number of customers producing energyis growing.
- The importance of diversity, equality and inclusion is increasingly recognised.
- Digitalisation creates challenges regarding the competence requirements in various fields and the competition for skilled professionals is intensifying.

## **TECHNOLOGY**

- The energy system requires the new opportunities presented by smart grid technology.
- The deployment of the next generation of smart metering systems is under way.
- Industrial customers invest in solutions that enable the phasing out of combustion.
- Cybersecurity and digitalisation will be increasingly emphasised in the security of supply, network management and service development.
- Demand response and the flexible production of electricity require the development of real-time network management, including energy storage solutions and small-scale production.
- The national datahub harmonises and enhances the operating practices of sales and network companies.
- Hydrogen technology research and investments are growing.

## **ENVIRONMENT**

- The security crisis temporarily makes it more difficult to commit to emission reduction targets.
- Electricity plays a vital role in the reduction of emissions. Solar and wind power capacity is growing.
- Electricity network services enable improvements in energy efficiency and the reduction of emissions.
- Continuous improvement in circular economy and efficiency.
- Increasing requirements regarding the minimisation and compensation of environmental impacts.

#### **LEGISLATION**

- The focus will shift from security of supply to the overall economic aspects of solutions.
- The integration of the EU's clean energy package into Finnish legislation is ongoing.
- Regulatory methods will be issued for the 6th and 7th regulatory periods on the basis of the Electricity Market Act.
- The customer's position will be strengthened by a customer-centered retail market model.
- Efficiency requirements are emphasised in the monitoring of development plans.
- Network development will be influenced by the electrification of society and demand response services.

## Strategy

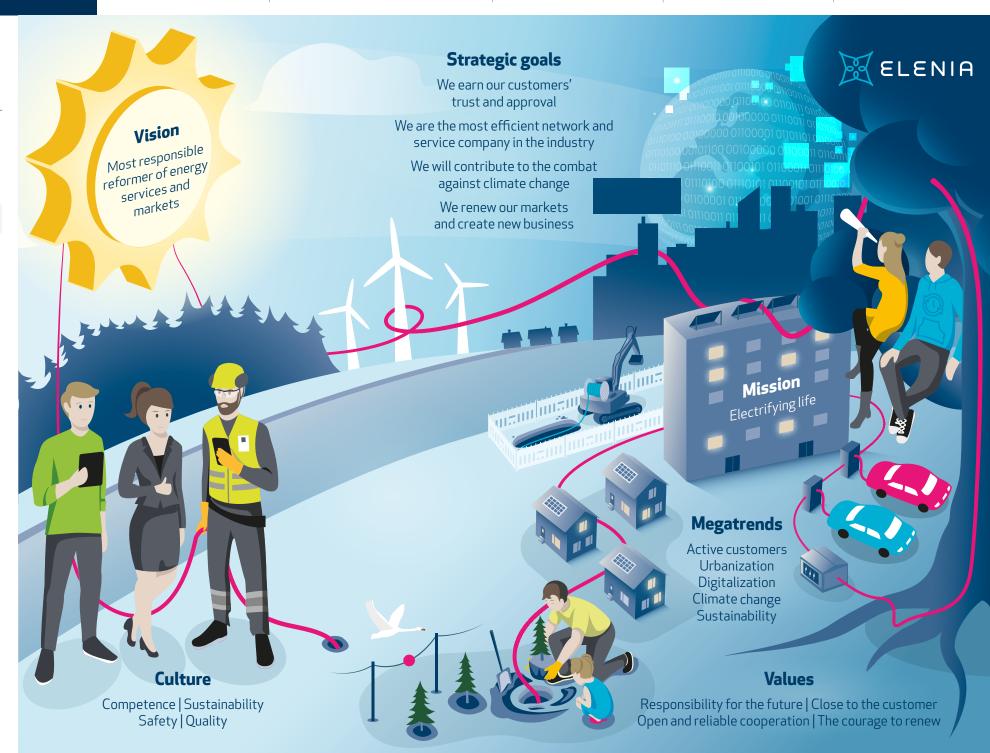
## **SUCCESS FACTORS**

#### **Network business**

- We utilize digitalization in our operational processes efficiently and innovatively
- We improve our security of supply taking into account customer needs
- We strive to influental and customer-minded stakeholder collaboration
- We provide a Smart Grid for our customers and electricity market participants
- We renew the services and practices of the industry together with our partners

## Service business

- We provide the best service experience
- We are the most efficient and high quality network builder
- We are active operator in fiber network markets
- We promote market digitalisation and create new services



# Key sustainability themes and vision targets



## SAFETY AND WELL-BEING AT WORK

Our work is safe.

We support the well-being and professional development of our personnel.

We are an equal working community.

#### **OUR 2035 VISION TARGETS**

Lost time injury frequency LTIF <1



# CUSTOMER EXPERIENCE AND THE QUALITY OF ELECTRICITY NETWORK SERVICES

We care for the smooth day-to-day lives of our customers by offering safe, high-quality and friendly service and by ensuring the reliability of electricity network services in all circumstances.

## **OUR VISION TARGET 2035**

Reputation and trust score: 3.5 (1–5)



## CLIMATE ACTION AND ROLE AS FORERUNNER

We promote the development of a sustainable society and way of life. Sustainable development and maintaining biodiversity are the foundation of our operations.

#### **OUR VISION TARGET 2035**

Net Zero Elenia



## SOCIAL IMPACT

We create value for society.

We promote the zero-carbon electrification of society.

#### **OUR VISION TARGET 2035**

The amount of electrical energy fed to customers: 7.3 TWh, renewable energy fed into the network: 7.3 TWh

(Electricity consumption +14%, renewable energy +295%)

A responsible, sustainable approach is a natural part of Elenia's activities and services. It is also essential for our task of ensuring smooth daily life in society and maintaining the security of supply.

In recent years, we have taken significant steps to develop our sustainability further, with the most important step being our commitment to the science-based global climate targets. The main objectives of our strategy include earning our customers' trust, ensuring efficient operations, the renewal of the electricity market, and promoting climate change mitigation. These are the cornerstones of our sustainability programme, and they link it directly to our strategy.

Elenia's sustainability programme guides our day-to-day work alongside our business strategy. We make progress in sustainability by putting our sustainability programme into action. Although the energy crisis affects the entire society, our goals and results are strongly guided by our climate targets and climate action.

Our sustainability efforts are focused on four key themes, for which we have set long-term objectives for 2035.

- Safety and well-being at work
- Customer experience and the quality of electricity network services
- Climate action and leadership
- Impact on society

## Elenia has clear vision targets for sustainability

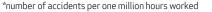
The direction of Elenia's sustainability is defined by the Group's vision: The most responsible reformer of energy services and markets

To ensure that our vision is implemented, we set performance indicators in 2021 for our 2035 vision targets. The objectives associated with our sustainability vision are related not only to our own operations but also to our partners, customers, and society at large. As part of society, we bear responsibility for keeping life efficient and functional.

## An ambitious target for lost time injury frequency

We want to make Elenia one of the world's safest places to work. One of the objectives associated with our vision is to bring the joint lost time injury frequency\* of Elenia and our partners to less than one in the long term. This target requires significant efforts to accomplish. Achieving it will require us and our partners to continuously improve operating practices and safety culture.

Changing culture and attitudes related to occupational safety is a long process that calls for uncompromising rules, commitment to goals, and increasing awareness among all the parties involved. We provide training and orientation to our contractors, assess best practices for safety management, and focus on continuous learning to ensure that everyone who works for Elenia gets to go safely back home at the end of the day.





#### Key sustainability themes and vision targets

## Strengthening customer trust

It is very important for us to foster and develop our customers' and stakeholders' trust in, and acceptance of, our operations. We are confident that our long-term efforts help build this trust.

Although we are good at measuring the quality and performance of our operational activities and our customers' satisfaction in our day-to-day services, we also need information on our customers' views and impressions of Elenia.

In 2021 and 2022, we measured Elenia's trust and reputation in the eyes of the public by means of a national survey. In 2022, we also conducted a trust and reputation measurement among our customers. The results are encouraging. They are close to the national averages and indicate that we are developing in a positive direction. We have set a realistic goal of being above-average in this respect. As one part of our effort to build trust, we published customer promises in 2021. They will be revised as necessary to respond to the expectations of our customers.

## Towards a zero-carbon electric society

The impacts of climate change are changing the energy sector and energy markets at an accelerating rate, and the European security crisis is now creating further volatility. Fossil fuelbased energy production is giving way to

renewable energy, and the significance of electricity is increasing in homes, transport, industry and society as a whole.

Our role on the path towards a zero-carbon electric society is to facilitate change. We aim to promote the electrification of society and help connect renewable energy production to our network. Our target is that the total electricity transferred to customers and the total renewable energy fed into the network will both amount to 7.3 TWh in 2035. We work towards this goal by providing effective connection services and smart grid services that enable decentralised electricity production, storage, and demand response alongside the conventional consumption and production of energy.

During this decade, our customers will gain access to a growing range of solutions for participating more actively in the electricity market, taking advantage of their own electricity production, and obtaining almost real-time data on their electricity consumption. In addition to the renewal of the ageing electricity network and making it weatherproof, we create value through our services.

## Elenia's path to carbon neutrality

Climate change influences our operations both as a risk and as an opportunity. Storms, large variations in weather, and weaker ground frost present problems for electricity distribution. Our network renewal efforts reduce the weather-related risks of electricity distribution but, at the same time, the growing production of renewable energy makes the supply of energy more weather dependent. Indeed, decentralised energy production



needs to be complemented by flexibility solutions and load management enabled by a smart grid.

In climate change mitigation, our vision target is carbon neutrality for Elenia. Developing our emission calculations and making them more accurate has helped us establish a better understanding of which measures will have the greatest impact. As network losses are a significant source of emissions for us, our goal is to reduce them. In 2021, we made a commitment to the Science Based Targets ini-

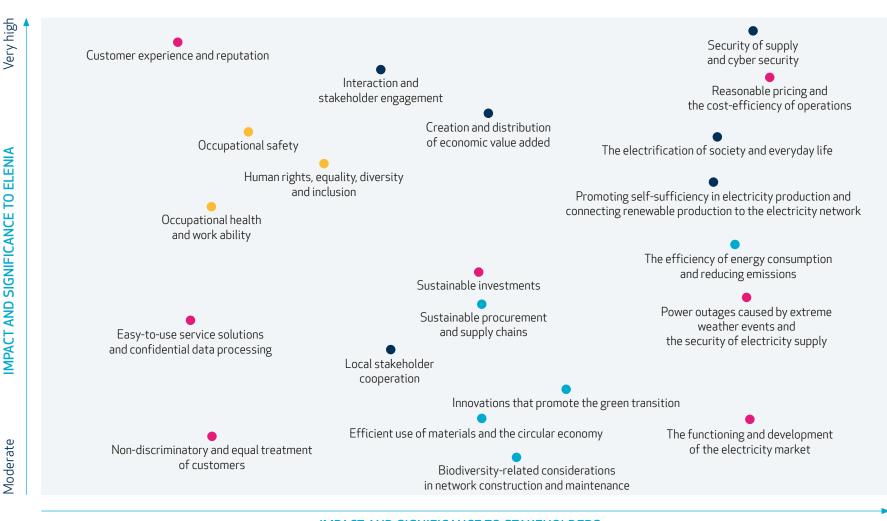
tiative, which is a framework for setting ambitious science-based climate targets. This commitment is part of Elenia's even more ambitious goal of carbon neutrality by 2035.

In our sustainability materiality assessment, we have identified the sustainability aspects that are most material to Elenia's business operations and strategy. The materiality assessment is based on our understanding of the impacts of sustainability risks on Elenia's operations and the impacts of Elenia's industry on sustainability, people and the environment. The identification of these impacts is based on a comprehensive materiality assessment carried out in 2019. We have updated the materiality aspects and assessments annually as necessary.

We complemented the assessment in 2022, considering changes in the operating environment, feedback, our TCFD climate risk and opportunity assessment, the results of our development efforts pertaining to the EU taxonomy, and the UN Sustainable Development Goals. We assessed the impacts of climate change, the green transition and the ongoing energy crisis on Elenia's operations and the impacts of Elenia's operations on society, people and the environment. We identified and assessed the materiality from both perspectives in accordance with the double materiality principle. We then consulted our stakeholders on the materiality issues and organised a workshop where our stakeholders ranked the aspects according to their perceived significance.

The results are shown in the matrix. Elenia's material aspects are grouped under four main principles of sustainability.

## **ELENIA'S MATERIALITY ASPECTS 2023**



Moderate

IMPACT AND SIGNIFICANCE TO ELENIA

Moderate

## IMPACT AND SIGNIFICANCE TO STAKEHOLDERS

Very high

- Safety and well-being at work
- Customer experience and the quality of electricity network services
- Climate action and role as forerunner
- Social impact



COMMITTEE TO BOOST ELENIA'S STAKEHOLDER COOPERATION The European energy crisis highlights the importance of improving Finland's self-sufficiency in energy and ensuring the security of supply in the energy system. The national targets strengthen the role of Elenia's smart grid services in the energy market. Open and constructive interaction with our stakeholders is increasingly important.

As part of our stakeholder cooperation, we established Elenia's Stakeholder Committee in 2022. The Committee meets 2–3 times a year to discuss topical themes. We provide the Stakeholder Committee with information about our sustainability and development work, discuss the development of the electricity market and hear the views of the Committee members on how we can further improve our services, taking into account the needs and expectations of both customers and society.

The Stakeholder Committee does not make decisions concerning the company. It works in close advisory cooperation with the company's senior management. It has no business responsibilities or official status in the organisation. The company does not pay salary or remuneration to the Committee members; however, the company reimburses the travel and accommodation expenses incurred by their participation in the Committee work.

## ELENIA'S STAKEHOLDER COMMITTEE MEMBERS

- Anneli Jäätteenmäki, former Prime Minister and Member of Parliament, Centre Party
- Emma-Stina Vehmanen, Transport Policy Advisor, Suomen Yrittäjät
- Johannes Koskinen, Member of Parliament, Social Democratic Party
- Marju Silander, Executive Director, Finnish Homeowners' Association
- Pekka Verho, Professor of Electrical Power Engineering, Tampere University
- Petri Pylsy, Leading Specialist, Finnish Real Estate Federation
- **Sofia Vikman**, Member of Parliament, National Coalition Party Elenia's representatives:
- CEO Tapani Liuhala, Deputy CEO Jorma Myllymäki



AN EXCELLENT
GRESB 2022 RATING
WITH A SCORE OF 96





Elenia achieved another excellent result in the GRESB sustainability assessment with a score of 96 and a complete five-star rating. GRESB has assessed Elenia's sustainability and ESG impacts for five years now.

The GRESB Infrastructure Assessment was conducted for the seventh time, with 649 infrastructure companies participating globally. Elenia ranked 46th among the participating companies. In the Network Utilities: Electricity Distribution Companies category, Elenia ranked third among 10 participating companies.

The GRESB 2022 result shows that Elenia makes sustainable choices in our energy and climate efforts and in achieving our emission reduction targets. Our sustainability development areas include, for example, the successful implementation of emission reduction targets, the implementation of the human rights due diligence obligation and taking biodiversity into consideration in operations.

GRESB, the Global Real Estate Sustainability Benchmark, is an international sustainability benchmark customised for the real estate and infrastructure sector. It evaluates the sustainability of companies and their performance based on ESG indicators: environmental responsibility, social responsibility and governance.



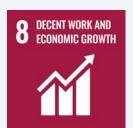
# UN Sustainable Development Goals

Our vision of being the most responsible innovator of energy services and markets supports the UN Sustainable Development Goals (SDGs) on the path towards low-carbon, safe and sustainable societies. We have identified six SDGs that we can particularly promote through our operations. In the nationwide Energy Efficiency Agreements 2017–2025 programme, we have also undertaken to promote energy efficiency in our business and services.



To ensure affordable, reliable, sustainable and modern energy for all.

Elenia builds a sustainable, smart and weatherproof electricity network for its customers and enables the connection of renewable energy to the network.



To promote sustainable economic growth for everyone, full and productive employment as well as decent jobs.

Elenia looks after the well-being and occupational safety of its employees and partners and demands that its ethical principles be respected in all operations. Elenia employs locally.



To build a sustainable infrastructure and promote sustainable industry and innovations.

Elenia procures sustainable materials and creates innovative solutions to promote the transformation of the energy sector.



To ensure safe and sustainable cities and residential communities.

Elenia ensures the availability of energy and the continuity of operations in all circumstances.



To act urgently against climate change and its impacts.



Elenia enables the energy revolution by developing a smart electricity network and creating a foundation for the energy market. Elenia improves the efficiency of energy and material consumption and promotes the circular economy of the electricity network.



To promote the implementation of sustainable development and global partnerships.

Elenia wields influence through customeroriented and local-level stakeholder cooperation and requires that its partners comply with laws, agreements and terms of employment and commit to the principles of sustainability.

## Sustainability programme and sustainability targets

## SUSTAINABILITY TARGETS

SUSTAINABILITY PRINCIPLES 2022 AND SUSTAINABILITY VISION 2035

STRATEGIC OBJECTIVES

VISION

Employee satisfaction

TEKO programme implementation

TUISKU -project implementation

**Customer satisfaction** 

Days without a power outage of over 6 hours

Customers in a weatherproof network

Fulfillment of customer promises

Emission reduction roadmap

Sustainable procurement

Partners' sustainability promises

Innovation and development portfolio

Renewable energy

Security of supply

Installation of next-generation smart indicators

Utilisation of SMEs

Local stakeholder cooperation





CUSTOMER EXPERIENCE AND QUALITY OF ELECTRICITY NETWORK SERVICES

**REPUTATION & TRUST 3.5** 



CLIMATE ACTION AND ROLE AS FORERUNNER

**NET ZERO ELENIA** 



SOCIAL IMPACT

**ENERGY USE AND RENEWABLE ENERGY 7.3 TWh** 

WE EARN
OUR CUSTOMERS' TRUST
AND APPROVAL

WE ARE
THE MOST EFFICIENT
DISTRIBUTION NETWORK COMPANY
IN OUR INDUSTRY.

WE PROMOTE
THE MITIGATION OF
CLIMATE CHANGE



THE MOST
RESPONSIBLE REFORMER
OF ENERGY SERVICES
AND MARKETS

## Sustainability programme and sustainability targets

Each year, we assess the need to develop our sustainability programme and its targets as well as the way we measure our progress. Our targets are discussed under each theme in this report. In addition to the performance indicators specified in our sustainability programme, our units and teams have other sustainability-related performance indicators with results monitored at the unit and team levels.

Read more about last year's report Elenia and sustainalibility 2021.

provide the best service in the industry").

	INDICATOR NAME AND DESCRIPTION	TCFD	TARGET 2022	RESULT 2022	TARGET 2023	TARGET 2025	TARGET 2030	TARGET 2035
(I)	VISION TARGET – Lost time injury frequency LTIF		3	4.5	3	< 2.5	<2	<1
SAFETY AND WELL-BEING AT WORK	Employee satisfaction Signi flame index, scale 0–100		73	75	74			
8 occasi work was (consuccidents)	Safely back home (TEKO) programme implementation		6 actions of TEKO -programme implemented	5/6 of TEKO-programme completed	TEKO -programme implementation: Minimum of 5/6 KPI's on target			
M	TUISKU -project implementation		New	New	Tuisku -project implementation: Progress and results according to the plan			

complaints: Weatherproof network

60%, Electricity connections 92%

complains 85%

3.3

3.5

CUSTOMER EXPERIENCE
AND THE QUALITY OF
ELECTRICITY NETWORK
SERVICES

VISION TARGET – Reputation and trust		3.1	3.05		3.1	3.2
Customer satisfaction Customer satisfaction in the electricity network business (CSAT), scale 1–4		3.2	3.24		3.2	
Days without a power outage of over 6 hours  Days on which no Elenia customers experienced power outages longer than six hours.		More than 280 days	291 days		More than 280 days	
Customers in a weatherproof network  Number of customers within the scope of electricity distribution quality requirements	TCFD	82%	80%	•	83%	
Fulfillment of customer promises  Measures the fulfilment of selected promises from the three customer promises ("We provide a smooth customer experience", "We conserve energy and the environment together", and "We		<ul> <li>Customer service resolution rate 70%</li> <li>Small-scale production service concept completed</li> </ul>	Customer service resolution rate 80% Small-scale production service concept partially completed Success rate in processing time of		<ul> <li>Success rate in the callback service 90%</li> <li>Doubling the number of consumption tracer users 10,000 pcs</li> <li>Success rate in processing time of</li> </ul>	

time of complaints

• Success rate 90% in processing



(\*b



## Sustainability programme and sustainability targets

	INDICATOR NAME AND DESCRIPTION	TCFD	TARGET 2022	RESULT 2022		TARGET 2023	TARGET 2025	TARGET 2030	TARGET 2035
<b>φ</b>	VISION TARGET - NET ZERO ELENIA (Scope 1 & 2)	TCFD	<72,494 tCO <sub>2</sub> e	71,536 tCO <sub>2</sub> e	•	Less than on year 2022	< 34,500 tCO <sub>2</sub> e	<17,250 tCO <sub>2</sub> e	< 690 tCO <sub>2</sub> e
CLIMATE ACTION AND ROLE AS FORERUNNER  Emission reduction roadmap		TCFD	Actions taken in accordance with the emission reduction roadmap (8 actions)	7 actions taken fully or partially	•	Actions taken in accordance with the emission. Competitive bidding for electricity purch the total volume of network losses with ze 2. Assessing maintenance measures for SF reporting of SF6 leaks 3. Phasing out Elenia's diesel vehicles 4. Assessing the acceptability of recycled 15. Assessing the emissions reduction commetwork of contracting partners.	ased to cover network l ro-CO2 electricity 6 switchgear, developir naterials in cables	osses, with the aim of c	developing the
	Sustainable procurement Sustainability of procurement and supplier sustainability audits		Two sustainability audits carried out during 2023  Supplier sustainability as one quality indicator in all public procurement	<ul> <li>Two sustainability audits carried out</li> <li>Supplier sustainability as one quality indicator in all public procurement</li> </ul>		Two sustainability audits carried out during 2023 More than 20% of suppliers are committed to SBTi			
9 NOTES MONITOR	Partners' sustainability promises  All network construction partners make three sustainability promises and their fulfilment is monitored		57 promises	57 promises	•	42 promises			
13 COMMIT IN PROPERTY ON THE COMMIT	Innovation and development portfolio Implementing key development projects in accordance with the targeted benefits and schedule		11 projects	8 projects	•	5 projects			
SOCIAL IMPACT	VISION TARGET – ENERGY USED BY CUSTOMERS AND RENEWABLE ENERGY	TCFD	Renewable energy production >2.4 TWh Energy consumption >6.5 TWh	Renewable energy production 2.6 TWh Energy consumption 6.26 TWh	•	Renewable energy production >3.4 TWh Energy consumption >6.1 TWh	Renewable energy production 5 TWh Energy consumption 6.7 TWh	Renewable energy production 6.1 TWh Energy consumption 7 TWh	Renewable energy production and energy consumption 7.3 TWh
	Renewable energy The amount of renewable energy fed into Elenia's network relative to the amount of energy distributed to customers	TCFD	44%	42%	•	55%			
7 APPROMISATION TO SERVICE TO SER	Security of supply		New	New		Reformation of the interrupt critical customer classification			
8 DECENT WORK AND 11 SUSTAINABLE CHIES AND COMMANDES CHIES	Installation of next-generation smart indicators	TCFD	66,640	74,419	•	100,000	-		
13 COMME 17 PRINCESSARY	Utilisation of SMEs SMEs' share of contracting services		50%	60%		50%			
	Local stakeholder cooperation Local stakeholder events in Elenia's network area		4	4		4			

# We manage sustainability as part of our daily work

Sustainability is an integral part of Elenia's strategy, and our values — Responsibility for the future, Close to the customer, Open and reliable cooperation, and The courage to renew — constitute the foundation for our operations and choices.

Elenia's sustainability programme and the targets apply to everyone at Elenia. The company's management team, in cooperation with the Board of Directors, is responsible for sustainability efforts. It leads by example and creates the conditions for every Elenia employee and partner to contribute to the achievement of Elenia's targets in their own work.

The sustainability steering group and the steering groups for different business processes regularly monitor the implementation of the sustainability programme and the achievement of its goals. The implemen-

tation of the programme is the responsibility of the Head of Customer and Stakeholder Relations together with the sustainability steering group. Elenia's management team assesses the effectiveness of the sustainability programme and related revision needs on a regular basis.

Progress towards sustainability targets is comprehensively monitored on a monthly basis by the management team, the Board of Directors and the owners, whoreceive continuous reporting on sustainability. In addition to the internal reporting, Elenia's main owners regularly deepen their insight into themes related to Elenia's sustainability and compliance by collecting data through various surveys and studies. The Audit Committee of the Board of Directors also regularly discusses Elenia's most significant sustainability risks and their management.

The Chief Communications Officeris in charge of annual sustainability reporting, which involves management and specialists from the entire organisation. Elenia's Board of Directors reviews the sustainability report.

Sustainability is also part of Elenia's remuneration policy. The entire personnel's remuneration related to sustainability is linked to Elenia's target of achieving a top score in the global GRESB assessment.



RESPONSIBILITY FOR THE FUTURE



CLOSE TO THE CUSTOMER



OPEN AND RELIABLE COOPERATION



COURAGE TO RENEW

# SUSTAINABILITY THEMES



## ත් න

## BOARD OF DIRECTORS AND COMMITTEES

Establish requirements and monitor the development and results of the sustainability of Elenia and its partners

## MANAGEMENT TEAM AND EXECUTIVES

Ensure that Elenia and its partners have the required resources and opportunities to perform their work sustainably

## STEERING GROUP FOR SUSTAINABILITY

Builds and maintains Elenia's sustainability programme and reporting, including the related goals

## STEERING GROUPS FOR SERVICE PROCESSES

Steer and revise work and activities in line with the sustainability targets

## TEAMS AND PARTNERS

Through their daily work, play the most important part in ensuring the provision of our sustainable services and operations



## Good corporate governance and the activities of the Board of Directors

Good corporate governance and transparency form the basisfor our sustainability and serve the interests of Elenia's stakeholders. Elenia's operational activities take place in Finland and the company has an international ownership base. Elenia Oy's Board of Directors has eight members. Four of the Board members are Finnish and one of them is a woman. The occupations, commitments and expertise of the Board members are described in more detail on Elenia's website.

## Elenia's management team and Board of Directors

The considerations in planning the composition of the Board of Directors include the needs associated with the Group's current and future business operations and the diversity of the Board of Directors, which is assessed from multiple perspectives. The members of the Board of Directors must have sufficient and complementary experience and expertise.

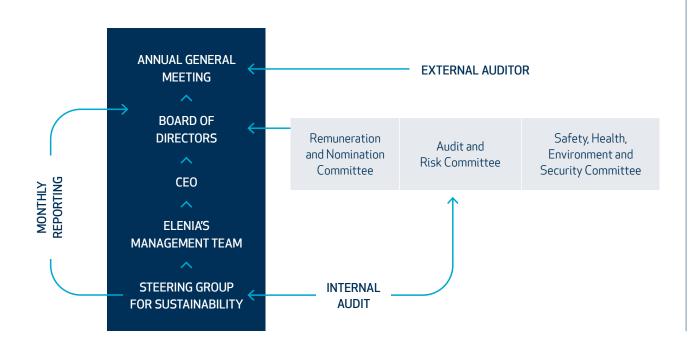
Elenia's Board of Directors approves significant sustainability actions, such as the Net Zero business plan, which is a central element of Elenia's sustainability programme. The Board of Directors receives monthly

reports on safety statistics, accidents, sickness-related absences, overtime, greenhouse gas emissions, material recycling statistics and topical compliance issues. When necessary, the Board of Directors deepens its understanding by consulting experts on different aspects of sustainability, both within the Elenia organisation as well as external experts.

Elenia's Board of Directors has three committees – the Nomination and Remuneration Committee, the Audit Committee, and the Safety, Health, Environment and Security Committee – which regularly discuss sustainability-related themes in their meetings.

The Board of Directors and its committees assess their work through regular self-assessments and by using

external evaluations. The assessment is focused on the organisation of Board activities and establishing a deeper understanding of the themes on the agenda, such as sustainability expertise. The themes identified in the assessments – including regulation, the green transition and sustainability – have been highlighted for increased discussion or focus on the Board of Directors' annual calendar depending on needs and topicality at any given time. The assessments have also provided added value and support to operational activities. One example is the Tuisku project, which is a programme aimed at improving safety culture that was launched at the proposal of the Safety, Health, Environment and Security Committee.



# Management systems and the Code of Conduct

Our certified management systems provide a framework for our operations. In our day-to-day operations, we follow the principle of continuous improvement. The management team assesses the functioning of the management systems and related needs for improvement three times a year in management reviews.

Alongside the management systems, our operations are guided by our Code of Conduct, the policies implemented in our various operating areas and internal guidelines that specify our approach for example regarding non-discrimination and the prevention of bribery and the grey economy. Our Code of Conduct provides the guidelines for our day-to-day decision-making and helps us navigate at times challenging situations at work.

All of our jobs are gender neutral, and we do not tolerate discrimination, bullying or harassment of any kind. We believe that the best working communities consist of diverse people with different backgrounds. All our construction projects are put up to tender with full transparency, as are other purchases that exceed the threshold values specified in the applicable legislation concerning procurement. Elenia does not condone any form of grey economy or illegal business practices in procurement or other business activities. The company has separate procedures and guidelines for competitive tendering.



#### Management systems and the Code of Conduct

We ensure the practical implementation of the Code of Conduct, our policies, and our internal guidelines by training our personnel and partners. We provide induction training to our personnel on sustainability-related themes and guidelines in an online learning environment.

In addition to training and increasing awareness, Elenia has incorporated a Code of Conduct commitment into all key agreements and reserved the right to audit partners' activities to ensure that the partners operate as agreed. Audits are conducted regularly. In addition to the direct auditing aspects, they provide a good opportunity for communication and promoting sustainability between the parties.

Elenia has a whistleblowing channel for all of our stake-holders to report actual and suspected misconduct. We encourage everyone to discuss any problems and grievances with their supervisor, a management representative, the internal audit function, or the legal and risk management team.

Elenia's internal audit function is responsible for maintaining the whistleblowing channel, investigating notifications received through the channel and reporting them to the Audit Committee of the Board of Directors. The need for, and scope of, investigation is assessed separately for each notification received through the whistleblowing channel or other channels. When the investigation is completed, an internal audit officer assesses the potential corrective actions with the Group's management and monitors their implementation.

#### Commitment to the Code of Conduct

International commitments are part of the Code of Conduct confirmed by Elenia's Management Team. The commitments and their significance are communicated to the personnel and stakeholders in various ways, including online training activities. As part of our significant agreements, we require our partners and their subcontractors to commit to compliance with Elenia's Code of Conduct for partners.

The identification, prevention and minimisation of adverse sustainability impacts is supported by Elenia's risk management and the related regular measures and management systems. We are committed to preventing adverse impacts in all of our operations, and we describe our operating practices in more detail under each sustainability theme in this report.

We launched a project in 2022 to sharpen and clarify Elenia's actions regarding respecting human rights. In the first stage, the project is focused on assessing the current state of the human rights impacts of our operations. When this assessment is completed, the aim will be to deepen our expertise on human rights and draft a human rights policy. The ongoing project is part of the practical implementation of Elenia Group's due diligence obligation.

## OPERATIONS ARE GUIDED BY CERTIFIED MANAGEMENT SYSTEMS

- Asset management ISO 55001:2014
- Occupational health and safety ISO 45001:2018
- Environment ISO 14001:2015
- Information security ISO/IEC 27001:2013
- Energy efficiency agreement

Certified management systems and the energy efficiency agreement are central aspects of Elenia's sustainability management. They apply to all Elenia employees and partners.









## THE CODE OF CONDUCT, POLICIES AND GUIDELINES THAT STEER OUR OPERATIONS

- Code of Conduct for personnel
- Code of Conduct for partners
- Human resources policy
- Asset management policy
- Risk management policy
- Information security policy
- Environmental policy
- Programme to ensure non-discrimination



#### WE ARE COMMITTED TO

- The ILO Declaration on Fundamental Principles and Rights at Work
- The UN's Rio Declaration on Environment and Development,
- The UN Convention against Corruption
- The principles of the UN Global Compact initiative
- The UN Sustainable Development Goals

## Risk management is an area of continuous development

The comprehensive management of risks and opportunities is part of Elenia's management and daily operations.

Elenia's management is responsible for incorporating risk management into strategic and operative management and business processes. The Legal Affairs and Risk Management team is responsible for comprehensive risk management, reporting and monitoring related to the planned measures. Business units and processes are responsible for risk identification and assessment as well as for planning, implementing, and monitoring risk management measures. The Audit Committee focuses on Elenia's risks and their management at the Board of Director's level.

The foundation for identifying, influencing and managing risks and opportunities is laid down by Elenia's risk management policy, risk management procedure, risk register, regular measures determined by the annual risk management plan, and management systems. For each risk, the risk register includes a description of the risk and its impacts, the probability of the risk and its impact should the risk materialise and, as a combination of these, a risk score. The risk register also includes information on the risk owner and the responsible persons, as well as the measures planned for mitigating the risk, including schedules and responsible persons.

All of the Group's risks are reviewed twice a year in workshops whose participants include business area

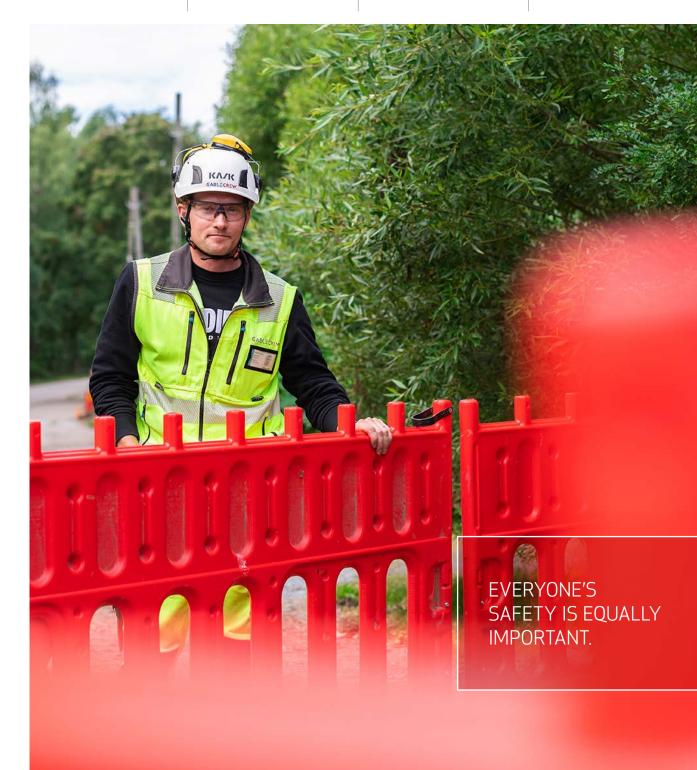
management and key personnel, risk managers and the management team. A report describing the Group's main risks is prepared based on the above-mentioned activities and reviewed by the Audit Committee of the Board of Directors.

The most significant sustainability-related risks associated with Elenia's operations include

- The increase in extreme weather phenomena caused by climate change, and resulting disruptions to electricity networks and the distribution of electricity to customers
- Risks related to occupational safety and general electrical safety
- Environmental risks related to groundwater areas, for example
- Risks related to the grey economy and risks related to information security.

The underground cabling of electricity networks and the clearing of trees in the proximity of overhead lines are effective risk management measures that we carry out systematically. Developing the automation of the electricity network and continuously updated, detailed contingency plans are also ways to manage weather-related risks. All of these generate significant benefits by reducing the duration of power outages.

We work continuously together with our partner network to reduce occupational safety risks through, for example, training and requiring the observation and reporting of all near misses and safety risks. We have a zero-tolerance policy concerning intoxicants and pharmaceuticals used as drugs. Our strict substance abuse policy, applied equally to all, is based on ensuring electrical safety.



#### Risk management is an area of continuous development

We require our contractors to have an occupational health and safety management system, targeting to ensure the well-being and continued ability to work of the contractor's own employees as well as to prevent occupational injuries and illnesses.

We have set a target joint LTIF rate for Elenia and its partners to reflect the principle that, for Elenia, everyone's safety is equally important. We systematically monitor the fulfilment of statutory obligations in our partner network and prevent potential risks and negligence during contractual relationships. We steer the risk management and insurance cover of the partner network companies to account for any personal injury or damage to property. Our goal is to ensure the insurance coverage of our partner companies' entrepreneurs and employees in the event of accidents as well as secure the continuity of their business.

We require our contractual partners to commit to our environmental goals to support risk prevention. Our contractual partners are required to have an environmental management system that supports Elenia's environmental efforts. Our contractual partners must provide evidence of preventive measures to eliminate environmental risks, as well as procedures for incidents involving environmental damage. Our environmental efforts cover our entire supply chain.

To prevent the risk of potential oil leaks, we annually inspect over 1,000 transformer substations located in groundwater areas. We have also reduced the number of pole-mounted transformers by replacing them with new kiosk-style secondary substations whose oil collector trays prevent oil leaks into the environment.

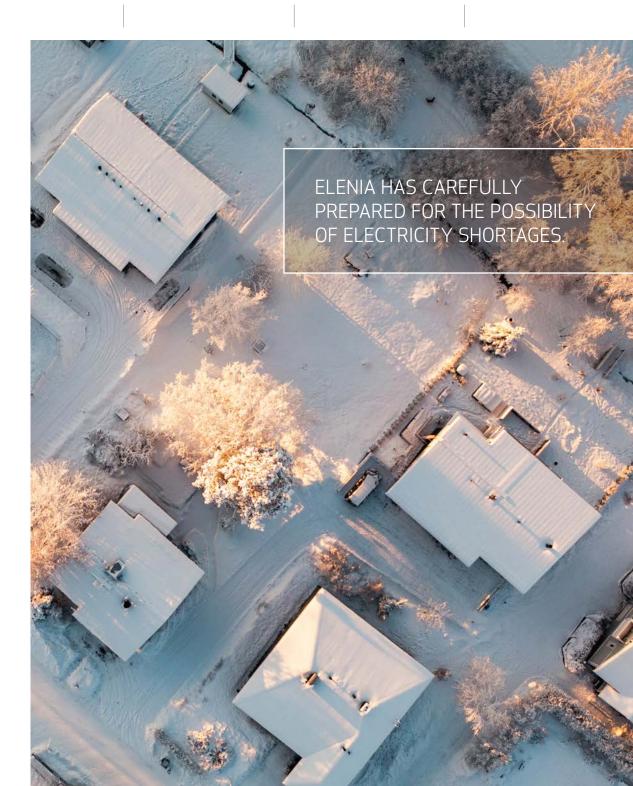
The goal of our data protection measures is to ensure that customer data is processed securely. New, smart electricity

systems and the accumulated data pertaining to them must be accompanied by robust information security. Elenia's certified information security management system guides the implementation of information security and the prevention of information security risks. Our employees and the members of our partner network complete information security training that is regularly renewed and the practical information security is incorporated into all contracts and development projects.

In 2022, two themes were identified as increasingly important in risk management: human rights risks, particularly relating to the international procurement of materials, and risks related to the national and regional security of supply and electricity shortages, caused by the war in Ukraine.

With regard to human rights risks, the legal and risk management team has, together with the procurement organisation, started an analysis to assess the current state and deficiencies concerning human rights risks. This will be followed by the creation of a roadmap to address any potential deficiencies. Progress will be monitored at the Management Team level.

Regarding the security of supply, Elenia has always had a high level of preparedness, but contingency planning has been further enhanced in response to the war in Ukraine. Preparations for electricity shortages have emerged as the most prominent issue, one that has not been a significant theme in Finland for several decades. The reasons include the discontinuation of electricity and gas imports from Russia and the delays associated with the commissioning of the third reactor at the Olkiluoto nuclear power plant.



## TCFD climate reporting - risks and opportunities



Our sustainability report for 2022 is our second to include a Task Force on Climate-related Financial Disclosures (TCFD) report. The TCFD reporting framework helps companies assess the impacts of climate-related risks and opportunities on their business, strategy and financial decision-making.

#### The TCFD report covers the following areas

- **Governance** describes the role of Elenia's senior decision-makers – the Board of Directors and the management team – in climate-related matters.
- Strategy presents the climate-related risks and opportunities identified by Elenia and their financial impacts on Elenia's business. Elenia completed a scenario analysis in accordance with the TCFD recommendations in 2022
- Risk Management describes how climate-related risks are identified, assessed, and managed as part of Elenia's risk management process.
- Metrics & Targets describes Elenia's climate goals, greenhouse gas emission calculations, and indicators used in assessing climate risks. Metrics and targets help assess the company's potential riskweighted returns, ability to meet financial obligations, and general exposure to climate-related risks, as well as the development of the company's work pertaining to climate-related risks.

### Governance

Elenia's highest decision-making body is the Board of Directors. The Board of Directors receives monthly reports on climate-related issues. The Board of Directors reviews Flenia's climate efforts as a whole at least once a year. In its meetings, the Safety, Health, Environment and Security Committee discusses the development of the carbon footprint and the actions taken to reduce greenhouse gas emissions. The Committee also assesses climate-related risks and opportunities.

The Board of Directors takes climate issues and climate-related risks into account in all its decisions. In addition, the Board of Directors reviews climate-related perspectives, risks, opportunities and targets at least once a year at its strategy day.

The Board of Directors has set carbon neutrality targets for Elenia. Progress towards these targets is monitored regularly, especially by the Safety, Health, Environment and Security Committee. Elenia's legal and risk management team is responsible for risk management at Elenia. It reports the Group's most significant risks to the Audit Committee of the Board of Directors regularly, twice a year.

The Management Team discusses the development of greenhouse gas emissions and measures to reduce them as part of monthly reporting. The Management Team annually reviews targets, risks and opportunities related to climate change and greenhouse gas emissions as part of the sustainability programme. The success of climate-related efforts and the achievement of targets is also assessed in management reviews twice a year.

The Management Team takes climate issues and climate-related risks into account in all its decisions. The Management Team also discusses perspectives and targets related to climate change as part of business strategy and planning. The Management Team reviews the Group's most significant risks twice a year. Climate-related risks are discussed as part of Elenia's normal risk management.

## Strategy

Promoting climate change mitigation is one of Elenia's strategic goals. It is an important task for us to identify potential climate-related risks and opportunities so that we can take them into account in our business operations, strategy and financial planning in the short, medium and long term. This is also a topic of interest for financing providers, investors and other stakeholders.

Climate-related risks are categorised into physical and transition risks according to the tables below. Physical climate-related risks occurring in Elenia's operations include, for example, acute risks such as various extreme weather phenomena and chronic risks such as the shortening of the frost period.

In addition to physical risks, we have identified transition risks, which are categorised into policy and regulation risks, technology risks, market risks and reputation risks. Elenia has taken into account extreme weather phenomena and other climate-related risks in the strategic planning of the electricity network business, e.g. to ensure the security of supply for customers.

Climate-related issues can also present business opportunities. We have identified these kinds of opportunities in Elenia's operations and categorised them into resource efficiency, energy sources, products and services, the market and resilience, according to the table on page 25.

The scenario analysis completed in 2022 in accordance with the TCFD recommendations strengthens Elenia's strategic resilience to the impacts of climate change. We



chose three IPCC physical climate scenarios and three IEA transition scenarios for Elenia. These choices allowed us to consistently assess events and uncertainties from the perspective of factors that are relevant to Elenia, and the differences in approaches between the scenarios enhance our preparedness. We assessed the potential realisation and impacts of climate-related risks and opportunities considering the different scenarios. We describe our risk mitigation measures in more detail in the scenario analysis.

- More information on Elenia's climate-related risks and opportunities is presented in the table on pages 24–25
- Elenia's scenario analysis is available on the company's website at www.elenia.fi

## Risk Management

We systematically identified and assessed risks and opportunities related to climate change for the first time in 2021. Climate-related perspectives had also been incorporated into risk management activities previously; for example, in assessing the risks to the electricity network posed by extreme weather phenomena.

Climate-related risks and opportunities were identified under the leadership of the sustainability steering group and subsequently assessed by the Management Team in cooperation with experts on sustainability and risk management. The risks were then reviewed with the persons responsible for them, and customised risk management measures were prepared for each risk.

Climate risks have been integrated into Elenia's enterprise risk management. Going forward, they will be identified, assessed, managed and monitored in the same manner as other risks.

## **Metrics & Targets**

Metrics and targets help Elenia assess the company's potential risk-weighted returns, ability to meet financial obligations, and general exposure to climate-related risks, as well as the development of the company's work pertaining to climate-related risks.

In addition to the development of greenhouse gas emissions, the key metrics in the assessment of climate risks include the share of the weatherproof electricity network, the underground cabling rate, the share of renewable energy in the energy fed into the network, and the implementation of the actions outlined in the emission reduction roadmap.

We also measure the zero-carbon electrification of society by monitoring the energy consumption of our customers, the volume of renewable energy production, and progress in the installation of next-generation smart meters. These metrics and indicators are shown in Elenia's sustainability programme or performance indicators, marked with TCFD.

- Elenia's carbon footprint is presented on page 59.
- Elenia's climate targets and commitment to the targets are presented on page 60.
- Elenia's emission reduction roadmap is shown on page 61.



Long-term risk

## ELENIA'S CLIMATE RISKS AND OPPORTUNITIES

RISK	DESCRIPTION OF THE IMPACTS ON ELENIA'S OPERATIONS			SCALE OF THE IMPACTS   IMPACT ASSESSMENT   (Small, Medium, High)		IMPACT ASSESSMENT	INCOME STATEMENT	CASH FLOW	BALANCE SHEET	
		Policy and regulation	Technology	Market	Reputation					
Increase in the price of emission allowances	Costs of transmission losses increase	х		х		Medium	In the short term, the economic impact is medium. In the long term, regulation methods compensate for the cost increases.	Х	Х	
	The costs of network materials (especially steel, aluminium, copper) increase	Х		Х		Medium	In the short term, the economic impact is medium. In the long term, regulation methods compensate for the cost increases.		Х	Х
Unsuccessful technology investments – Smart grid	Electricity reading system	Х	Х			High	In the short term, significant economic impacts as well as impacts on the company's reputation and the reliability of invoicing can be seen.	Х	Х	Х
Customer investments in small-scale production	Customers become more independent from the network			Х		Small	The distribution volume decreases, but customers will remain within the scope of electricity network services, as off-grid solutions are unlikely in Finnish conditions. In the long term, regulation methods compensate for the lower distribution volumes.	Х	Х	
Increased stakeholder concern or negative feedback	Adequate level of Elenia's climate work is questioned, for example, in public debate and in the media				Х	Small	Elenia's reputation as a reliable climate operator deteriorates in the eyes of customers, stakeholders and the general public.	Re	putational ha	ırm
	Conflicts related to the land use of renewable energy production capacity				Х	Small	In order to integrate wind power, the need for land use increases, which could lead to contradictory situations with local landowners. The landowners' appreciation towards Elenia diminishes.	х	Х	

RISK	DESCRIPTION OF THE IMPACTS ON ELENIA'S OPERATIONS	TYPE OF RISK	SCALE OF THE IMPACTS (Small, Medium, High)	IMPACT ASSESSMENT	INCOME STATEMENT	CASH FLOW	BALANCE SHEET
Increased and severe storms	Interruptions and damage to the network	Acute	High	Extreme weather phenomena cause a large number of interruptions and damage to the network. These costs have an impact on the result and thereby on the cash flow.	Х	Х	
Freezing rain	Freezing of network components		High	Interruptions and network damage caused by weather events incur costs. The costs have an impact on the result and thereby on the cash flow.	Х	Х	
Snow load in the winter when the temperature is close to zero	Interruptions and damage to the network		High	Extreme weather phenomena cause a large number of interruptions and damage to the network. These costs have an impact on the result and thereby on the cash flow.	Х	Х	
Forest fires due to prolonged droughts	Interruptions and damage to the network		Small	Interruptions and network damage caused by weather events incur costs. The costs have an impact on the result and thereby on the cash flow.	Х	Х	
Increased and severe floods	Interruptions and damage to the network (especially primary substations and transformers)		Small	Interruptions and network damage caused by weather events incur costs. The costs have an impact on the result and thereby on the cash flow.	Х	Х	
Shortening of the frost period	Network maintenance through existing equipment becomes more difficult	Chronic	Small	Interruptions and network damage caused by weather events incur costs. The costs have an impact on the result and thereby on the cash flow.	Х	Х	
Heat waves	Overheating of equipment premises due to insufficient cooling		Small	Interruptions and network damage caused by weather events incur costs. The costs have an impact on the result and thereby on the cash flow.	Х	Х	

## Elenia's climate risks and opportunities

# Short-term risk 0–5 years Medium-term risk 6–15 years Long-term risk 16–30 years

## OPPORTUNITIES

OPPORTUNITY	DESCRIPTION OF THE IMPACTS ON ELENIA'S OPERATIONS			SCALE OF THE IMPACTS (Small, Medium, High)	IMPACT ASSESSMENT	INCOME STATEMENT	CASHFLOW	BALANCE SHEET			
		Resource efficiency	Sources of energy	Products and services	Market	Resilience					
The transition to a low-carbon energy system	Increased transmission and distribution capacity is needed to integrate renewable energy into the network		Х	х	Х		High	Increase investments in the short term, but increase revenue and profitability in the medium to long term.	х	Х	х
Sustainable financing	Electricity transmission and distribution infrastructure is seen as an interesting object of financing				Х		Medium	Reduces financing costs, which has a positive impact on profitability and cash flow.	х	х	
More energy-efficient components and network materials	Reducing transmission losses reduces costs	Х					Small	In the short term, it reduces costs and improves profitability. In the medium term, regulation methods will eliminate the impact.	Х	х	
Increased electronic transport infrastructure	Charging points and other infrastructure require Elenia's services			х	Х		High	Increase investments in the short term, but increase revenue and profitability in the medium to long term.	Х	х	х
Electrification of industry	The need for Elenia's services grows			х	Х		High	Increase investments in the short term, but increase revenue and profitability in the medium to long term.	Х	х	х
Combating the impacts of climate change	The readiness for change (resilience) of the electricity distribution network plays an important role nationally			х		Х	High	In the short term, it increases investment and/or potential costs but, in the long term, it improves the return potential and allows for reputational benefits.	х	х	х

The EU taxonomy is a classification system to identify companies that are considered sustainable from a financial and investment perspective. Its purpose is to support a green transition of the capital markets. Elenia con-

ducted its first EU taxonomy screening based on the company's figures from 2021.

Businesses' eligibility for EU taxonomy is examined from the point of view of whether their business operations are among the approximately 100 economic activities described in the taxonomy legislation. The selected activities are central to the achievement of the international climate goals. Elenia's electricity distribution business is considered part of the economic activity 4.9. Transmission and distribution of electricity.

At the time of writing, the EU has published technical screening criteria for business operations contributing to climate change mitigation and adaptation. We assess EU

taxonomy-alignment by reflecting Elenia's taxonomy-eligible business operations on the published EU Taxonomy Technical Screening Criteria. Taxonomy-alignment has been assessed more extensively with regard to climate change mitigation, and the computational figures presented below describe the contribution of climate change mitigation. Due to the nature of the sector, the transmission and distribution of electricity strongly supports the mitigation of climate change. We assess Elenia's taxonomy-eligibility and taxonomy-alignment with economic indicators: turnover, investments and operating costs.

We have also identified the relevant actions for climate change adaptation target. These include underground

cabling of the electricity network, a battery concept that supports electricity distribution, and the installation of next-generation electricity meters for customers. Elenia's underground cabling rate is over 60%. Nearly 100,000 new generation electricity meters have been installed for Elenia's customers by the end of 2022. The climate change adaptation is not described in the economic indicators, as we have focused our resources on verifying the significant contribution to climate change mitigation, which covers Elenia's core business as a whole.

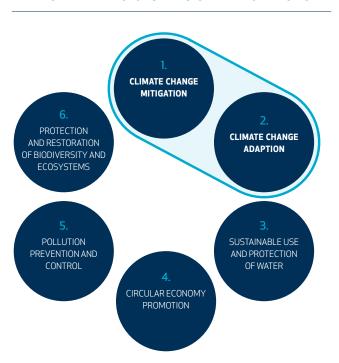
Elenia has identified the climate risks and opportunities relevant to its business operations and assesses them regularly by utilising the climate scenario analysis,



#### Elenia participates in the implementation of the EU's sustainable finance strategy

according to the TCFD Recommendations, which has been implemented in 2022. In addition to contributing climate objectives, EU taxonomy ensures that companies' business operations do not cause harm to other environmental objectives. Other environmental objectives in addition to climate objectives include the sustainable use of water, the contribution of circular economy, the prevention of environmental pollution, as well as biodiversity and the protection of ecosystems.

#### ENVIRONMENTAL OBJECTIVES OF THE EU TAXONOMY



At Elenia, we use natural resources efficiently, reduce waste and recycle materials. When we replace the ageing electricity network with a weatherproof network, we recover the old material for reuse in accordance with the construction site demolition plans. Materials that cannot be reused are recycled or used for energy generation. In addition, circular economy has been included in Elenia's agreements to ensure as comprehensive reuse and recycling as possible.

Elenia takes environmental and natural aspects into account, such as groundwater, Natura sites and ancient monuments, in the planning and construction of the electricity network. Elenia's electricity network is designed to support environmental values. Elenia still has a very small proportion of electrical installations with PCB, which is banned for environmental reasons. It accounted for 1.34% of Elenia's scrapped distribution transformers in 2022. More information on contributing Elenia's circular economy can be found at 68 and on biodiversity work and targets at 65.

## Minimum social protection measures

EU taxonomy-alignment also requires companies to comply with minimum social safeguards with regard to human rights, corruption and bribery, taxation and fair competition. Minimum safeguards mean that companies respect human rights and act in accordance with good governance.

In its operations, Elenia has taken into account the following minimum safeguards.

## Human rights

Human rights are respected in Elenia's operations, which means that we have a Code of Conduct that we apply to both our own personnel and partners. We also have an equality and non-discrimination plan. Our Code of Conduct is based on legislation and international standards. Elenia's personnel are required to complete online training courses on safety, non-discrimination, confidentiality and professional secrecy. Personnel and safety themes are reported monthly to Elenia's Board of Directors. Elenia has a whistleblowing channel for its own personnel, partners and other stakeholders on the Elenia.fi website. Neither Elenia nor its senior management have been found guilty of human rights violations.

In 2022, Elenia started an appropriate human rights due diligence process in accordance with the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises. In the first phase, we carried out a gap analysis that assessed the current state of human rights risk management at Elenia. In 2023, the implementation of the process will continue with the training of the management and responsible persons and the drafting of a human rights commitment. In addition, a roadmap on human rights work will be drawn up for Elenia on the basis of a gap analysis.

## Corruption and bribery

Elenia has anti-bribery guidelines for all personnel. The guidelines outline the principles on how employees con-

duct their business operations openly and honestly. Partners are required to act in accordance with the principles, and thus a condition of anti-corruption is included in the general terms and conditions of Elenia. Risks related to corruption and bribery have been identified as part of Elenia's risk management. Elenia requires its employees to complete anti-corruption and anti-bribery training every two years.

Elenia has a whistleblowing channel for its own personnel and other stakeholders on the Elenia.fi website. Elenia's internal auditor monitors the bribery and corruption related matters as part of normal audit activities. If misconduct is identified during audits, it will be addressed with the necessary measures. In 2023, Elenia will review its anti-corruption and anti-bribery process from the perspective of EU taxonomy requirements and, if necessary, develop the process.

Elenia and its senior management have not been convicted of corruption in court. The number of anti-corruption convictions or fines, or potential public law cases and similar cases against the company, was 0 in 2022.

#### **Taxation**

In accordance with the GRI-207 standard, taxation has been reported on page 83 of the sustainability report. Elenia has not been found guilty of tax evasion.

#### Fair competition

Elenia is committed to complying with the competition rules in all its Group companies. Elenia has an existing competition law policy that has been reviewed with the personnel. Elenia requires online training in competition

## Elenia participates in the implementation of the EU's sustainable finance strategy

law from management and personnel according to their duties. The purpose of the training is to provide guidance on how competition rules should be taken into account in daily business operations and thus ensure that Elenia complies with the provisions of competition law. Neither Elenia nor its senior management have been found to have violated competition laws.

#### **KPI** calculation

When we looked at our turnover, investments and operating costs, we used the financial statement figures prepared in accordance with the International Financial Reporting Standards (IFRS). We compared Elenia's taxonomy-eligible turnover with the Group's total turnover, taxonomy-eligible investments with the Group's total investments, and taxonomy-eligible operating costs with the Group's total operating costs. 97.2% of Elenia's turnover (2021: 97.4%), 97.2% of our investments (2021: 96.0%) and 79.0% of our operating costs (2021: 76.1%) is taxonomy-eligible and at the same time taxonomy-aligned. The majority (99%) of Elenia's taxonomy-eligible turnover is represented by revenues from electricity distribution. In addition, it includes a small amount of electricity network connection fees and other income, mainly contracting fees from the electricity network business operations. Taxonomy-eligible but not-aligned, 0.03%, includes the carbon-intensive capacity connected to Elenia's electricity network. Taxonomy-eligible investments are Elenia's investments in the electricity network business, and taxonomy-eligible operating costs include the Group's external operational costs incurred from the electricity network business operations. The calculation of the key figures does not take into account intra-Group transactions.

In the calculation for the year 2022, the taxonomy-eligible operating costs have included external operating costs of customer, sales and energy services related to Elenia's electricity network business operations. In other respects, the principles for calculating key figures have remained unchanged compared to 2021.

Not-eligible share of turnover is 2.8% (2021: 2.6%), 2.8% of investments (2021: 4%) and 21.0% of operating costs (2021: 23.9%). Not-eligible business operations cover Elenia's fibre network business, customer service business (excluding operating costs for customer service related to Elenia's electricity network business), internal service charges and a small share of reserve capacity. None of these have been interpreted as being included in the classification of economic activities in the EU taxonomy.

When examining the proportion of Elenia's EU taxonomy-eligible activities in accordance with the taxonomy, it can be noted that Elenia's taxonomy-eligible turnover, investments and operating costs are in line with the criteria set for climate change mitigation.

## ELENIA'S TAXONOMY-ELIGIBLE AND -ALIGNED TURNOVER, INVESTMENTS AND OPERATING EXPENSES FOR CLIMATE CHANGE MITIGATION

KPI	Total* (MEUR)	Eligible (MEUR)	Not eligible (MEUR)
Turnover	317.4	308.4	8.9
Investments	151.5	147.3	4.2
Operating expenses	117.4	92.7	24.6

<sup>\*</sup>Numbers in eligible and not eligible columns may not total correctly due to rounding.

#### **TURNOVER**



## **INVESTMENTS**



## **OPERATING EXPENSES**





# SAFETY AND WELL-BEING AT WORK

Our work is safe.

We support the well-being and professional development of our personnel.

We are an equal working community.

Vision target 2035
Lost time injury frequency
LTIF <1

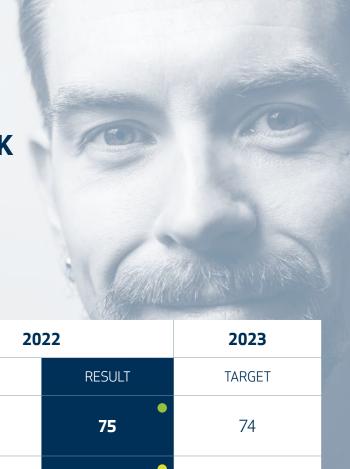
20	2023	
TARGET	RESULT	TARGET
3	4.5	3







# SAFETY AND WELL-BEING AT WORK



PERFORMANCE	20	22	2023
INDICATORS	TARGET	RESULT	TARGET
Employee satisfaction	73	75	74
Safely back home (TEKO) programme implementation	6 actions of TEKO -programme implemented	5/6 of TEKO-programme completed	TEKO -programme implementation: Minimum of 5/6 KPI's on target
TUISKU-project	New	New	Tuisku -project implementation: Progress and results according to the plan

# Elenia – my choice, every day

Elenia's employees are highly competent professionals in their field, and we want to take care of them in our working community. Maintaining a healthy worklife balance is important. We create opportunities for professional growth. We work continuously to ensure our own safety and that of our partners.

Our objectives in 2022 included ensuring the smooth flow of work as the pandemic still continued

and a new crisis broke out. Russia's invasion of Ukraine has had an impact on work and coping with work as the security crisis has created unprecedented turmoil in the energy sector. It is important for us to focus on the well-being of our employees and maintain our ability to provide our customers with good services.

We continued to operate using a flexible model that includes both remote and in-office work. It was, however, clear that our employees were eager to get together in person after the pandemic years. We were delighted to celebrate Elenia's 10-year anniversary together, and we marked the milestone with a project to refine Elenia's values. We also organised various events at our office.



## One Elenia

Elenia has 324\* employees, most of whom work in Tampere. We also have a workstation in Helsinki and a second customer service location in Mikkeli. Elenia has 27\* leased employees working in customer service. We agree on the use of leased employees annually with our personnel representatives.

We value and respect each other's competence, skills and diversity. We work together to develop our company culture in response to the changing world to support our strategy and objectives, as the well-being of our employees directly influences the customer's service experience.

We ensure employee engagement and expertise through our HR policy and HR strategy. In 2022, we complemented our HR strategy with regard to equality. We published concrete objectives and actions for ensuring and developing equality, diversity and inclusion.

\*on 31 December 2022

#### **EQUAL ELENIA**

- All Elenia employees received training on equality-related themes in 2022.
- We ensure the equality of pay and publish an annual review of wage equality and separate remuneration schemes.
- In 2022, we carried out a project to identify key roles and prepared career path descriptions in some of our units. We will continue to prepare career path descriptions in 2023.
- Everyone at Elenia has an equal opportunity to enjoy employee benefits, including both financial remuneration and other forms of remuneration.
- Our working community has a shared goal of being intoxicant-free and non-smoking.
- We do not condone harassment or inappropriate conduct, and we ensure compliance through induction training and monitoring.
- In recruitment, we select the most suitable candidate based on the requirements of the job.
- No incidents of discrimination were reported in 2022.



HIGHLIGHTING
EQUALITY THROUGH
DISCUSSION AND
REMUNERATION





In 2022, we highlighted equality through remuneration, for which we received suggestions from our employees. We put together a list of day-to-day actions related to equality, diversity and inclusion. A forum comprised of employees chose the three most significant actions for remuneration purposes: equal and respectful actions by customer service personnel towards both customers and coworkers, a Christmas campaign to help the non-profit organisation Hope, and team leaders' encouragement of inclusion in daily work.

We invited Sara Salmani, an expert on diversity and inclusion, to speak at Elenia Academy to inspire our employees to think about the different dimensions and impacts of equality and diversity. Salmani provided practical examples to shed light on equality and inclusion and help us recognise the importance of diversity.

# Flexible working time solutions increase convenience in daily life

In 2022, we drafted our first working community development plan, which was reviewed through dialogue with personnel representatives to ensure that the plan is aligned with our HR strategy and our daily work.

The key success factors of our HR strategy are as follows:

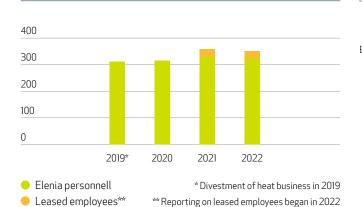
- Skilled employees
- An attractive employer
- Diversity, equality and participation
- A healthy working community that values a sense of community
- A company culture that promotes a forerunner approach to business

The working community development plan reveal the degree to which aspects that support equality – such as family leave, training and equal pay – are achieved. The different stages of the employment life cycle and changes in employees' personal circumstances are part of our daily life. We support our employees in changing life circumstances by offering flexible solutions in the form of study leave, job alternation leave and various part-time work arrangements. Flexibility with regard to in-office work and remote work also makes daily life smoother.

In terms of the gender distribution of the personnel, Elenia is an equal opportunity working community. Women outnumber men by a small margin. However, as is typical of the energy sector, the proportion of men is higher in the electricity network business and the proportion of women is higher in the service business.



#### ELENIA PERSONNELL AT THE YEAR END

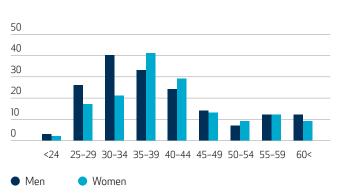


#### GENDER DISTRIBUTION 2022 (%)



## GENDER DISTRIBUTION DIFFERENT JOB GRADES 2022 (%) AGE DISTRIBUTION 2022

the collective agreement.





## **Equal pay**

For salaried employees at Elenia, the scoring of work responsibilities in accordance with the collective agreement enables the assessment of wage equality with regard to base salary. Wage equality is good among Elenia's groups of salaried employees. In line with our equality objectives, we keep the average wage differences between women and men within ±5 per cent unless a deviation from this range is justified by an individual's work history. Senior salaried employees are treated as one reference group, as they do not have a scoring system set out in their collective agreement.

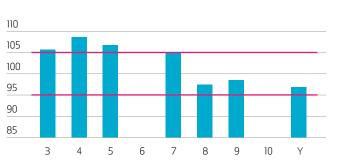
As a distribution system operator, one of the challenges Elenia faces with regard to equality is the small proportion of women at all academic levels within the fields that relate to Elenia's industry. This is due to a lower interest towards study programmes in technology, engineering and mathematics among girls and women. In the previously male-dominated category of senior salaried employees, the number of women has increased in relative terms, which is a positive development.

We have an annual performance bonus scheme that covers all of our personnel, as well as separate remuneration schemes based on performance. The amount of separate remuneration has increased significantly over the

past three years. The targets of the annual performance bonus scheme include sustainability targets, namely the lost time injury frequency (LTIF), which applies to the bonuses for all of Elenia's personnel and, as sustainability targets for the management, employee satisfaction and, in the long term, the result of the annual GRESB assessment.

Our employee benefits support the green transition in society by promoting the use of electric cars and bicycles.

## ELENIA'S WOMEN'S SALARY EUROS IN RELATION TO MEN'S SALARY EUROS 2022 (%)



Job grades of salaried employees (3–10) and senior salaried employees (Y) according to the collective agreement. If the number of representatives of either gender is too low, reporting on the basis of pay data is not possible.

# Competent employees deliver high-quality services

Highly competent employees are an important asset for us. Developing the competence of our employees and providing training ensures high-quality service for our customers now and in the future. Training needs are assessed annually on a team-specific basis.

In 2022, our employees received nearly 8,000 hours of training organised by external providers, which corresponds to an average of approximately three working days per employee. The level of training activity returned to the pre-pandemic level after a couple of quieter years. We monitor the number training participants by themes, which include professional competence, safety, leadership and project management, sustainability and the environment. In 2022, we focused particularly on training related to professional competence development and safety.

We have defined the strategic competencies that are of strategic significance to Elenia's operations, services and renewal, and we have conducted related competence assessments on a team-specific basis. We will continue to carry out the competence assessments in three-year intervals.

## TRAINING ACTIVITIES ATTENDED BY ELENIA EMPLOYEES (NUMBER OF PARTICIPANTS)

	2021	2022
Professional competence development	233	501
Safety	308	446
Leadership/project management	17	11
Responsibility and the environment	0	84
Total	558	1,042



EXPERT ACADEMY
PROVIDES WIDE-RANGING
INSIGHT AND SKILLS

We organised Elenia's first Expert Academy in 2022. The training programme was implemented in collaboration with Aalto PRO. The training package was focused on strategic competencies and aimed at our specialists. It provided us with more in-depth expertise in various specialist positions. The participants represented all of Elenia's business units.



## Job satisfaction

To gain insight into the wishes and needs of our employees and the factors that influence their well-being and employee satisfaction, we measure job satisfaction by means of various surveys each year. We also monitor the overall work ability of our personnel. The results are discussed with supervisors, and they subsequently define team-specific or unit-specific development measures.

Our target score for our personnel survey in 2022 was 73, which we exceeded with a score of 74.85. The results indicate that we have successfully improved our employee insight over the past three years.

In 2022, our working community interaction survey included a question on equality. On a scale of one to five, Elenia employees gave a score of 4.6 for their own equal treatment of colleagues, and a score of 4.4 for their experience of equal treatment on the part of their colleagues.

According to the personnel survey, the most significant matters for Elenia employees are:

- Motivating roles and responsibilities
- Work-life balance
- Fair pay and benefits

Personnel surveys are important channels of employee engagement, giving everyone the opportunity to influence the working community and the actions we take. The actions taken under our annual work ability programme are based on occupational health care cooperation as well as the wishes of our personnel. Together with our occupational health care provider, we conducted an assessment of psychosocial stress factors and cognitive ergonomics.

Elenia's team leaders hold annual target-setting and development discussions with their team members, as well as other discussions as needed due to changing circumstances. We encourage team leaders to discuss well-being at work with their team members annually, even if there are no signs of any concerns.



# Active work ability management in different career stages

We support our employees' work ability and prevent adverse impacts related to work and workplace conditions through multidisciplinary cooperation with our occupational health provider and employment pension insurance company. There were no occupational illnesses or fatalities at Elenia in 2022.

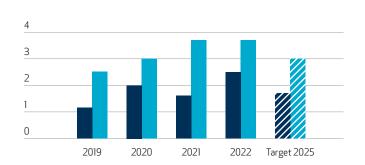
The importance of maintaining work ability was highlighted during the pandemic, and remote work has emphasised the role of supervisors in supporting work ability. When our personnel began to actively return to in-office work in 2022 along with remote work, we offered our employees the opportunity to have a physiotherapist assess the ergonomics of their workstations. As part of our efforts to maintain physical work ability and well-being, we organise weekly exercise breaks. We also support our employees by means of a sports application.

The scope of our occupational health care agreement exceeds the statutory requirements, providing employees with quick access to treatment as well as appointments with an occupational physiotherapist without a referral. We have expanded our employee benefits to allow employees to use well-being services for dental care and massages.

Elenia Oy's sickness absence rate\* increased slightly in 2022, from 3.66 to 3.74, remaining in line with the general level in private sector service industries. At Elenia Verkko Oyj, the sickness absence rate\* rose from 1.62 to 2.48, which is still below the average for salaried employees in Finland.

\*sickness absence % = time of sick leave in relation to theoretical working time

#### SICK LEAVES (%)



- Elenia Verkko Oyj
- Elenia Oy and Elenia Group Oy

Internal changes in Elenia's companies in 2020. The 2019 figures have not been adjusted to correspond to the current organization.





WE CELEBRATED
ELENIA'S 10<sup>TH</sup>
ANNIVERSARY
WITH A SPORTS
CHALLENGE THAT
LED TO A DONATION
OF EUR 10,000 TO
THE NON-PROFIT
ORGANISATION HOPE

Elenia turned 10 in 2022. To celebrate the milestone, we joined forces with the Finnish Olympic Committee on a challenge with the goal of getting 76,000 kilometres' worth of exercise – a distance that equals the total length of Elenia's electricity networks. The sports challenge took place in the form of a light-hearted competition between teams created in the HeiaHeia application to see which team would reach the highest number of kilometres per person between November and May. The initial target of 75,500 kilometres was reached in just three months. By May, the winning team had accumulated an impressive 1,237 kilometres of exercise per person. Elenia's total came to 140,971 kilometres of exercise. At our event to celebrate our 10th anniversary, we donated EUR 10,000 to the non-profit organisation Hope to mark the successful achievement of our exercise goal.

## Safe at work – every day



Safety is our goal in everything we do. Elenia has the second-largest electricity network in Finland. Work on our electricity network is outsourced to our contractor partners. We take safety perspectives into account in the development of our operations and electricity network services, monitor the safety of our operations and manage the development of our safety culture throughout service chain, which includes our contractor partners and subcontractors.

Our safety culture is guided by the Safety Manifesto we have created in cooperation with our partners, as well as the related "TEKO – Safely Back Home" programme. We make determined progress towards our goal of zero accidents. Our safety management covers occupational safety, customer safety, the physical safety of our premises and operations, cyber security and preparedness for various exceptional situations.

We use the TEKO – Safely Back Home programme to manage the development of occupational safety. All Elenia's main contractors for maintenance and construction operations participate in the programme. As a network of

partners, the companies take responsibility for the implementation of safety awareness and safe working practices among their subcontractors. This means that the impact extends to as many as a thousand workers at our construction sites. By developing technology and operating models, we incorporate safety perspectives into practical work on the electricity network. One example of these activities is the Elenia Avain risk assessment tool.

We have assessed the level of safety in the operations of Elenia and our partners in cooperation with occupational safety professionals. Based on the assessment, we launched the Tuisku project to further develop the safety culture and safety-related activities of Elenia and our partners.

## Safety management

Safety aspects form an integral part of leadership at Elenia, starting from Board meetings, where safety-related issues are discussed at the beginning of each meeting. The committee on safety, health, environment and security, which consists of members of Elenia's Board of Directors, meets at least three times per year to monitor safety performance and development.

The development of safety is extensively incorporated into everyone's performance targets, and accident frequency is an indicator included in everyone's annual targets. Safety-related issues are regularly discussed in management team, unit and team meetings. The occupational health and safety com-

mittee meets four times per year. Safety targets are also incorporated into partner-specific scorecards.

Safety is also a regular topic in discussions and meetings between teams and partners. We engage in continuous on-site monitoring at our electricity network construction sites and engage in active cooperation with our partners to develop the HSEQ (Health, Safety, Environment, Quality) aspects of operations. Senior management and line managers representing Elenia and contractor partners conduct Safety Walks at construction sites, and our employees participate in safety training pertaining to our partners. Regarding major power disruptions, we organise safety information sessions for engineers before they start work and also during major disruptions.





## Safety assessment highlighted development needs

We assessed Elenia's safety level in cooperation with our risk management function and a consulting company specialising in occupational safety. The aim of the project was to assess Elenia's safety-related operating and leadership practices to support the development of safety. The project was carried out in spring 2022 and the results were presented to Elenia's senior management. The results provided an overview of the current situation and included recommendations on development areas.

The level of Elenia's safety culture was measured as part of the project by means of a survey of Elenia employees and partners. The respondents included 85 Elenia employees and 144 employees of our partners. The project also involved interviews with Elenia's senior management and partners, as well as site visits.

The results showed that there is a strong commitment to safety among Elenia's senior management and owners. Electrical safety has held an important role for a long time now, and the role of occupational safety has increased and more resources have been allocated to it. Other positive findings included Elenia's effective tools and programmes for developing occupational safety, including the development areas outlined in the TEKO - Safely Back Home programme and the Elenia Avain tool.

## Main areas of development

- Developing a partner management model to ensure each partner's compliance with safety-related requirements.
- Everyone's responsibility for safety. The management of Elenia and its partners must recognise their responsibility for the complete avoidance of injuries.
- Preventing serious accidents. Elenia's operating environment involves a lot of high-risk work.
- Developing communication throughout the contracting chain.

These development areas have been incorporated as goals in the Tuisku safety development project to be carried out in 2023.

Based on a safety assessment conducted by DSS+, a consulting company specialising in occupational safety, we launched a safety project aimed at helping Elenia and our partner companies realise the objective of every employee going home safely every day and moving towards our longterm sustainability target of having a lost time injury frequency rate of less than one. Safety development under the Tuisku project involves six key partner companies engaged in electricity network construction. The results of the project will have a broad impact on the entire partner network. The Tuisku project will change and develop our safety-related operations and strengthen the foundation of long-term safety efforts.

#### The elements of the Tuisku project

- Safely Back Home safety rules to prevent serious accidents and fatalities. The rules cover safety-related attitudes and dangerous work stages.
- Developing safety management, taking into account the operations and processes of Elenia's employees as well as the employees of partners and subcontractors.
- Agreeing on and implementing best practices for construction sites together with partner companies.
- Updating the safety criteria used in selecting partners for future work on the electricity network.
- Influencing safety-related attitudes and safety culture with the help of team discussions at Elenia and all partner companies.



TUISKU PROJECT **ON SAFFTY** 







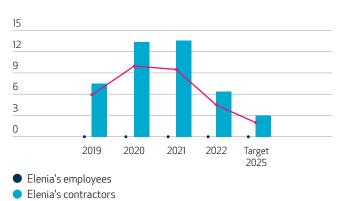




# Occupational health and safety system

Our occupational health and safety activities are based on an ISO 45001 certified management system. The system was audited in 2022, with no deviations found. One development area that was highlighted was the question of how to get all of our contractors and subcontractors to use our information systems for both safety observations and risk assessments. In the audit, we received positive feedback on the level of our environmental and safety actions in the contractor chain and related development projects. The use of Elenia Avain in risk management was singled out in particular.

LOSTTIME INJURY FREQUENCY, LTIF\*



Internal audits of the occupational health and safety system were conducted in the form of visits to some of our regional partners. The development areas highlighted in the internal audits included challenges related to the subcontractor chain, such as ensuring effective induction training and the flow of information throughout the partner chain.

## Safety observations and accident investigations

In work performed for Elenia in 2022, there was one fatal accident and eight accidents leading to an absence of at least one day. All of these accidents involved partners' employees. The fatal accident was comprehensively investigated in collaboration with the partner company

NUMBER OF SAFETY OBSERVATIONS FOR DIFFERENT PARTIES



and the authorities, and we have responded to the tragic incident by further specifying our instructions and guidelines concerning the activity in question.

Our lost time injury frequency (LTIF) was 4.5, representing a significant decrease. However, we still fell short of our target of having an LTIF under 3. The number of accidents and the lost time injury frequency decreased to less than half of the previous year's figures. We review all accidents thoroughly in cooperation with our partners with the aim of achieving our most important objective, which is zero accidents in work performed for Elenia.

Continuous observation and reporting of risks caused by the environment and working methods is an important part of the development of occupational safety. Learning from these observations is particularly important. In work performed for Elenia, the work environment and the related risks change on a daily basis according to the variability of the work. In 2022, Elenia's employees and partners reported over 3,600 safety observations, with the minimum target being 3,000. The total number of safety observations as well as risk observations recorded in Elenia Avain related to an individual's own work increased compared to the previous years.



Shared LTIF

<sup>\*</sup> Lost time injuries per million worked hours

## Safely in the vicinity of the electricity network

Safe operation in the vicinity of the electricity network is extremely important. We build and maintain our electricity network so that it does not cause hazards to our customers, stakeholders, or the rest of society.

In the case of power outages, we take safety- and society-related impacts into account when determining the order in which the electricity supply is restored. We prioritise faults critical to safety.

Elenia uses signs at construction sites to communicate information on the necessary personal protective equipment. This also increases awareness of the on-site safety requirements among local customers and stakeholders. Schoolchildren and commuters pass our construction sites every day, and we are responsible for ensuring safety in the vicinity of our construction sites.

## Information increases safety and reduces costs

We emphasise communication to prevent and reduce damage to the electricity network in connection with construction and other work carried out in the vicinity of the electricity network. Damage to the electricity network is

caused by underground cables severed during excavation work, high load transport or vehicles colliding with the structures of overhead lines, and trees accidentally falling on overhead lines. Such damage can even cause prolonged and widespread power outages.

Any damage to the electricity network is a risk to safety and may expose employees and outsiders to electrical accidents. In years of calmer weather, most power outages are caused by different types of damage, which lead to unnecessary hazards, costs and adverse impacts for both customers and the parties responsible for the damage.

We provide guidance to our customers and other parties regarding safe work and operations performed close to the overhead line or the underground cable network, by means of electronic learning materials and social media, for example. We have developed our reporting on network damage incidents to better understand their causes and further develop safety.

We have an online course available on our website on how to avoid damaging the electricity network. It provides concise information on safety and tips on how to avoid damage. The course is free of charge and is particularly aimed at people involved in excavation and other work in the vicinity of the electricity network, customers, educational institutions offering related study programmes, and other stakeholders. We have also published a video on how to find the location of underground power cables in advance easily and free of charge.

#### DAMAGE INFLICTED ON THE ELECTRICITY NETWORK IN 2022

## UNDERGROUND CABLE

**OVERHEAD** LINE

**OTHER DAMAGE\*** 

## CAUSES OF DAMAGE IN THE UNDERGROUND CABLE NETWORK

• Earthworks of various kinds, including road, telecommunication, water supply, sewerage and real estate projects

## **CAUSES OF DAMAGE IN THE** OVERHEAD LINE NETWORK

- Trees falling onto the lines
- Damage caused by large machinery

## SAFETY DISTANCES OF WEATHERPROOF CABLE

# Induction training related to work performed on the electricity network

We train our employees in topics such as occupational safety, electrical safety, first aid and safe roadside working practices. As part of our safety-related efforts, we develop and maintain the security solutions for our business premises and network assets in line with the requirements for managing critical infrastructure.

In 2021, we started a new practice of "Sanoista TEKOi-hin" ("From words to safety-related action") discussion events, which are aimed at responding to the challenge identified in internal audits of the occupational health and safety system concerning the way we pay attention, and react, to various issues at construction sites. The aim is to harmonise operating practices and provide means of bringing up challenging topics and disseminating proven practices.

Employees engaged in work performed on the electricity network for Elenia complete various induction training and other training programmes that promote safety at work. A wide range of online courses is available. In 2022, we produced an online course to support induction training for workers engaged in short-term work at our construction sites. Our online courses have been taken over 7,500 times to date. We also have a webinar that is in continuous use and aimed particularly at professionals who perform or supervise earthworks operations. The webinar has been viewed by nearly 750 people.

#### ONLINE COURSES ON SAFETY

 Earthworks for electricity networks and safety

SAFETY AND WELL-BEING

- Demolition of electricity networks and safety
- Safe material delivery and recycling
- Safe meter replacement
- Safe electrical connections
- Safe deployment
- Safety in roadside work
- Removal of fallen trees and safety
- Fault repair and safety
- Welcome to Elenia's construction site

### PARTICIPANTS IN SAFETY TRAINING

	2019	2020	2021	2022
First-aid courses	67	76	105	72
Occupational safety training	60	26	75	45
Safety in electrical work training*	35	54	84	47
Road safety training	18	14	33	35
Track work safety qualifications	8	10	18	12
Other training**	1		2	85
Total participants	189	180	317	296

 $<sup>^{\</sup>star}$  Includes electrical safety qualification 1 and the SÄTKY electrical safety card



# AN EXERCISE TO IMPROVE PREPAREDNESS FOR EXCEPTIONAL SITUATIONS

In June 2022, we collaborated with an external partner to organise an exercise focused on preparedness and exceptional situations. The participants also included specialists representing our partners. The aim was to develop our collective capacity to manage operations in exceptional situations.

The two-day exercise was held remotely on a training platform. The simulated exceptional situations dealt with issues such as pressure on individuals, disruptions in information systems and communications, and physical threats to employees and companies. We received positive feedback and identified development areas to help us improve our preparedness for responding to exceptional situations. In 2022, we drafted a long-term plan for exercises concerning exceptional situations.

In summer 2022, we participated in a rescue drill at our Tampere office. In the autumn, we organised an orienteering event related to facility security to help the participants review the security practices of the facility.



<sup>\*\*</sup> In 2022: Change training on SFS 6000-6002 standards and basic training on occupational health and safety

## Site supervision and cooperation with partners

Elenia's management, supervisors and the responsible persons representing partner companies conduct Safety Walks at Elenia's construction sites to observe the site's safety culture and safety attitudes, listen to employees and acquaint the on-site personnel with the managers and supervisors.

In 2022, Elenia's managers and supervisors conducted 243 Safety Walks, and partners conducted 338 Safety Walks. The walks involved discussions on occupational safety, and attention was paid to issues such as the personal protective equipment used by the workers and the use of the Elenia Avain tool.

In 2022, we also launched an HSEQ (Health, Safety, Environment and Quality) development project together with our partners. The aim is to prevent accidents and improve safety, sustainability and quality in work performed for Elenia. The project involves HSEQ coordinators conducting visits to Elenia's construction sites to observe on-site work and activities, as well as engage in discussions with the employees regarding their safety attitudes and actions. The observations made by the coordinators are processed by the HSEQ team and Elenia employees.

A total of 505 site visits were conducted as part of the development project in 2022. Attention was paid to topics such as the use of personal protective equipment, working methods and ensuring the induction training of the employees. The employees found the discussions positive and useful. The HSEQ team has been actively involved in working on our Life Saving Rules.





# CUSTOMER EXPERIENCE AND QUALITY OF ELECTRICITY NETWORK SERVICES

We support the smooth running of the everyday life of our customers by offering safe, high-quality and friendly service and by ensuring the reliability of electricity network services in all circumstances.

**Vision target 2035**Score on reputation and trust 3.5 (1–5)

20	22	2023
TARGET	RESULT	TARGET
3.1	3.05	3.1









## **CUSTOMER EXPERIENCE AND QUALITY** OF ELECTRICITY NETWORK SERVICES

PERFORMANCE	20	22	2023
INDICATORS	TARGET	RESULT	TARGET
Customer satisfaction	3.2	3.24	3.2
Power outages longer than six hours	Over 280 days	291 days	Over 280 days
Customers within the scope of electricity distribution quality requirements	82%	80%	83%
Fulfillment of customer promises	<ul> <li>Customer service resolution rate 70%</li> <li>Small-scale production service concept completed</li> <li>Success rate 90% in processing time of complaints</li> </ul>	<ul> <li>Customer service resolution rate 80%</li> <li>Small-scale production service concept partially completed</li> <li>Success rate in processing time of complaints:          Weatherproof network 60%, Electricity connections 92%</li> </ul>	<ul> <li>Success rate in the callback service 90%</li> <li>Doubling the number of consumption tracer users 10,000 pcs</li> <li>Success rate in processing time of complains 85%</li> </ul>

## We support the smooth running of the everyday life of our customers

We support the smooth running of the everyday life of our customers by offering safe, high-quality and friendly service and by ensuring the reliability of electricity network services in all circumstances. Customer satisfaction and the customers' experience of Elenia's services are two of the cornerstones of our sustainability programme. They indicate the extent that we and our partners have succeeded in our task.

While we cannot influence storms, we can mostly get quick updates about any disruptions in electricity distribution with the help of our round-the-clock monitoring and smart technology. Our efforts to upgrade and weatherproof the ageing network have resulted in storms and snow loads causing clearly fewer disruptions in electricity distribution and in the everyday lives of our customers.

In addition to reliability, the information security of our services and operations is extremely important and we manage it as part of Elenia's overall security. Our responsibility for the security of supply is also underscored by the impacts of the European security crisis on Finland.



## **Energy services for** households, businesses and society

With our electricity network services and electricity distribution, we contribute to Finland's security of supply while promoting a green transition for society. Our basic task is to ensure the effortless day-to-day operation of households, businesses and society by distributing electricity to users.

We monitor the electricity network around the clock, maintain it continuously and develop electricity network services with a long-term approach. We build electricity connections, repair network faults when power outages occur and provide high-quality customer service on a dayto-day basis. To meet the expectations of our customers and society, we upgrade the electricity network to create

a weatherproof smart grid as part of the green transition, which increases the significance of renewable energy.

As a distribution system operator, Elenia serves 438,000 customers in Kanta-Häme, Päijät-Häme, Pirkanmaa. Central Finland. South Ostrobothnia and North Ostrobothnia. The total amount of electricity distributed in 2022 was 6.260 GWh.

The winter months of 2022 were substantially warmer than in the previous year, but the conditions were not exceptional. Compared to 2021, which was a cold year, Elenia's distribution volumes declined by just under six per cent. From the autumn onwards, distribution volumes were reduced by the electricity saving efforts of households. In response to the energy crisis, society and the energy sector encouraged citizens to participate in the effort by carrying out the Down a Degree campaign. During the latter part of the year, consumers reduced their electricity consumption by nearly 10 per cent compared to the previous year.

Elenia's service business provides energy companies with diverse services related to the electricity market. We provide services to approximately 1.2 million end customers. We keep a close eye on the quality of our services and train our customer service personnel to guarantee the best service experience for our customers. Our operations are based on strong energy sector expertise and modern information systems.

Our vision target for sustainability is customer acceptance and trust in Elenia. For 2022, our target was to achieve a score of 3.1 in the national Trust & Reputation survey. Our result was 3.05. Our target for 2023 is 3.1. We ensure an excellent customer experience by fulfilling our customer promises, measuring customer satisfaction, developing our services and engaging in continuous dialogue with our customers.

#### CUSTOMER SEGMENTS AND DISTRIBUTION VOLUMES

## **CUSTOMERS BY SEGMENT**

438,000



## **ENERGY BY CUSTOMER SEGMENT**





## AIMING TO SERVE CUSTOMERS DURING A SINGLE INSTANCE OF CONTACT

Our customer promises ensure sustainable services for our customers and help conserve energy and the environment. We develop our customer promises based on practical experience. In 2022, we measured the ease of service with the customer service resolution rate and the target to offer a solution to the customer's need during the first instance of contact. We achieved this goal at a rate of 80 per cent.

Our customer promises accelerate the development of our electronic service channels. We aim to expand the Elenia Aina service offering to make it easier for customers to make the green transition and save energy. The new service features we launched in 2022 included a charging calculator for electric cars and a service for submitting a notification of an energy community. Connecting small-scale production to the network is another area of development for us. We added a solar electricity calculator to the service in 2023.

We offer our customers a satisfaction guarantee in weatherproof electricity network construction projects. We launched the new Elenia Weatherproof map service, which makes it easy for customers to give feedback on construction. The map service makes it faster to relay feedback to the persons responsible. This enhances our response to complaints, as the processing time for complaints is an area in which we still need to improve.

#### **OUR PROMISES TO CUSTOMERS**







## WE PROVIDE A SMOOTH CUSTOMER EXPERIENCE

- Elenia Aina makes your life easier
- We won't keep you on hold
- If you need to discuss your electricity connection, you can book a call time with us
- We will keep you up to date on the construction of your electricity connection

## WE CONSEVE ENERGY AND THE ENVIRONMENT TOGETHER

- Avoid surprises with our Consumption Tracker
- Fighting climate change by planting trees
- Advice and services for small-scale energy production
- Protecting the Finnish national bird, the whooper swan

## WE PROVIDE THE BEST SERVICE IN THE INDUSTRY

- Elenia Weatherproof comes with a satisfaction guarantee
- We will automatically compensate you for extended power outages
- We will root out the causes of brief power outages
- Extra care for priority groups

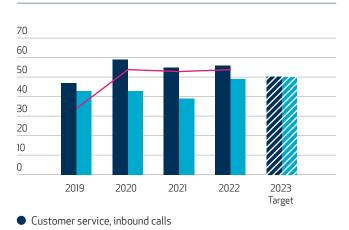
## Customer satisfaction as a component in target agreements and choices of partners

Customer satisfaction is one of our most important indicators of success. We monitor customer satisfaction in fault management, the construction of electricity connections and weatherproof networks, and our customer service in various channels. Our personnel and partners receive information on the results in almost real time. The results are reported to the management team and the Board of Directors on a monthly basis. Customer satis-

## **NET PROMOTER SCORE**

Customer service, e-mails

Net Promoter Score, NPS



faction is incorporated into the employees' target agreements, and it affects the bonuses of our partners as well as our selection of partners.

We measure customer satisfaction on a scale of 1–4 by means of Customer Satisfaction Score (CSAT) surveys. For 2022, we increased our target to 3.2, and exceeded that target by achieving a score of 3.24. We will keep our target unchanged for 2023. Our score also exceeded our target with regard to the satisfaction of connection customers, land owner satisfaction, service in power outages, and telephone customer services. Our satisfaction scores for the Elenia Aina service, the outage map service and the construction of the Elenia Weatherproof network fell short of our target, and we have identified these areas as development priorities.

## Service quality differences have narrowed

We monitor satisfaction with our various customer service channels by means of the Net Promoter Score (NPS), which came to 54 in 2022. The quality of customer encounters in the telephone service was at a good level. The result can be considered to be excellent in a period in which contacts with customers were characterised by the crisis and disarray in the energy markets and the preparations for potential electricity shortages, which cast a shadow over the latter part of the year.

We have managed to reduce the differences in quality between the different service channels. The favourable development was facilitated by, for example, coaching and training related to written e-mail services and telephone services, as well as the more precise analysis of customers' service expectations.

## Better communication on network construction and power outages

We have made progress in customer satisfaction related to the construction of the Elenia Weatherproof network. Project-specific SMS communication was fully in use in construction projects carried out in 2022. Our customers have been satisfied with the improvements in communication, which were partly driven by the customers participating in a survey on communication in the context of construction projects.

We updated our outage map in spring 2021 based on a comprehensive customer survey. The updates improved customer satisfaction.

#### CUSTOMER EXPERIENCE CSAT (1-4)

	2021	2022
Network services overall customer experience	3.12	3.24
Fault service, inbound calls	3.5	3.5
Fault service, online map	2.9	3.07
Landowners' satisfaction	3.5	3.65
Elenia Säävarma construction	2.8	2.92
Connection services	3.3	3.5
Elenia Aina	2.3	2.53

Uniform measurement was adopted in 2021 regarding all functions of network business.

FI FNIA AINA - NOW OVFR 100.000 USERS



The number of users of the Elenia Aina service exceeded our target. By the end of 2022, we had over 100,000 customers using the service, which allows people to monitor their electricity consumption. We made several improvements to the service in 2022 based on customer feedback and enhanced its data protection. We separated value added tax and electricity tax from each other to update the consumption data page to correspond to the amounts shown on the customer's invoice.

We added new green transition tools for customers to the service, including an electric car charging calculator and a feature for submitting a notification of establishing an energy community. The progress of the renewal of the consumption metering system improved the speed at which customers' electricity consumption data is updated. At its fastest, the information is now updated in a matter of hours. Customer feedback has highlighted the importance of displaying the spot price of electricity. This will be added to the service in 2023, along with a solar electricity calculator to help customers plan their small-scale production.

Satisfaction with the Elenia Aina service is growing, but we have not achieved our target yet. With that in mind, we will continue our development efforts in 2023.

## The electrification of society plays a significant role in the electricity network development

Since 2014, distribution system operators have submitted their electricity network development plans to the Energy Authority every second year. Pursuant to an amendment of the Electricity Market Act that entered into effect in autumn 2021, distribution system operators must present in their development plans not only their measures concerning the security of supply but also their views on the development of the operating environment and, in particular, preparations for the transformation of the energy sector and promoting the green transition over the next decade. DSOs are also required to provide information on the cost-efficiency of their network development activities.

By the end of 2022, nearly 1,000 MW of wind power had been connected to Elenia's high-voltage distribution network. This is expected to more than double over the next 10 years. In response to this trend, we will replace and build over 850 kilometers of new 110 kV transmission lines by 2036.

At the end of 2022, more than 11,000 solar power plants were connected to the low-voltage and medium-voltage distribution network. In addition, the charging stations required due to the increase of electric vehicles are becoming more common both in real estate properties and along motorways. These require additional local capacity from the electricity network and flexibility solutions in the future.

Elenia's goal is to achieve a 90 per cent underground cabling rate in the electricity network by the end of 2036.

By the end of 2022, nearly 62 per cent of Elenia's network was underground. Together with the continuous development of network automation and information systems this ensures the electricity distribution quality level required by the electrification of society.

In 2021–2025, we are renewing the smart electricity metering system by installing 400,000 new smart meters for our customers. By the beginning of 2023, approximately 100,000 meters had already been installed. A sufficiently strong electricity network together with smart electricity metering enables electricity market development and flexibility solutions for electricity consumption.

## High-quality network maintenance

Reliable electricity distribution requires continuous maintenance of the electricity network. We ensure the safety, functionality and condition of the electricity network in collaboration with our partners. Our maintenance programme provides the framework for year-round inspections, tree clearance and maintenance activities. Based on the inspections, we focus maintenance operations on various parts of the electricity network in a timely manner.

In 2022, we inspected approximately 2,200 kilometers of the low-voltage overhead line network and some 12,000 locations in our underground distribution network. Inspections of the medium-voltage and high-voltage network are conducted



## The electrification of society plays a significant role in the electricity network development

as helicopter inspections. Aerial inspections were carried out on some 4,200 kilometers of network during the year.

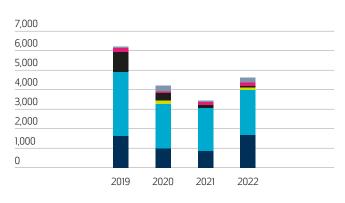
Our entire high-voltage distribution network is photographed, and laser scanned in four-year intervals, and a quarter of the medium-voltage network each year. We inspect our substations four times a year and regularly maintain their equipment. We place emphasis on ensuring the safety of sites that require special attention. For example, we inspected approximately 1,300 transformer substations located in groundwater areas in 2022.

Each year, we manage trees adjacent to our power lines over approximately 3,000–7,000 kilometers to ensure the reliability of electricity distribution in our overhead lines. Tree clearance work is carried out in approximately six-year intervals on the high-voltage distribution network, while the corresponding interval is 4–5 years for the medium-voltage network and eight years on the low-voltage network.

Storms or heavy snow loads may cause trees to fall or bend onto the power lines. We use forest management to reduce power outages caused by trees falling onto distribution lines, thereby improving the security of supply of the overhead line network. In 2022, we cleared trees along approximately 4,200 kilometers of the low-voltage and medium-voltage networks and some 450 kilometers of the high-voltage network. All tree clearing activities are carried out mechanically using forestry machines, helicopter sawing, chain saws or clearing saws. No chemical agents are used in the management of trees along power line corridors.

In 2022, we also continued to invest in fibre-optic networks in connection with the construction of electricity networks. By improving the security of supply of electricity distribution and providing modern data communication connections, we help maintain the vitality of sparsely populated areas for remote work, for example. The joint construction of networks improves cost efficiency.

#### FOREST MANAGEMENT (KM) 2017-2022



- Low-voltage network clearance (0.4 kV)
- Medium-voltage network clearance (20 kV)
- Pruning with helicopter (20 kV)
- Forest management in the side areas of mediumvoltage network (20 kV)
- High-voltage network clearance (110 kV)
- Forest management in the border zone of high-voltage network (110 kV)



## ELENIA AVOIN -INTERACTION AND JOINT DEVELOPMENT WITH CUSTOMERS



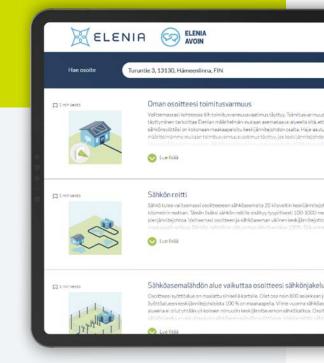
Pursuant to the amended Electricity Market Act, distribution system operators in 2022 were subject to a new obligation to

publish their development plans for assessment by customers and stakeholders. As a response to this new requirement, we created the Elenia Avoin service.

The development plan is a very complex and comprehensive as a whole and our goal was to present it in a way that is easy to understand and shows how the plan influences the customer. Elenia Avoin provides transparency regarding the current state of the electricity network and long-term plans and helps people understand how the distribution network works.

In the Elenia Avoin service, the user enters an address, and the service shows which substation feeds electricity to the location and what development measures are planned for the substation feeder in question. The customer can check when the legally required level of the security of supply will be achieved at the address in question and how and when the distribution network in their area is developed by Elenia.

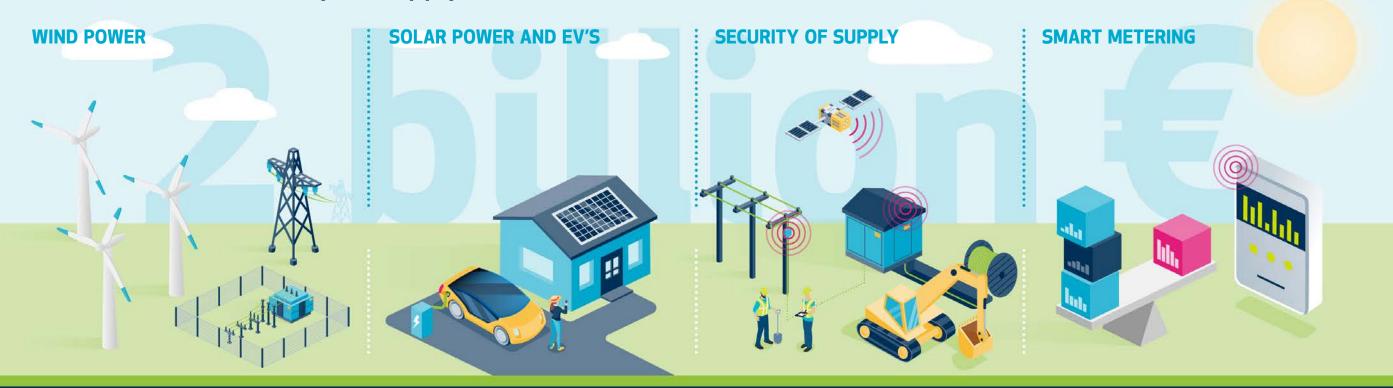
Elenia Avoin was published in May 2022 and the official development plan consultation lasted for a month. Over 16,000 users viewed our plans during the consultation period, and we received nearly 800 feedback responses. While the feedback



did not result in changes in the actual development plan, it led to a small number of maintenance assignments and field surveys. The feedback was mainly positive, and we were able to provide the Energy Authority with valuable information about our customers' views on electricity network management.

The service is now in continuous use, and we will continue to collect comments on our development plan via the Elenia Avoin service in the future. Next, we will use the service to collect information and ideas from our customers regarding the green transition.

## Investments to Security of Supply and Green Transition 2022–2036



- 1,000 MW of connected wind power in high voltage network in 2022
- Wind power capacity will be doubled during following 10 years
- New high voltage network over 850 km

- 10,000 PV solar power plants connected in low voltage network in 2022
- Charging points to properties and along high ways
- Solar power will be tripled during following 10 years
- Flexibility and capacity increasement

- 90% cabling rate in 2036
- Development of network automation and information systems
- Tens of battery storage systems
- Maintenance of remaining overhead lines
- Possible alternative solutions

- New metering solution 2021–2025
- 400,000 new smart meters
- Enabling carbon-free society and electricity markets
- Smart and resilient distribution network is a foundation for flexibility

# Electricity network service quality was at a good level

The conditions concerning the operational reliability of the electricity network were primarily favourable in 2022.

The year was exceptionally stable in terms of weather, although there were days with record-breaking levels of thunder and lightning in August, particularly in western Finland and Ostrobothnia. During the worst period, some 10,300 customers were without electricity due to thunderstorms. The longest outages lasted for more than two days, as the thunderstorms hindered efficient and safe fault repair operations on the electricity network.

In addition to the thunderstorms, Storm Manu caused a significant number of fault management assignments in March. The number of customers without electricity peaked at 9,000 at that time. There were no major power disruptions in 2022.

The number of technical faults was also low, and the number of incidents of network damage caused by outsiders remained at the same level as in the previous year.

In 2022, the System Average Interruption Duration Index (SAIDI) for Elenia's customers was 70 minutes. This figure is three minutes higher than in 2021, and it includes the combined 15-minute impact of Storm Manu and the thunderstorms. The security of supply has improved, although we did not reach our target.

The System Average Interruption Frequency Index (SAIFI) was slightly higher than in the two previous years, at 2.7 interruptions per customer. This was mainly due to the record-breaking thunderstorms in August. The number of momentary interruptions to the supply of electricity was at the lowest level in Elenia's 17 years of monitoring history. The Momentary Average Interruption Frequency Index (MAIFI) was 4.6.

We were pleased to achieve our target concerning the number of days on which no single Elenia customer experienced a power outage exceeding six hours. The target for 2022 was 280 days and our result was 291 days.



#### DEVELOPMENT OF OUTAGE PERFORMANCE INDEXES 2014-2022

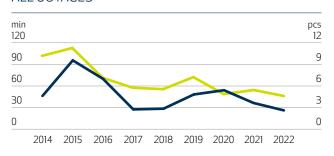
## ALL OUTAGES



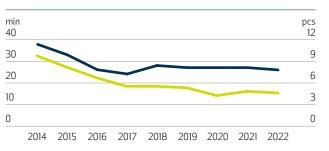
## WITHOUT MAJOR DISTURBANCIES



#### **ALL OUTAGES**



#### WITHOUT MAJOR DISTURBANCIES



SAIDI, System Average Interruption Duration Index (min/customer)
SAIFI, System Average Interruption Frequency Index (pcs/customer)

CAIDI, Consumer Average Interruption Duration Index (min/customer)
 MAIFI, Momentary Average Interruption Frequency Index (pcs/customer)

## Electricity network service quality was at a good level

## Wide-ranging and reliable contingency planning

The year 2022 was exceptionally busy with regard to contingency planning.

- Starting from February, Russia's invasion of Ukraine created the need for contingency planning and continuously maintaining situational awareness.
- The legally required contingency plan was submitted to the Energy Authority in June.
- We prepared for electricity shortages and provided related information to customers and stakeholders during the autumn.
- We fulfilled our operational and testing requirements under the Network Code for Emergency and Restoration and reported on these to the transmission system operator Fingrid before the Code entered into effect in December.
- We supplemented our contingency plan with information on the classification of critical customers in accordance with the relevant Government Decree and submitted the plan to the Energy Authority in January 2023.
- We maintained continuous preparedness and engaged in contingency planning regarding major power disruptions. There were eight incidents of Code Yellow preparedness, which is the lowest level. There were no incidents of Code Orange or Code Red preparedness.

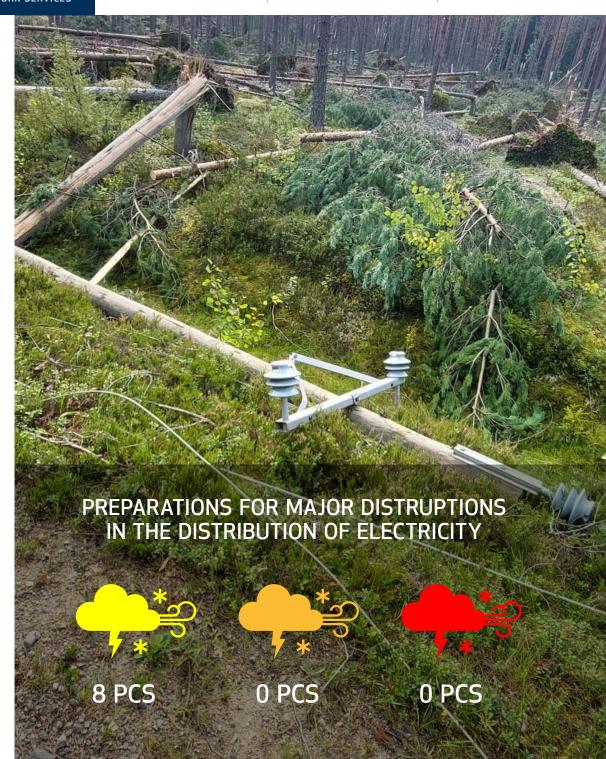
The war that Russia started in February meant that Elenia needed to focus on preparedness in accordance with our contingency plan. We concentrated particularly on physical security, cyber security and situational awareness. We actively participated in situational awareness meetings of the energy sector's security of supply organisation. Situational awareness was also improved by various meetings and having employees participate in national defence courses.

Distribution system operators are required to update their contingency plans, as specified in the Electricity Market Act, once every three years. Elenia's updated plan includes primary plans for various disturbances, such as disruptions in electricity distribution, the main grid, information and telecommunications systems, and a contingency plan for emergencies. On the whole, our preparedness and contingency planning are at an excellent or good level. In our self-assessment of contingency planning, we identified six development areas. Development measures are under way, or have already been completed, in three of these areas.

## EU-required Network Code entered into force

Network Code for Emergency and Restoration, which is in line with EU legislation, entered into force in Finland in 2022. It requires distribution system operators to participate in implementing an automatic under-frequency control scheme for nationally significant fault situations and to fulfil a 24-hour operability requirement with regard to control room operations and designated electricity network sites, and to maintain a test programme for these purposes.

We began to take measures to satisfy these requirements several years ago and completed the last actions in 2022. Among other things, we connected to a highly fault-tolerant data communications network, enhanced our speech-based connections to electricity network sites and improved the capabilities of our system solutions. Based on tests conducted in November we meet the requirements.





## MAJOR ATTENTION TO CONTINGENCY PLANNING FOR ELECTRICITY SHORTAGES

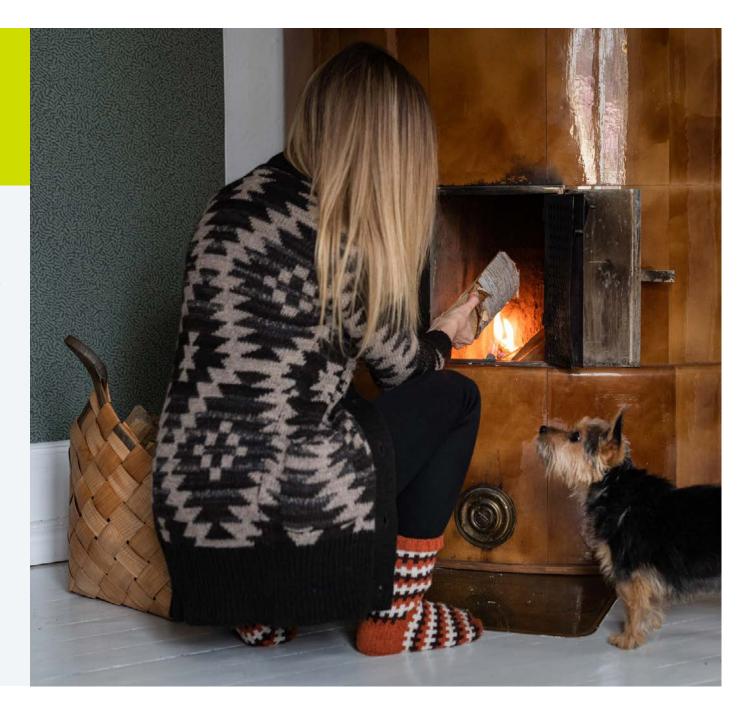
The transmission system operator Fingrid highlighted the risk of electricity shortages during the winter season 2022–2023 due to the shutdown of the cross-border electricity transmission connections between Finland and Russia in the spring of 2022. Our operation unit engaged in dialogue with Fingrid in the summer regarding the sufficiency of electricity and the related necessary measures. Our contingency plan sets out the principles for our actions in response to electricity shortages. In summer 2022, we recognised the need to further specify the plan, and we initiated development measures to that end.

We increased the level of preparedness for electricity shortages by, for example, introducing system tools that make our operations quicker, engaging in the inter-system exchange of electricity shortage data with Fingrid, and updating our plan concerning rotating power outages in response to electricity shortages. We provided training to our personnel and majority of the employees of our fault repair partners on key actions pertaining to electricity shortages and updated our communication practices.

A Government Decree entered into force in December. specifying critical customer groups in society that need

to be taken into account in the event of disruptions and electricity shortages. We updated our customers' criticality classifications, which involved a large number of contacts with customers as well as webinars for municipalities and the rescue authorities, for example. Despite the tight schedule, we were able to reach the customer groups defined as critical and take into account the places of electricity use that are important for society in preparation for the risk of potential electricity shortages in winter 2022–2023.

Interest in the topic of electricity shortages among the media and customers reached unprecedented levels. Elenia was involved in nearly 200 media articles, and our customer service received a large number of contacts. Through active communication, we encouraged our customers to help prevent electricity shortages by conserving electricity and moving their consumption from weekday mornings and early evenings to other times. We also informed our customers that the duration of any rotating and controlled power outages would not exceed two hours at a time.



## Increased focus on cyber security in response to elevated global tensions

The events of 2022 made cyber security a key issue regarding Finland's security of supply. Hybrid operations and the use of cyber attacks as part of the security crisis caused by Russia underscore the importance of cyber security in ensuring the operational continuity of electricity distribution. At the same time, the continued growth of cyber crime - and particularly malware that jeopardises operational continuity emerging as the most common form of cyber crime - elevated the threats to a new level.

The management of information security is a continuous battle o keep the threats under control. It is our responsibility to keep up with these challenges. In terms of cyber security, the past year at Elenia was characterised by strong cooperation both nationally and within the energy sector. The ISO 27001 information security certificate issued to Elenia demonstrates the company's commitment to information security.

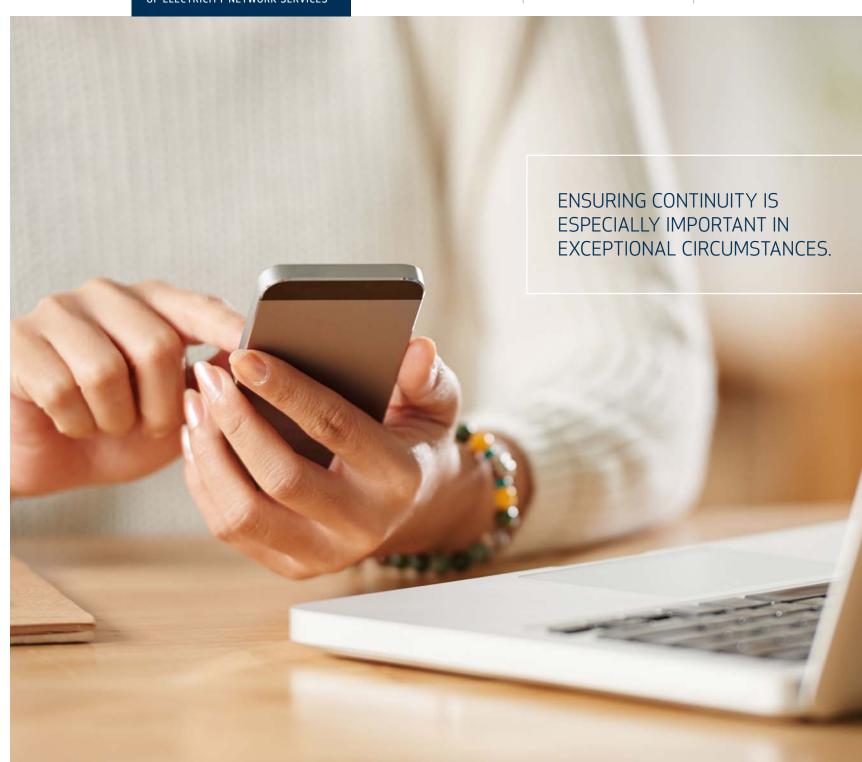
## Protecting the personal information of customers

Ensuring that customers' personal information is appropriately protected is crucial for Elenia.

We process large quantities of data, much of which can be linked to individual persons. This makes it necessary for us to continuously assess the level of security with regard to customers' personal information.

We make sure that our customers can trust that their personal information is processed securely. We achieve this by maintaining up-to-date guidelines, specifying responsibilities concerning the processing of personal information, providing training to the personnel of Elenia and our partners, and by engaging in partner management and monitoring and reporting deviations.

In 2022, we reported two deviations concerning personal information to the Data Protection Ombudsman We immediately implemented the corrective actions required by the observed deviations.



## Moderate pricing as the basis of long-term development

In electricity network services, the customer pays for uninterrupted access to electricity. The total price of electricity consists of the electricity distribution service, the electricity and taxes levied by the state. Elenia has an obligation to invoice electricity tax and value-added tax on top of electricity distribution charges and remit them to the state.

Elenia is responsible for these services on a continuous basis, and the amount of electricity distributed has little impact on the associated costs. Most of Elenia's costs – roughly 80 per cent – are fixed costs, which are covered by fixed fees in addition to distribution fees.

## The pricing of electricity network services in the long run

The construction of a new weatherproof electricity network and smart grid takes decades, and the network must serve customers in the zero-carbon electrification of our changing society for more than half a century. The pricing of electricity network services must be assessed over the same time horizon.

In 2022, the costs affecting electricity network services increased significantly due to the European security crisis. For example, the prices of construction, materials and energy have risen. The sharp rise in the price of electrical energy has led to a manifold increase in the costs of network losses. Therefore, Elenia's electricity network service prices will increase by an average of 5.8 per cent in late spring 2023. In this way, we make sure that the price change does not enter into effect during the period of high electricity consumption in the winter.

With our electricity network services and electricity distribution, we contribute to the security of supply while promot-

ing a green transition for society. We have systematically replaced ageing overhead lines with weatherproof networks and developed the smart grid to promote the development and zero-carbon electrification of society. Our investments during the past decade exceed EUR 1 billion.

## The impacts of Elenia's investments

- Over 250,000 of our customers have been brought within the scope of our weatherproof network.
- The underground cabling rate of our electricity network has increased to more than 60 per cent.
- Nearly one-fifth of all wind power in Finland is connected to our electricity network.
- Nearly 12,000 small-scale solar power plants have been safely connected to our electricity network.
- In our renewal of electricity metering systems, we have installed next-generation smart meters for over 100,000 customers. The installations will be completed in 2025.



# COSTS WERE INCREASED BY THE RECORD-HIGH PRICES OF ELECTRICAL ENERGY

The record-high electricity prices significantly increased Elenia's costs in 2022. Elenia is the largest single buyer of electricity in its network area. The costs of electricity purchasing increased by as much as 50 per cent, which contributed to the increase in distribution tariffs that will enter into effect at the beginning of May 2023. The annual network losses of Elenia's electricity network correspond to the consumption of approximately 20,000 electrically heated single-family houses.

#### ELECTRICITY NETWORK SERVICES COVER

- around-the-clock electricity distribution in accordance with customer needs
- the maintenance and renewal of electricity network services and electricity networks
- measuring hourly output data for electricity consumption and communicating it to the market
- customer service and invoicing
- continuous operational control of the network and fault repair, and
- the development of electricity network services

#### NETWORK SERVICE FEE



#### IMPROVEMENT IN THE SECURITY OF SUPPLY AND PRICE INCREASES FOR ELECTRICITY NETWORK SERVICES



 Customers within the scope of quality requirements

Underground cabling rate

Price increase for electricity network services

## Elenia's story - Continuous sustainable renewal

## 2001-2010

- 2001 Officials propose 6-hour outage cutoff after storm Janika.
- 2002–2008 Smart meters installed for all our customers.
- **2005–2010** Overhead lines were made more secure through automation. Compact primary substations to use.
- 2007 Outage web map service as the first in Finland.
- 2008 SMS outage service as the first in Finland.
- **2009** Decision on underground cabling in rural areas as the first DSO. Launch of 6h service promise as the only DSO.
- 2010 Service for hourly monitoring of electricity consumption as the first in Europe. Low voltage network monitoring with smart meters.

## 2011-2020

- **2012** Automatic fault location, isolation and power restoration to shorten outage times for customers.
- **2013** Web map service of weatherproof works. Digital service to customers for monitoring electricity consumption.2017 Customer service production for energy companies, more than a million end customers.
- 2017-2020 Test pilot of market-based demand flexibility.
- 2018 Battery concept for regulating and reserve power in outages.
- 2018–2021 5 stars in global GRESB sustainability evaluation.2019 Building of optical fibre in connection with weatherproof network. Sustainability programme and report.

## 2021-2035

- **2012–2021** Investments €1,000M in Elenia weatherproof network. 10,000 man-years of work to our partners, 2/3 SME.
- 2018–2024 Next generation smart metering enabling virtual power plants and demand flexibility.
- 2021-2025 To customers new generation smart meters.
- 2021 Web map service of wind farms connected to our network.
   EleniaGO mobile game. SBTi climate commitment based on science.
- 2022 Datahub information exchange system for electricity consumption. Listening to customers regarding development of network. Electric car charging calculator.
- 2023 Solar power calculator, AinaLab

2035 Elenia carbon neutral for Scope 1 and 2.





# CLIMATE ACTION AND ROLE AS FORERUNNER

We promote the development of a sustainable society and way of life. Sustainable development and maintaining biodiversity are the foundation of our operations.

**Vision target 2035**Net Zero Elenia

20	22	2023
TARGET	RESULT	TARGET
< 72,494 tCO <sub>2</sub> e	71,536 tCO <sub>2</sub> e	< 71,536 tCO <sub>2</sub> e











## **CLIMATE ACTION AND ROLE AS FORERUNNER**



		THE THE PROPERTY OF THE PARTY O	THE TOTAL OF SEXUAL SEX
PERFORMANCE	202	2	2023
INDICATORS	TARGET	RESULT	TARGET
Emission reduction roadmap	Actions taken in accordance with the emission reduction roadmap (8 actions)	7 actions taken fully or partially	Actions taken in accordance with the emission reduction roadmap (5 actions)
Sustainability of procurement and supplier sustainability audits	<ul> <li>Two sustainability audits conducted</li> <li>Supplier Sustainability as one quality indicator in all public procurement</li> </ul>	<ul> <li>Two audits</li> <li>Supplier         Sustainability             as one quality             indicator in all public             procurement     </li> </ul>	<ul> <li>Two sustainability audits conducted</li> <li>More than 20% of suppliers are committed to SBTi</li> </ul>
Partners' sustainability promises	57 promises	57 promises	42 promises
Innovation and development portfolio	11 projects	8 projects	5 projects

## A smart grid is necessary for climate action

We work for a better tomorrow by using energy and materials as efficiently as possible and by reducing adverse climate and environmental impacts together with our partners. Our ambitious target is to reduce the emissions of our own operations by 75 per cent (Scope 1 and 2) by 2030, using 2020 as the baseline. A further target is net zero emissions for our entire value chain by 2050. Our climate targets and emission reduction roadmap guide our efforts

to reduce emissions in our operations, construction and procurement, as well as in service solutions for our customers.

We have identified risks and opportunities related to climate change and incorporated them into our strategy work and risk management. We are equally committed to our environmental efforts regarding biodiversity. We promote the development of a sustainable society and way of life, and we are on the leading edge of the ongoing electric transition. In order to reap the full benefits of the growth of solar and wind power for society and people's daily lives, the energy system needs smart grid solutions, and Elenia is an international forerunner in adopting these.



## Elenia's direct and indirect greenhouse gas emissions

In 2022, Elenia's carbon footprint was 169,074 tCO<sub>2</sub>e. Our combined Scope 1, 2 and 3 greenhouse gas emissions decreased by 8 per cent in 2022, compared to 2020. The reduction in our carbon footprint is mainly due to a decrease in network investments.

Elenia's Scope 1 emissions are minor. Elenia's direct greenhouse gas emissions consist of the fuel consumption of the company's vehicles and reserve power generators as well as the leaks of electricity network equipment that contain SF6 gas as a refrigerant.

Our indirect Scope 2 emissions constitute approximately 42 per cent of our carbon footprint. Elenia's own use of electricity and heating represented a small proportion of the total emissions. Most of the Scope 2 emissions arise from electricity network losses in Elenia's network, and the purchasing of electricity to cover network losses is our most significant source of emissions. Our objective for the future is to purchase zero-CO<sub>2</sub> electricity. We seek contracts whereby the electricity we purchase supports the production of renewables.

Most of our carbon footprint arises from our supply chain (Scope 3). Electricity network materials – especially the use of aluminium and plastic – represent the majority

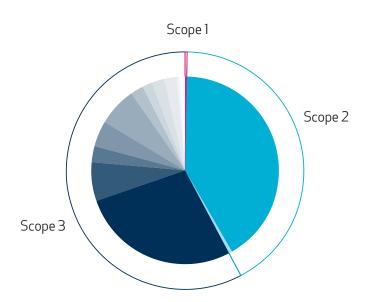
of our emissions. Other significant supply chain emissions arise from electricity network losses in the transmission grid and regional networks as well as the work related to the construction of the electricity network.

Flenia's emissions in 2022

- Scope 1 emissions 659 tCO<sub>2</sub>e
- Scope 2 emissions 70,877 tCO<sub>2</sub>e
- Scope 3 emissions 97,538 tCO₂e

By determining our carbon footprint, we have identified our most significant sources of emissions helping us to make decisions and purchases that are sustainable from the climate perspective. In accordance with our sustainability programme, we have set emission targets until 2030.

## BREAKDOWN OF ELENIA'S CO<sub>2</sub> EMISSIONS



Scope 1	tCO <sub>2</sub> e	%
<ul> <li>SF6-leaks, fuel (vehicles, reserve capacity equipment)</li> </ul>	659	0.4%
Scope 2		
Network losses	69,996	41.4%
<ul> <li>Other electricity and heating (own use, Valmisvalo)</li> </ul>	881	0.5%

Scope 3	tCO <sub>2</sub> e	%
<ul> <li>Network materials</li> </ul>	46,661	27.6%
<ul><li>Main grid fees</li></ul>	11,531	6.8%
<ul><li>Earthworks</li></ul>	4,633	2.7%
<ul> <li>Fibre network investments</li> </ul>	7,431	4.4%
<ul> <li>Supply chain emissions from energy consumption</li> </ul>	11,230	6.6%
<ul> <li>Regional network fees</li> </ul>	3,706	2.2%
<ul> <li>Other procurement</li> </ul>	2,959	1.8%
<ul> <li>Other purchased products and services</li> </ul>	3,513	2.1%
<ul> <li>Other investments</li> </ul>	4,035	2.4%
<ul> <li>Material transport</li> </ul>	694	0.4%
Waste	765	0.5%
Assets leased to the company itselfs Business travel	92 147	0.1%
Commuting	141	0.1%



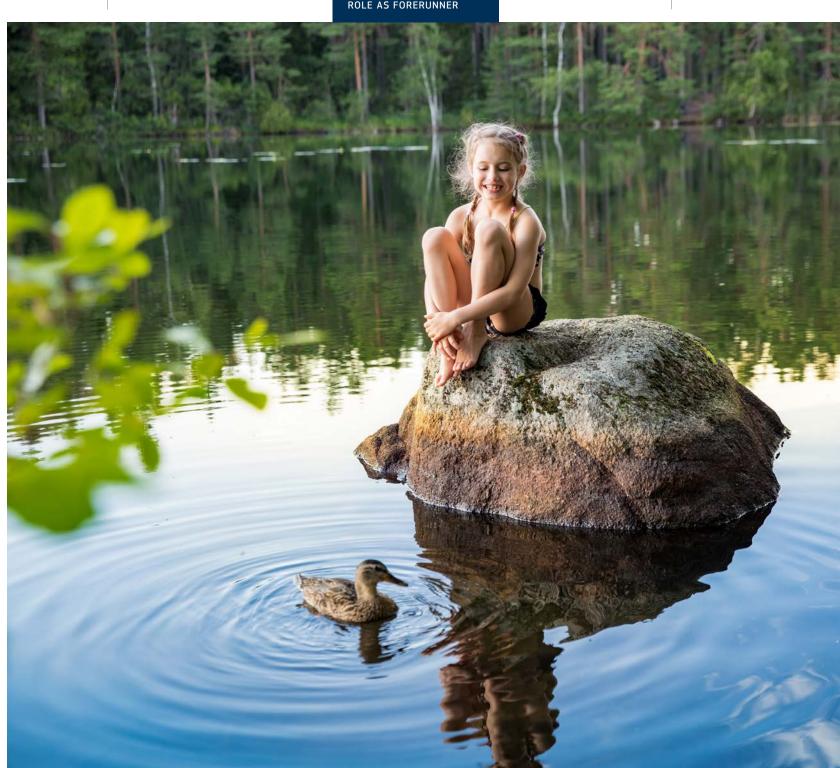
ELENIA AND SUSTAINABILITY 2022 60 CLIMATE ACTION AND ROLE AS FORERUNNEI

# The partner network plays a key role in the achievement of SBTi emissions reduction targets

We have set targets for reducing the greenhouse gas emissions of our operations in alignment with the Science Based Targets initiative and the Paris Climate Agreement. According to the target validated by the SBTi, Elenia will reduce its greenhouse gas emissions by 42 per cent by 2030, including Elenia's own emissions and the emissions arising from purchased energy. Elenia has also set an even more ambitious target of reducing the emissions of its own operations by 75 per cent (Scope 1 and 2) by 2030, using 2020 as the baseline.

Elenia is also committed to setting Net Zero targets that cover not only the emissions from Elenia's own operations but also the emissions generated by the entire value chain (Scope 1, 2 and 3). The Net Zero targets must be met by 2050, which means a reduction of approximately 90 per cent in emissions throughout our entire value chain.

These ambitious targets require a strong commitment to action by both Elenia and our partners. We want to engage the commitment of our partners to climate action and sustainability, as the direction we are moving in is to set emissions reduction targets for the entire supply chain. Cooperation with the partner network plays an important role in achieving the targets.



## Emission reduction roadmap 2023

2021 2025 2030

NETWORK DEVELOPMENT	Developing the electricity network to improve its reliability to replace carbon-intensive reserve capacity
AND OPERATIONAL ACTIVITIES SCOPE 1	Assess alternatives to replace SF6 gas and continue to collect statistics on the use of SF6 gas their suitability as a replacement for SF6 gas
	Phasing out diesel cars
PURCHASING ELECTRICITY TO COVER NETWORK LOSSES <b>SCOPE 2</b>	Market survey of zero-CO <sub>2</sub> electricity purchasing First round of competitive bidding for zero-CO <sub>2</sub> electricity to cover 20–30% of the total requirement, total approx. 75%  Second round of competitive bidding for zero-CO <sub>2</sub> electricity to cover 20–30% of the total requirement, total approx. 50%  Third round of competitive bidding for zero-CO <sub>2</sub> electricity to cover 20–30% of the total requirement, total approx. 75%  Fourth round of competitive bidding for zero-CO <sub>2</sub> electricity to cover 20–30% of the total requirement, total approx. 75%  Third round of competitive bidding for zero-CO <sub>2</sub> electricity to cover 20–30% of the total requirement, total approx. 75%  Third round of competitive bidding for zero-CO <sub>2</sub> electricity to cover 20–30% of the total requirement, total approx. 75%
MATERIAL PURCHASING AND PARTNERSHIPS	Determining the emission factors for aluminium for cables  Assessment of the acceptability of recycled materials in cables  Calculation of the cost impact of new raw materials for cables
SCOPE 3	Communicating Elenia's climate targets to material suppliers  Partnership-based development and innovation efforts related to low emissions
	Low emissions as a criterion in competitive bidding, and incorporating incentives related to emission reductions into competitive bidding processes
CONTRACTING AND PARTNERSHIPS	Induction training for partners and engaging their commitment to climate efforts  Emission calculation training
SCOPE 3	and tools for partners  Incentives for making a commitment to emission reductions incorporated into competitive bidding processes
	Sustainability promises in partners' climate efforts  Emission calculation as a criterion in competitive bidding, and emission reductions incorporated into performance incentives
	Collaborative development and innovation efforts related to low emissions
	Optimising routes used in maintenance, fault management and service operations
	Joint construction with Elenia Kuitu and other infrastructure operators
	Incorporating environmental issues and the goal of low emissions into the conversation  Challenging distribution network companies involved in the main grid and high voltage distribution network to get involved in pursuing emission reductions

## Emissions reduction roadmap guides the targets

In 2021, we created Elenia's emissions reduction roadmap, which describes our emissions reduction targets and the actions required to achieve them. The targets for 2022 were as follows:

- Competitive bidding for electricity purchased to cover network losses, with the aim of covering 25 per cent of the total volume of network losses with CO<sub>2</sub> free electricity
- Setting more accurate emission factors for the products of cable suppliers
- Assessing the acceptability of recycled materials in electricity network component standards and production
- Communicating Elenia's climate targets to other material suppliers
- Introducing strategic contracting partners to Elenia's climate targets and the calculation of CO<sub>2</sub> emissions
- Reviewing Elenia's climate targets with Fingrid and four high-voltage distribution network operators
- Discussions with the Energy Authority and the Ministry of Economic Affairs and Employment on how the regulatory model should encourage and steer distribution system operators towards low emissions
- Assessing procurement criteria, setting targets and criteria for future purchases.

Climate targets were incorporated into Elenia's purchasing criteria. Sustainability-related quality criteria, such as commitment to SBTi targets, were applied in all significant purchases made during the year.

We carried out a competitive bidding process for our first purchasing agreement for  $\mathrm{CO}_2$  free electricity to cover network losses, but we had to suspend the procurement due to the crisis in the electricity market. This was a major disappointment, as it will delay the achievement of our emissions reduction targets by about one year. We will resume the procurement process when we deem it to be feasible.

We introduced all of our contracting partners to Elenia's climate targets and emission calculation. We launched an emission calculator that our contracting partners can use to calculate the greenhouse gas emissions generated by construction operations. This made Elenia's own carbon footprint calculations more accurate and represented the first step towards taking emissions reduction targets into account in construction and procurement.

We engaged in active dialogue with cable suppliers to specify the emission factors of their products and improve emission calculations. Elenia's climate targets were also communicated to other suppliers of materials.

We also discussed our emission calculation and reduction targets with the transmission system operator and a few high-voltage distribution system operators. We raised the topic in stakeholder meetings and with the

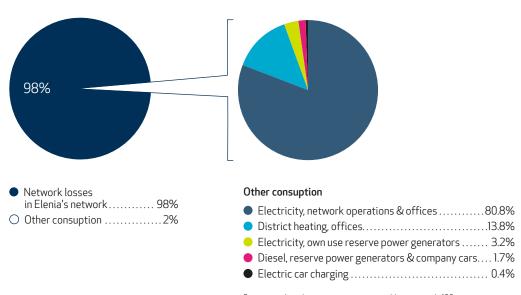


ELENIA IS COMMITTED
TO SCIENCE-BASED
CLIMATE ACTION

Elenia joined the Science Based Targets initiative (SBTi) in 2021. The initiative enables investors and other stakeholders to monitor the emissions targets of companies. The global SBT climate initiative links companies' targets of reducing  ${\rm CO_2}$  emissions with the Paris Agreement goal of limiting the global temperature increase to 1.5°C.

SBTi is a joint project between the Carbon Disclosure Project (CDP), the UN Global Compact corporate sustainability initiative, the World Resources Institute and the World Wide Fund for Nature (WWF).

## **ELENIA'S ENERGY CONSUMPTION 2022**



Due to rounding, the percentages may not add up to exactly 100.

## Emissions reduction roadmap guides the targets

supervisory authority. Our expectation is that emissions reductions will be better taken into account in the regulation of the industry.

We will continue our efforts with regard to assessing the acceptability of recycled materials, among other things. The current standards concerning electrical devices do not enable the use of recycled aluminium or recycled plastic in power cables, for example, but this may change as recycling methods develop further. One of our key goals is to finalise Elenia's Net Zero Business Plan and publish concrete long-term targets in 2023.

# THE CARBON FOOTPRINT OF ELENIA'S ELECTRICITY NETWORK

**SERVICES** 

We determined the carbon footprint of Elenia's electricity network services. The carbon footprint includes electricity network losses, the use and maintenance of the electricity network, transport, electricity network materials and their production, the construction and demolition of the electricity network, and waste management. In 2022, the carbon footprint was  $0.0145\ kgCO_{2}e/kWh$ .

For a customer that uses 15,000 kWh of electricity per year, the electricity network services generate emissions of 370 kg  $\rm CO_2e$ . According to Sitra's calculations, the average carbon footprint is  $\rm 10,300~kgCO_2e$ . Reducing the emissions of our electricity network services naturally reduces the carbon footprint of each of our customers.

## Emissions reduction targets for 2023

According to the emissions reduction roadmap, the targets for 2023 are as follows:

- Competitive bidding for electricity purchased to cover network losses, with the aim of covering 25 per cent of the total volume of network losses with CO<sub>2</sub> free electricity
- Assessing maintenance measures for SF6 switchgear, developing the operating model, developing the reporting of SF6 leaks
- Phasing out Elenia's diesel vehicles
- Assessing the acceptability of recycled materials in cables (recycled aluminium or plastic)
- Assessing the emissions reduction commitments of contracting partners and setting related targets

## NET ZERO ABATEMENT MAP 2035 ELENIA SCOPE 1 + SCOPE 2 (ktCO<sub>2</sub>e)



### Net Zero Business Plan

Elenia's Board of Directors approved the Net Zero Business Plan in December 2022. At this stage, the plan is focused on Scope 1 and Scope 2 emissions and the relevant emissions reduction measures between now and 2035. The targets are in line with our SBTi commitment and our own Net Zero Elenia 2035 vision target, which covers Elenia's emissions reduction targets and their cost impacts.

**Network losses:** The aim is for the full volume of network losses to be covered by  $CO_2$  free electricity by 2035.

SF6 gas: The EU is in the process of setting tighter restrictions on the use of SF6 gas. We are monitoring the regulatory developments, assessing alternatives, and conducting tests on the potential use of SF6-free switchgear in future purchases. We will assess and develop the maintenance of SF6 switchgear in cooperation with our material supplier and partners and developing the reporting of potential SF6 leaks.

Reserve capacity: In 2020, Elenia had 11 reserve power generators. Four of these were decommissioned in 2021–2022. A plan has been created for phasing out the remaining reserve power generators by 2040. We will develop the electricity network making it possible to discontinue the use of fixed reserve power generators. We will replace fossil fuel with biofuel by 2025 for those reserve power generators that will remain in use longer.

Vehicles: Elenia will phase out diesel vehicles in 2023.

# Improving energy efficiency through the Elenia Aina service and the Down a Degree campaign

Elenia participates in the national energy efficiency agreement for 2017–2025. Under the agreement, we are committed to reducing our annual network losses in electricity distribution by six per cent, totalling 13.2 GWh, by 2025. We achieved this target ahead of schedule, in 2020.

We are continuing to improve the energy efficiency of our electricity network and promoting the energy efficiency of our customers by various means, including the Elenia Aina service, which gives customers the opportunity to monitor their electricity consumption. The use of the service increased tremendously in 2022 as the energy crisis made people more interested in their energy consumption. The number of registered users exceeded 100,000 at the end of 2022.

During the national Energy Saving Week in October, Motiva launched the Down a Degree campaign to encourage people to reduce energy consumption to prevent potential energy shortages caused by the energy crisis. Elenia also campaigned for energy saving measures throughout the winter season and provided tips on how to reduce energy consumption in daily life.

 $Computational\ reductions\ of\ network\ losses\ in\ 2022$ 

- Distribution substations 1,607 MWh
- Medium-voltage lines 806 MWh
- Low-voltage lines 3,524 MWh



## SUBSTATIONS INVOLVED IN THE DOWN A DEGREE CAMPAIGN

As part of our contribution to the Down a Degree campaign, we evaluated and reduced the indoor temperatures of our substations. Our partners will carry out temperature adjustments by the end of 2023 at all 150 of our substations. We will make temperature checks a standard procedure of substation inspections, and we will also assess other ways to improve the energy efficiency of substations and develop new solutions during the construction of substations.





## Protecting biodiversity

Taking biodiversity into consideration has always been part of Elenia's electricity network planning and construction. In 2022, we started an assessment process to clarify the impacts of our operations on biodiversity and to create a development path with clear targets. This effort is based on the energy sector biodiversity roadmap created by Finnish Energy. The roadmap includes actions that promote biodiversity. We have carried out an assessment of the extent to which these actions are currently realised at Elenia.

Biodiversity targets are part of the management of energy companies Biodiversity has been identified as an integral aspect of Elenia's business operations and strategy.

In accordance with our environmental policy, as part of responsible land use we ensure the preservation of nature and biodiversity. We take cultural landscapes, the built environment and archaeological heritage into account in our operations. We conserve the environment and promote sustainable construction through active joint construction with various stakeholders.

Biodiversity-related efforts are carried out systematically and transparently, in line with the principle of continuous improvement Environmental and TCFD risks have been identified as part of Elenia's risk management, and they are monitored systematically. They include risks and opportunities related to biodiversity.

In our sustainability report and GRESB assessment, we report annually on our actions to promote biodiversity, such as the restoration of habitats – for example, by planting saplings in areas where overhead lines have been dismantled – and the number of bird visibility markers installed.

## Elenia's goals related to the energy sector's collective biodiversity policies

Biodiversity thinking has been mainstreamed, which means that it is taken into account in all operations as part of the green transition We work together with our stakeholders to preserve biodiversity. Our goal for 2023 is to increasingly focus on biodiversity alongside our climate efforts, and to identify the direct and indirect nature impacts of our operations. The aim is to minimise our negative impacts and maximise our positive impacts.

species and habitat types, and improving the quality of habitats We take nature conservation into account when planning the construction of electricity networks or the dismantling of old networks. To accomplish this, we use a system that displays valuable natural areas, such as traditional biotopes, conservation areas, historical sites and museum areas. We plan the routes of our electricity networks with due consideration for nature, the environment and the cultural environment. We take environmental factors into account throughout our

electricity network construction projects.

The energy sector contributes to halting the endangerment of

The energy sector participates in creating an ecological transition that is socially and economically fair and permeates all of society We are involved in a Finnish Energy project aimed at distribution system operators to produce a study on the current state and development of biodiversity in power line areas. The goal of the project is to identify feasible and cost-effective measures for protecting biodiversity in power line areas.



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# ELENIA PARTICIPATED IN THE LUMOLAIDUN NETWORK, WHICH WAS SELECTED AS THE BEST LANDSCAPE PROJECT OF 2022

ProAgria Southern Finland's Lumolaidun network project was selected as the best landscape project of 2022 at the Landscape Symposium organised by the Ministry of the Environment. One of the sites of the Lumolaidun network is Luoto island in Nokia, where an area under Elenia's and Fingrid's power lines has been managed by grazing sheep for over a decade now.

Grazing sheep have looked after the undergrowth beneath the power lines on the island, helping to clear the landscape and increasing the diversity of species in the meadows. Experts specialising in various areas conducted a survey of the species of plants, insects, birds and fungi, as well as soil biodiversity, in the meadows. A large number of endangered species were found. The new information on the species and their habitats helps target the management of traditional biotopes to make them favourable for the species found in them.

The Lumolaidun network will represent Finland in the European Council's landscape competition in 2023.

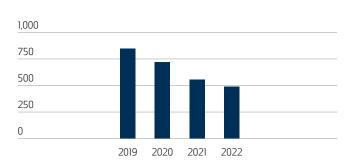


## Environmental deviations under control

Elenia's typical deviations that result in environmental impacts include oil leaks caused by faults in distribution transformers and leaks of SF6 gas from electrical equipment. Faults are caused by factors such as thunderstorms, technical defects and vandalism.

There were 35 oil leak incidents and 11 SF6 leaks in Elenia's electricity network in 2022. The total amount of spilled oil was 2,088 kg, which is a higher figure than in the previous years. Vandalism was the main reason for the leaks. All of the sites in question were appropriately decontaminated and there is no need for further action or monitoring regarding the leaks. The total amount of SF6 gas released into the atmosphere was 28 kg, which is slightly higher than previously due to an increase in the number of SF6 separating switches.

## POLE MOUNTED TRANSFORMER SUBSTATION IN THE GROUNDWATER AREA 2019–2022 (PCS)



The aim of the process for managing environmental damage incidents is adherence to consistent operating and reporting practices. The management of environmental damage incidents is based on close cooperation between various parties to, for example, inspect and decontaminate any soil contaminated by oil leaks, and transport the contaminated material to a waste processing centre. An external environmental consultant is responsible for the investigation of oil leak incidents. The goal for 2023 is to further develop the reporting of potential SF6 leaks.

## Careful protection of groundwater

To prevent oil spills, we inspected 1,320 pole-mounted transformers and kiosk-style secondary substations in class 1 groundwater areas in 2022. We reduce the number of pole-mounted transformers by replacing them with new kiosk-style secondary substations equipped with oil collector trays that prevent oil leaks into the environment. We removed 65 pole-mounted transformers from groundwater areas in 2022.



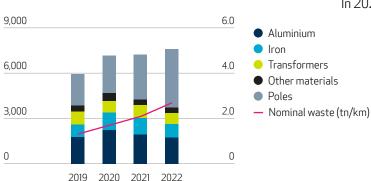
# Used electricity network components are recycled for use as raw material

Each year, we upgrade our electricity network to make it weatherproof, which makes material efficiency and the circular economy important environmental aspects for us. Through efficient recycling, decommissioned electricity network is reverted back to raw material and spare parts. By recycling and utilising materials, we use natural resources wisely and mitigate climate change.

### The new life of the old overhead lines

Once a new underground cable network has been commissioned, the old overhead lines are no longer needed. The parts left over after a network has been disassembled include poles, transformers and overhead lines. We collect the disassembled materials for recycling pur-

#### RECYCLED MATERIALS (tn)



poses. Materials that cannot be reused as-is are recycled or used in heating production. The material recycling process is based on crushing the material, separating the different materials and the thermal processing of the material. Reusable fractions are forwarded to be used as industrial raw material. We are continuing our cooperation with our long-term recycling partner to find ways to make even more efficient use of the disassembled materials.

The quantities of disassembled materials are reported to Elenia's Board of Directors on a monthly basis. In 2022, we recycled 7,610 tonnes of material, with poles accounting for approximately half of the total amount. The material recovery rate in 2022 was 60 per cent, which is below the target of 75 per cent. This was due to the large number of decommissioned poles in poor condition. The poles that are disposed are recovered as energy. We also monitor the efficiency of material consumption. In 2022, the efficiency of our cable use was 95 per cent.



## Progress made with sustainable procurement in spite of the crises

The years of the COVID-19 pandemic and Russia's invasion of Ukraine have led to significant changes and difficulties with regard to supply chains and the availability of products. Ukraine was previously a significant supplier of subcontracted components used particularly within electrical engineering.

The EU's economic sanctions against Russia have changed the energy market considerably. The changes in the market have led to a significant increase in the cost level, and component availability challenges in 2022 were severe at times.

Elenia has not had direct purchasing agreements in Russia, but Russia previously played an indirect role in Elenia's operations by providing raw materials to the supply chain. The use of Russian aluminium in Elenia's cables was discontinued in 2022.

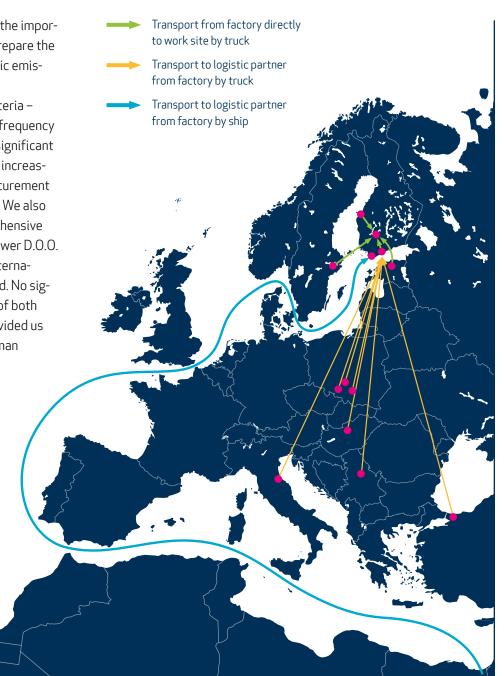
For all of these reasons, progress in 2022 with regard to GHG emission calculations, in particular, was not entirely in line with Elenia's targets, as a significant amount of resources and time had to be used on addressing availability issues and cost changes throughout the supply chain. We have yet to reach our targeted level for product-specific carbon footprint calculations, and our efforts to promote the potential uses of recycled materials fell short of our plans.

In 2022, we carried out a pilot project with Reka Kaapeli Oy concerning cable that features aluminium with

lower GHG emissions. The aim was to highlight the importance of this issue in Elenia's business and to prepare the supply chains for more detailed product-specific emissions reporting.

We applied sustainability-related quality criteria – such as commitment to SBTi targets, accident frequency (LTIF) or public sustainability reporting – in all significant purchases made during the year. As a result, an increasing proportion of our suppliers, in terms of procurement value, have made an SBTi climate commitment. We also joined forces with a partner to conduct comprehensive ESG audits of two of our suppliers: the KKM Power D.O.O. production plant in Serbia and an Enersense International Oyi power line construction site in Finland. No significant deviations were found and the results of both audits were exceptionally good. The audits provided us with important information on the ESG and human rights-related efforts of our supply chain. The results also help us to better address human rights issues in our other procurement activities.

The goal for 2023 is to make product-specific emissions calculations even more accurate and to adopt a comparable and consistent sustainability framework with strategic suppliers, at a minimum, and to continue to carry out sustainability audits on at least two suppliers or subcontractors. As regards to our climate efforts, our target is to purchase at least 20 per cent of our total procurement volume from companies that are part of the SBTi climate commitment.



#### WHOLESALE AND LOGISTICS

Sonepar Suomi Oy, Finland

#### MEDIUM VOI TAGE CABLE

Prysmian Group Finland Oy, Finland Reka kaapeli Oy, Finland

#### LOW VOLTAGE CABLE

Prysmian Group Finland Oy, Finland Reka kaapeli Oy, Finland

#### **COMPACT SECONDARY SUBSTATION**

KL-Industri AB. Sweden Maviko Oy, Finland Harju Elekter Oy - Harju Elekter, Estonia

#### DISTRIBUTION CABINETS

Onninen Oy - Emiter Sp. z o.o., Poland

#### DISTRIBUTION TRANSFORMERS

Hitachi Energy, Poland Siemens, Hungary Sonepar Suomi Oy - Toshiba, India

#### SPECIAL TRANSFORMERS AND REACTORS

Maviko Oy - Sönmez Trafo, Turkey Sonepar Suomi Oy – KKM Power d.o.o., Serbia Zennaro Electrical Constructions, Italy

#### POWER TRANSFORMERS

Hitachi Energy Finland Oy, Finland

## SMART METERS

Aldon Oy, Finland

#### **NETWORK AUTOMATION**

Cinia Oy, Finland

MIKRONIKA Sp. z o.o., Poland

# Partners issued sustainability promises more comprehensively than before

We need to engage partners throughout our supply chain in the effort to increase sustainability. To promote sustainability in our partner network and to increasingly engage our partners in sustainability-related efforts, we have requested our suppliers to issue sustainability promises since 2021. Initially, we requested two sustainability promises. Our partner network has perceived the sustainability promises as a positive initiative that drives development, and this motivated us to increase the number of requested promises to three for 2022.

In 2022, we received three sustainability promises from all of our network construction partners. We received a total of 57 promises.

One of the promises needed to concern occupational safety, one needed to concern environmental or climate targets, and one needed to be related to the well-being at work or employee satisfaction of the partner's personnel. The idea for this third promise came from our partner network.

The sustainability promises need to be quantifiable or entail concrete actions so that their implementation can be reliably evaluated. The promises concerned issues such as the implementation of measures identified on the basis of on-site safety observations, improved results in employee satisfaction surveys, performance review discussions with technicians, developing carbon footprint calculations and taking action in response to the calculations, and piloting of low-emission machines. We also received promises with regard to reducing the idling of vehicles and machines, and electric excavators were also piloted during the year.

We monitored the fulfilment of the promises on a regular basis in cooperation meetings. These follow-up activities enabled us to incorporate the themes and targets of our sustainability programme into regular discussions in our day-to-day cooperation with partners. Our partners once again fulfilled nearly all of their promises in full in 2022. We have requested sustainability promises for 2023 on the same themes as in 2022.

Sustainability promises can provide our partners with insight into sustainability thinking and prepare them for future procurement processes in which sustainability targets will be emphasised in partner selections, procurement criteria and the quality scores used in bidding processes, for example.



## SUSTAINABILITY PROMISES HAVE AN IMPACT ON WORK AND RESULTS

Our partners' sustainability promises had an impact on their work and produced good results. Some examples of the results are provided below:

- One of our regional partners made an environmental and climate promise to assess
  the use of battery-powered tools to replace tools powered by internal combustion.
  A battery-powered rock drill received good feedback from technicians for its light
  weight and ease of operation. The partner will replace all combustion-powered rock
  drills with battery-powered ones.
- As part of its sustainability promise concerning employee well-being and satisfaction, one of our partners began serving breakfast to employees once a month in connection with safety briefings. The shared breakfast gave the employees the opportunity to take a moment to think about the important theme of developing occupational safety.
- One of our partners promised to improve the rectification of deficiencies identified
  in safety observations. By creating a systematic operating model, the partner has
  improved construction site document management, purchased a different type
  of safety goggles, added more oil absorbent pads to its equipment to ensure an
  effective response to potential oil spills, and made the condition monitoring of lifting
  equipment more systematic.
- Some of the sustainability promises concerning occupational safety issued for 2022 were related to the partners' management having a more active presence at construction sites. The supervisors and managers of our network construction partners conducted a total of 338 on-site Safety Walks during the year. In 2021, the corresponding figure was 212.

# Innovation and development projects benefit customers

Elenia's innovation and development portfolio is managed by means of a project management model that is updated annually based on the lessons learned and the experiences accumulated.

One of our development projects concerned the deployment of the centralised data exchange system for the electricity retail market and its Datahub 2.0 follow-up project. Datahub, which is the statutory data exchange system that covers all of the participants in the Finnish electricity market, improves data exchanges and other aspects of operations for electricity users, electricity suppliers and distribution system operators. The Datahub 2.0 provided customers with access to the netting of consumption and smallscale production at the beginning of 2023, as well as functionality to support energy communities. The next change will involve the introduction of a 15-minute balance settlement period in late spring 2023.

We will continue our demand response projects in 2023. During the year, we aim to provide customers with the opportunity to control heating loads connected to the electricity meter in a more precise manner than what is presently enabled by day and night controls.

COORDINATION

## **ELENIA'S SMART GRID ENABLES ELASTIC MARKETS**

## REMOTE CONTROL **OF CONSUMPTION**

In the future, more real-time remote control of electricity consumption will enable customers to agree with a market player that the electric load of their household is controlled, which leads to financial gains for them.

A new smart electricity consumption metering system enables customers to participate in the flexibility markets with the help of remote control of electricity consumption as well as a continuous development of the entire energy system.

#### **ELENIA**

EMERGENCY POWER

As a distribution system operator, Elenia is responsible for electricity distribution and maintaining the electricity network. A smart grid functions as a service platform in the transformation towards a more distributed low-carbon energy system.

#### **ELECTRICITY MARKETS**

Electricity markets consist of a collaboration between electricity producers, distribution system operators and electricity suppliers. New operators who utilise the possibility to control consumption remotely and offer flexibility to balance variations in production are entering the market.

MARKETSUPPLY

### **ENERGY SYSTEM**

The energy system comprises the smart grid, electricity production and electricity consumption.

## **ELECTRICITY STORAGES**

A bank of batteries placed in an electricity network enables the utilisation of stored electricity in fault situations in the electricity network as a back-up power source for customers as well as a reserve for the electricity markets which stabilises variations in production and consumption.

## **SMART METERING SYSTEM**

## **MARKET PLAYERS**

Market players, such as suppliers, carry out the exchange of electricity on the electricity markets.

**PRODUCTION** 

The increase in renewable weather-

dependent electricity production, such

as wind and solar power, increases the

demand for flexibility in consumption

and utilisation of batteries.



## NEW SERVICES FOR ELECTRIC CARS AND SOLAR POWER PRODUCTION

In 2022, we provided our customers with access to an electric car charging calculator as part of the Elenia Aina service. The calculator helps customers determine the right type of home EV charging station for their needs. The calculator shows the available capacity of the customer's electricity connection and calculates the appropriate power capacity for the home charging station. It also provides information on what changes might be needed to ensure that there is enough capacity for the recommended home charging station. The aim of this new service is to promote the development of electric mobility.

We also promote the growth of renewable electricity production. Starting from early 2023, customers who use the





Elenia Aina service have access to a solar power calculator that provides an estimate of what kind of solar power equipment would suit their level of consumption. The user can also enter information on their planned solar power equipment to have the calculator provide an estimate of the financial savings obtained from the solar panels and the reduction in climate emissions that would be achieved. The calculator also checks whether the solar power equipment of the selected capacity can be connected to the electricity network immediately, or whether Elenia needs to reinforce the network before issuing a connection permit.



## ELENIAGO – MAKING MAINTENANCE MORE FUN AND EFFICIENT THROUGH CROWDSOURCING

EleniaGO is a location-based mobile game in which players score points by taking photos of Elenia's link boxes and transformer substations and by participating in photography challenges. By playing the game, the users participate in the maintenance of essential network infrastructure. At the same time, the game increases safety awareness related to the electricity network. Players can spend the points they earn on product prizes or to have a tree planted as part of the Taimiteko project.

Released in May 2021, EleniaGO has seen steady growth in the number of registered users and now has almost 3,000 players. During the past two summers, the players took nearly 78,000 photos across our network area. The most active player has taken over 2,000 photos.

The new version released in the summer of 2022 guides the players to take photos of locations for which we do not have recent photos, or locations that we specifically need photos of. We have used information obtained from the game to carry out repairs at over 200 locations. Examples of the issues that we have addressed include tilted link boxes, inadequate land filling and missing warning signs. Having these issues highlighted by the users of the game meant that these issues were

addressed before the normal maintenance inspections carried out at intervals of 6–8 years.

Our contractor partners also make use of the photos in their maintenance, planning and fault repair activities. Artificial intelligence is used in the analysis of the photos to enhance planning and the maintenance of the electricity network.





# **SOCIAL IMPACT**

We create value for society.

We promote the zero-carbon electrification of society.

### Vision target 2035

The amount of electricity fed to customers: 7.3 TWh and renewable energy fed into the network: 7.3 TWh

20	2023	
TARGET	RESULT	TARGET
Renewable energy production ≥2.4 TWh	Renewable energy production 2.6 TWh	Renewable energy production ≥3.4 TWh
Energy consumption ≽6.5 TWh	Energy consumption 6.26 TWh	Energy consumption ≥6.1TWh



















PERFORMANCE	2022		2023	
INDICATORS	TARGET	RESULT	TARGET	
Renewable energy	44%	42%	44%	
Security of supply	New	New	Reformation of the interrupt critical customer classification	
Installation of next-generation smart meters	66,640	74,419	100,000	
SMEs' share of contracting services	50%	60%	50%	
Local stakeholder events in Elenia's network area	4	4	4	

### Promoting the zerocarbon electrification of society

We create value for society. We distribute electricity to 438,000 customers in approximately one hundred municipalities. We are present, as a reliable partner, in the daily lives of our customers, landowners, municipali-

ties and other stakeholders. We promote the zero-carbon electrification of society and we are committed to ambitious climate targets. We create jobs and well-being through our investments aimed at upgrading the ageing electricity network and facilitating the use of renewables. Our operations are based on the continuous development of society and long-term cooperation with our partners, which strengthens local vitality, entrepreneurship and employment. We view sustainable operating practices as a prerequisite for cooperation, and we do not compromise on them.



### Elenia's value creation in 2022

We have identified the value that we create regarding society, economy, environment as well as social aspects.

### **CREATED VALUE** AND IMPACTS

### **BUSINESS MODEL**

Vision, mission and strategy Management model Values

### **RESOURCES AND INPUTS**



#### **CUSTOMER VALUE**

Electricity distribution to 438,000 customers

Reliability of electricity distribution 99.99%

Customer experience NPS 54.5

Number of small-scale production customers 11,576

### **PARTNERSHIPS**

900 person-years Significant local

employment effect

### **ECONOMIC VALUE**

Electricity network investments EUR 172.8 million Group EBITDA EUR 204.2 million

Taxes and levies EUR 13.5 million Electricity tax and VAT collected EUR 166.1 million

### CIRCULAR ECONOMY AND EMISSIONS

Recycling and energy recovery of materials from the old overhead line network

CO<sub>2</sub> emissions: (Scope1) 659 tCO<sub>2</sub>e, (Scope2) 70,877 tCO<sub>2</sub>e, (Scope3) 97,538 tCO<sub>2</sub>e

Share of renewable energy of the total electricity connected to the network 42%

### **SOCIAL VALUE**

The reliability of electricity distribution, the renewal and weatherproofing of the ageing network

The development of multichannel customer service, a first-class customer experience

Innovation development

Direct and indirect employment

Employee experience 74.9

Elenia's and its partners' joint lost time injury frequency (LTIF) 4.5 Brand equity

### **BUSINESS PROCESSES**

### **ELECTRICITY DISTRIBUTION BUSINESS**

Quality of delivery process

Delivery of electricity process

Outage management process

Connection and additional services process

### SERVICE BUSINESS

Energy sector customer service concept

Procurement and construction management services

Fibre optic business

### **SERVICES**

Electricity supplied to customers 6,260 GWh

New electricity connections Connecting renewable

energy to the network

E-services

Energy sector customer service

Fibre optic connections and fibre

#### SUPPORT FUNCTIONS

Risk Management

Cybersecure ICT Solutions and Services

### **PERSONNEL** AND COMPETENCE

Personnel FTE 300.3

Training hours 24.6 h/person/year

University degree 77%

### **PARTNERSHIPS**

Contractors Service Providers

Suppliers

ICT partners

Stakeholders Investors

Public affairs

### **ELECTRICITY NETWORK**

76.700 km of electricity networks

Customers covered by the quality requirements 80.3%

Weatherproof network share 61.7%

### **ECONOMIC**

Issued bonds EUR 1.8 billion Adjusted equity tied up in electricity network operations EUR 1.7 billion

Credit rating BBB (S&P)

### INTANGIBLE

Smart grid innovations, network licence, certificates related to occupational health and safety, environmental management and asset management, customer and network data, brand

### **NATURAL RESOURCES**

Purchased cables contain 3,248 tonnes of aluminium, 3,472 tonnes of PE plastic and 118 tonnes of copper, transformers contain 336 tonnes of oil Network losses 311 GWh

## Climate change mitigation is transforming the energy sector at an accelerating pace

The energy crisis that began in 2022 has unsettled Europe. It accelerates the shift away from coal-based energy production and towards clean and renewable energy. The significance of electricity is increasing in homes, transport, industry and society as a whole. We aim to promote this transformation and contribute to the electrification of society. We work towards this goal by providing effective connection services and smart electricity network services.

The electrification of industry is continuing. For a few years now, we have offered and sold record amounts of medium-voltage electricity connections to industrial customers. Our target for 2022 was to provide 12 direct electrification-related connections to industrial operators. We exceeded that target.

We have an important role in promoting the electrification of transport by enabling the electricity connections required for the charging of electric vehicles, both in homes and at public charging stations. In 2022, we released an electric vehicle charging calculator that customers can use to assess whether their electricity con-

nection is suitable for an electric vehicle charger and determine the most appropriate capacity of the charger. At the beginning of 2023, there were public charging stations in approximately 200 locations within Elenia's network area, comprising over 800 charging points.

Electricity storage is a significant area of development in the electric transition. Over 10 electricity storage connections will be added to Elenia's network within the next few years. Elenia is the first distribution system operator to publish pricing for electricity storage solutions.

As regards the promotion of electrification, our goal for 2023 is to issue a total of 90 quotations for high-voltage and medium-voltage connections, and respond to enquiries concerning renewable energy, energy storage, electric transport and the electrification of industry.

During this decade, our customers will gain access to increased opportunities for participating more actively in the electricity market, taking advantage of their own electricity production, and obtaining almost real-time data on their electricity consumption. Our goal is to offer new solutions to these needs.

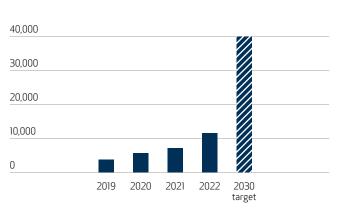


#### SOCIAL IMPACT

### A record-breaking year in solar power

The amount of solar power equipment connected to Elenia's network in 2022 was over three times higher than in the previous year. There was growing interest in solar power production connections of various sizes. The exceptional conditions in the electricity market created a situation that was previously quite rare: the decisions of small-scale producers concerning the size of their solar power equipment reflected their intention to sell electricity to the market rather than merely produce electricity for their own use. An entirely new segment that emerged was production sites with a capacity in the tens of kWs but no consumption. These changes in the market were

### TOTAL NUMBER OF SOLAR POWER DEVICES IN ELENIA'S NETWORK (PCS)



reflected in the growing number of electricity network upgrades to enable smallscale production.

We prepared for the netting of small-scale production and compensation calculation, which were introduced at the beginning of 2023. Netting provides all smallscale producers of less than 100 kVA with improved opportunities to make better use of their own production, while compensation calculation expands the opportunities of housing companies to make use of their on-site electricity production.

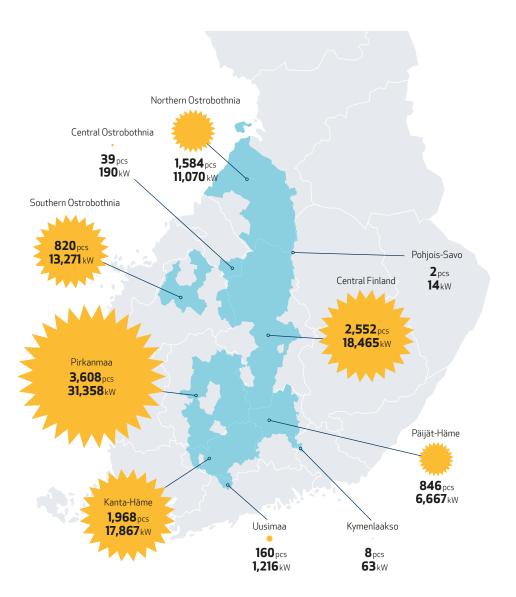
We have developed a solar power calculator that our customers can use to assess the cost-effectiveness of solar electricity relative to their electricity consumption. The service was launched at the beginning of 2023 and it is still being developed further. We will also develop our notification channel and processes for small-scale production to better respond to the increased number of installations.



### **SOLAR POWER IN ELENIA'S NETWORK**

Solar power connected to Elenia's network was totally ~100<sub>MW</sub>

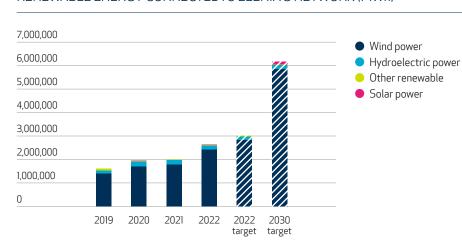
12/2022



### The amount of wind power connected to Elenia's network continues to grow



#### RENEWABLE ENERGY CONNECTEDTO ELENIA'S NETWORK (MWh)



We added four new wind power connections to our high-voltage distribution network in 2022. At the end of the year, the total amount of wind power connected to Elenia's network was 946 MW, representing an increase of 194 MW during the year. Connection contracts have already been signed for 1,600 MW, which means that the amount of wind power will continue to grow in the next few years.

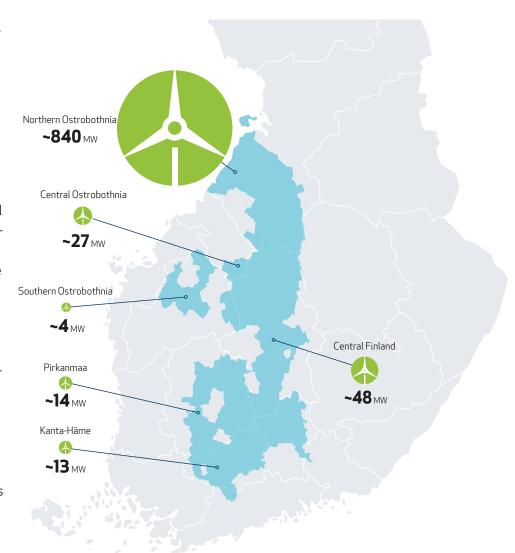
We connect wind farms to our network if there is available capacity. If the capacity is not sufficient, the alternatives are to either strengthen the network or to connect the wind farm to a different part of the system, such as Fingrid's main grid. If the network capacity is insufficient, the connection cannot be implemented in such a way that the electricity produced by the wind farm can be safely transmitted. In the worst case, the wind farm may not be built, or its implementation may be delayed by several years from what was originally planned. As strengthening the network requires investment, we intend to increase our investments in the high-voltage network in the years to come. This enables the growth of wind power fed into Elenia's network.

In 2022, the hour with the highest wind power output in Elenia's network was from 17:00 to 18:00 on 31 December. During that hour, wind farms fed 869 MWh of electricity into Elenia's network. The total wind power produced and fed into Elenia's network for the year was 2.4 TWh. It is increasingly common that the amount of electricity consumed by our customers corresponds to the electricity output of the wind farms connected to Elenia's network.

Our sustainability vision target is for the amount of electricity fed into Elenia's network annually from renewable energy sources to rise to 7.3 TWh by 2035. That matches our estimate of the total electricity consumption of our network in 2035. This target can be achieved if we are able to respond to the growing need of wind power operators to connect wind power to the network.

### WIND POWER IN **ELENIA'S NETWORK** 12/2022

Approximately a fifth of all Finnish wind power is connected to Elenia's network ~946<sub>MW</sub>



### **Electricity metering** upgrades as part of the electric transition and climate goals

The interest of customers in electricity consumption changed significantly in 2022, and there was high demand for demand response services in electricity consumption in particular. This was due to the impacts of the European energy crisis on the price of electricity and concerns over the adequate availability of electricity during the cold winter season. At the same time, the growth of electricity produced from renewable energy sources, the related increasing fluctuations in electricity production and the growth in the need for electricity in society require the electricity system and market to be even more flexible and real-time.

Elenia's new smart electricity metering system promotes the required development of the electricity market and provides improved conditions for demand response solutions, for exam-

We have made good progress with our upgrading of the electricity metering system. By the end of 2022, next-generation electricity meters had already been installed for 100,000 of our customers.

We will install next-generation electricity metering devices for a total of approximately 400,000 customers between 2021 and 2025. As the installation work has progressed, we have developed the safety of our operating practices by means of safety audits, among other things. Our partner will conduct the next safety audit in 2023.



### HAN PORT PROVIDES CUSTOMERS WITH METERING DATA

The next-generation smart electricity metering devices are equipped with a Home Automation Network (HAN) port, also known as an RJ12 interface, which customers can use to access electricity metering data. The metering data can be used by the customers' home automation systems and smart charging systems for electric vehicles, for example. The data is almost realtime and it can be used for smart home controls, energy consumption monitoring and checking invoices. To start using the HAN interface, customers can contact Elenia's customer service.





### Our operations are based on a partner network

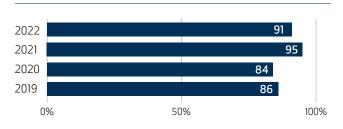
Our diverse partnerships are a significant factor behind our highly functional services and the effective implementation of projects. As a construction management and developer organisation, we purchase all of our services in the open market. Elenia has no in-house contracting operations or holdings in the service market. Our material purchasing, logistics services, IT service production and application development are also based on effective partnerships with various companies.

### Our partners are satisfied with the smoothness of cooperation

We monitor the quality and performance of our partners by means of indicators that cover safety, customer satisfaction, the quality of work and delivery times, for example. Long-term monitoring has enabled us to work together with our regional partners and project partners

#### THE FLUENCY OF COOPERATION WITH ELENIA

The cooperation works "well" or "very well" - the respondents' share (%)



to improve the quality and efficiency of work. In 2022, the quality and performance of our regional partners remained at an excellent level, and their occupational safety improved significantly. The lost time injury frequency (LTIF) was 1.7.

We measure the satisfaction of our partners by means of an annual survey to gain insight into their views concerning cooperation with Elenia. The survey covers not only our contracting and material partners but also our IT partner. In 2022, we received survey responses from about 90 individuals representing 40 companies.

Our partners' satisfaction scores reflecting the smoothness of cooperation have been at a high level for a long time. In 2022, some 91 per cent of the survey respondents rated the smoothness of cooperation as good or very good. Many of the respondents indicated that their cooperation with Elenia had improved from 2021.

According to the partner satisfaction survey that we conducted in 2022, our strongest areas of performance were the promotion of occupational safety, creating a positive image of the Elenia organisation, and our contact persons being easy to reach. The area that was highlighted as needing improvement the most was our ability to understand our partner's business, and smooth and transparent communication between the parties.

Based on the results of the survey, we will harmonise the operating models that we use in our cooperation with partners in 2023, particularly with regard to our regional partners and project partners. We engage in development efforts in collaboration with selected partner companies so that the new operating models also cover the management of the subcontracting network.

The partners wished that future plans would be developed in a more strategic direction to bring a more long-term

approach to operations and enhance commitment to cooperation. The results directly reflect the impact that the changes made by the Energy Authority in the middle of the regulatory period have on long-term partner cooperation, and the partners' concerns over the continuity of work. The exceptional and uncertain global situation and general rise in costs were also reflected in the results of the partner survey.

### Our monitoring of the grey economy exceeds the legal requirements

All of the main contractors and subcontractors involved in Elenia's construction projects are required to join the Reliable Partner service. We want to ensure that our partner companies fulfil their statutory obligations as

contracting parties and employers. By requiring that subcontractors also join the service, we ensure, more extensively than required by law, that all the companies in our partner network operate appropriately and that their information is up-to-date.

In contractual relationships, we have addressed negligence in relation to, for example, tax in default and unpaid pension insurance contributions. At present, Elenia's Reliable Partner service continuously monitors over 250 companies that operate in various roles at our construction sites.

We also monitor the partner companies' financial dependence on Elenia. Conversely, we also monitor whether Elenia, as the client, is excessively dependent on any individual partner companies.



# The construction and maintenance of the electricity network create work at the regional level



The underground cabling and maintenance of Elenia's electricity network and the construction of the fibre optic network provide employment in the five regions covered by Elenia's network area. Elenia has over 50 contracting partners whose combined annual employment effect has been approximately 1,000 person-years for a long time.

The cuts to investments in 2022 and 2023 were not reflected in the total amount of contracting procurement, but it significantly reduced the order backlog of partner companies carrying out distribution network construction projects in particular.

Three out of four partner companies are small or medium-sized enterprises that create jobs locally and strengthen the vitality and economic development of their respective regions.

Elenia's procurement management is aimed at building and maintaining a diverse partner network that takes into account the operations and long-term development of large, medium-sized and small enterprises. Both, SMEs and companies that are larger and have a broader scope

### PROCUREMENT OF CONTRACTING SERVICES 2022 (%)



Due to rounding, the percentages may not add up to exactly 100.

of operations have equal opportunities to participate in procurement processes and become partners to Elenia.

We communicate openly about our projects and engage in procurement-related cooperation and joint construction, also with local stakeholders, such as municipalities, data communications companies and village communities.

### SMEs represented over 60 per cent of contracting purchases

Small and medium-sized enterprises accounted for slightly over 60 per cent of Elenia's annual purchasing volume of EUR 95 million for contracting services. Our target of 50 per cent was exceeded by a clear margin.

Wind power is being built in Finland at a record pace, which also requires Elenia to make major investments, especially in substations and the transmission line network. Large projects also require more financial and human resources from partner companies. As a consequence, contracting purchases from large companies will increase.

There are also pending mergers and acquisitions among Elenia's partner companies. If these arrangements are carried out, several of Elenia's medium-sized partners will merge or operate as part of a larger company.

Due to the large projects and M&A activity, the share of contracting services purchased from SMEs is expected to fall to less than half of the total purchasing in 2023. Nevertheless, SMEs will continue to play an important role in our partner network, both in direct contractual relationships with Elenia and as subcontractors.



### The construction and maintenance of the electricity network is a source of employment at the regional level

### Work on the electricity network provides employment to various professional groups

Elenia's regional partners operate locally in areas such as the construction of the electricity network and connections, network maintenance, and fault management in response to power outages. The construction of electricity connections in relation to the construction of detached houses in cities and the electrification of summer cottages had a particularly significant employment effect for Elenia's regional partners in 2022.

The construction and maintenance of the electricity network require the expertise of different professional groups. Electricity network construction creates jobs for earthworks and electrical industry professionals, in particular. The clearing of line corridors along the overhead line network is carried out by forestry professionals. In addition, Elenia's various projects employ experts in logistics, planning and permit processes, as well as recycling professionals. Material purchasing has an indirect employment effect for Finnish electrical industry companies that manufacture components and equipment.

### Partner companies in the SME sector need to strengthen their sustainability expertise

Our operations are influenced not only by our own sustainability targets but also the various legislative and reporting-related obligations that are being gradually expanded to also apply to our supply chains and partner companies. For SMEs, sustainability-related development efforts may be hindered by their limited resources and expertise, even if they have the willingness to develop their sustainability. We take this into account when we engage in cooperation to develop the sustainability of our partner companies in the SME sector. We expect our partner companies to continuously develop their sustainability expertise to ensure the preconditions and continuity of the partnerships.



**CONSISTENT SBTi CLIMATE TARGETS**  We are strengthening our sustainability collaboration with our partner companies by adopting consistent climate and emissions reduction targets. Thirteen of our contracting and materials partners have made a commitment to the international Science Based Targets climate initiative (SBTi). Partner companies committed to the initiative accounted for more than half of Elenia's annual contracting and material purchases in 2022. We will continue to develop the climate targets set for the supply chain in collaboration with our partner companies in accordance with our emissions reduction roadmap.



#### SOCIAL IMPACT

## Elenia provides employment and creates tax revenue for society

Elenia provides employment and economic added value in Finnish society. The company has invested over EUR 1,000 million in the development of its electricity networks. To finance its investment programme, Elenia had nearly EUR 1.8 billion in interest-bearing liabilities from international institutional investors and financial institutions at the end of 2022.

In 2022, investments in Pirkanmaa and Central Finland each represented about 30 per cent of Elenia's total investments. Approximately 20 per cent of the total amount of investment was allocated to North Ostrobothnia, just under 10 per cent to Kanta-Häme and South Ostrobothnia, and approximately 5 per cent to Päijät-Häme.



As a Finnish company, Elenia pays all of its taxes to Finland. In 2022, the company's tax footprint totalled EUR 179.6 million, including taxes paid by Elenia as well as taxes collected by Elenia from its customers and remitted to the state in full. Elenia's tax footprint was largely unchanged from the previous year.

Electricity tax collected from customers constitutes the largest share of Elenia's tax footprint. In 2022, Elenia remitted a total of EUR 105.4 million to the state in electricity taxes. The collection of electricity tax is prescribed to be carried out by distribution system operators by law, with the Parliament deciding the tax rate.

With regard to value added tax, the company remitted the net sum of paid and charged taxes. Last year, Elenia collected and remitted a total of EUR 171.3 million in taxes and tax-like charges. The taxes and tax-like charges do not show up in Elenia's result. Instead, the company

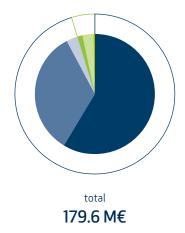
serves as a pass-through entity for invoicing for the items in question.

Based on its financial result for the financial year 2022, Elenia paid EUR 2.5 million in corporate income taxes. The Energy Authority supervises distribution system operators, and the statutory electricity and natural gas network fees that it charged from all distribution system operators in Finland totalled approximately EUR 5.3 million in 2022. Elenia's share of these fees was 10 per cent, or approximately EUR 500,000.

In addition to direct and indirect taxes, our tax footprint includes withholding taxes and social security contributions deducted from the salaries of our employees. The summary covers the taxes and tax-like charges that we are legally obligated to pay or collect from our customers.

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### ELENIA'S TAX FOOTPRINT 2022 (M€)



### Taxes collected and remitted by Elenia

Electricity tax	105.4
Value added tax	60.7
Withheld taxes and sickness insurance contributions $\dots$	5.2
total	171.3

### Taxes and fares paid by Elenia

)	Corporate income tax	. 2.
	Pension insurance contributions	. 5.
	Network payment	. 0.
	total	8.

#### SOCIAL IMPACT

### Elenia provides employment and creates tax revenue for society

### Responsible management of tax-related matters

Elenia operates in the energy sector, which is characterised by capital-intensive long-term investments. Elenia has an extensive, long-term investment programme under way to ensure compliance with the quality requirements stipulated by the Electricity Market Act and support society's transition to a zero-emission energy system. Investments in 2022–2036 amount to EUR 2 billion. This is reflected in Elenia's taxation, which is why predictability and certainty are very important to us with regard to taxes as well.

Elenia's tax policies are based on the laws and regulations pertaining to taxation, and they are prepared by the Management Team together with the Board of Directors and the Board's Audit Committee in particular.

Our tax policies cover all of the direct and indirect taxes associated with our operations. They include income tax, electricity tax, value added tax, capital gains tax, transfer tax and real estate tax, amongst others. Also included in taxes are the withholding taxes and social security contributions deducted from the salaries of employees.

The tax policies are reviewed annually and they are based on Elenia's business strategy, sustainability, risk management policy and Code of Conduct. Elenia is committed to continuous development with regard to taxation. This ensures that tax-related matters are managed responsibly and in accordance with sustainable principles.

In 2023, we will draft a separate tax strategy to document our tax principles. In the future, the Board of Directors will approve the tax strategy and any amendments thereto. Elenia's CFO will be in charge of the implementation of the tax strategy and propose potential amendments to the Audit Committee and the Board of Directors. The need to update the tax strategy will be assessed annually.

### Proactive and transparent tax principles

We comply with domestic and international tax laws, regulations and established interpretations of tax laws. We monitor the development of tax legislation and obligations and analyse their impacts. We use tax advisory services as necessary; for example, in connection with amendments to tax laws. The CFO is in charge of the procurement of such advisory services.

We pay all of our taxes to Finland. The taxes we pay and remit have a positive impact on Finnish society and its economic prosperity.

We proactively identify, assess and manage tax-related financial, business, reputation and compliance risks. Tax risks, like the Group's other business risks, are managed as part of normal risk management in accordance with Elenia's risk management policy and procedures.

Our taxation and the related criteria are predictable and transparent. We disclose our taxes in our consolidated financial statements in compliance with the international financial reporting standards (IFRS) and aim to

ensure that our stakeholders understand the key factors associated with our taxation.

We are committed to ensuring that our tax-related disclosures are relevant and correct. We provide the tax authorities with all of the information necessary for the processing of tax-related matters. We file tax returns on time and pay our taxes in the correct amounts and in a timely manner.

Our strategic and operational objectives are the starting point for our tax planning and optimisation. We engage in tax planning in the spirit of the legislation gov-

erning taxes and use our business operations as the starting point. We do not engage in artificial arrangements or arrangements carried out purely for tax-related purposes, nor do we engage in aggressive tax planning.

Our transfer pricing is based on the OECD's arm's length principle, and this principle applies to all intra-Group transactions. We do not operate in countries identified by the EU as non-cooperative jurisdictions for tax purposes. Elenia's tax-related advocacy efforts take place through Finnish Energy and the Confederation of Finnish Industries.

### ILLUSTRATIVE DIAGRAM ON ELENIA'S VALUE CREATION AND VALUE DISTRIBUTION (MILJ. €)

	2020	2021	2022
Value creation	424.2	449.0	436.4
Electricity tax	107.6	108.0	105.4
Revenues from customers	316.6	341.0	331.0
Value distribution	424.2	449.0	436.4
Society*	118.0	118.6	113.7
Investments	164.4	156.6	151.5
Elenia's partners	80.5	91.9	105.7
Banks, other financiers and owners	49.1	69.6	52.7
Personnel	12.2	12.3	12.8

<sup>\*</sup> includes taxes and tax-like items such as electricity tax, income tax, but not value added tax. The full tax footprint is depcited in a separrate diagram.

### **Broad-based** stakeholder engagement



### **CLOSE COOPERATION** WITH MUNICIPALITIES

Elenia's network area covers approximately 100 municipalities. We regularly meet with representatives of municipalities in various roles: customer, land owner, public authority and partner. In 2022, we held meetings with dozens of municipal and public sector organisations, including water utilities, heating companies and hospital districts. These cooperation meetings were focused on current issues, including potential electricity shortages, customer relationship management and, in the case of municipalities, the promotion of joint construction. We also organised two webinars for municipalities in relation to preparations for potential electricity shortages. Almost 400 people participated in the webinars.



### **ELENIA DONATES EUR 50.000** TO TAMPERE UNIVERSITY

Elenia participated in Tampere University's matched funding campaign, which ended in June 2022. Elenia made a donation of EUR 50,000 to the university. Tampere University of Technology, which is currently part of Tampere University following a merger of with the University of Tampere, has been an important partner in Elenia's cooperation with educational institutions for a couple of decades now. The cooperation produces new and increasingly broad expertise in the field of electrical engineering solutions as well as our increasingly digital services.

Student cooperation is at the core of our HR strategy. Many students become familiar with Elenia through our cooperation with student guilds and guest lectures. We also offer summer traineeships and thesis writing opportunities to students to provide pathways to working life. We commission theses each year from students at universities as well as universities of applied sciences. Over the past decade, roughly one-tenth of all master's theses written in the field of electrical engineering in Tampere have been written for Elenia.

"The number of master's theses is extraordinarily high. It speaks to Elenia's pioneering role in the industry and favourable attitude towards development. The advisory process works very well and helps the advisors keep abreast of industry developments and provides access to the latest information," says **Pekka Verho**, Professor of Electrical Engineering at Tampere University.



Tampere University alumni who currently work at Elenia. Over the years, many new energy industry professionals have started their careers at Elenia through thesis writing and working as a trainee. Their jobs have ranged from development engineer and process coordinator positions to safety-focused project engineer jobs, as well as roles in operations control, invoicing and receivables management. Acting as a thesis advisor is also a way for Elenia's professionals to develop their expertise.



### THE FINNISH OLYMPIC COMMITTEE AND THE LASTEN LIIKE CAMPAIGN

Our cooperation with the Finnish Olympic Committee continued in 2022. With Elenia's support, 20 new free-of-charge sports clubs were established for children in Heinola, Hämeenlinna and Lapua. During the autumn, children and young people spent nearly 1,800 hours doing physical activities under the guidance of instructors trained through Lasten Liike cooperation. The two-year cooperation with the Finnish Olympic Committee takes place in 2022 and 2023 and has led to 40 new sports clubs being established in municipalities within Elenia's network area.





### **DIVERSE COOPERATION** WITH SCHOOLS

In 2022, we participated in the "Safe Journeys to School" road safety campaign for the third consecutive year. This time, we helped ensure safe journeys to school for children and young people in Heinola in October together with our contractor partner Exsane. We also engaged in school cooperation in relation to electricity network safety at Palokka comprehensive school in Jyväskylä in February. In May, we participated in a "Save the Climate" event organised by lower secondary school students in Viitasaari. The aim of the event was to provide engaging and inspiring information on the climate and the environment.





### **OVER 55,000 SAPLINGS PLANTED** WITH THE TAIMITEKO PROJECT

Our cooperation with the Finnish 4H youth organisation is continuing. One of our customer promises is to plant a tree sapling for each new e-invoice agreement. Over the past three years, we have planted some 55,000 saplings. The saplings are planted by members of the 4H youth organisation, who also get summer jobs through the cooperation. Last year, the cooperation led to 20,000 saplings being planted in Orivesi and Kannonkoski. Saplings were planted across a total of 10 hectares of line corridors. Each new tree absorbs carbon and mitigates climate impacts.







### LOCAL COOPERATION IN THE DISTRIBUTION OF CUSTOMER BULLETINS

We continued to distribute customer bulletins concerning our construction of a weather-proof electricity network through cooperation with local sports clubs in 2022. Bulletins were distributed in Saarijärvi and Jämsä in connection with six construction projects. The distribution partners were Saarijärven Naisvoimistelijat ry and the gymnastics and sports club Koskenpään Kiri ry. The financial support received through the cooperation was particularly crucial for the clubs after the challenging years of the pandemic.











### NETWORKING AT FAIRS

We participated in three fairs in autumn 2022. At the FinnMETKO fair for heavy machinery contractors, our main message was focused on working safely in the vicinity of the electricity network. Our goal is that heavy machinery contractors always study the underground electricity network structures before engaging in excavation work to ensure safety. At the Isännöintipäivät trade show for property managers, we built networks with a key group of influencers. It is important that property managers have access to the latest information on acquiring electricity connections and monitoring electricity consumption, as well as services related to the energy transformation. We also participated in the Energy Fair, where we focused on current topics and also presented information on our next-generation electricity metering devices.



### **STAKEHOLDERS**

### **OPERATING ENVIRONMENT**

#### **OWNERS AND INVESTORS**

Sustainable network development Management of network assets

#### INFRASTRUCTURE NETWORK OWNERS

Parties responsible for road infrastructure maintenance
Telecom and broadband operators
Water utilities

### CONTRACTORS, MATERIALS SUPPLIERS AND OTHER PARTNERS

Quality and efficiency of service and electricity distribution

#### REGULATION

EU legislation and regulations Energy policy Regulation of network companies

#### SOCIETY

Security of electricity distribution
Sustainable network development
Promoting energy efficiency
Schools and future talents

#### **AUTHORITIES AND ORGANISATIONS**

E.g. Ministry of Economic Affairs and Employment; Energy Authority; Finnish Safety and Chemicals Agency; Centres for Economic Development, Transport and the Environment; Regional State Administrative Agencies; Central Union of Agricultural Producers and Forest Owners; rescue authorities; trade unions

#### **PERSONNEL**



#### SAFETY

Customer safety
Occupational health and safety, wellbeing at work
Cybersecurity
Security of supply

### **ELECTRICITY MARKETS**

Market parties Renewable energy production Decentralised small-scale production

### **PUBLICITY**

Informational services
Reputation management
Employer image

#### **CUSTOMERS**

Quality and efficiency of service and electricity distribution Promoting energy efficiency

#### **COMPETITORS**

Continuous renewal Improving efficiency

#### **CITIES AND MUNICIPALITIES**

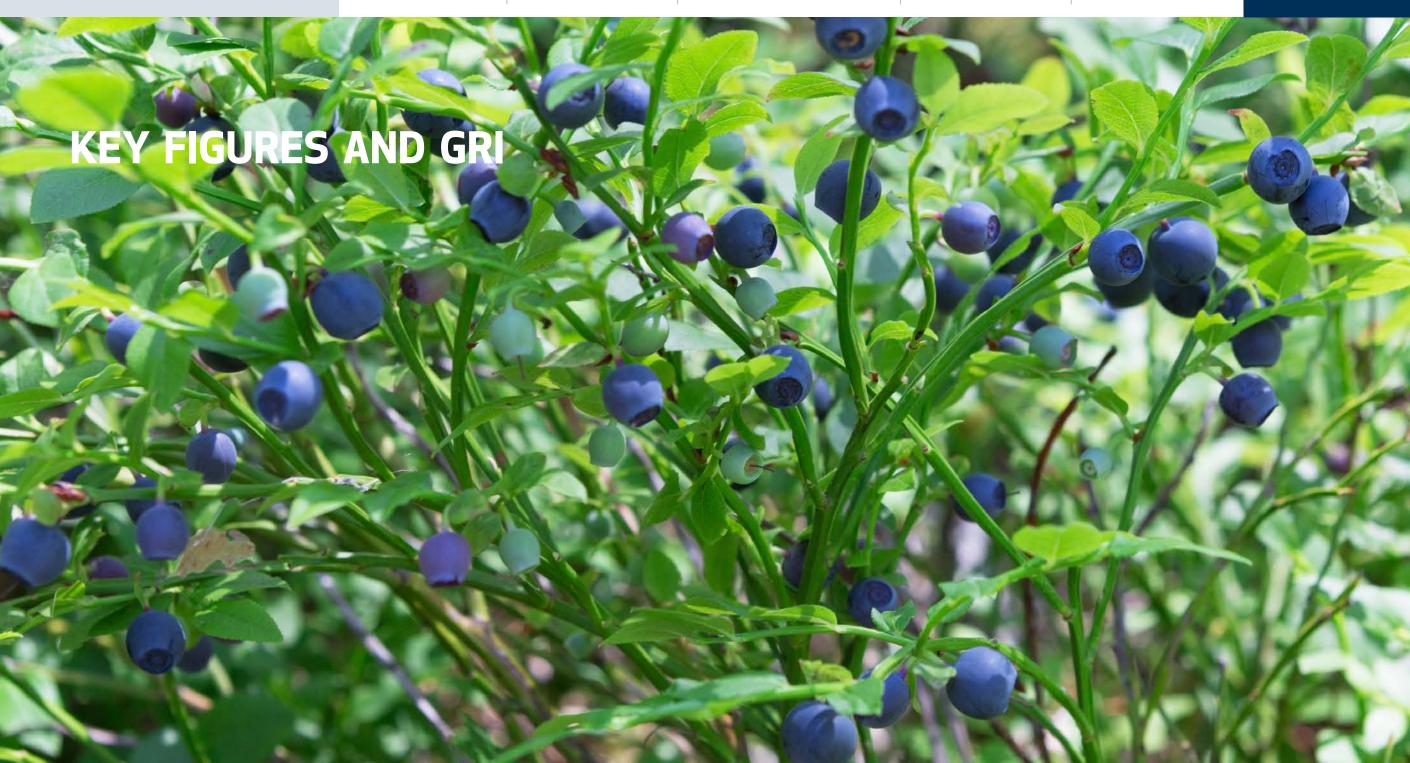
As customers
As partners
As authorities

### TECHNOLOGICAL DEVELOPMENT AND DIGITAL TRANSFORMATION

Technology dependence Service automation Rate of change

### **ENVIRONMENT**

Electricity network lifecycle management
Material and logistics management
Responsible land use
Circular economy and of recycling materials



#### KEY FIGURES

### Reporting principles

Elenia and Sustainability 2022 report covers information on Elenia Oy and its wholly-owned subsidiary Elenia Verkko Oyj, which is a distribution system operator. The Group's reporting also encompasses the 2022 Annual Review, which contains the financial information for the Group and its parent company Elenia Oy.

### Elenia's interim- and annual reports

Elenia publishes an annual and sustainability report annually, this is the Elenia's fifth sustainability report. The previous report was published in April 2022.

Elenia has prepared the reported information based on the updated Global Reporting Initiative (GRI) reporting standards (2021) as well as the GRI Electric Utilities Sector Supplement concerning themes that we consider material. Elenia has reported the information cited in GRI content index for the period 1.1.-31.12.2022 with reference to the GRI Standards. Ramboll Finland Oy has conducted an external check for this report.

The reporting also takes into account the requirements of the Sustainability Accounting Standards Board (SASB). Information on

SASB conformity is presented in a separate table at the end of the report, on pages 100–104.

The reported Scope 1 and 2 emissions and the related energy consumption figures have been subject to third-party assurance. The assurance statement is on page 110 of the report.

In addition SAIDI (excluding major disturbancies) and LTIF information in this report for the period 1.1.2020-31.12.2022 have been subject to third-party assurance. The assurance statement is on page 111 of the report.

### Changes in the organisation and reporting

Elenia Group simplified its group structure on 1 July 2020. The distribution system operator Elenia Oy and Elenia Finance Oyj merged with Elenia Verkko Oyj. At the same time, the name of the service company Elenia Palvelut Oy was changed to Elenia Ltd and the company became the parent company of the Elenia Group. Company-specific disclosures, such as the number of employees, for previous periods have not been adjusted to correspond to the current organisational structure.

Elenia's Vierumäki Valmisvalo street light service, located in Vierumäki, was divested at the end of January 2021.

Changes in the reported key figures are mentioned separately in connection with the figures in question.

### Defining the report content

The content of this report and the selected key figures are based on Elenia's sustainability programme, the additional specifications made to the programme and the targets set under the programme.

The material aspects were supplemented in 2022, taking into account the changes and feedback in the operating environment, the results of the TCFD climate risk and opportunity assessment, the EU taxonomy development work, and the UN's sustainable development goals. The updating work evaluated the effects of climate change, the green transition and the ongoing energy crisis on Elenia's operations, as well as the effects of Elenia's operations on society, people and the environment. The material aspects were identified and analyzed from both perspectives

according to the double-materiality principle. After this, Elenia's stakeholders also rated the most relevant themes.

### Data measurement, calculation and reporting principles

This reporting covers the year 2022 and, with regard to key information, the development seen in previous years. The information has been compiled internally by our experts and forwarded to Elenia's communications department, which then compiled this report.

As we move forward with our sustainability efforts, we will further develop our performance indicators and data collection methods and potentially increase their specificity. Changes in the calculation or reporting methods are described separately in connection with the information in question.

### Personnel and safety

The figures concerning the Group's own personnel include Elenia's own employees and the leased employees at Elenia Ltd. The reporting of the departure turnover rate has been updated, effective from 2022, to be cal-

culated on the basis of active employment relationships (HC active) instead of the total number of employment relationships (HC all total).

The number of safety observations includes the observations that our employees, partners and other stakeholders have reported through various channels. Our contractual partners also report occupational accident information for any subcontracting chains they use.

### Energy

Information about the distribution and consumption of energy is based on measurement data. Electrical energy consumption includes losses in Elenia's network as well as the company's own electricity consumption.

The district heating consumed in the offices is included in the rent and is estimated based on the square footage.

As a new reported data, the consumption of renewable electricity includes the electricity consumption of the Tampere and Helsinki offices, which according to the landlords, is 100% certified renewable electricity. The electricity in these offices is included in the

ELENIA AND SUSTAINABILITY 2022 91 KEY FIGURES

### Reporting principles

rent and consumption is estimated based on the square footage.

The electricity use of reserve power generators was previously included in the electricity consumption for Elenia's network operation, but the contracts were transferred to Elenia Oy during 2022, and the information will be reported separately.

The consumption of biodiesel was included in the consumption of diesel in 2021, but starting from 2022, it will be reported separately.

#### Materials and waste

The figures provided for recycled materials mainly depict materials from decommissioned overhead lines that are recycled. This data is compiled in electronic reporting systems in cooperation with our recycling partner.

The amount of waste relative to operating volume (t/km) also includes the waste generated at Elenia's office.

### Greenhouse gas emissions

Greenhouse gas emissions are calculated and reported in accordance with the Greenhouse Gas Protocol (GHG).

CO<sub>2</sub> emissions are reported from the following emission sources:

Scope 1 consists of SF6 gas leaks, emissions from the company's leased cars and emissions from the fuel consumed by stationary reserve capacity equipment (estimated based on the electricity generated). The Scope 1 emissions of Elenia's operations are minor.

**Scope 2** consists of network losses, emissions from own electricity and heating consumption and the electrical energy used by Elenia's Vierumäki Valmisvalo streetlights until the end of January 2021, when the Valmisvalo service was divested.

The majority of Elenia's indirect Scope 2 emissions result from electricity network losses and are estimated based on electricity balance calculations. The source of the electricity delivered to Elenia is determined

in accordance with the residual mix for Finland. According to the information provided by the Energy Authority, the emissions from electricity determined on the basis of the residual mix amounted to  $234.90~\rm gCO_2/kWh$  in 2021. This was the most recent figure available when this report was completed. This coefficient has been used to calculate emissions for 2021 and 2022.

The GHG emissions from previous years have been calculated using the following coefficients:

2021 234.90 gCO <sub>2</sub> /kWh	
2020 232.41 gCO <sub>2</sub> /kWh	
2019 249.29 gCO <sub>2</sub> /kWh	
2018 289.67 gCO <sub>2</sub> /kWh	
2017 264.04 gCO <sub>2</sub> /kWh	

The new residual mix coefficient is usually published in June. The Scope 2 emissions reported in Elenia's 2021 and 2022 sustainability reports have been retrospectively adjusted according to the newer residual mix coefficient. Market-based coefficients have been used for Scope 2 emissions in calculating Elenia's carbon footprint.

Business premises where Elenia has its own electricity agreement are included in Scope 2 with regard to electricity consumption. Premises where electricity is included in the rent are included in Scope 3. For our own electricity contracts, we can influence the method of production of the purchased electricity.

**Scope 3**, or other indirect emissions, represents our largest source of emissions. Most of the Scope 3 emissions result from electricity network construction materials, of which the most significant emissions were from the use of aluminum and plastic.

Other significant Scope 3 emissions arose from the CO<sub>2</sub> emissions from electricity distributed in the national grid and the electricity networks of other distribution system operators (the main grid and regional networks) as well as earthworks in electricity network construction. The calculations also take into account purchased products and services, including driving related to maintenance operations, maintenance machines, helicopter flights, regional network and main grid fees and other purchasing.

### Other emissions into the air and soil

Emissions into soil occur when there are oil leaks from transformers. The data is entered into information systems monthly and subsequently collected from those systems for reporting. Also, the amount of SF6 refrigerant leaked from electrical equipment is reported. SF6 is a greenhouse gas and is reported and calculated as part of Elenia's Scope 1 emissions.

### Financial information

The reported taxes, payments and other financial figures are based on audited data.

#### **KEY FIGURES**

### Sustainability key figures



### SAFETY AND WELL-BEING AT WORK

### ELENIA PERSONNELL IN FIGURES

	2019	2020	2021	2022
Employees, head count total (31.12.)	311*	315	329	324
Elenia Oy		228	242	247
Elenia Verkko Oyj		87	87	77
Number of new employees	44**	35	55	34
Employee turnover (%)	6.4	6.8	8.2	9.5***

<sup>\*</sup> Divestment of heat business in 2019

The electricity network company Elenia Oy and Elenia Finance Oyj merged into a company called Elenia Verkko Oyj during summer 2020. At the same time, the name of the service company Elenia Palvelut Oy was changed to Elenia Oy and the company became the parent company of the Elenia Group.

Leased employees (31 December)	2021	2022
Elenia Oy	29	27
Elenia Verkko Oyj	0	0

Reporting on leased employees began in 2022

	2020	2021	2022
Male	157	170	171
Female	158	159	153
Full-time	300	309	309
Part-time	15	20	15
Permanent employees	300	301	297
Contract	15	28	27
Average age of employees (31.12.)	40.2	39.8	39.9

Gender distribution and monthly salary in different job grades and for senior salaried employees 2022

Job grade*	2021	2022
3	100.2	105.7
4	109.0	108.6
5	105.8	106.8
6	103.4	-
7	104.0	105.1
8	99.7	97.5
9	97.1	98.5
10	-	-
Y	95.2	96.9

Gender distribution 2022

delider distribution 2022				
Female (%)	Male (%)			
84	16			
57	43			
74	26			
96	4			
50	50			
43	57			
29	71			
7	93			
31	69			

<sup>\*</sup> Job grades of salaried employees (3–10) and senior salaried employees (Y) according to Collective Agreement TES. If the number of representatives of either gender is too low, reporting on the basis of pay data is not possible.

#### **Trainings**

2021	2022
4,527	7,992
3,375	5,902
1152	2,090
14	25
558	1,042
233	501
308	446
4	5
13	6
0	84
	4,527 3,375 1152 14 558 233 308 4 13

Only includes training produced by partners

<sup>\*\*</sup> of which 16 in the business transfer

<sup>\*\*\*</sup>The reporting of the departure turnover rate has been updated, effective from 2022, to be calculated on the basis of active employment relationships (HC active) instead of the total number of employment relationships (HC all total)

### Sustainability key figures

### SAFETY AND WELLBEING

Elenia's employees & contractors							Target	Target
	2017	2018	2019	2020	2021	2022	2022	2025
Shared LTIF, Elenia's employees & contractors	10.0	5.2	5.9	10	9.5	4.5	3.0	2.0

Elenia's employees							Target	Target
	2017	2018	2019	2020	2021	2022	2022	2025
Sick leave (Elenia Verkko Oyj)*	1.5	1.2	1.2	2.0	1.6	2.5	< 2.5	1.7
Sick leave (Elenia Oy and Elenia Group Oy)*	4.7	4.4	2.5	3.0	3.7	3.7	< 4	3.0
Fatalities, number	0	0	0	0	0	0	0	0
Lost time injuries (over 30 days sick leave), number	0	0	0	0	0	0	0	0
Lost time injuries, number	2	0	0	0	0	0	0	0
Recordable injuries, number	1	0	0	1	0	1	0	0
Lost Time Injury Frequency, LTIF								
(Injuries / million hours worked)	4.1	0	0	0	0	0	0	0
Total Recordable Incident Frequency, TRIF (Lost time								
injuries and recordable injuries / million hours worked)	1.2	0	0	1.9	0	1.7	0	0
Near misses, number	14	20	20	40	25	17	0	0
Safety observations, number	107	126	158	424	751	1,073	1,100	2,000
Commuting accidents	0	2	0	2	2	0	0	0

<sup>\*</sup> Elenia's companies changed in 2020. The figures for 2017-2019 have not been adjusted to correspond to the current organization structure Reporting of commuting accidents started in 2020.

Elenia's contractors							Target	Target
	2017	2018	2019	2020	2021	2022	2022	2025
Fatalities, number	0	0	0	0	0	1	0	0
Lost time injuries (over 30 days sick leave), number	1	0	1	5	3	2	0	0
Lost time injuries, number	16	11	13	16	16	6	5	4
Recordable injuries, number	25	18	23	26	21	21	11	8
Lost Time Injury Frequency, LTIF								
(Injuries / million hours worked)	12.1	7.0	7.5	13.4	13.6	6.4	4.0	3.0
Total Recordable Incident Frequency, TRIF (Lost time								
injuries and recordable injuries / million hours worked)	29.5	18.4	19.8	30.0	28.7	21.5	13.0	8.0
Near misses, number	205	236	168	220	271	192	400	300
Safety observations*, number	58	137	157	502	1,171	1,870	1,600	3,000
Commuting accident	1	0	1	1	0	0	0	0

<sup>\*</sup> Includes both negative and positive safety observations Reporting of commuting accidents started in 2020.

Elenia's customers							Target	Target
	2017	2018	2019	2020	2021	2022	2022	2025
Fatalities, number	0	0	0	0	0	0	0	0
Lost time injuries, number	0	0	0	0	0	0	0	0
Recordable injuries, number	0	0	0	2	3	0	0	0
Safety observations*, number	54	73	62	133	140	124	250	400

<sup>\*</sup> Includes customer related near misses and safety obesrvations.

Elenia's other stakeholders							Target	Target
	2017	2018	2019	2020	2021	2022	2022	2025
Fatalities, number	0	0	0	1	0	0	0	0
Lost time injuries, number	0	0	0	0	0	0	0	0
Recordable injuries, number	0	0	0	1	4	1	0	0
Safety observations*, number	24	31	27	99	116	90	50	100

<sup>\*</sup> Includes stakeholder related near misses and safety obesrvations.

### Sustainability key figures



### CUSTOMER EXPERIENCE AND QUALITY OF ELECTRICITY NETWORK SERVICES

### NET PROMOTER SCORE -MITTAUSTEN TULOKSET

Net Promoter Score								Target
	2016	2017	2018	2019	2020	2021	2022	2022
Net Promoter Score, NPS	39	41	36	34	54	53	54	50
Customer service, inbound calls	39	45	44	47	59	55	56	50
Customer service, e-mails	35	44	45	43	43	39	49	50

Elenia Aina's promoter score was decoupled from the overall promoter score in 2020.

### ELENIA'S UNDERGROUND CABLING RATE (%)

															Target
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022
0.4 kV	29%	31%	32%	33%	36%	39%	41%	45%	48%	51%	55%	59%	62%	65%	_
20 kV	7%	8%	9%	12%	15%	19%	23%	27%	32%	38%	44%	50%	56%	60%	60%
Entire network	21%	22%	23%	25%	28%	31%	34%	38%	41%	45%	50%	54%	59%	62%	62%

### ELENIA'S CUSTOMERS COVERED BY THE QUALITY REQUIREMENTS (%)

												Target	Requirement	Requirement
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022	2028	2036
Zoned areas	29%	36%	41%	51%	58%	65%	74%	81%	85%	87%	88%	-	-	100%
Sparsely populated areas	21%	24%	28%	33%	38%	42%	46%	51%	58%	65%	71%	-	-	100%
Customers total	26%	31%	36%	44%	49%	55%	62%	68%	73%	78%	80%	82%	75%	100%

### CUSTOMER EXPERIENCE, CSAT (1-4)

			Target
	2021	2022	2022
Network services overall customer experience	3.1	3.2	3.2
Fault service, inbound calls	3.5	3.5	3.2
Fault service, online map	2.9	3.1	3.2
Landowners' satisfaction	3.5	3.7	3.2
Elenia Säävarma construction	2.8	2.9	3.2
Connection services	3.3	3.5	3.2
Elenia Aina	2.3	2.5	3.2

Uniform measurement was adopted in 2021 regarding all functions of network business.

### RECLAMATIONS IN ELENIA WEATHER-PROOF PROJECTS

					Target
	2019	2020	2021	2022	2022
Nr of reclamations / built km	1,031	909	862	847	850

### CYBER SECURITY & DATA PROTECTION

	2020	2021	2022
Number of data protection incidents reported			
to the Finnish Data Protection Ombudsman	n/a	3	2

### Sustainability key figures

### OUTAGE PERFORMANCE INDEXES

### All outages

	2014	2015	2016	2017	2018	2019	2020	2021	2022
SAIDI	148	659	295	94	95	254	217	111	70
SAIFI	3.2	6.8	4.2	3.4	3.5	5.3	4.0	3	2.7
CAIDI	46	96	70	27	28	48	54	36	26
MAIFI	10.2	11.3	7.1	5.7	5.5	7.2	4.8	5.4	4.6

### Without major disturbancies

	2014	2015	2016	2017	2018	2019	2020	2021	2022
SAIDI	111	109	88	78	95	87	70	67	70
SAIFI	3.0	3.3	3.3	3.2	3.5	3.2	2.6	2.5	2.7
CAIDI	38	33	26	24	28	27	27	27	26
MAIFI	9.8	8.2	6.7	5.5	5.5	5.3	4.2	4.8	4.6

**SAIDI** (System Average Interruption Duration Index)

**SAIFI** (System Average Interruption Frequency Index)

**CAIDI** (Consumer Average Interruption Duration Index )

MAIFI (Momentary Average Interruption Frequency Index)

### FOREST MANAGEMENT (km)

	2017	2018	2019	2020	2021	2022
Low-voltage network clearance (0.4 kV)	5,024	3,483	1,630	989	870	1,668
Medium-voltage network clearance (20 kV)	1,872	2,284	3,279	2,290	2,189	2,325
Pruning with helicopter (20 kV)	132	82	-	176	-	121
Forest management in the side areas of medium-voltage network (20 kV)	1,089	720	1,033	380	157	78
High-voltage network clearance (110 kV)	30	130	187	74	149	178
Forest management in the border zone of high-voltage network (110 kV)	306	221	97	314	100	272
Total	8,453	6,920	6,226	4,223	3,465	4,642

KEY FIGURES

ELENIA AND SUSTAINABILITY 2022 96 **KEY FIGURES** 

### Sustainability key figures



### CLIMATE ACTIONS AND ROLE AS FORERUNNER

### **ELENIA'S ENERGY CONSUMPTION (MWh)**

							Target	Target
	2017	2018	2019	2020	2021	2022	2022	2030
Non-renewable electricity, total	263,006	275,430	276,669	272,382	311,796	301,902		
Network losses in Elenia's network	258,863	271,166	272,430	268,336	307,658	297,981		
Own consumption of network operations	3,574	3,713	3,689	3,521	4,067	3,681		
Valmisvalo*	569	551	550	525	71			
Offices						51		
Reserve power generators, own use						168		
Electric car charging						21		
Diesel usage,total				281	158	86		
Diesel, reserve power generators				130	40	14		
Diesel, Elenia cars				151	118	72		
District heating consumption of offices, total					849	719		
Renewable energy total						469	500	365,300
Offices, renewable electricy						467		
Biofuels, Elenia's own cars						2		
Total energy consumption of Elenia Group	263,006	275,430	276,669	272,663	312,803	303,176	298,241	365,300

<sup>\*</sup> Valmisvalo was Elenia's street light network in Vierumäki, Finland, the business was divested 31st Jan.2021
The calorific value of the used diesel in MWh, estimated by the number of liters and the electricity generated by reserve power.

### WASTE GENERATED (t)

							Target	Target
	2017	2018	2019	2020	2021	2022	2022	2024
Hazardous*	3,376	3,661	4,576	5,548	5,662	7,076	5,000	3,600
Non-hazardous	2,907	3,293	3,938	4,709	4,332	3,790	4,200	3,500
Total	6,283	6,954	8,514	10,257	9,994	10,866	9,200	7,100

<sup>\*</sup> includes contaminated soil

### RECYCLED MATERIALS (t)

	2017	2018	2019	2020	2021	2022
Aluminium	1,322	1,562	1,775	2,220	1,930	1,757
Iron	686	715	801	1,190	1,100	903
Transformers	661	664	861	737	841	707
Other materials	238	271	418	542	385	381
Poles	2,259	1,582	2,093	2,469	2,957	3,855
Total	5,166	4,793	5,948	7,158	7,212	7,603
Nominal waste (tn/km)	1.7	1.4	1.3	1.7	2.1	2.7
Material efficiency: the amount of cable ordered relative to the amount of cable installed (%)	94	91	92	96	94	95
Reuse of decommissioned network materials: directing to be used as raw materials for new products (%)	n/a	n/a	n/a	75	69	60

### WASTE DIVERTED FROM AND DIRECTED TO DISPOSAL (t)

							Target	Target
	2017	2018	2019	2020	2021	2022	2022	2024
Re-use	868	1,894	2,223	2,948	2,627	2,440	2,600	2,000
Recycling	2,907	3,211	3,855	4,689	4,255	3,748	4,000	3,000
Composting	0	0	0	0	0	0	0	0
Waste to energy recovery	2,259	1,582	2,093	2,469	2,957	3,855	2,500	1,900
Landfill	249	267	343	150	155	823	100	200
Diverted from landfill (%)	96.0	96.2	95.8	98.5	98.5	92.4	96	96

### Sustainability key figures

### MATERIALS USED (t)

	2018	2019	2020	2021	2022
Aluminium in purchased cables	4,740	5,130	4,959	4,485	3,248
PE plastic in purchased cables	5,040	5,805	5,661	5,206	3,472
Copper in purchased cables	17	14	175	145	118
Oil in transformers	416	426	421	464	336

### BIRD MARKERS INSTALLED IN THE NETWORK (pcs)

	2017	2018	2019	2020	2021	2022
Bird markers installed	227	309	399	139	299	397

### **ENVIRONMENTAL INCIDENTS**

	2017	2018	2019	2020	2021	2022
Oil leaks (kg)	1,292	1,300	1,790	1,163	1,104	2,088
Transformer failures involving oil leakage, total (pcs)	30	35	19	33	34	35
Transformer damage due to weather conditions etc.			10	24	24	17
Damaged during demolition, transportation or storage			1	3	1	3
Damaged by an animal			3	0	1	
Vandalism in the contractor's storage area			0	4	1	1
Damaged by third party			4	1	4	10
Damaged hydraulic hose of a large machinery			1	1	3	4

The contaminated soil due to environmental incidents is cleaned up and transported to a waste management facility. Total transformer damage in 2021, the amount corrected.

### POLE MOUNTED TRANSFORMER SUBSTATION IN THE GROUNDWATER AREA (pcs)

	2015	2016	2017	2018	2019	2020	2021	2022
Pole mounted transformers in the ground water areas	1,252	1,161	1,052	953	848	720	555	490

### HABITAT MANAGEMENT (ha)

							Target	Target
	2017	2018	2019	2020	2021	2022	2022	2024
Habitat removed (forest management in side areas of network)	1,965	2,229	1,089	333	472	760*	410	140
Habitat maintained (clearance)	1,625	2,008	2,480	1,959	2,048	1,863	2,172	1,738
Habitat enhanced or restored (dismounted overhead network)	749	823	922	1,430	1,375	1,168	1,100	700
Habitat protected (on-site)	9	9	9	9	9	9	9	9
Habitat protected (off-site)	0	0	0	0	0	0	0	5

 $<sup>\</sup>ensuremath{^*}$  includes for the first time also the forest management in the border zone of the network

### CO<sub>2</sub>-EMISSIONS (tCO<sub>2</sub>e)

							Target	Target
	2017	2018	2019	2020	2021	2022	2022	2035
Scope 1 (car fuel emissions, fixed reserve power generators and SF6 gas)	66	227	576	351	464	659		
Scope 2 (electricity usage for network losses, own use and Valmisvalo service)	69,444	79,784	68,972	63,308	73,254	70,877		
Total, Scope 1 & 2	69,510	80,011	69,548	63,659	73,718	71,536	< 72,942	< 690
Scope 3*			120,909	120,274	121,350	97,538	less than in 2020	4.2% annual reduction com- pared to 2020 baseline
Total, Scope 1-3			190,457	183,932	195,068	169,074	< year 2020	< 45,500

<sup>\*</sup>Scope 3 calculation first started in 2020

Scope 2 emissions for 2019–2021 have been updated afterwards according to the residual mix multiplier published by Energy Authority.

#### **KEY FIGURES**

### Sustainability key figures



### CAPACITY AND ENERGY OF NETWORK OPERATIONS

			Target	Target
	2021	2022	2022	2030
Power capacity (kVA)	3,069,500	3,119,500	3,119,500	3,720,000
Energy Distributed (MWh)	8,038,751	8,168,428	8,760,296	12,635,400

### **ENERGY IMPORTED (MWh)**

			Target	Target
	2021	2022	2022	2030
Biofuels	0	2	0	0
Renewable electricity	2,004,301	2,636,221	3,020,061	6,533,600
Renewable heating	0	0	0	700
Tuulivoima	158	86	120	0
Non-renewable electricity	6,342,281	5,830,846	6,037,516	6,466,400
Non-renewable heating	849	719	800	0
Total	8,347,589	8,467,874	9,058,497	13,000,700

### **ENERGY EXPORTED (MWh)**

			Target	Target
	2021	2022	2022	2030
Renewable electricity	2,004,301	2,635,754	3,019,561	6,169,000
Non-renewable electricity	6,030,556	5,528,944	5,740,695	6,466,400
Total	8,034,857	8,164,698	8,760,256	12,635,400

### TALOUDELLINEN TULOS JA VEROT (milj. €)

	2018	2019	2020	2021	2022
Revenue	272.7	295.6	306.3	328.6	317.4
TAXES AND LEVIES PAID	10.3	11.0	10.4	10.7	8.3
Corporate income tax	6.0	5.6	5.4	5.4	2.5
Pension insurance contributions	4.0	5.0	4.6	4.9	5.3
Network payment	0.3	0.4	0.4	0.4	0.5
TAXES COLLECTED AND REMITTED	155.0	156.1	167.5	173.4	171.3
Electricity tax	112.1	112.5	107.6	107.3	105.4
Value added tax	37.6	39.1	54.9	60.9	60.7
Withheld taxes and sickness insurance contributions	5.3	4.5	5.0	5.2	5.2

The paid corporate income taxes include advance payments made during the year, final taxes for previous financial years and allocated taxes, and exceludes deferred taxes.

### WAGE EXPENSES OF ELENIA GROUP (M€)

	2018	2019	2020	2021	2022
Wage expences	11.4	11.5	11.9	12.3	12.8

### PROCUREMENT OF CONTRACTING SERVICES (M€)

	2018	2019	2020	2021	2022
Procurement of contracting services, total	88.5	97.6	99.5	92.7	93.8
Small enterprises	22.6	26.0	34.1	31.3	33.3
Medium-sized enterprises	20.2	24.9	29.7	25.9	23.4
Large companies.	45.7	46.8	35.7	35.5	37.1

### Sustainability key figures

### ELENIA'S TOTAL INVESTMENTS IN ITS ELECTRICITY NETWORK (M€)

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Investments in the electricity network	105.0	107.1	119.2	137.5	148.1	152.7	165.0	172.1	175.8

### RENEWABLE ENERGY CONNECTED TO ELENIA'S NETWORK (MWh)

										Target	Target
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022	2030
Wind power	32,808	352,275	632,925	1,178,011	1,385,990	1,388,545	1,692,945	1,768,799	2,422,269	2,816,356	5,832,000
Hydroelectric power	160,941	226,931	196,147	192,676	130,125	142,242	212,835	198,006	173,610	168,362	180,000
Other renewable	25,561	23,969	24,994	23,487	79,370	71,118	28,716	24,609	20,178	21,584	25,000
Solar power	0	0	402	1,321	3,251	5,680	10,143	12,887	19,697	13,259	132,000
Renewable energy total	219,310	603,175	854,468	1,395,495	1,598,736	1,607,585	1,944,639	2,004,301	2,635,754	3,019,561	6,169,000
Energy distributed to customers	6,112,038	5,994,156	6,330,493	6,342,805	6,439,102	6,361,863	6,031,793	6,643,471	6,260,202	6,311,529	7,002,000
Solar energy in Elenia's network (cumul. nr)			584	1,498	2,456	3,937	5,752	7,136	11,575	8,674	40,000

Topic	Accounting metrics	Unit of measure	Code	Elenia 2022	Elenia 2021
Greenhouse Gas Emissions & Energy Resource Planning	Gross global Scope 1 emissions	tCO <sub>2</sub> -e	IF-EU-110a.1	Scopel: 659 tCO <sub>2</sub> e	Scopel: 464 tCO <sub>2</sub> e
	Percentage covered under emissions-limiting regulations, and emissions-reporting regulations	(%)			
	Greenhouse gas (GHG) emissions associated with power deliveries	tCO <sub>2</sub> -e	IF-EU-110a.2	Scope2: 70,877 tCO <sub>2</sub> e	Scope2: 73,254 tCO <sub>2</sub> e *
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets		IF-EU-110a.3	Elenia has committed, and the commitment has been validated, to the Science Based Targets initiative (SBTi) and is taking part in the ambitious Net Zero target. Elenia is committed to reducing its greenhouse gas emissions by 42% by 2030, including Elenia's own emissions and emissions arising from purchased energy (Scope I and 2). Elenia has also set an even more ambitious target of reducing the emissions of its own operations by 75 per cent (Scope I and 2) by 2030, using 2020 as the baseline. Vision target 2035: Net Zero Elenia. Elenia's emission reduction roadmap and Net Zero Business Plan illustrates its emission reduction targets.	Elenia has committed, and the commitment has been validated, to the Science Based Targets initiative (SBTi) and is taking part in the ambitious Net Zero target. Elenia is committed to reducing its greenhouse gas emissions by 42% by 2030, including Elenia's own emissions and emissions arising from purchased energy (Scope 1 and 2). Elenia's emission reduction roadmap illustrates its emission reduction targets. Elenia has made its first TCFD report.
	(1) Number of customers served in markets subject to renewable portfolio standards (RPS) and (2) percentage fulfillment of RPS target by market	Number, Percentage (%)	IF-EU-110a.4	Not applicable	Not applicable
Air quality	Air emissions of the following pollutants: (1) NOx (excluding N <sub>2</sub> O), (2) SOx, (3) particulate matter (PM1O), (4) lead (Pb) (5) mercury (Hg)  Percentage of each in or near areas of dense population		IF-EU-120a.1	Not relevant in Elenia's operations	Not relevant in Elenia's operations
	T creentage of each firor flear areas of defise population				

<sup>\*</sup> Scope 2 emissions for 2021 have been updated afterwards according to the residual mix multiplier published by Energy Authority.

Topic	Accounting metrics	Unit of measure	Code	Elenia 2022	Elenia 2021
Water management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress		IF-EU-140a.1	Not relevant in Elenia's operations	Not relevant in Elenia's operations
	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Number	IF-EU-140a.2	No leakages to groundwater	No leakages to groundwater
	Description of water management risks and discussion of strategies and practices to mitigate those risks		IF-EU-140a.3	The contaminated areas have been identified and are monitored regularly. The environmental authorities have stated that the current land use in these sites doesn't require further actions. A new risk assessment will be made in case the land use changes.  The groundwater areas have been classified according to the criticality of the water management, and the company's goal is to	The contaminated areas have been identified and are monitored regularly. The environmental authorities have stated that the current land use in these sites doesn't require further actions. A new risk assessment will be made in case the land use changes.  The groundwater areas have been classified according to the criticality of the water management, and the company's goal is to
				reduce the number of pole-mounted transformers in the critical areas.	reduce the number of pole-mounted transformers in the critical areas.
				In connection with underground cabling, the old pole-mounted transformers are replaced with new kiosk-style secondary substations equipped with oil collector trays that prevent oil leaks.  All the main transformers in the groundwater area are equipped with a separate oil collector tray.	In connection with underground cabling, the old pole-mounted transformers are replaced with new kiosk-style secondary substations equipped with oil collector trays that prevent oil leaks.  All the main transformers in the groundwater area are equipped with a separate oil collector tray.
				We monitor the environmental damage incidents carefully. In a potential oil leak incident, a systematic soil investigation process will be made by an external environmental consulting company. Oil leaks are reported monthly in the environmental report which is being monitored at the board level.	We monitor the environmental damage incidents carefully. In a potential oil leak incident, a systematic soil investigation process will be made by an external environmental consulting company. Oil leaks are reported monthly in the environmental report which is being monitored at the board level.
				Water abstractions and their criticality are taken into account in power outages and prioritized in the order of repair.	Water abstractions and their criticality are taken into account in power outages and prioritized in the order of repair.
Coal ash management	Amount of coal combustion residuals (CCR) generated, percentage recycled		IF-EU-150a.1	Not relevant in Elenia's operations	Not relevant in Elenia's operations
	Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment		IF-EU-150a.2	Not relevant in Elenia's operations	Not relevant in Elenia's operations

Topic	Accounting metrics	Unit of measure	Code	Elenia 2022	Elenia 2021
Energy affordability	Average retail electric rate for (1) residential, (2) commercial and (3) industrial customers	Rate	IF-EU-240a.1	1.1) Residential: Holiday home, 1,000 kWh/year 31.61 cent/kWh 1.2) Residential: Single-family-house, 5,000 kWh/year 12.72 cent/kWh 1.3) Residential: Single-family-house with electricity heating, 19,000 kWh/year 8.92 cent/kWh 2) Commercial: 50,000 kWh/year 9.60 cent/kWh 3) Industrial: 180,000 kWh/year 5.69 cent/kWh	1.1) Residential: Holiday home, 1,000 kWh/year 31.61 cent/kWh 1.2) Residential: Single-family-house, 5,000 kWh/year 12.72 cent/kWh 1.3) Residential: Single-family-house with electricity heating, 19,000 kWh/year 8.92 cent/kWh 2) Commercial: 50,000 kWh/year 9.60 cent/kWh 3) Industrial: 180,000 kWh/year 5.69 cent/kWh
	Typical monthly electric bill for residential customers	Euros	IF-EU-240a.2	1)Residential: Summer house, 1,000 kWh/year 26.34 €/month 2) Residential: Single-family-house, 5,000 kWh/year 53.02 €/month 3) Residential: Single-family-house with electricity heating, 19,000 kWh/year 125.37 €/month	1)Residential: Summer house, 1,000 kWh/year 26.34 €/month 2) Residential: Single-family-house, 5,000 kWh/year 53.02 €/month 3) Residential: Single-family-house with electricity heating, 19,000 kWh/year 125.37 €/month
	Number of residential customer electric disconnections for non-payment, percentage reconnected within 30 days	Number, Percentage (%)	IF-EU-240a.3	3,000 pcs 75%	3,400 pcs 74%
	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory		IF-EU-240a.4	In connection with disconnection notices, we advise customers to contact Kela if non-payment is due to payment difficulties caused by serious sickness, unemployment or other reason mainly through no fault of one 's own. In Finland Kela is responsible for admitting social assistance and can support customers in order to avoid disconnection of electricity. In addition, we always follow the winter disconnection ban for customers so that heating of the permanent residence is not cut in the winter.  Due to the energy crisis, we have enabled customers exceptional payment flexibility for payments. The flexibilities apply to due date transfers, payment plans and interest-free payment periods	In connection with disconnection notices, we advise customers to contact Kela if non-payment is due to payment difficulties caused by serious sickness, unemployment or other reason mainly through no fault of one 's own. In Finland Kela is responsible for admitting social assistance and can support customers in order to avoid disconnection of electricity. In addition, we always follow the winter disconnection ban for customers so that heating of the permanent residence is not cut in the winter.  Due to the energy crisis, we have enabled customers exceptional payment flexibility for payments. The flexibilities apply to due date transfers, payment plans and interest-free payment periods

Topic	Accounting metrics	Unit of measure	Code	Elenia 2022	Elenia 2021
Workforce Health & Safety	(1) Total recordable incident rate (TRIR) (2) fatality rate, and (3) near miss frequency rate (NMFR)	Rate	IF-EU-320a.1	Reported as per million (1,000,000) hours worked  1) TRIR: Elenia = 1.7, Contractor partners = 21.5  2) Fatality Rate: Elenia = 0, Contractor partners = 0.7  3) NMFR: Elenia = 29.1, Contractor partners = 137.5	Reported as per million (1,000,000) hours worked  1) TRIR: Elenia = 0, Contractor partners = 28.7  2) Fatality Rate: Elenia = 0, Contractor partners = 0  3) NMFR: Elenia = 42.0, Contractor partners = 194.4
End-Use Efficiency & Demand	Percentage of electric utility revenues from rate structures that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)	%	IF-EU-420a.1	100% of revenues. The allowed return is not dependent on volymes of electricity distributed.	100% of revenues. The allowed return is not dependent on volymes of electricity distributed.
	Percentage of electric load served by smart grid technology	%, MWh	IF-EU-420a.2	100%, 6,260 GWh	100%, 6,643 GWh
	Customer electricity savings from efficiency measures, by market	MWh	IF-EU-420a.3	Elenia participates in the national energy efficiency agreement for 2017–2025. Elenia is committed to reducing its annual network losses in electricity distribution by six per cent by 2025. This means reducing of annual network losses by 13.2 GWh which corresponds the annual electricity consumption of more than 700 families of 4.  We achieved this target in full with the actions we took in 2020. We will continue to improve the energy efficiency of our electricity network and promote the energy efficiency of our customers by among other things the Elenia Aina service.Our target is to continuously improve the energy efficiency of our own operations as well as our customers.  Computational reductions of network losses in 2022: Distribution substations: 1,446 MWh Medium-voltage lines: 639 MWh Low-voltage lines: 2,812 MWh	Elenia participates in the national energy efficiency agreement for 2017–2025. Elenia is committed to reducing its annual network losses in electricity distribution by six per cent by 2025. This means reducing of annual network losses by 13.2 GWh which corresponds the annual electricity consumption of more than 700 families of 4.  We achieved this target in full with the actions we took in 2020. We will continue to improve the energy efficiency of our electricity network and promote the energy efficiency of our customers by among other things the Elenia Aina service.Our target is to continuously improve the energy efficiency of our own operations as well as our customers.  Computational reductions of network losses in 2021: Distribution substations 1,607 MWh Medium-voltage lines 806 MWh Low-voltage lines 3,524 MWh
Nuclear Safety & Emergency	Total number of nuclear power units		IF-EU-540a.1	Not relevant in Elenia's operations	Not relevant in Elenia's operations
Management	Description of efforts to manage nuclear Discussion and safety and emergency preparedness		IF-EU-540a.2	Not relevant in Elenia's operations	Not relevant in Elenia's operations

Topic	Accounting metrics	Unit of measure	Code	Elenia 2022	Elenia 2021
Grid Resiliency	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	0	IF-EU-550a.1	Reported 0	Reported 0
	<ul> <li>(1) System Average Interruption Duration Index (SAIDI),</li> <li>(2) System Average Interruption Frequency Index (SAIFI), and</li> <li>(3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days</li> </ul>		IF-EU-550a.2	No major event days in 2022 1) 70 min 2) 2,7 pcs 3) 26 min	1) SAIDI 111 min, without major disruptions 67 min 2) SAIFI 3.0 pcs, without major disruptions 2.5 pcs 3) CAIDI 36 min, without major disruptions 27 min
Activity metrics	Number of: (1) residential, (2) commercial, and (3) industrial customers served	Number	IF-EU-000.A	1) Residential: Housing 373,858 2) Commercial: Agriculture, services, construction 58,049 3) Industrial: 6,116 Other 22	1) Residential: Housing 371,535 2) Commercial: Agriculture, services, construction 57,909 3) Industrial: 6,013 Other 24
	Total electricity delivered to: (1) residential, (2) commercial, (3) industrial, (4) all other retail customers, and (5) wholesale customers	MWh	IF-EU-000.B	1)Housing 2,620,723 MWh 2) Agriculture, services and construction 1,828,352 MWh 3) Industrial 1,472,909 MWh 4) Other 338,218 MWh	1)Housing 2,905,973 MWh 2) Agriculture, services and construction 1,891,441 MWh 3) Industrial 1,501,285 MWh 4) Other 344,772 MWh
	Length of transmission and distribution lines	km	IF-EU-000.C	76,700 km	76,000 km
	Total electricity generated, percentage by major energy source, percentage in regulated markets	MWh, %	IF-EU-000.D	Not relevant in Elenia's operations	Not relevant in Elenia's operations
	Total wholesale electricity purchased	MWh	IF-EU-000.E	Electricity imported to our network (power plants + other networks) 8,467,041 MWh	Electricity imported to our network (power plants + other networks) 8,346,582 MWh

### **GRI-index**

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2-2	Entities included in the sustainability reporting	90	
2-3	Reporting period, frequency and contact point	90	The report is published annually. For more information, please contact Heini Kuusela-Opas, Chief Communications Officer, heini.kuusela-opas@elenia.fi
2-4	Restatements of information	90	
2-5	External assurance	110, 111	Reported Scope 1 and 2 emissions and the related energy consumption, as well as SAIDI ja LTIF data are verified by a third party.
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205-3	Confirmed incidents of corruption and actions taken	27	Elenia and its senior management have not been convicted of corruption in court. In 2022, there were no potential public law cases against the company.
	Anti-com	npetitive Behavio	or and the second secon
3-3	Management of the material topic	27-28	
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303-4	Discharge to soil	97	
	В	iodiversity	
3-3	Management of the material topic	27; 65	
304-2	Significant impacts of activities, products, and services on biodiversity	49; 65-67	
304-3	Habitats protected or restored	66; 97	
		Emissions	
3-3	Management of the material topic	58; 60-63	
305-1	Direct GHG emissions (Scope 1)	59; 97	
305-2	Energy indirect GHG emissions (Scope 2)	59; 97	
305-3	Other indirect GHG emissions (Scope 3)	59; 97	
305-5	Reduction of GHG emissions	60-63	
		Waste	
3-3	Management of the material topic	27; 68	
306-1	Waste generation and significant waste-related impacts	68	
306-2	Management of significant waste-related impacts	27; 68	
306-3	Waste generated	68; 96	
306-4	Waste diverted from disposal	96	
306-5	Waste directed to disposal	96	
	Supplier Envi	ronmental Asses	sment
3-3	Management of the material topic	19; 21; 69-70	
308-1	New suppliers that were screened using environmental criteria	69	

GRI	CONTENTS	PAGE	ADDITIONAL NOTES		
	400 - SOCIAL				
		Työsuhteet			
3-3	Management of the material topic	30-32			
401-1	New employee hires and employee turnover	92			
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time	31	Everyone at Elenia has an equal opportunity to enjoy employee benefits and remuneration.		

KEY FIGURES

3-3	Management of the material topic	30-32	
401-1	New employee hires and employee turnover	92	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	31	Everyone at Elenia has an equal opportunity to enjoy employee benefits and remuneration.
	Occupation	nal Health and Saf	fety
3-3	Management of the material topic	36-38	
403-1	Occupational health and safety management system	19;39	
403-2	Hazard identification, risk assessment, and incident investigation	20-21; 36-40	
403-3	Occupational health services	36	
403-4	Worker participation, consultation, and communication on occupational health and safety	36-38; 42	
403-5	Worker training on occupational health and safety	41	
403-6	Promotion of worker health	36	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	20-21; 37-38; 42; 70	
403-8	Workers covered by an occupational health and safety management system	39; 41	
403-9	Work-related injuries	39; 93	
403-10	Work-related ill health	93	There were no occupational illnesses or fatalities at Elenia in 2022.

### **GRI-index**

GRI	CONTENTS	PAGE	ADDITIONAL NOTES
	Trainir	ng and Education	
3-3	Management of the material topic	34	
404-1	Average hours of training per year per employee	34; 92	
404-2	Programs for upgrading employee skills and transition assistance programs	34	
404-3	Percentage of employees receiving regular performance and career development reviews	35	
	Diversity a	nd Equal Opportu	ınity
3-3	Management of the material topic	31	
405-1	Diversity of governance bodies and employees	18; 32; 92	
405-2	Ratio of basic salary and remuneration of women to men	33; 92	
	Non-	-discrimination	
3-3	Management of the material topic	27; 31	
406-1	Incidents of discrimination and corrective actions taken	31	No incidents of discrimination were reported in 2022.
	Loca	al Communities	
3-3	Management of the material topic	85	
	Supplier	Social Assessme	nt
3-3	Management of the material topic	19-21; 69-70	
414-1	New suppliers that were screened using social criteria	69	
	F	ublic Policy	
415-1	Political contributions		Elenia does not support political organizations or their representatives with gifts or benefits.

GRI	CONTENTS	PAGE	ADDITIONAL NOTES						
	Customer	Health and Safe	ty						
3-3	Management of the material topic	40							
416-1	Assessment of the health and safety impacts of product and service categories	40; 93							
	Customer Privacy								
3-3	Management of the material topic	21; 54							
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	54; 94	In 2022, there were reported two deviations concerning personal data.						

### **ELECTRIC UTILITIES SECTOR SUPPLEMENT**

EU2	Net energy distribution by energy source	77-78; 98-99	
EU3	Number of residential, industrial, institutional and commercial customer accounts	45	
EU4	Length of above and underground transmission and distribution lines		76,700 km of electricity network, with underground cabling rate of 61.7%.
EU10	Planned capacity against projected electricity demand over the long term	48; 50; 76-78	
EU12	Transmission and distribution losses	96	
EU18	Contractor and subcontractor employees that have undergone health and safety training	41	
EU25	Injuries and fatalities to the public involving company assets	40; 93	
EU28	Power outage frequency	51; 95	
EU29	Average power outage duration	51; 95	

### Elenia - Proportion of turnover associated with taxonomy-aligned economic activities 2022

				Substantial contribution criteria				DNSH criteria (Do No Significant Harm)												
onomic activities	Code	Absolute turnover	Proportion of turnover	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Pollution	Circular economy	Biodiversity and ecosystems	Minimum safeguards	Taxonomy-aligned proportion of turnover year 2022	Taxonomy-aligned proportion of turnover year 2021	Category (enabling activity)	Category (transitional activity)
		kEur	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	Е	Т
conomy eligible activities				,			·	,			·								, , , , , , , , , , , , , , , , , , ,	
Taxonomy-aligned activities																				
nsmission and distribution of electricity	4.9	308,410	97.2%	100%						N/A	Υ	N/A	Υ	Υ	Υ	Υ	99.96%	99.94%	Е	
Turnover of taxonomy-aligned activities (A.1)		308,410	97.2%																	
A.2. Taxonomy-eligible but not taxonomy-aligned activities																				
nsmission and distribution of electricity	4.9	109	0.0%																	
rnover of taxonomy-eligible but not taxonomy-aligned activities (A.2	)	109	0.0%																	
tal A.1 + A.2		308,519	97.2%																	

B. Taxonomy non-eligible activities		
Turnover of taxonomy non-eligible activities (B)	8,918	2.8%
Total A + B	317,437	100.0%

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### Independent Assurance Report to the Management of Elenia Verkko Plc

(This document is an English translation of the Finnish report)

We have been engaged by the Management of Elenia Verkko Plc (hereafter "Elenia") to provide limited assurance on selected environmental indicators presented in Elenia Oy and Elenia Verkko Oyj's Sustainability Report 2022 (hereafter "Selected Environmental Information") for the year ended 31 Dec 2022.

The Selected Environmental Information consists of the following indicators:

- Scope 1 emissions
- Scope 2 emissions
- Energy consumption related to Scope 1 and Scope 2 emissions

### Management's responsibilities

The Management of Elenia is responsible for the preparation and presentation of the Selected Environmental Information with reference to the reporting criteria, i.e. *GRI Sustainability Reporting Standards*, and the information and assertions contained within it. The Management is also responsible for determining Elenia's objectives with regard to sustainable development performance and reporting, including the identification of stakeholders and material issues, and for establishing and maintaining appropriate performance management and internal

control systems from which the reported performance information is derived.

### Our responsibilities

Our responsibility is to carry out a limited assurance engagement and to express a conclusion based on the work performed. We conducted our assurance engagement on the Selected Environmental Information in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board IAASB. That Standard requires that we plan and perform the engagement to obtain limited assurance about whether the Selected Environmental Information is free from material misstatement

KPMG Oy Ab applies International
Standard on Quality Control ISQC 1 and
accordingly maintains a comprehensive
system of quality control including
documented policies and procedures
regarding compliance with ethical
requirements, professional standards and
applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants IESBA, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

### Procedures performed

A limited assurance engagement on Selected Environmental Information consists of making inquiries, primarily of persons responsible for the preparation of information presented in the Selected Environmental Information, and applying analytical and other evidence gathering procedures, as appropriate. In the engagement, we have performed the following procedures, among others:

- Interviewed a member of Elenia's senior management and relevant staff responsible for providing the Selected Environmental Information;
- Assessed the application of the GRI
   Sustainability Reporting Standards
   reporting principles in the presentation
   of the Selected Environmental
   Information;

- Assessed data management processes, information systems and working methods used to gather and consolidate the Selected Environmental Information;
- Reviewed the presented Selected Environmental Information and assessed its quality and reporting boundary definitions and;
- Assessed of the Selected Environmental Information's data accuracy and completeness through a review of the original documents and systems on a sample basis.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement.

Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

### Inherent limitations

Inherent limitations exist in all assurance engagements due to the selective testing of the information being examined. Therefore fraud, error or non-compliance may occur and not be detected. Additionally, non-financial

data may be subject to more inherent limitations than financial data, given both its nature and the methods used for determining, calculating and estimating such data.

### Conclusion

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Based on the procedures performed and the evidence obtained, as described above, nothing has come to our attention that causes us to believe that the information subject to the assurance engagement is not prepared, in all material respects, with reference to the *GRI Sustainability Reporting Standards*.

Helsinki, 26 April 2023 KPMG Oy Ab

Antti Kääriäinen Partner, APA Tomas Otterström Partner, Advisory ELENIA AND SUSTAINABILITY 2022 111 KEY FIGURES

### Independent Assurance Report to the Management of Elenia Verkko Plc

(Translated from the original report in Finnish language)

### Scope

We have been engaged by Elenia Verkko Oyj (hereafter "Elenia") to perform a 'limited assurance engagement,' as defined by International Standards on Assurance Engagements, hereafter referred to as the engagement, to report on SAIDI (excluding major disturbancies) and LTIF information in Elenia's sustainability report for the period 1.1.2020–31.12.2022 (the "Subject Matter").

### Subject Matter:

	2020	2021	2022
SAIDI excluding major	70	67	70
disturbancies*			
LTIF**	10.0	9.5	4.5

<sup>\*</sup> According to SASB, excluding major disturbancies, which Elenia has defined as follows: Category 3 = Major disturbancy, 15,000–50,000 customers without electricity, Class 4 = Significant disturbancy, > 50,000 customers without electricity.

### Criteria applied by Elenia

In preparing the Subject Matter, Elenia applied the Sustainability Accounting Standards Board (SASB) sustainability reporting standards and Elenia's own internal reporting principles (the "Criteria"). As a result, the Subject Matter information may not be suitable for another purpose.

### Elenia's responsibilities

Elenia's management is responsible for selecting the Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the subject matter, such that it is free from material misstatement, whether due to fraud or error.

### Ernst & Young's responsibilities

Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained.

We conducted our engagement in accordance with the International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ('ISAE 3000'), and the terms of reference for this engagement as agreed with Elenia on 20.2.2022. Those standards require that we plan and perform our engagement to obtain limited assurance about whether, in all material respects, the Subject Matter is presented in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

### Our Independence and Quality Control

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, and have the required competencies and experience to conduct this assurance engagement.

Ernst & Young also applies International Standard on Quality Control 1, Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained

had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information, and applying analytical and other appropriate procedures.

Our procedures included:

- a) Development of our knowledge and understanding of Elenia's material sustainability reporting topics, organization and activities.
- Interview with senior management to understand Elenia's sustainability management,
- c) Interviews with personnel responsible for gathering and consolidation of the Subject Matter to understand the systems, processes and controls related to

- gathering and consolidating the information.
- d) Assessing sustainability data from internal and external sources and checking the data to reporting information on a sample basis to check the accuracy of the data,
- Performing recalculation of reported information and evaluating the correctness of underlying data and narrative disclosures.

We also performed such other procedures as we considered necessary in the circumstances.

#### Conclusion

Based on our procedures and the evidence obtained, we are not aware of any material modifications that should be made to the SAIDI (excluding major disturbancies) and LTIF information for the period 1.1.2020–31.12.2022, in order for it to be in accordance with the Criteria.

Helsinki, 17.3.2023

Ernst & Young Oy
Authorized Public Accountant Firm.

Miikka Hietala Authorized Public Accountant Nathalie Clément Leader of Sustainability Services

<sup>\*\*</sup> Loss time injuries \* 1,000,000 / conducted workhours.

ELENIA AND SUSTAINABILITY 2022 112 KEY FIGURES

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