ELENIA

ELENIA AND SUSTAINABILITY

2019

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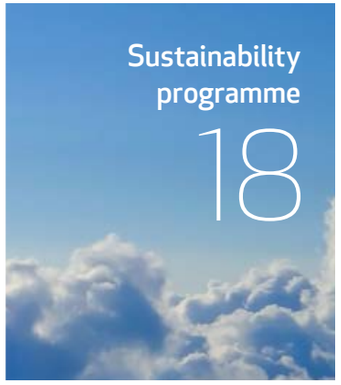


In addition to this sustainability report, Elenia's reporting includes also the Annual Review 2019.

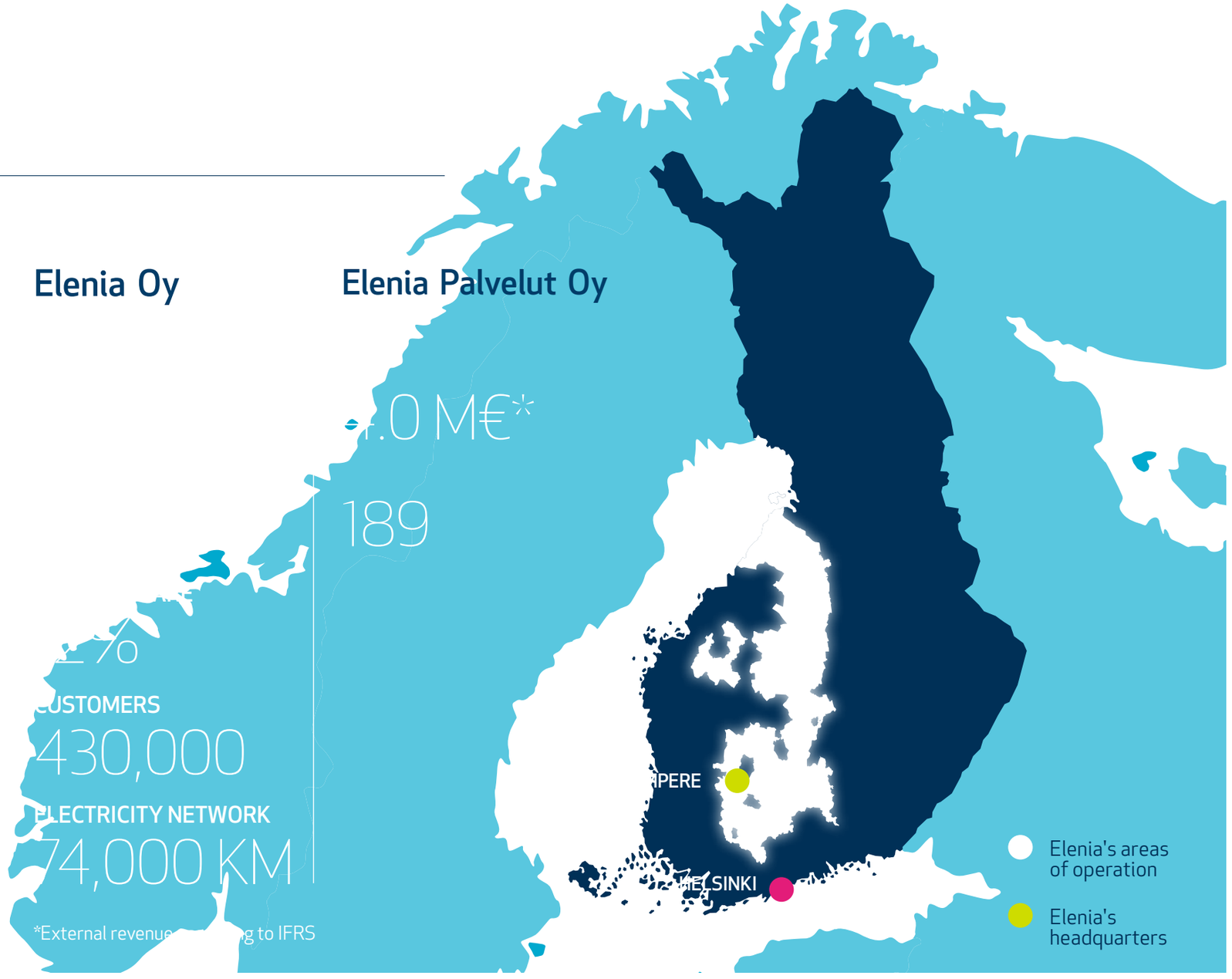
Elenia today

Elenia Group consists of the electricity distribution company Elenia Oy and its wholly owned subsidiaries Elenia Palvelut Oy, a customer service provider in the energy sector, and Elenia Finance Oyj. The Group's revenue in 2019 totalled EUR 295.6 million. In the past decade, we have invested over EUR 1 billion to ensure the security of supply of electricity distribution.

Elenia Group's headquarters are in Tampere. We distribute electricity to a total of 430,000 household, corporate and community customers in the regions of Kanta-Häme, Päijät-Häme, Pirkanmaa, Central Finland, South Ostrobothnia and North Ostrobothnia. Our electricity network spans over 74,000 kilometres, which means it could circle the Earth over one and a half times.

Elenia Oy's subsidiary Elenia Palvelut Oy is an energy sector service provider founded in 2015. It offers energy companies a comprehensive service concept, 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 Lahti Energia, Lumme Energia, Suur-Savon Sähkö, Etelä-Savon Energia, Tampereen Sähkölaitos and Suomen Kaasuenergia.

Elenia is owned by the State Pension Fund of Finland, Allianz Capital Partners on behalf of the Allianz Group and Macquarie Super Core Infrastructure Fund. Elenia divested its district heating operations on 22 July 2019.



CEO's review

Responsible front runner shows future direction

In 2019, we revised our strategy in which sustainability has a significant role. We also drew up for the first time our sustainability programme in this connection. Sustainability has long been part of our business operations, but the new programme now provides an even clearer framework for our activities.

Our mission is to be the most responsible reformer of energy services and markets. This role requires us diverse competence and genuine proactiveness.

Climate change influences our operations and the modernisation of our services. Renewable energy sources, in particular, are increasingly important in combating climate change. The increasing production of wind and solar power, which varies depending on weather conditions, affects the balance of the whole electricity system and calls for new solutions, which we will continue to develop and test.

We see the present transition in the energy sector, first and foremost, as an opportunity. It boosts the demand for smart solutions. One of the new solutions in this decade is demand-side flexibility, which will give households an increasingly active role in the electricity market.

Extreme weather phenomena – storms, thunder and snow loads – have already left their mark on electricity distribution and legislation. In response to such weather conditions, our electricity networks are rapidly moved underground. A decade ago, one-fifth of our electricity network was weatherproof, now that figure has risen to 50 per cent.

However, change cannot happen without knowledge and insight. Open communication and the provision of diverse information about the transition taking place in the energy market are key in this respect. Elenia and its staff play an important part in all this.

Safety and security are gaining increasing importance at home, at work and in the electricity network. Our major investments – especially the construction of a weatherproof network launched over 10 years ago – improve the security of electricity supply and ensure flexible daily life in a digitalised society that is increasingly dependent on electricity. New, smart electricity systems and the accumulated data pertaining to them must be accompanied with robust information security. In addition, we closely monitor the safety of our staff and partners. Ensuring safety is the bedrock of our operations.

Our systematic work to develop our sustainability has also been noted in international comparisons. In the summer 2019, we received a full five stars in the GRESB (Global Real Estate Sustainability Benchmark) assessment for the infrastructure sector. According to this assessment, we are the world's most sustainable distribution system operator.

Our mission in society and in maintaining smooth daily activities encourage us to continue our efforts in line with our sustainability-oriented strategy. This report describes our sustainable goals and our efforts to promote them.

Tapani Liuhala
CEO

Elenias strategy

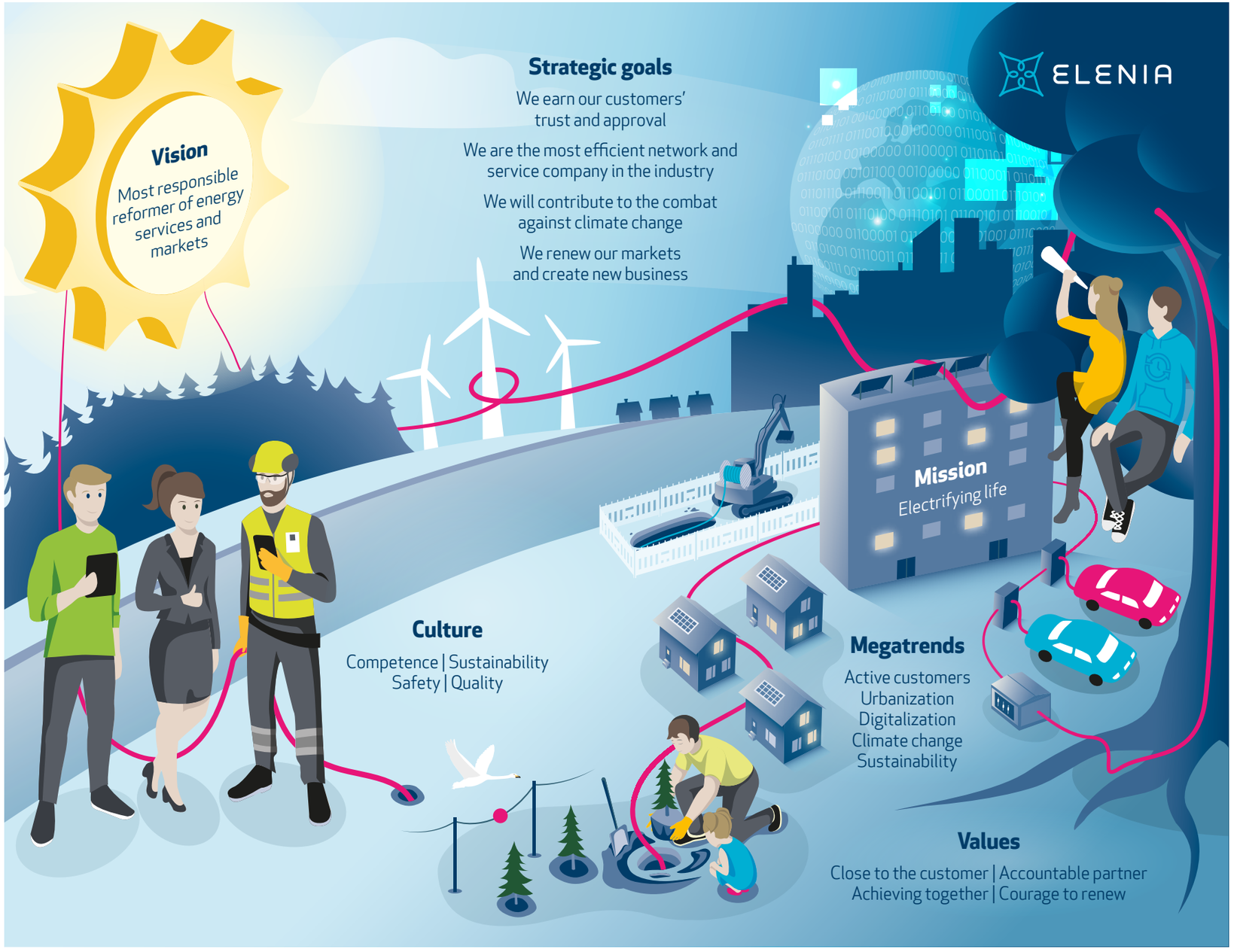
SUCCESS FACTORS

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



Elenia's service development

2001 – STORM JANIKA
Officials propose the 6-hour outage cutoff after storm Janika hits.

2002 – SMART METERS
Testing our smart electricity meters 2002–2004 and smart meters installed for all our customers 2004–2008.

2005 – AUTOMATION OF NETWORK
Our overhead line network was made more secure through automation. Compact primary substations are launched.

2007 – OUTAGE MAP
Our outage map service is the first in Finland.

2008 – SMS SERVICE
Our SMS outage service is the first in Finland.

2009 – WEATHERPROOF SOLUTIONS
Weatherproof electricity network construction solutions. Our customers are entitled to compensation for outages lasting over 6 hours. A standard for reliable electricity distribution entered into Finnish law in 2013.

2010 – DIGITAL MONITORING
Hourly electricity consumption monitoring was introduced into our digital services first in Europe.

2013 – NEW DIGITAL SERVICES
Elenia mobile app as a free-of-charge service channel. Including monitoring of electricity consumption, ability to check whether the power is on, visual footage of threats to the functioning of the electricity network. Elenia Weatherproof as an online map service on ground cable construction.

2015 – ELENIA AINA
Elenia Aina is a digital service channel that, among other things, allows you to monitor your electricity consumption.

2016 – ELENIA WEATHERPROOF
More than a billion euros in Elenia Weatherproof investments, more than 10,000 man-years of work to our partners.

2017 – TESTING DEMAND FLEXIBILITY
Pilot project to create market place for demand flexibility.

2018 – SMART GRID FUTURE SOLUTIONS
Next-generation smart metering for all our customers.

2001 | 2002 | 2005 | 2007 | 2008 | 2009 | 2010 | 2013 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2024

Sustainability programme and the management of sustainability

A responsible, sustainable approach is a natural part of Elenia's activities and services. It is also required for our social task of securing a smooth daily life.

In recent years, we have taken important steps to further develop our approach. The main goals of our new strategy include earning our customers' trust, ensuring efficient operations, renewing the electricity market and combating climate change.

In parallel with our strategy, we also drew up Elenia's first sustainability programme, which was approved in the autumn 2019. The programme provides clearer structure for our work and its goals steer us along our path more systematically.

SAFETY AND WELLBEING AT WORK

Occupational safety

Occupational health and wellbeing at work

CUSTOMER EXPERIENCE AND QUALITY

Customer experience and quality

Sustainable investments

Reliable information security and protection

Local stakeholder cooperation

CONTINUITY OF OPERATIONS AND ROLE AS FORERUNNER

Continuity of operations and contingency planning

Renewable energy and energy efficiency

Efficient use of materials and the circular economy

Innovation to promote changes in the energy sector

SOCIAL IMPACT

Sustainable procurement and supply chains

Generation of added economic value

Risks and opportunities of climate change to business

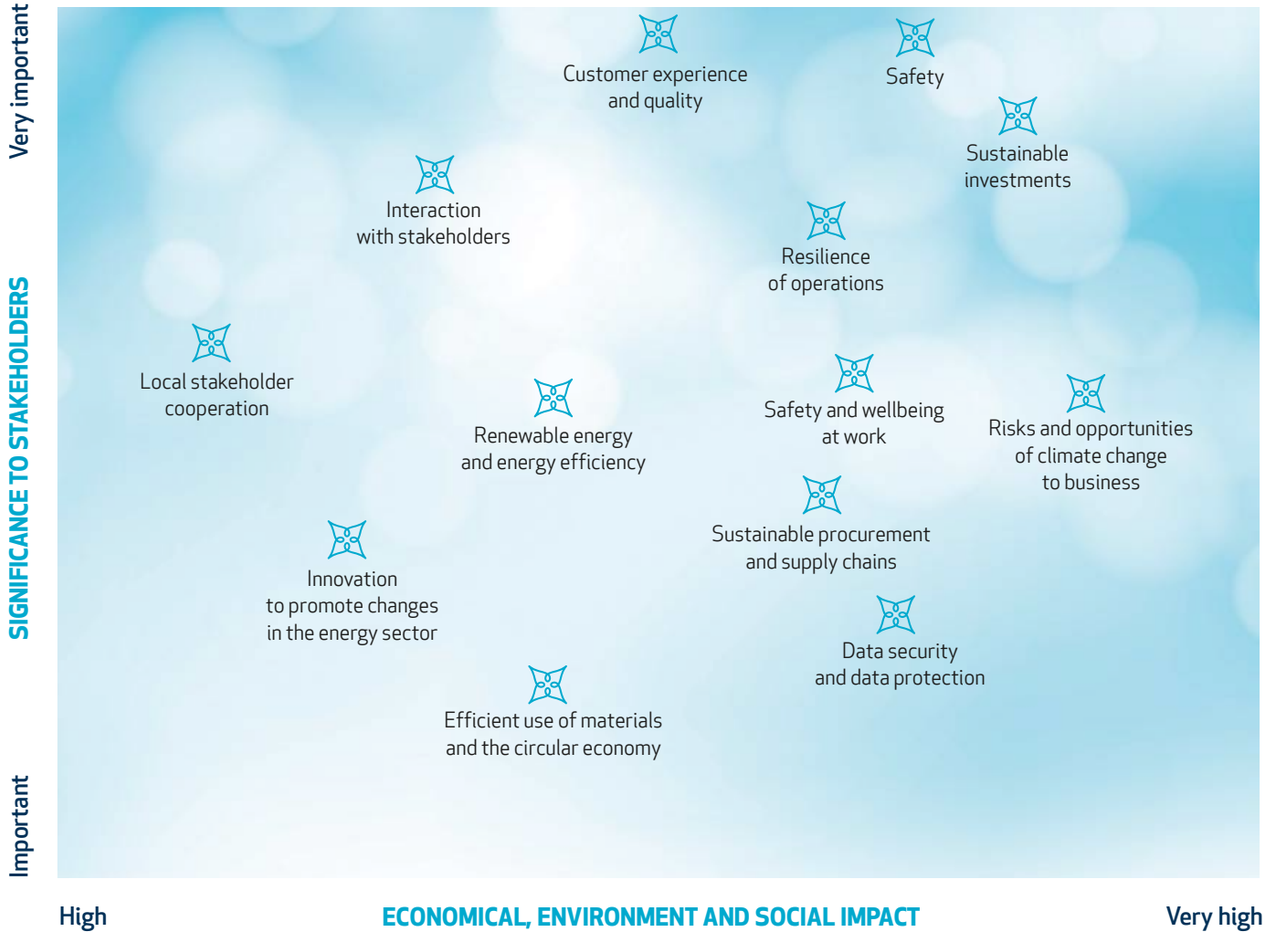
Interaction with stakeholders

Sustainability programme and the management of sustainability

In connection with the preparation of the sustainability programme, Elenia's management and specialists conducted the first analysis of the company's sustainability and its key themes in 2018. We continued this work in 2019 by more extensively involving staff and stakeholders and asking for their opinions about Elenia's services and operations, and by determining the main impacts of our operations on people, society and the environment. We used this information to update the materiality matrix in early 2020.

In our sustainability programme, we have identified the key themes under each sustainability principle as well as the indicators describing them. The development and goal-orientedness of operations play an important part in sustainability. We have set targets for the main themes and follow their progress. We will report on this in greater detail in our future reports. We are also prepared to develop and elaborate on our sustainability programme as our work progresses and to mirror any changes in our stakeholders' expectations.

MATERIALITY MATRIX



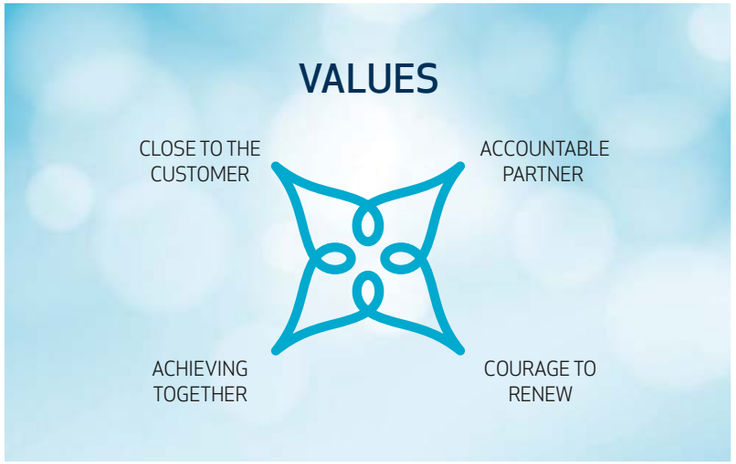
We manage sustainability as part of our daily operations

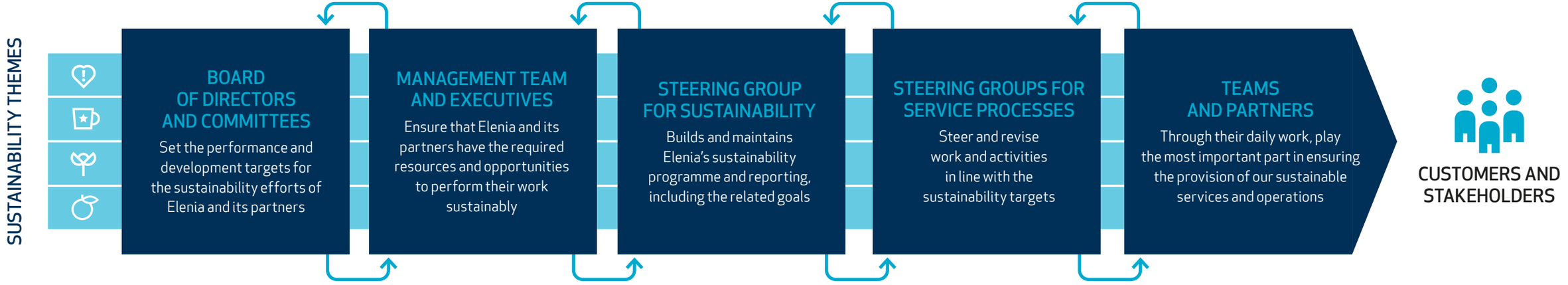
Sustainability lies at the heart of Elenia's strategy, and our values — Close to the customer, Accountable partner, Achieving together and Courage to renew — still form the foundation for our operations and choices.

The goals of our sustainability programme apply to everyone at Elenia. The company's management team is responsible for sustainability efforts, leading by its own example and creating the appropriate conditions for ensuring that everyone at Elenia and its partners can follow sustainable practices in their own work.

The steering group for sustainability management and the steering groups for different business processes regularly monitor the implementation of the sustainability programme and the achievement of its goals. The management team assesses the functioning of the sustainability programme and management systems as well as the related needs for improvement twice a year in management reviews. Sustainability reports are submitted to the Board of Directors monthly, and sustainability matters are regularly discussed by the Board's Audit and Risk Committee and Safety, Health, Environment and Security committee.

The implementation of Elenia's sustainability programme is jointly managed by the customer relationship manager and the steering group for sustainability. The head of communications is in charge of the annual sustainability report and its preparation, which involves the management and specialists from the entire organisation.





Corporate governance and transparency as the foundation

Corporate governance and transparency lay the foundation for Elenia's sustainable operations, and they serve the interests of Elenia's customers, shareholders and investors, partners, employees and the general public. The decision-making bodies responsible for Elenia's governance and operations are the Annual General Meeting of shareholders, Board of Directors and CEO.

The CEO manages the company's day-to-day administration in accordance with the instructions and orders issued by the Board of Directors, supported by the management team. In its investor communications, Elenia complies with the EU's Market Abuse Regulation (596/2014) and the rules of the London Stock Exchange.

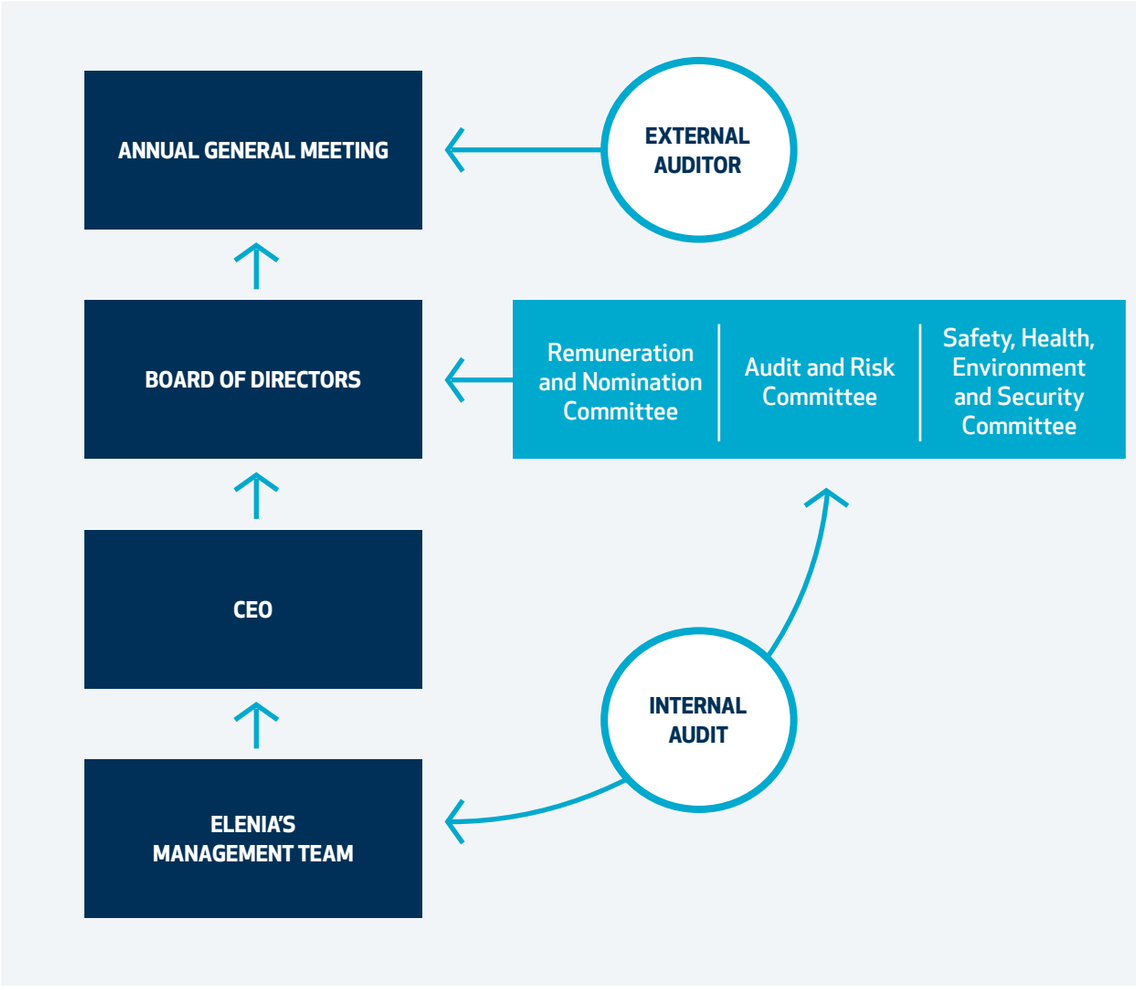
The Board of Directors is responsible for company's administration and appropriate organisation of operations. Since 2018, the Board of Directors has three committees: the Remuneration and Nomination Committee, the Audit and Risk Committee and the Safety, Health, Environment and Security Committee.

The Board of Directors is responsible for monitoring the effectiveness of internal control, internal audit and risk management systems. It also approves the annual plan and focal areas for internal audit and regularly reviews risk management operations. Internal audit is an independent and neutral function that secures the effective implementation of governance, risk management and control measures.

More information on Elenia's risk management on page 73

Elenia's Management Team

Elenia's Board of Directors



Management systems and Code of Conduct provide a framework for sustainability

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

Alongside these, our operations are guided by the Code of Conduct for employees and partners, the policies of the different operating areas, other guidelines and specifications as well as, naturally, legislation. At Elenia, the induction of personnel into sustainability-related themes and guidelines takes place in an online learning environment. A detailed description of the process can be found on page 29.

ELENIA'S CERTIFIED MANAGEMENT SYSTEMS PROVIDE A FRAMEWORK FOR OPERATIONS

- Asset management: PAS 55 and ISO 55001
- Occupational health and safety: ISO 45001:2018
- The environment: ISO 14001:2015
- Information security management: ISO/IEC 27001:2013 certification
- Energy efficiency agreement is in line with ISO 50001 for energy management

Certified management systems cover all of Elenia's business, all of Elenia's staff and all of Elenia's partner network. Sustainability management is included in all of these management systems.

THE POLICIES, CODE OF CONDUCT AND GUIDELINES STEERING OUR OPERATIONS

- **Procurement Policy**
- **Asset Management Policy**
- **Information Security Policy**
- **Occupational Health and Safety Policy**
- **Environmental Policy**
- **Code of Conduct for personnel**
- **Code of Conduct for partners**

INTERNAL GUIDELINES

Elenia's operational programme for ensuring non-discrimination
Human Resources and and Training Policy
Anti-bribery Policy
Risk Management Policy
Whistleblowing Policy

Accountable partner

Elenia's operations and services provided are based on close cooperation with partners. Jointly with our diverse partner and cooperation network, we strive to secure the safety of operations, an excellent customer experience, attention to environmental aspects as well as efficient, responsible and high-quality operations.

Our partner cooperation is based on our key value of being an accountable partner. We demand high levels of responsibility from ourselves and our partners. We also care about our own and our shared wellbeing and safety at work.

Read more about safety and sustainable procurement on page 64

We are committed to and also require our partners and their subcontractors to comply with Elenia's Code of Conduct for partners, which define our shared responsible business practices.

Elenia's Code of Conduct for partners

Full five stars in the Global Real Estate Sustainability Benchmark

In the autumn 2019, Elenia became the number one distribution system operator in the Global Real Estate Sustainability Benchmark (GRESB). Seven distribution system operators from around the world took part in the assessment. Worldwide, a total of 393 infrastructure companies took part in the GRESB assessment. In the global overall results, Elenia ranked fifth. A total of 236 European companies took part in the assessment, and Elenia ranked third among them.

The international GRESB system assesses the sustainability of the infrastructure sector and offers us an important benchmark and research tool for the continuous development of sustainability as it provides information about the global development of sustainability in the infrastructure sector. GRESB assesses the performance of companies in environmental matters, corporate social responsibility and corporate governance.

Elenia improved its GRESB scores considerably from the previous year, achieving a full five stars and successfully improving its score by eight units to achieve a score of 89. Elenia took part in the GRESB assessment for the first time in 2018 and was also awarded five stars then.

Peer Comparison

1st — Electricity Distribution Companies | Maintenance and operation
out of 7

Rankings

3rd — Europe / Non-listed
out of 236

3rd — Europe
out of 236

5th — All Infrastructure Assets
out of 393

Elenia and the UN sustainable development goals

Our vision of being the most responsible reformer of energy services and markets contributes to the UN sustainable development goals (SDG) towards low-carbon, safe and sustainable societies. We have identified six SDGs that we especially can promote through our operations.

Read more on page 14

In line with the Energy Efficiency Agreements 2017–2025, a nationwide programme, we have undertaken to promote energy efficiency in our business and services. Our progress is monitored annually through energy efficiency reporting maintained by Motiva Oy. More information on energy efficiency on page 51.

We also comply with:

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

Elenia and the UN sustainable development goals

Ensure access to affordable, reliable, sustainable and modern energy.

Elenia constructs sustainable, smart and weatherproof electricity network to customers and enables to connect renewable energy to Elenia's network.

METERS:
- Execution of WEATHERPROOF -project according to the plan
- Innovations and pilot installations of next-generation smart meters
- Next-generation smart metering integrations' functioning
- Amount of renewable energy, feeded to Elenia's network

Build resilient infrastructure, promote sustainable industrialization and foster innovation.

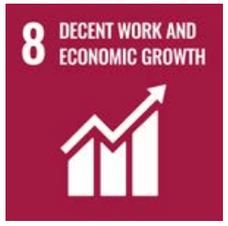
Elenia makes responsible procurement of materials and investments and also innovative solutions for contributing energy transition.

METERS:
- Responsible purchase of materials
- Excecution of innovation and development portfolio

Take urgent action to combat climate change and its impacts.

Elenia enables completion of energy transition by developing smart grid and creating platform to energy market. In addition Elenia improves the efficiency of energy and material usage and also circular economy of demolished network.

METERS:
- Effectiveness of material usage in Elenia Weatherproof projects
- Percentage of demolished network materials recycled
- Next-generation smart metering integrations' functioning
- Research on CO_2 free electricity network losses
- Activities according to the national energy efficiency agreement



Promote inclusive and sustainable economic growth, employment and decent work for all.

Elenia takes care of occupational safety, health and wellbeing of employees and partners and requires respect of ethical principles in all Elenia's activities. In addition Elenia employs locally.

METERS:
- Employee satisfaction
- LTIF (Lost Time Injury Frequency)
- Safety communication and activities to stakeholders
- Research on domestic content in investments

Make cities inclusive, safe, resilient and sustainable.

Elenia ensures energy supply and business continuity in all situations.

METERS:
- Amount of customers covered by the electricity distribution quality requirements
- Research on the network development plan's sustainability
- Crisis preparedness practices according to the plan
- Analysis on operational impacts of the critical information systems
- Treatment of information security risks
- Zero information security violations reported to the Information Protection Ombudsman

Revitalize the global partnership for sustainable development.

Elenia focuses attention on customer-orientation and local stakeholder cooperation. It requires that partners comply with law, agreements and working conditions and requires also commitment to the principles of corporate responsibility.

METERS:
- Customer satisfaction
- Number of claims in Elenia Weatherproof projects
- Sustainability reviews made with contracting partners
- Energy lessons to primary school children

Trends in Elenia's operating environment

POLICY

The political environment will put increasing emphasis on cost-effectiveness

- Public discussion about the pricing of distribution system operators
- Increased emphasis on cost-effectiveness

ECONOMY

Organic growth is expected to be slow

- Slow-down in population growth around the country
- Consolidation among the electricity retailers
- Moderate increase in electricity consumption
- Pressure to increase prices resulting from investments in networks

SOCIETY

Several factors will contribute to changes in the energy sector

- Urbanisation, new solutions for sparsely populated areas
- Electrification and requirements for the quality of electricity
- A changing and increasingly diverse customer interface
- Customers becoming producers
- Increasing demands for sustainable development

TECHNOLOGY

The smart grid will provide new opportunities

- Active network management, including energy storage solutions
- Solutions for coordinating supply and demand, such as:
  - Virtual power plants
  - Next-generation automated metering system
- Digitalisation

THE ENVIRONMENT

Increasing awareness of climate change

- Enabling energy efficiency and decarbonisation
- Minimising and compensating for personal environmental impact
- Increasing use of solar and wind power
- The circular economy and improved efficiency

LEGISLATION

The focus will shift away from security of supply

- The EU's clean energy package will become part of national legislation
- In the following regulatory periods, the focus of national supervision is expected to shift from investments to overall cost-efficiency
- The importance of demand flexibility will increase

Climate change drives the transformation of energy production and consumption

THE SMART GRID WILL ASSUME A CENTRAL ROLE

The mitigation of climate change is transforming the energy sector and energy markets. Energy production that generates carbon dioxide emissions must give way to renewable energy, and the future is set to become increasingly electric in all areas of life: homes, transport, industry and society. This energy transition will also affect electricity network services and increase their significance as part of the big picture of energy consumption, production and storage.

The target set for international cooperation is to limit the increase of the Earth's average temperature and to bring about changes throughout the world to keep warming at 1.5 degrees or less. Reducing the emissions generated by energy production will play a key role in achieving this target.

The continuous growth of wind and solar power makes it more challenging to maintain the balance of the electricity system because the output of these energy sources depends on the weather. The amount of electricity produced must always match the amount used. The effective functioning of the electricity system requires a smart and weatherproof electricity network.

Two decades of work have seen Elenia develop a smart grid that is among the world's best and the subject of widespread interest at international events for the energy sector. A few years from now, our customers will be able to access near real-time data on their electricity consumption when the next-generation metering system is deployed.

A significant change is also taking place in customers' attitudes towards their energy consumption. More and more people are making value judgments regarding electricity consumption and starting to produce electricity themselves. The lower costs of technology and various smart solutions give customers greater possibilities to contribute to the achievement of climate targets.

Electricity storage and electric cars with storage and smart charging functionalities will provide more opportunities in the future for utilising one's own electricity production. At the same time, smart solutions will be introduced in homes and household appliances, enabling the electricity consumption at

→

Climate change drives the transformation of energy production and consumption

homes to automatically react to the price of electricity, for example, which provides benefits to customers.

The key challenge faced by the Finnish electricity market in the future will be to ensure the security of supply with regard to electricity generation as well as electricity distribution networks. The primary goal is to build a smart energy system that meets the security of supply requirements.

The growth of renewable energy production and the concurrent downscaling of traditional electricity production creates the need for stronger demand response in electricity consumption. A smart energy system makes electricity available whenever it is needed and implements this required level of demand response without causing disruptions to customers and society.

Elenia has engaged in the determined development of a smart grid as a platform for the electricity market of the future. We will be able to offer the solutions of the next-generation smart metering system we are currently working on for use by virtual power plant operators in the demand response market, for example.

In the future, the smart grid can promote the expansion of the commercial demand response market by providing network-based load control for use by the competitive markets. This will give a growing number of consumers access to the demand response market.

We began modernising the ageing electricity network to make it weatherproof against increasingly extreme weather phenomena more than a decade ago. We have made great progress on that front as well. In 2020, half of our electricity network will be underground and weatherproof. Our investments in the reliability of electricity distribution exceeded a billion euros during the past decade. By 2028, 75 per cent of Elenia's network will be underground. This will ensure city-level electricity distribution even outside urban areas.

The strengthening of the customer's position and digitalisation will revolutionise the conventional operating models of the electricity markets. The energy sector will be transformed by comprehensive services that make the customer's day-to-day life easier and promote energy efficiency. Elenia will play a significant role in this transformation by developing first-class services for its customers. ■

Sustainability programme

KEY RESPONSIBILITY THEMES

- Safety at work
- Safety and wellbeing at work
- Customer experience and quality
- Sustainable investments
- Data security and data protection
- Local stakeholder cooperation
- Continuity of operations and contingency planning
- Renewable energy and energy efficiency
- Efficient use of materials and the circular economy
- Innovation to promote changes in the energy sector
- Sustainable procurement and supply chains
- Generation of added economic value
- Risks and opportunities of climate change to business
- Interaction with stakeholders

PRINCIPLES OF SUSTAINABILITY

- SAFETY AND WELLBEING AT WORK
- CUSTOMER EXPERIENCE AND QUALITY
- CONTINUITY OF OPERATIONS AND ROLE AS FORERUNNER
- SOCIAL IMPACT

STRATEGIC GOALS

- WE EARN OUR CUSTOMERS' TRUST AND APPROVAL
- WE ARE THE MOST EFFICIENT NETWORK AND SERVICE COMPANY IN THE INDUSTRY
- WE WILL CONTRIBUTE TO THE COMBAT AGAINST CLIMATE CHANGE

VISION

ELENIA

MOST RESPONSIBLE REFORMER OF ENERGY SERVICES AND MARKETS

SAFETY AND WELLBEING AT WORK

We support the wellbeing, health and professional development of our personnel.

Our work is safe.

KEY RESPONSIBILITY THEMES

- SAFETY AT WORK
- SAFETY AND WELLBEING AT WORK

SAFETY AND WELLBEING AT WORK

Elenia's values encourage us to achieve things together, have the courage to renew ourselves and to be an accountable partner. Elenia has a staff of world-class professionals, and we take care of our work community. We provide opportunities and create space for professional development as well as for work-life balance.

We monitor our performance in job satisfaction and wellbeing at work and jointly address matters if we detect any need to revise our operating methods.

We work uncompromisingly to ensure our own safety and that of our partners. Our goal is for everyone to return home safe and healthy every day

Elenia – my choice, every day

We completed our Talent Strategy 2025: Elenia – my choice, every day at the beginning of 2019. We have implemented the strategy in daily work through discussions conducted at team meetings. The revision of our business strategy last autumn will entail updates to our Talent Strategy in 2020. This will support the development of business operations, the needs survey for new competencies, successful recruitment and the joint development of good employee experiences. We will also determine how our human resources policy matches the needs of our business operations.

Elenia's new business strategy emphasises competence, responsibility, safety and quality. A support group made up of Elenia's staff will update the Talent Strategy. This will help ensure the staff's involvement and provide them with the opportunity to influence and collaborate in the reform.

Our Talent Strategy has three key objectives:

- An evolving community spirit and a healthy work community
- An attractive employer image
- An operating culture that boosts Elenia's role as forerunner

Elenia – my choice, every day

To achieve our objectives, we will introduce, for example, wellbeing and work-load discussions conducted with the supervisors as well as parental-leave discussions. Employees with children have access to childcare services if their children should fall ill. We will boost interaction through joint discussion events and monitor the daily workload and recovery from work. In addition, we will harmonise project control and reward principles.

We are recruiting personnel for specialist duties. Our new professionals usually have a degree in engineering or business from a university or university of applied sciences. ■

OUR TALENT STRATEGY THAS THREE KEY OBJECTIVES

An evolving community spirit and a healthy work community

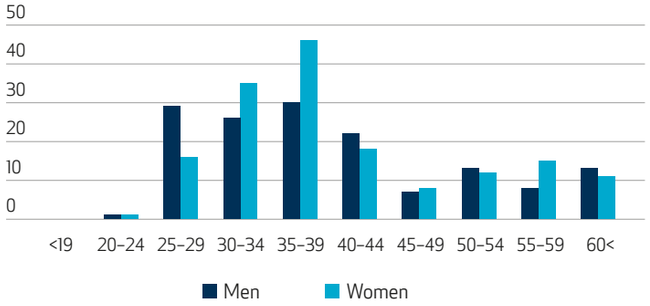
■

An attractive employer image

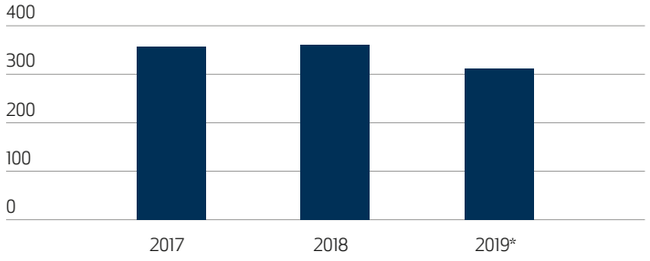
■

An operating culture that boosts Elenia's role as forerunner

ELENIA'S STAFF AGE DISTRIBUTION 2019

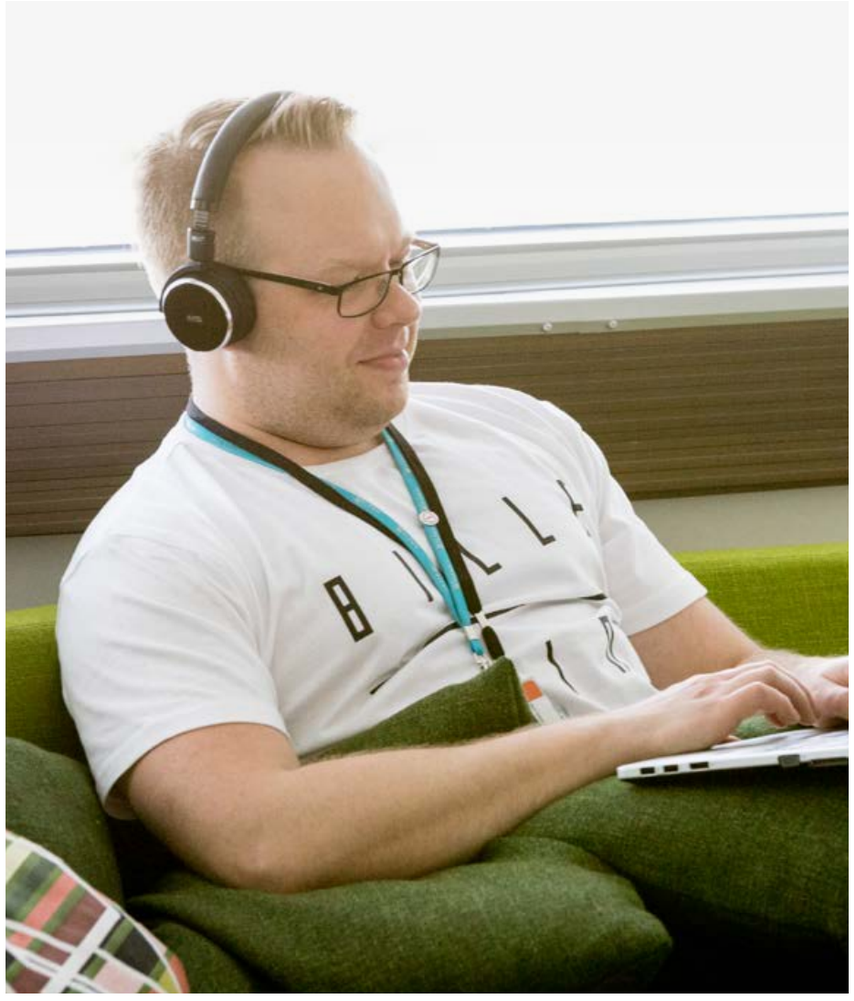


ELENIA'S HEADCOUNT 2017–2019



*Divestment of heat business, 22 July 2019

Early intervention reduces the amount of sick leaves



We promote the health of Elenia's employees, maintain their capacity for work and prevent work-related and workplace condition-related hazards through cooperation with occupational healthcare experts and employment pension insurers.

As for preventive occupational healthcare, we, like many other Finnish companies, are shifting the focus to the development of psychological wellbeing.

For many years, Elenia has actively conducted tripartite cooperation involving occupational healthcare, the supervisor and the employee to support the health of our staff as part of our early intervention scheme. Supervisory work to support the staff's capacity to work, monitoring of sick leave and support for returning to work after an absence play an important role in these efforts. In addition to the supervisor, co-workers can also look after one another and intervene if they detect problems in any of their team members' daily work.

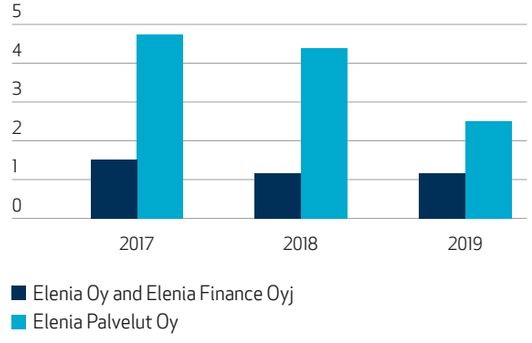
At our fully renovated Tampere office, we have invested particularly in ergonomics and other working conditions in an open-plan office. Each employee has an electric desk and, if they wish, noise-cancelling headphones. An occupational physical therapist provides assistance with screen-based work and desk ergonomics. Guided break exercise is offered weekly in our common facilities, which also feature wall bars and exercise equipment.

We also support our staff's wellbeing and ability to work with the help of through recreational and leisure activities. The leisure activities that the company supports aim to maintain the staff's wellbeing, for example, through exercise and culture.

Elenia is a smoke-free workplace, and we have zero tolerance for intoxicants and pharmaceuticals used as drugs. Our strict drug policy, applied equally to all, is based on ensuring electrical safety.

We follow the number of accidents leading to a sick leave and overtime and regularly report this information to the company's Board of Directors. In our network business, the amount of sick leave has been very low and clearly under the average for salaried employees in Finland. In the service business, the amount of sick leave has decreased in the past few years thanks to active early intervention and good cooperation with occupational healthcare providers. Following our organisational change, part of our network business staff transferred to service business operations as of 1 January 2019. ■

SICK LEAVE 2017–2019 (%)



Practical measures to achieve safety

We have set as one of our goals to make Elenia one of the world's safest places to work. In 2019, in connection with the TEKO (Returning Home Healthy) project, launched in the autumn of 2018, we collaborated with our partner network and carried out more practical measures than ever before. These included six courses on work safety in the electricity network, provided in our electronic learning environment together with our partners. Last year, over 700 people took part in our online courses, completing over 2,500 courses in all. We also drew up a visual handbook for electricity network construction sites and surveyed the best safety management practices followed in different fields.

To ensure quality, we regularly provide our contractor partners and their sub-contractors with induction training related to, for example, new products and the order and supply process of materials. In 2019, Elenia's recycling partner instructed contractors in the recycling of demountable overhead systems and material management. Partners were also introduced to legislative reforms and licensing-related matters.

SAFETY OBSERVATIONS AT THE HEART OF RISK PREVENTION

Observing and reporting near miss situations and safety risks as well as learning from such situations and accidents are important aspects of the development of safety at work. We report on safety observations on a monthly basis, both for our in-house work and the work of our partners.

Our goal in 2019 was to raise the number of safety observations to one thousand. We did not quite achieve this, even though the number of observations rose to a record number of 714. The ease of reporting safety observations is

→

Pioneering safety at work – escape room game on safety

In 2019, Elenia created a safety-themed escape room game. It exemplified the key safety aspects related to the construction site and construction project of a weather-proof electricity network. The goal of the gamified concept is to teach work-related safety aspects in a new and interesting way. A discussion on safety conducted after the game is an essential part of the escape room, which has come to be known as "Patu".

In the summer of 2019, the escape room game toured ten locations in Elenia's electricity network area, attracting over 500 players. We targeted an even larger group of players and will continue to use the game in 2020.

We have introduced our gamified safety training extensively to our stakeholders. This has promoted the escape room as a safety training innovation in other sectors as well. The effectiveness and impact of the game was assessed in a master's thesis completed at Elenia. According to the thesis, the novel approach to safety training was successful and well suited to the electricity network business.

Practical measures to achieve safety

an essential factor in raising the number of observations. In early 2020, we introduced a new reporting system, which is easy to use and which we therefore believe will help lower the threshold for reporting observations.

In 2019, a total of 14 accidents occurred at Elenia's sites. All of these involved partners performing work for Elenia. As a consequence, our LTIF (lost time injury frequency) rate rose to 5.9 and we were unable to meet our target rate of less than 3. We have set a target joint LTIF rate for Elenia and its partners, since for Elenia, everyone's safety is equally important. We will jointly work towards our main goal of ensuring that everyone returns home safely every day. →

SAFETY MANIFESTO

By signing this document, we commit both personally and on behalf of the companies we represent, their employees and subcontractors, to promoting a culture of safety, to developing safety practices and to actively ensuring that the aspects listed below are observed.

Objective

We will lead, develop and monitor our operating practices and our safety culture to ensure there are no further occupational accidents.

Prerequisities

We will ensure that all persons working at our sites have the necessary knowledge, understanding and the ability to implement safe and healthy practices in their daily work. We will ensure that a culture of safety is observed in our work environments, observing and preventing malpractices and, if necessary, halting work operations in case sufficient safety levels cannot be ensured. We will ensure that all persons working at work sites, including subcontractors, receive an appropriate induction for their work tasks, their implementation and to safety documentation.

Practice

We will ensure that all persons working at a work site wear the required personal protective equipment while on site, and that all personnel have valid qualifications. We will ensure that all persons working at a work site have access to appropriate, certified and safe tools and methods at all times. We will observe all relevant laws, authority regulations, industry standards and safe practices. We will constantly monitor and promote the safety of our work sites, ensuring the safety of third parties as well as of employees.

Learning

We will report and analyse all accidents and potentially dangerous situations that take place at our work sites in order to learn from them and to prevent them in the future. Additionally, all accidents will be covered with the CEOs of the companies concerned with no unnecessary delays. We will constantly monitor our own progress in reaching our set safety objectives. Safety is a shared issue, and with this manifesto we appeal to each party operating in our shared work environment. We hereby commit to these safety guidelines and to only using subcontractors who are willing to commit to the terms and conditions of this contract. In this way, we will ensure that all our employees get to leave our sites and go home healthy at the end of their working day.

ELENIA

SAFELY BACK HOME

Practical measures to achieve safety

PRACTICE LEADS TO BETTER OVERALL SAFETY

Practising for emergency situations helps us ensure the safety of our staff, partners and society under all conditions. In 2019, we organised a crisis management exercise, where senior management, system and data communication coordinators, the control centre and the staff in charge of electricity network operations practised reacting to and containing cyberattacks.

In the autumn, we continued with a safety and rescue exercise to test our resources and competence in the event of a fire. In connection with this exercise, we taught our safety personnel skills such as the use of fire extinguishers.

During the national accident prevention day, we organised an office orienteering for Elenia's staff at the Tampere premises to ensure that everyone is acquinted with emergency instructions in practice. ■

Safety Walks at sites

In 2019, to develop our safety culture, we rentroduced safety walks at our sites. Through them, we wish to communicate to our partners' electricians working in the field that our management is truly committed to the development of safety. The revised safety walk approach helps us address safe attitudes and behaviour at work through discussions and observations. On-site supervision, in turn, enables us to more closely address tangible and technical aspects that ensure the safety on sites. Our goal was to have senior management representatives, managers and our safety engineer visit 100 sites in 2019. We clearly exceeded this goal with our over 140 safety walks.

Job satisfaction and work-life balance

The basic elements, such as workspaces and salaries, only partly affect job satisfaction. Of greater importance are factors such as the content and meaningfulness of work, professional development, work-life balance, the values and culture of the work community as well as opportunities to influence work.

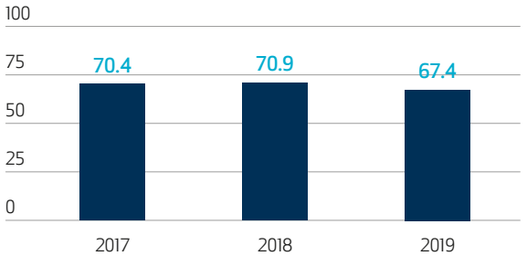
We measure job satisfaction both annually and through a monthly pulse survey carried out ten times a year. The development work carried out in teams based on the results as well as the opportunity to participate in the work boost the staff's opportunities to influence matters. Teams for which five or more responses have been registered receive their own results for both the annual and pulse survey.

In the annual survey, everyone can provide feedback on management, teamwork and their own participation in the work community's operations and development. Teams review the results of the annual survey and determine how they can address the matters pinpointed as being in most urgent need of development. Teams also monitor the completion of measures.

With regards to the pulse surveys on the experience of daily work, instead of following individual results, it is more important to examine the trend in key figures and take any action that they warrant. These results are also examined within the teams so that the teams can identify the aspects they should take into account in daily operations. The 2019 surveys indicated a slight improvement overall, compared to the results from the previous year.

Elenia conducted two annual workplace surveys in 2019. Both the People Power and Siqni surveys are widely used and highly appreciated methods. The result of the 2019 People Power survey dropped slightly from the previous year, totalling 67.4 on a scale of 0 to 100. Meanwhile, the results of Siqni, conducted among customer service teams and teams close to them, improved slightly from the previous year, amounting to 71 on a scale of 0 to 100. The initial level in Siqni was 65, recorded three years ago.

PEOPLE POWER -INDEX 2017–2019



Over the past three years, Elenia's People Power index has matched the average for expert work in Finland.

Elenia's 2019 surveys indicated that satisfaction has improved with regards to the basic elements and partly also in professional development and aspects related to the immediate work community. Our development now targets the staff's experience of being able to influence common matters, of being heard and of being able to better control the workload. We will address all these in our development measures for 2020. The teams also define the measures they will take to improve daily operations. The goal is to strengthen everyone's opportunities to directly influence matters.

We have used the Siqni survey in customer service for several years, and it has served as a good development tool for individual team members. All survey respondents receive their own job satisfaction assessment of the key factors affecting job satisfaction. The Siqni survey focuses expressly on individual job satisfaction. The focus of the People Power survey, in turn, is on team- and company-level development.

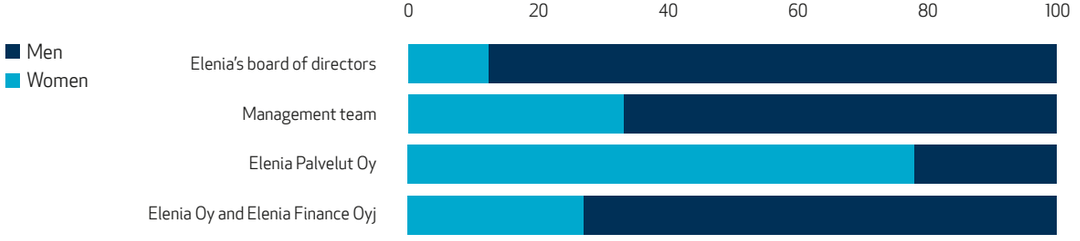
We conducted our own additional survey focusing on the areas in which our People Power results were the weakest. We received a great deal of feedback and ideas, which we will use at all levels of the organisation in 2020. The results of workplace surveys played a key role when we determined the goals and focus areas for our Talent Strategy. We will also take them into account when updating our Talent Strategy and developing our corporate culture in 2020. ■

Everyone is important

Elenia is an equal work community in terms of its gender distribution. Women slightly outnumber men. Professions and work communities in the energy sector have traditionally been dominated by men. As regards technical competence, Elenia's work community is enriched by a highly competent customer service staff that provides services not only to Elenia but also to many other energy companies. Elenia's network business encompasses duties calling for advanced technical education and experience. In these duties, the share of women remains under one third.

For every post, we choose the best applicant to complement the team's competence, performance and structure. We consider an equal gender distribution to be one of the factors improving performance. It is the supervisors' responsibility to balance team structures for different job grades in connection with recruitment This means increasing the share of men in customer service duties as well as increasing the share of women in technical duties. All of Elenia's duties are gender neutral. →

GENDER DISTRIBUTION AT ELENIA IN 2019 (%)



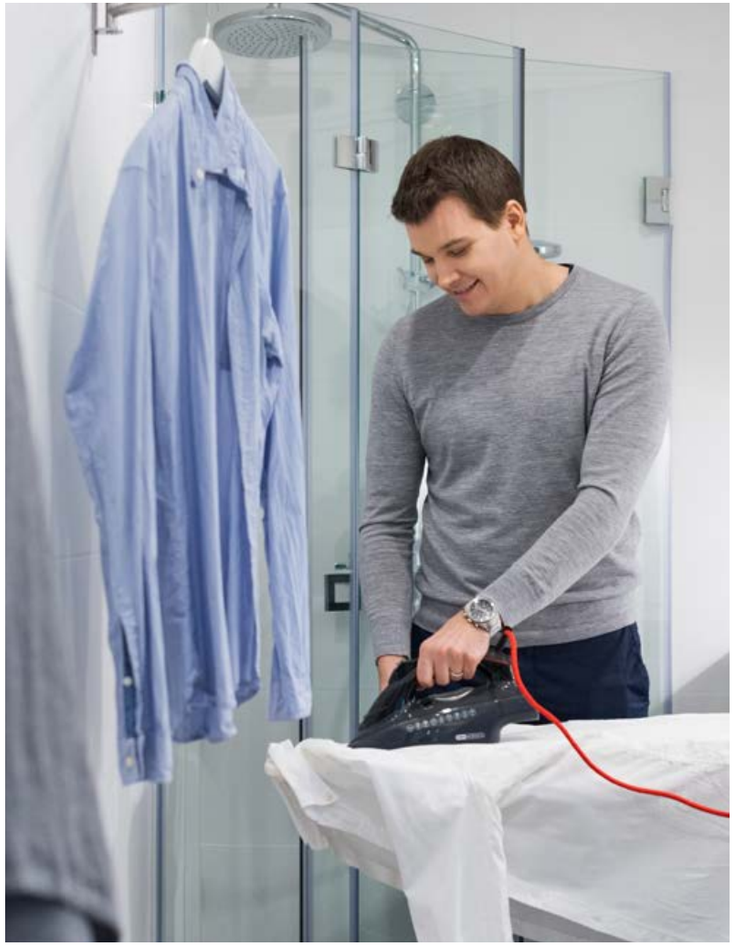
Everyone is important

Elenia has zero tolerance for harassment of any kind. Supervisors monitor work and intervene if any indications of harassment are detected. In their own role, Elenia's occupational safety representatives ensure compliance with zero tolerance.

We update our gender equality plan annually and prepare the relevant equality report for the previous year. Available to all staff members, the report describes how aspects supporting equality, such as family leave, training and equal pay, have been achieved in the previous year. Elenia offers good pay equality based on analyses of salaried employees grouped by the job grades specified in the collective agreement or on analyses of senior salaried employees as a group.

The age distribution of our staff means that many of our employees are leading busy periods in their lives with family and children. Our flexible solutions, such as flexible working hours and remote work options, support young families and promote women's opportunities to opt for more challenging duties. We have long offered an extra week of paid paternity leave. Elenia's Talent Strategy also introduced the family leave discussion. During this discussion, the participants agree on practices that will keep the employee up to date on changes taking place in the company as well as on any vacancies opening up during their leave.

Elenia is involved in projects related to Finnish Energy's collaboration with educational institutions. The goal of these collaborative efforts is to encourage girls to opt for education in mathematics and natural sciences in order to increase the share of women in energy sector professions at all levels of education. Through Finnish Energy, Elenia also participates in the Equal by 30 campaign promoting women's opportunities in the energy sector.



TRAINING AND COMPETENCE DEVELOPMENT FOR THE FUTURE

We annually prepare a personnel and training plan that lays down the guidelines for development. We divide our training into three competence areas: mandatory occupational safety-related cards, professional training and general training, such as supervisory, language or Lean Six Sigma training. Our general training, which is offered at the Group level, is based on our strategic business needs. Professional development needs are mainly brought up by personnel and the teams themselves.

Autumn 2019 saw the launch of Elenia Akatemia, an extensive management and leadership development project, which will continue until summer 2020. The project is provided in cooperation with Aalto University Executive Education. Following the organisational reform that took effect in early 2020, several employees took on supervisory duties for the first time. Elenia Akatemia clarifies the fundamental principles of supervisory work as well as the roles and responsibilities of supervisors in achieving business targets and ensuring the continuous development of our corporate culture.

We have introduced training in the Lean Six Sigma methodology to help us streamline operations. This is an area that we have invested in significantly in recent years. Many of our employees holding a variety of positions have obtained several Green Belt certificates. Two of our professionals have obtained Black Belt certification, which is the most demanding level.

For several years, English-language classes, taught by a familiar teacher, have been offered during the workday. Several groups comprising members of different teams take part in language training. The goal is to strengthen and maintain Elenia employees' ability to operate in international environments.

According to preliminary statistics for 2019, the number of full training days exceeded 100. The staff also participated in part-time training events. The importance of webinars increased. Last year was also marked by extensive training in internal corporate security and information security. ■

Online courses on sustainability

Most of the sustainability training for Elenia's staff and partner network was carried out in the online learning environment. The new electronic learning environment allows studying regardless of time and place, as well as the real-time monitoring of progress. The learning environment has met with a good response, and we will continue to develop it. In 2020, we plan to launch new training dealing with the management and principles of sustainability. ■

Everyone must, for example, complete the following training related to sustainability

- Code of Conduct for employees
- Confidentiality and secrecy
- Ensuring non-discrimination
- Anti-corruption training
- Customer's data protection and security
- Management system
- Environmental management system
- Occupational health and safety system
- Asset management system
- Substance-abuse-free, non-smoking Elenia
- Safety in Elenia's facilities

We expect our partners to complete the following training related to sustainability

- Data protection and security
- Demolition of electricity network and safety
- Removal of fallen trees and safety
- Earthworks for electricity networks and safety
- Safety in roadside work
- Fault repair and safety
- Safe implementation

SAFETY TRAINING 2019

First-aid courses	67
Occupational safety card training	60
Safety at electrical work training	35
Data security training	18
Track work safety competence	8
Hot work licence training	1
Totally participants	**189**

CUSTOMER EXPERIENCE AND QUALITY

We care for the smooth day-to-day lives of our customers by offering safe, high-quality and friendly service.

17 PARTNERSHIPS FOR THE GOALS

11 SUSTAINABLE CITIES AND COMMUNITIES

KEY RESPONSIBILITY THEMES

- CUSTOMER EXPERIENCE AND QUALITY
- SUSTAINABLE INVESTMENTS
- DATA SECURITY AND DATA PROTECTION
- LOCAL STAKEHOLDER COOPERATION

CUSTOMER EXPERIENCE AND QUALITY

Customer experience and satisfaction regarding the quality of Elenia's services form two of the cornerstones of our sustainability programme. They tell us how we and our partner network have succeeded in our efforts as a trusted and reliable provider of electricity network services for households, companies and society and as a provider of customer services to our corporate customers.

In addition to reliability, we also prioritise the safety of our services and operations. We especially focus on building and maintaining our electricity network to ensure that it is safe to use.

While we cannot influence storms, blizzards and animals on the move, we can, in most cases, get quick updates about any disruptions in electricity distribution thanks to our round-the-clock surveillance and smart technology. Our efforts to renew and weatherproof an ageing network have resulted in clearly fewer disruptions in electricity distribution – and in the daily lives of our customers – due to storms and snow loads.

Customer satisfaction steers service development

Distribution system operator Elenia provides services to 430,000 customers in Häme, Pirkanmaa, Central Finland, South Ostrobothnia and North Ostrobothnia. The amount of electricity distributed in 2019 totalled 6,362GWh, closely equivalent to the previous years' figures.

The service business of Elenia Palvelut Oy continued to expand in 2019 as we took over certain services related to the electricity distribution and district heating functions of Suur-Savon Sähkö Group and Etelä-Savon Energia Group. The company now provides services to approximately 1.1 million end customers. →

CUSTOMERS OF ELENIA PALVELUT OY

- ALVA
- LAHTI ENERGIA
- LUMME ENERGIA
- SUUR-SAVON SÄHKÖ
- ETELÄ-SAVON ENERGIA
- TAMPEREEN SÄHKÖLAITOS
- SUOMEN KAASUENERGIA

Customer satisfaction steers service development

As a distribution system operator, we strive to provide our customers with good service experiences related to, for example, electricity network connections, the construction of the weatherproof electricity network, outage repairs, guidance and invoicing services related to electricity consumption, as well as daily customer service. The development of customer experience is based on understanding customer needs and expectations both at Elenia and in our partner network.

Customer satisfaction is one of the most important indicators of success. We regularly measure how well Elenia's operations match customer expectations approaching the question from several perspectives.

We measure, for example, customers' satisfaction with the repair of faults that have affected them, the construction of electricity network connections, the construction of the weatherproof network as well as landowners' satisfaction with tree and forest management. We use the Net Promoter Score (NPS), general customer satisfaction, service attitude, comprehensibility of service, ease of service use and initial resolution rate as indicators of customer experience.

We analyse the results jointly with our partners and use the information to develop our services. The results help our supervisors steer he work of their teams and help Elenia's partners improve the quality of their operations. Our staff and partners receive infor- →

CUSTOMER SEGMENTS AND DISTRIBUTION VOLUMES

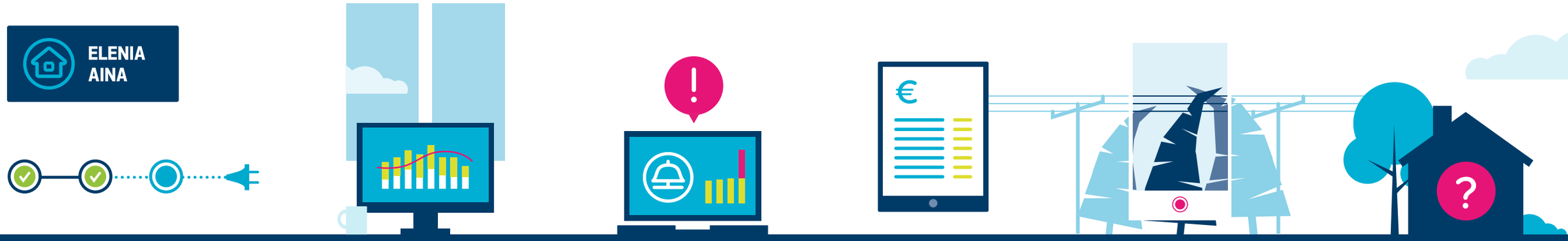
CUSTOMERS BY SEGMENT

Total
432,263

- Residential 85%
- Agriculture, services and construction 14%
- Industry 1%
- Other 0%

ENERGY BY CUSTOMER SEGMENT

- Residential 42%
- Agriculture, services and construction 29%
- Industry 24%
- Other 5%



FOLLOWING CONSTRUCTION OF ELECTRICITY CONNECTION
Follow the progress of your new electricity connection.

MONITOR YOUR CONSUMPTION
See how much electricity is consumed, even hour by hour.

AVOID SURPRISES WITH CONSUMPTION TRACKER
You will be notified of changes in your electricity consumption.

INVOICES SORTED
Monitor your invoices.

FAULT NOTIFICATION
Submit a fault notification or send a photo of a potential hazard.

IS MY ELECTRICITY ON?
Check whether the electricity is on at your home or cottage.

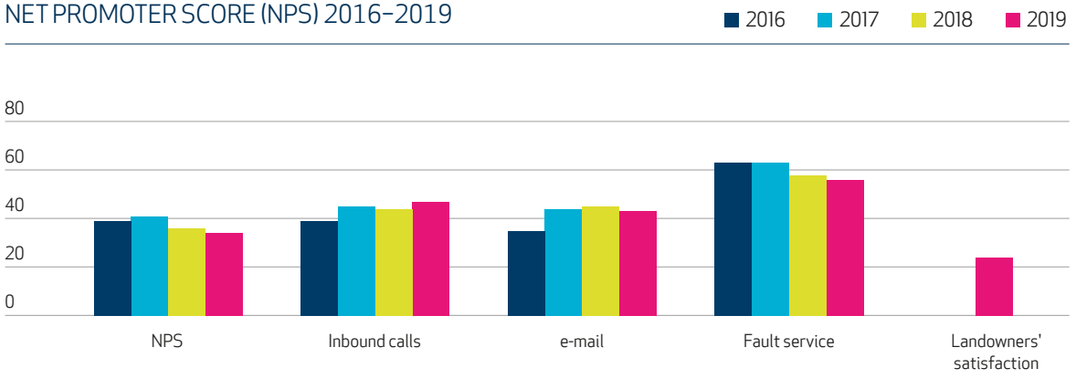
Customer satisfaction steers service development

mation about the results of work in near real time, if required. The results directly affect the quality scores of our partners and also influence the choice of partners and partners' bonuses.

When analysing the results, we focus on finding the reasons for deviations as well as identifying successful activities and areas in need of development. Open-ended customer feedback and customer experiences related to changes provide fruitful material for effectively analysing situations in need of development.

Our customers have provided us with good development proposals as well as critical feedback on Elenia's digital services. Much of our development work focuses on the renewal of Elenia Aina, a service for tracking electricity consumption, as well as Elenia Weatherproof, an online map service focusing on network construction. Some customers have been dissatisfied with communication regarding the construction of the weatherproof network, as well as with the quality of construction and the completion of post-construction work. We have therefore decided to make guaranteed satisfaction with weatherproof network construction one of our customer promises, which will be announced in autumn 2020. ■

NET PROMOTER SCORE (NPS) 2016–2019



In 2019, we started monitoring customers' satisfaction with weatherproof network as well as landowners' satisfaction. The number of respondents was comparatively small yet.

Digitalisation, automation and the weatherproof network improve efficiency

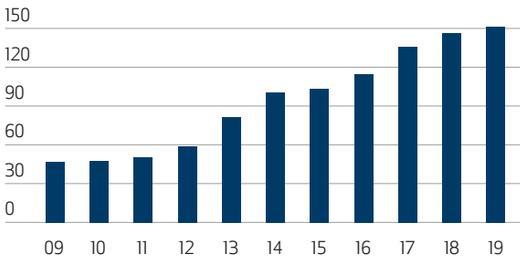
The Electricity Market Act was amended in 2013 to significantly increase the security of supply in Finland's electricity networks over a transition period of 15 years ending in 2028. see page 38. In practice, this means modernising the aged network with network and automation solutions that will better serve society.

The Energy Authority supervises the achievement of the objectives of the Electricity Market Act. Network companies are required to submit a development plan to the Energy Authority every two years. The regulatory methods also encourage electricity network companies to improve the security of supply of electricity networks and guide them to seek efficient and smart solutions that enable the creation of an electricity marketplace.

The fourth regulatory period (2016–2019) of the electricity network business expired at the end of 2019. The same regulation methods will be applied in the fifth regulatory period (2020–2023).

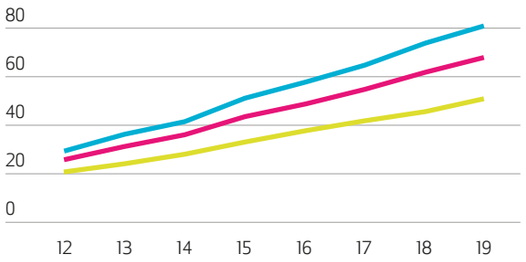
A decade ago, Elenia began to renew its ageing overhead network by introducing underground cabling and by adopting novel automation technology to achieve a weatherproof network. We are committed to achieving the security of supply targets specified in the Electricity Market Act on schedule, in 2028. →

ELENIA OY'S TOTAL INVESTMENTS IN ITS ELECTRICITY NETWORK 2009–2019 (EUR MILLION*)



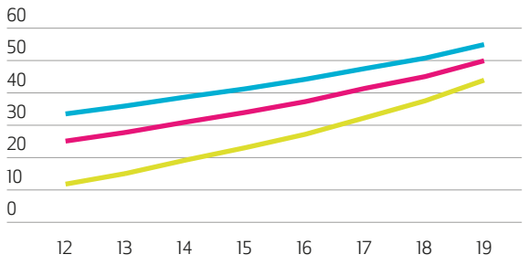
*excludes ICT system investments and the street lighting network

ELENIA OY'S CUSTOMERS COVERED BY THE QUALITY REQUIREMENTS 2012–2019 (%)



Pursuant to the Electricity Market Act, quality requirements will apply to 50% of customers by the end of 2019, 75% of customers by the end of 2023 and 100% of customers by the end of 2028.

ELENIA OY'S UNDERGROUND CABLING RATE 2012–2019 (%)



Digitalisation, automation and the weatherproof network improve efficiency

We will develop digitalisation, test new network technologies and add more automation to our network. These are ways for us to find increasingly cost-effective alternatives for different needs. A good example of this is the energy storage installed in Pirkanmaa in 2019, which is capable of securing power supply to almost one hundred customers in case of electricity network faults.

We have worked persistently to secure electricity distribution in accordance with our long-term development plan. In 2028, underground cabling will cover 75 per cent of our electricity network. In the past decade, our reform programme provided work equivalent to 10,000 person-years in Finland.

In addition to offering excellent security of supply, underground cabling is the most sustainable solution, in terms of safety and the environment, for replacing the ageing overhead line network in order to meet the needs, several decades into the future, of a society witnessing increasingly rapid digitalisation. ■

Urban-quality electricity in sparsely populated areas

In 2019, Elenia invested a total of €150 million in the construction and development of its electricity network. We built 4,500 kilometres of new underground cable network, of which over 2,200 kilometres was medium-voltage underground cable network and nearly 2,300 kilometres was low-voltage underground cable network. Over 2,000 new kiosk-style secondary substations were built to replace old pole mounted transformers.

The focus of our investments is moving from built-up areas to the improvement of security of supply in sparsely populated areas. For this purpose, we have drawn up a more detailed investment strategy to target network investments and maintenance management. The security of electricity supply in sparsely populated areas will improve, approaching the level of electricity distribution in urban environments.

Elenia's security of supply

2019

NETWORK INVESTMENTS IN 2019
150.9 M€

NEW UNDERGROUND CABLE NETWORK
4,509 km

0.4 KV LOW-VOLTAGE NETWORK
2,268 km

20 KV MEDIUM-VOLTAGE NETWORK
2,241 km

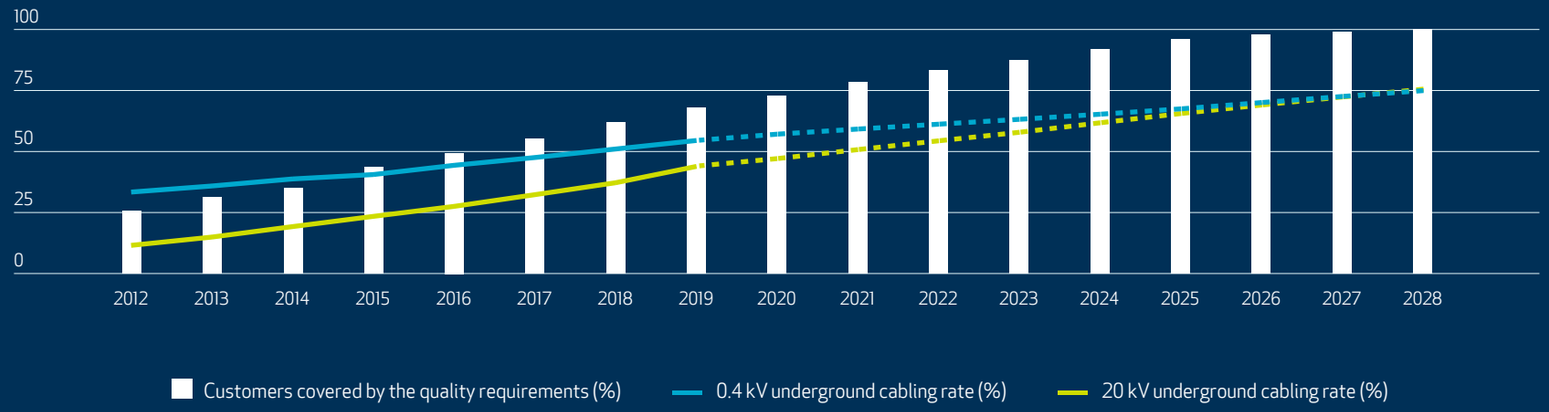
NEW SECONDARY SUBSTATIONS
2,020 pcs

UNDERGROUND CABLING RATE OF THE NETWORK AS A WHOLE
49.6 %

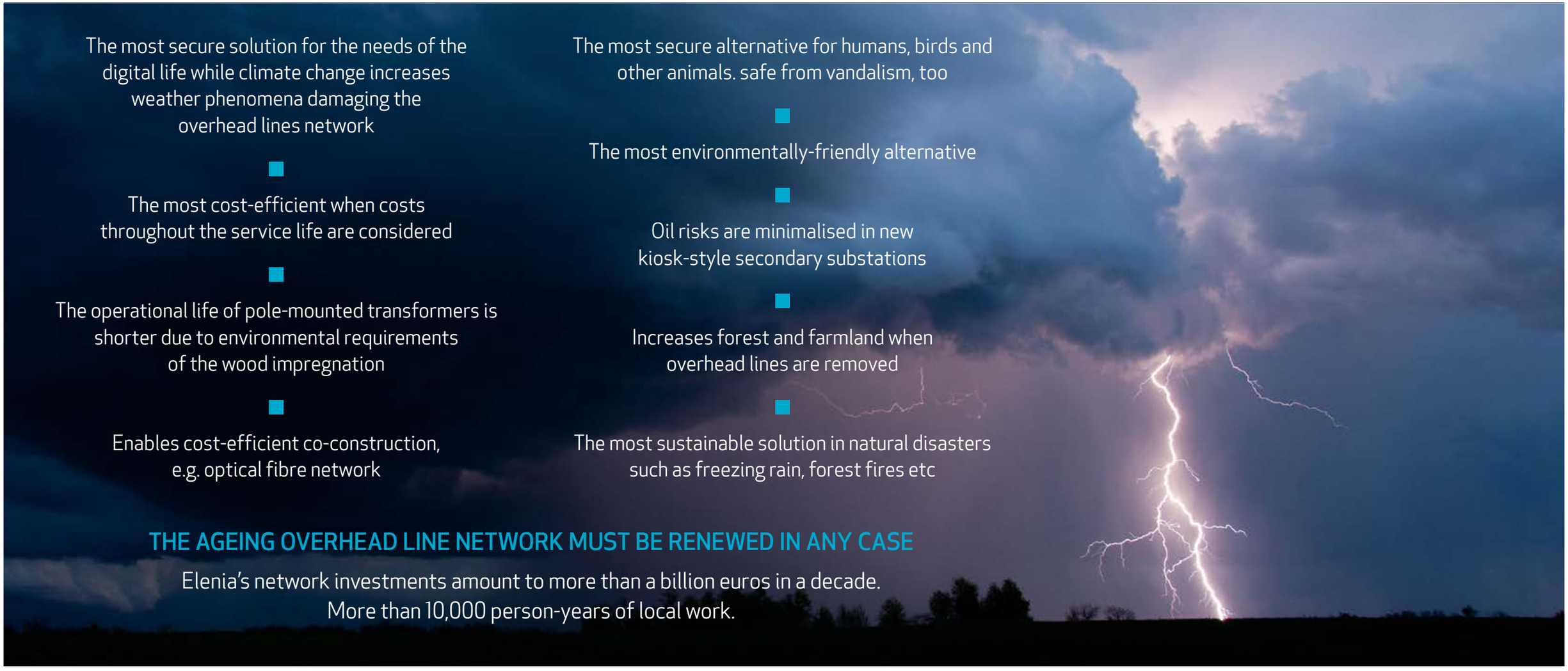
UNDERGROUND CABLING RATE OF THE MEDIUM-VOLTAGE NETWORK
43.9 %

UNDERGROUND CABLING RATE OF THE LOW-VOLTAGE NETWORK
54.3 %

DEVELOPMENT PLAN 2012–2028 (%)



Why undergound-cabled weatherproof?



The most secure solution for the needs of the digital life while climate change increases weather phenomena damaging the overhead lines network

The most cost-efficient when costs throughout the service life are considered

The operational life of pole-mounted transformers is shorter due to environmental requirements of the wood impregnation

Enables cost-efficient co-construction, e.g. optical fibre network

The most secure alternative for humans, birds and other animals. safe from vandalism, too

The most environmentally-friendly alternative

Oil risks are minimalised in new kiosk-style secondary substations

Increases forest and farmland when overhead lines are removed

The most sustainable solution in natural disasters such as freezing rain, forest fires etc

THE AGEING OVERHEAD LINE NETWORK MUST BE RENEWED IN ANY CASE

Elenia's network investments amount to more than a billion euros in a decade.
More than 10,000 person-years of local work.

Requirements stipulated by the electricity market act concerning the reliability of electricity distribution

Power outages caused by storms or snow loads shall not exceed **6 hours** in zoned areas and **36 hours** in other areas, as follows

50 %
of customers
by the end of 2019

75 %
of customers
by the end of 2023

100 %
of customers
by the end of 2028

The safety of the electricity network and safe operations in the vicinity of the network

The safety of the electricity network and safe work in the vicinity of the network are an inherent part of our operations. We build and maintain our electricity network so that it is not dangerous to our customers, stakeholders or the rest of society.

Storms, thunder, snow load and small animals cause power outages. Thanks to our 24-hour monitoring and electricity network technology, we are quickly alerted to extensive electricity interruptions, and our customers can see them on our outage map. Our power outage service is available round the clock every day of the year by telephone and through electronic channels.

In the case of several power failures, 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.

When excavations are carried out in the vicinity of the underground cable network, it is important to ensure compliance with electrical safety requirements. We provide location information on cable routes and mark the location in the field, if necessary.

ALL NETWORK DAMAGES CAUSED BY HUMANS CAN BE PREVENTED

When excavation work is performed in the immediate vicinity of an underground cable, we make sure that the cable is not live, to guarantee the safety of work. When a customer or landowner wants to fell trees in the vicinity of the overhead line network, we provide tree felling assistance to ensure the electrical safety of the felling.

PREVENTING DAMAGE TO THE ELECTRICITY NETWORK THROUGH COMMUNICATION

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. 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.

Any damage to the electricity network is a risk to safety and may expose employees and outsiders to electrical accidents. Damage to the network in an urban area can cause a power outage to hundreds, even thousands of customers. In years of calmer weather patterns, most power outages are caused by different types of accidents. These result in unnecessary costs and harm to customers and those who have caused the accident.

Elenia provides information on safe operations in the vicinity of electricity networks. We will target our communication more specifically to certain stakeholders in order to reduce damage. ■

DAMAGE INFLICTED ON THE ELECTRICITY NETWORK ANNUALLY

UNDERGROUND CABLE	OVERHEAD LINE	OTHER DAMAGE*
500	500	300

* e.g. link boxes, transformer sub-stations, etc.

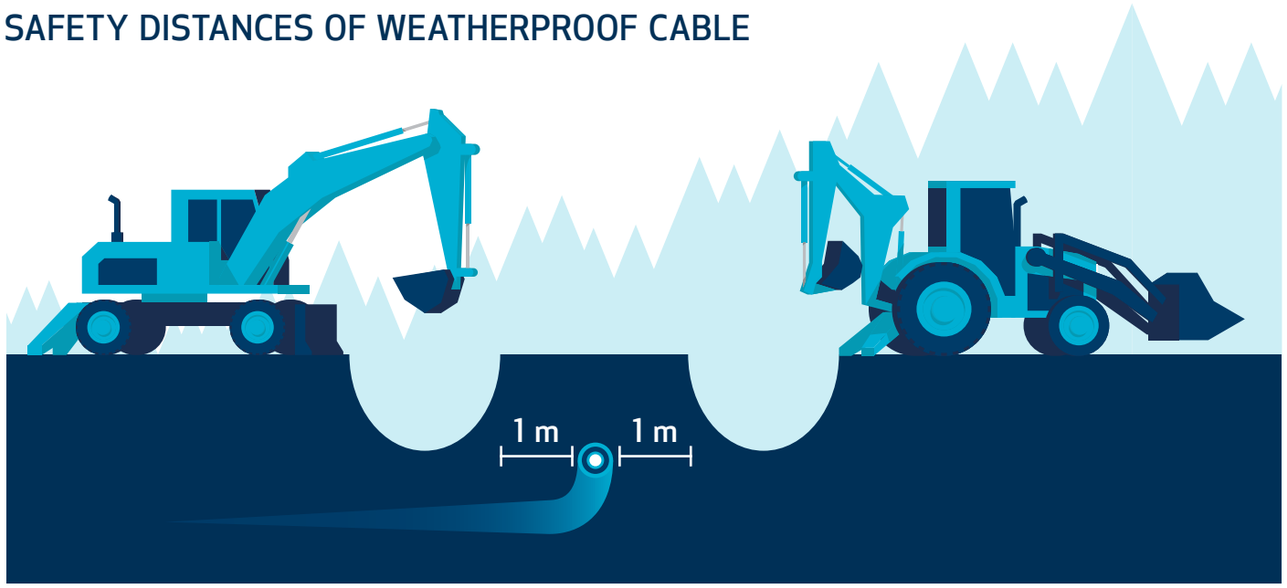
CAUSES OF DAMAGE IN THE UNDERGROUND CABLE NETWORK

- Earthworks of various kinds, including road, telecommunication, water supply and sewerage projects

CAUSES OF DAMAGE IN THE OVERHEAD LINE NETWORK

- Trees felled onto the lines
- Damage caused by large machinery
- Lines hit by high transported loads

SAFETY DISTANCES OF WEATHERPROOF CABLE



Renewed complaint handling improves quality

We are renewing our ageing electricity network by replacing the overhead line network vulnerable to extreme weather conditions with weatherproof underground cabling. While our construction projects improve the reliability of electricity distribution, construction work sometimes interferes with the daily lives of residents and landowners. We are working actively with our contracting partners to minimise any inconvenience.

We emphasise cooperation with our stakeholders during the planning stage of construction projects. We receive feedback from landowners regarding both communication and the attention given to their wishes. We have identified construction-time communication and environmental restoration after construction as the main areas in need of development.

For this purpose, we have revised our handling of complaints regarding network construction. We successfully halted the increase in the number of complaints even though the volume of construction continued to increase.

Local project supervision plays a key role in quality assurance during construction. It enables us to take customers better into account throughout the construction process. Ensuring the safety of electrical installations, employees and third parties are at the core of quality assurance.

We emphasise the quality of work when choosing partners. The network construction contractors who achieve the best performance in terms of customer satisfaction and technical quality always have an advantage in our competitive bidding. ■

Customer information in safe hands

Elenia has persistently worked to improve data security and data protection. The goal of our data protection measures is to ensure that the information provided by customers is handled safely. Data protection and the data security of our systems are at the core of our operations.

In addition to providing guidelines, we train our entire staff in data protection and data security. In addition to the online training we offer annually, we organised a series of training events for the entire staff in autumn 2019. In connection with this training, all staff members sought ways to improve the safe handling of customer data in their duties. The results have considerably helped the further development of our data protection and data security operations. We also updated our data protection handbook for our contracting partners to better match present needs.

Training maintains competence

Storms and snow loads caused power outages

Weather phenomena and interruptions in electricity distribution made 2019 a challenging year. Owing to the power outages caused by weather phenomena, the SAIDI (System Average Interruption Duration Index) indicator for our full-year operations totalled 254 minutes and exceeding our target value of 93 minutes.

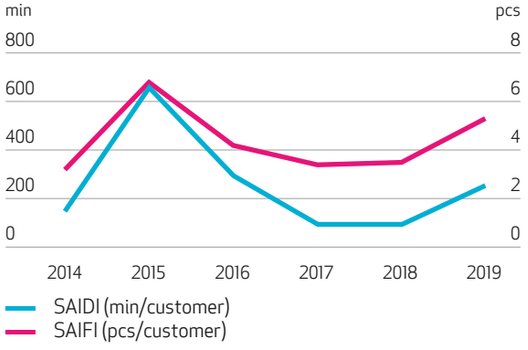
Weather conditions caused three major interruptions in 2019, and their total impact on the SAIDI value was 168 minutes. However, our network investments clearly reduced the impact of storms and snow loads, especially in built-up areas, where most of our large investments in the past few years have been carried out.

In addition to extended power outages, Elenia monitors the number of short, flickering power cuts. The goal is to systematically minimise their impact, especially on the business of corporate customers.

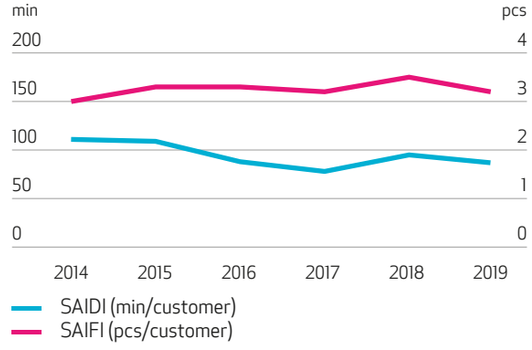
One of our new customer promises is to provide customers with solutions for brief power cuts. In practice, this means determining the best ways to reduce such power cuts in different locations. We will inform customers about the source of power cuts, the measures we will be taking and the schedule of their completion. ■

DEVELOPMENT OF OUTAGE PERFORMANCE INDEXES 2014–2019

ALL OUTAGES



WITHOUT MAJOR DISTURBANCIES



Elenia Kuitu – fibre-optic construction a new area for Elenia

In 2019, Elenia constructed its fibre-optic network and sold fibre-optic connections for the first time. We have invested in fibre-optic pilot projects in four locations in Akaa and Nokia in the Pirkanmaa region. Our fibre-optic networks, stretching over some 100 kilometres, have approximately 1,000 customers. Elenia owns the fibre-optic network it is constructing and provides fibre-optic connections to potential customers in the area.

The construction of the fibre-optic network has progressed mostly as scheduled, and the new network has received positive feedback from customers. However, the demand for fibre-optic connections in sparsely populated areas has not yet reached our target level, which is why we now aim to enhance sales and marketing by more clearly describing the future benefits of the broadband network.

We have long collaborated with fibre-optic partners in placing optical fibre and underground cables in the same trench. This lowers costs and reduces the amount of nuisance or damage from construction to residents and the environment.

Through our own and our collaborative construction of fibre-optic networks we contribute to the achievement of the targets set out in Finland's digital infrastructure strategy. Optical fibre enables the provision of top-speed data communication connections to residents in sparsely populated areas and helps maintain the vitality of rural communities. Fibre-optic connections facilitate remote work and business operations that depend on fast connections.

We aim to further expand our fibre-optic business. In 2020, we will be working on approximately 200 kilometres of new fibre-optic network for some 1,500 customers. ■

CONTINUITY OF OPERATIONS AND ROLE AS FORERUNNER

We ensure the reliability of electricity network services under all conditions. We promote the development of a sustainable society and way of life.

KEY RESPONSIBILITY THEMES

- CONTINUITY OF OPERATIONS AND CONTINGENCY PLANNING
- RENEWABLE ENERGY AND ENERGY EFFICIENCY
- EFFICIENT USE OF MATERIALS AND THE CIRCULAR ECONOMY
- INNOVATION TO PROMOTE CHANGES IN THE ENERGY SECTOR

CONTINUITY OF OPERATIONS AND ROLE AS FORERUNNER

The main goal of our services and operations is to ensure reliable electricity distribution under all conditions. This calls for continuous and predictive maintenance and renewal of the electricity distribution network as well as safe and reliable information systems. We follow a predictive approach to avoid surprises and practise various scenarios to be able to react quickly and appropriately, if needed.

We are actively involved in the changes affecting the energy market and in the development of new solutions. We promote the utilisation of zero-emission energy and test future methods today.

We also work for a better tomorrow by using natural resources as effectively as possible and by reducing the environmental load in collaboration with our partners.

Ensuring electricity distribution year-round

To ensure reliable electricity distribution and smooth daily operations in homes, companies and society at large, the electricity network must be continuously maintained and renewed. We ensure the safety, condition and functioning of electricity networks predictively through our efficient maintenance management carried out jointly with our partner network. Our maintenance programme sets out the inspection, clearance and maintenance activities performed on our electricity network.

We see to the reliability of power distribution through electricity-network inspections conducted around the year. We inspect our substations four times a year and regularly maintain the substation equipment. In 2019, we inspected 3,200 kilometres of low-voltage network and 7,800 items of the underground cable network.

Helicopter inspections of the electricity network are carried out in the summer months. We photograph and laser scan the entire high-voltage distribution network every four years as well as a quarter of our medium-voltage network each year. Last year, we inspected over 3,500 kilometres of our network by helicopter.

We place great emphasis on ensuring the safety of sites that call for special attention. For example, we annually inspect over 1,000 transformer substations located in groundwater areas. Thanks to regular inspections, we can allocate maintenance activities in a timely manner in different sections of the network.

→

Ensuring electricity distribution year-round

TREE MANAGEMENT INCREASES THE RELIABILITY OF THE OVERHEAD LINE NETWORK

Each year, we manage trees next to our power lines over a distance of approximately 5,000–8,000 kilometres in order to achieve security of supply in our overhead lines. We carry out systematic clearance on the high-voltage distribution network approximately every six years and keep the network clear of trees by felling adjacent trees and trimming the tops of trees.

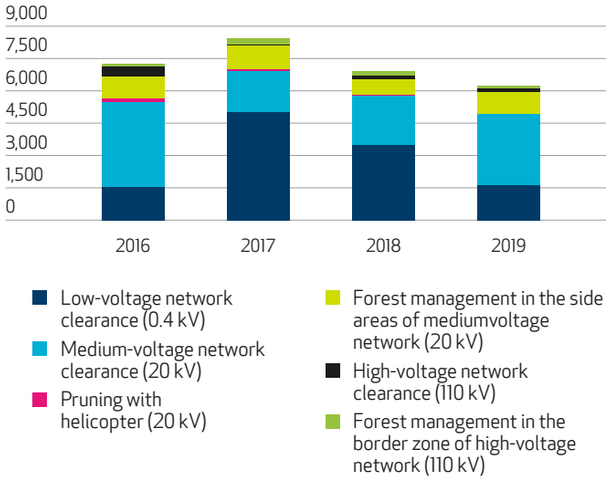
Clearance work on the medium-voltage network is carried out every four or five years by forest workers or by using a multi-function machine or helicopter. In the low-voltage network, clearance work is carried out every eight years. For tree management, we utilise aerial imagery and clearance analyses based on laser-scanned data.

Each year, we manage forests adjacent to the electricity network in cooperation with our partners over a distance of some 1,000 kilometres. An adjacent forest means trees close to the electricity network, on the edge of the approximately 10-metre-wide line corridor. Storms or heavy snow loads may cause trees in adjacent forests 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 our overhead line network. Smooth and responsible cooperation with forest owners and partners ensures that the work is performed efficiently.

MAINTENANCE MANAGEMENT WITH AN EYE ON THE LIFE CYCLE

We have identified the near-future investment needs of our distribution networks in sparsely populated areas. This will help us take the remaining service life of the network into account in our maintenance management. We will perform end-of-life-cycle service on networks that need to be renewed, while for networks with remaining service life, we can plan comprehensive measures to maintain the reliability of electricity distribution. ■

TREE MANAGEMENT (KM) 2016–2019



Recertification of network asset management systems

Elenia's network asset management systems were recertified by Lloyd's Register's auditors Steven Brady and Bernie Woods. The closing meeting was attended by Elenia's Harri Salomäki, Unit Manager, Partnerships and Innovations, Jarkko Kohtala, Head of Procurement and Construction, Tommi Lähdeaho, Unit Manager, Asset Management, Eveliina Kallio, Process Specialist, Jorma Myllymäki, Senior Vice President, Jenni Heinisuo, CIO and Heikki Paananen, Unit Manager, Operations.

Certification ensures that our network is developed sustainably, according to high quality standards and taking customer needs into consideration. Elenia's network asset management systems were recertified in accordance with the PAS 55 and ISO 55001 standards in late 2019.

The certification audit encompassed network asset management as well as network investments, electricity network maintenance management and outage service. Attention was also focused on our new business strategy and its impacts on our asset management policy, strategies and goals, as well as on the management of internal and external partnerships as well as asset management information systems. The audit also included field surveys of the clearance work and cabling projects carried out on the distribution network.

We received good results from the audit. The positive trend in security of supply, our contingency planning and our development activities in the field of cybersecurity were mentioned as strengths. For areas in need of development, we should focus on the management of distribution network investment projects and their implementation, on increasing interactive cooperation with our interest groups and on creating indicators for security of supply that take customers even better into account.

The following external follow-up audit of our asset management system will be carried out in June 2020. ■

Outages caused by Aapeli, Helka, Sointu and Aapo under control

In 2019, Finland experienced several storms that damaged our networks, leading to our full-year security of supply figures falling short of our normal level. Last year, security of supply was 99.95 per cent. Without the three major power outages caused by weather conditions, our continuity of supply would have exceeded 99.98 per cent.

The year began with Storm Aapeli in January, which we classified as a category 3 major outage on Elenia's scale of 1–4. Overall, we repaired approximately 500 fault areas and nearly 2,000 faults when returning electricity to our customers. Had it not been for the renewal investments that we have carried out on the ageing network to improve security of supply, we estimate that three times as many customers would have experienced a power outage. The ongoing development of fault management will result in more reliable electricity distribution as well as more effective outage repairs.

Storm Aapeli was followed by extended snow load issues due to heavy snowfall in the Pirkanmaa region and in Central Finland. We inspected the network using helicopters and teams in the field and together with our partners, we repaired imminent faults and outages for approximately four weeks. The total number of faults rose to some 2,500. As many as 30,000 trees were estimated to have bent onto the power lines due to heavy snow. Thanks to extensive predictive work, the snow loads caused but minor impacts on customers.

Spring, summer and autumn were mainly quiet in terms of fault management, although weather conditions did cause occasional problems to electricity distribution. We handled a smaller snow load situation in April and dealt with Storm Helka in May and with Storm Sointu in October.

The year ended with Storm Aapo just before Christmas. The snow loads, which formed at an exceptionally rapid pace, led to a challenging situation in the southern parts of Pirkanmaa and in Häme. In connection with restoring electricity to customers, we repaired approximately 600 faults, some of which involved high-risk traffic and working conditions. All our operations, including those taking place in the dark and in snowy terrain, were carried out without compromising on safety and security and with zero accidents.

Last year, we updated our statutory contingency plan, which includes preparedness principles and measures for weather-related major disruptions, cyberthreats, and disturbances in the main grid. In connection with the update, Elenia conducted a self-assessment of its own operations and its partners' operations. We will use this assessment to further develop our contingency preparations. ■

Cool-headed training for serious crises

At the end of the year, Elenia took part in a collaborative exercise called JÄÄTYVÄ 2019, organised in Western Finland by the Power Economy Pool of the National Emergency Supply Agency. In this imaginary crisis exercise, icy rain damaged the electricity network in Western Finland. The exercise was carried out on a test platform, where the crisis unfolded in a very realistic setting.

Elenia took part in organising and planning the exercise as well as in the actual training event. The JÄÄTYVÄ 2019 exercise was an opportunity to put preparedness to the test in an incident involving major disruption to the main grid and distribution networks. Among other things, we tested backup communications systems and methods for returning electricity in emergency situations.

The exercise especially focused on communications during an extensive power crisis and tested the parties' cooperative efforts in instructing citizens to cope with the situation. The participants included the transmission system operator, distribution system operators, other businesses, the regional rescue services department, municipalities, the authorities and the Finnish Broadcasting Company. The exercise provided a multitude of experiences and new solutions. It developed the ability of companies and organisations to cooperate in serious emergencies.

Information security management certificate to secure customers' supply of electricity

The main goal of our safe and responsible operating methods is to ensure electricity supply under all conditions. Elenia's information security management system steers the implementation of information security in daily work. Our management system is based on Elenia's strategy and the international ISO/IEC 27001 standard, for which we achieved certification in the spring of 2020.

The main purpose of the management system is to maintain the level of our information security and to continuously develop it so that we can secure electricity distribution relying on the information systems of the smart electricity network and ensure the information security of our customer information systems. In 2019, we made Elenia's updated information security policy public and defined indicators and follow-up measures for our information security.

Our staff participate in regularly updated information security training and practise safe email use through continued gamified training. We adopted an operating model that ensures the implementation of information security in all development projects from beginning to end. We will continue our work to develop the information security of contracts and procurement.

Partnerships play an important role in our operations, and we ensure cybersecurity throughout our service chain. We have extended our information security and data protection training to cover our entire partner network. To ensure joint learning, we conduct regular, joint discussions regarding information security incidents. In 2019, two information security violations were reported to the Information Protection Ombudsman. ■

Practice improves cyber readiness

We train for emergency situations to maintain our readiness at all times. In 2019, we conducted an extensive survey of information security risks and identified vulnerabilities in our operations. We enhanced our operating instructions based on the risk assessment.

We also ensure that our emergency instructions and operating models work in practice. We carried out an exercise in which Elenia's information networks and facilities were infiltrated in a controlled manner. The exercise simulated access to customer information and power network control systems, and the goal was to concretely identify areas in need of development in information networks, information systems and the security of facilities.

kiwa certified ISO/IEC 27001 Inspecta Sertifiointi Oy

Renewable power production continues to increase

Renewable energy investments have grown rapidly around the world, also in Finland. In Elenia's network area, this can be seen in the numerous wind power projects at different stages of operation and in the steadily increasing number of solar panels used by households.

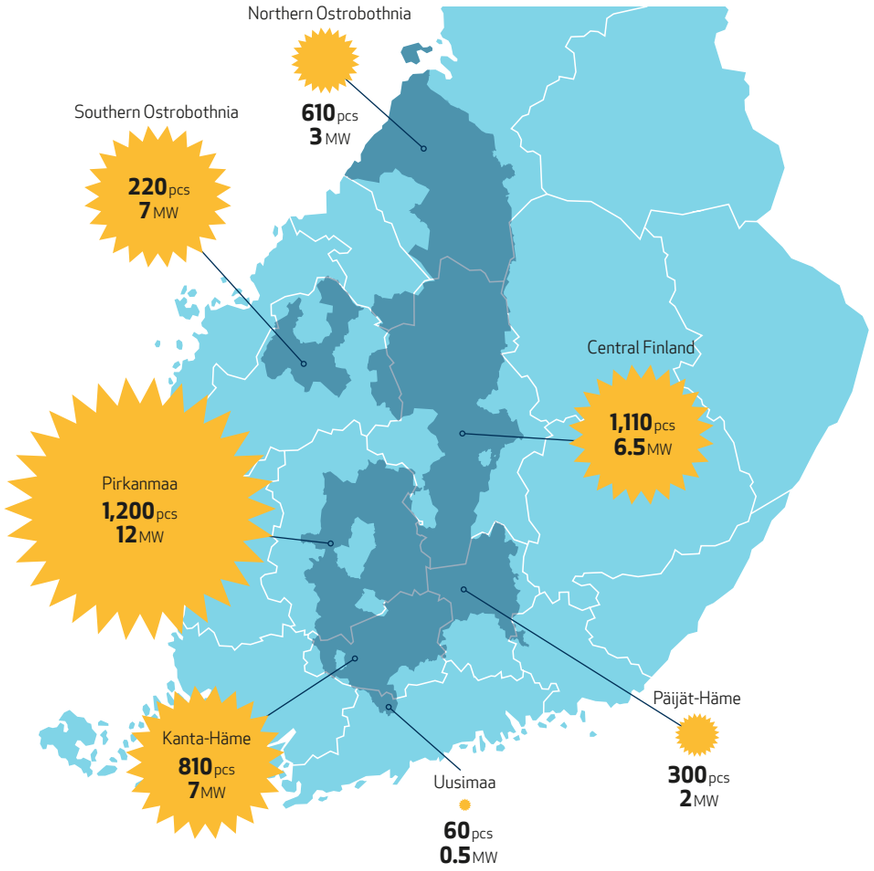
In many places around the world, solar power is now the most economical way to produce electricity. Even in Finland, despite the dark and long winter, the popularity of solar power has grown rapidly in recent years. Nearly 1,500 solar power devices were connected to the network in 2019, raising the overall number to nearly 4,000. Meanwhile, the power of an average domestic solar power system has improved, and households have begun to acquire larger systems, producing hundreds of kilowatts.

So far, single-family households and companies have been the main users of self-produced solar power. Housing companies have been able to use solar power economically for the property's common electricity consumption. In the future, electricity generated by housing companies can be distributed to all residents, once legislative obstacles have been removed. Elenia will offer this option to its customers. In this way, we will contribute to making solar power more common and will enable customers to use the power they produce. →

SOLAR POWER IN ELENIA'S NETWORK

3/2020

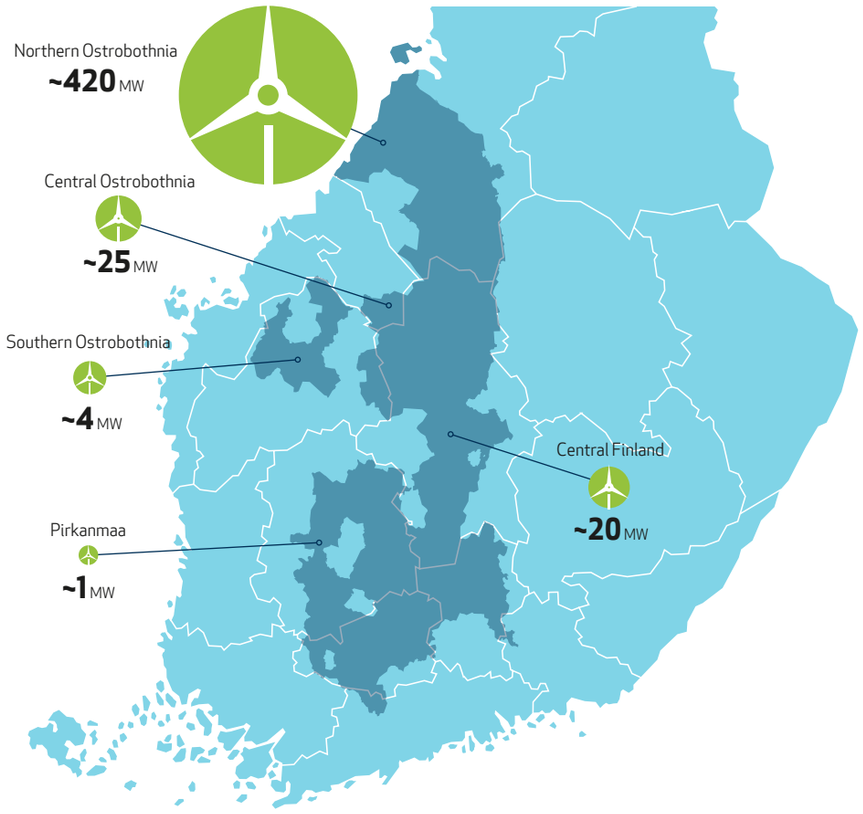
Solar power connected to Elenia's network was totally approximately **38 MW**



WIND POWER IN ELENIA'S NETWORK

3/2020

Approximately a fifth of all Finnish wind power is connected to Elenia's network **~470 MW**



Renewable power production continues to increase

FIRST MARKET-BASED WIND FARM IN ELENIA'S NETWORK AREA

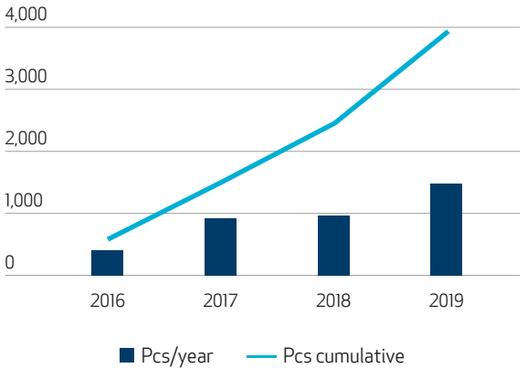
Approximately a fifth of all Finnish wind power is connected to Elenia's network. Elenia has also agreed on the connection of eight wind farms to its network in the next few years. By 2023, these wind farms will have approximately doubled the wind power connected to Elenia's network compared to the present.

Technological development lowers the production costs of wind power. For example, studies carried out by Lappeenranta University of Technology indicate that wind power is already the most economical way to produce electricity in Finland.

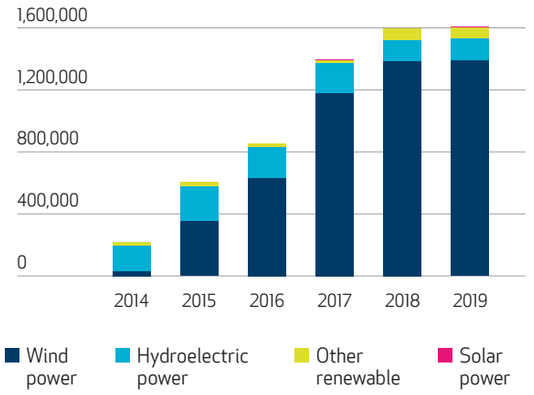
One of our customers is currently building a wind farm in Pyhäjoki, which will become the first fully market-based wind farm to be connected to Elenia's network. Until now, the profitability of wind farms has been based on subsidies. The wind farm's first turbine will begin generating electricity into Elenia's network in early 2020.

Elenia's role in the electricity market is to ensure that renewable energy production equipment is connected to the network. In this way, it helps ensure the distribution of renewable energy to the market. ■

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



RENEWABLE ENERGY FED INTO ELENIA'S NETWORK (MWh)



MEGATRENDS AFFECTING THE ENERGY SECTOR

The energy sector faces four international and national megatrends that will affect the development of Elenia's services and operations.

CARBON NEUTRALITY

From fossil fuels to renewable energy sources

Electrification of transport and heating

Energy efficiency

DISTRIBUTION

From centralised energy production to distributed electricity production and electricity storage

Flexibility and management of bottlenecks, regarding, for example, power transmission capacity between countries

DIGITALISATION

Opportunities provided by new technologies

New energy services and market participants

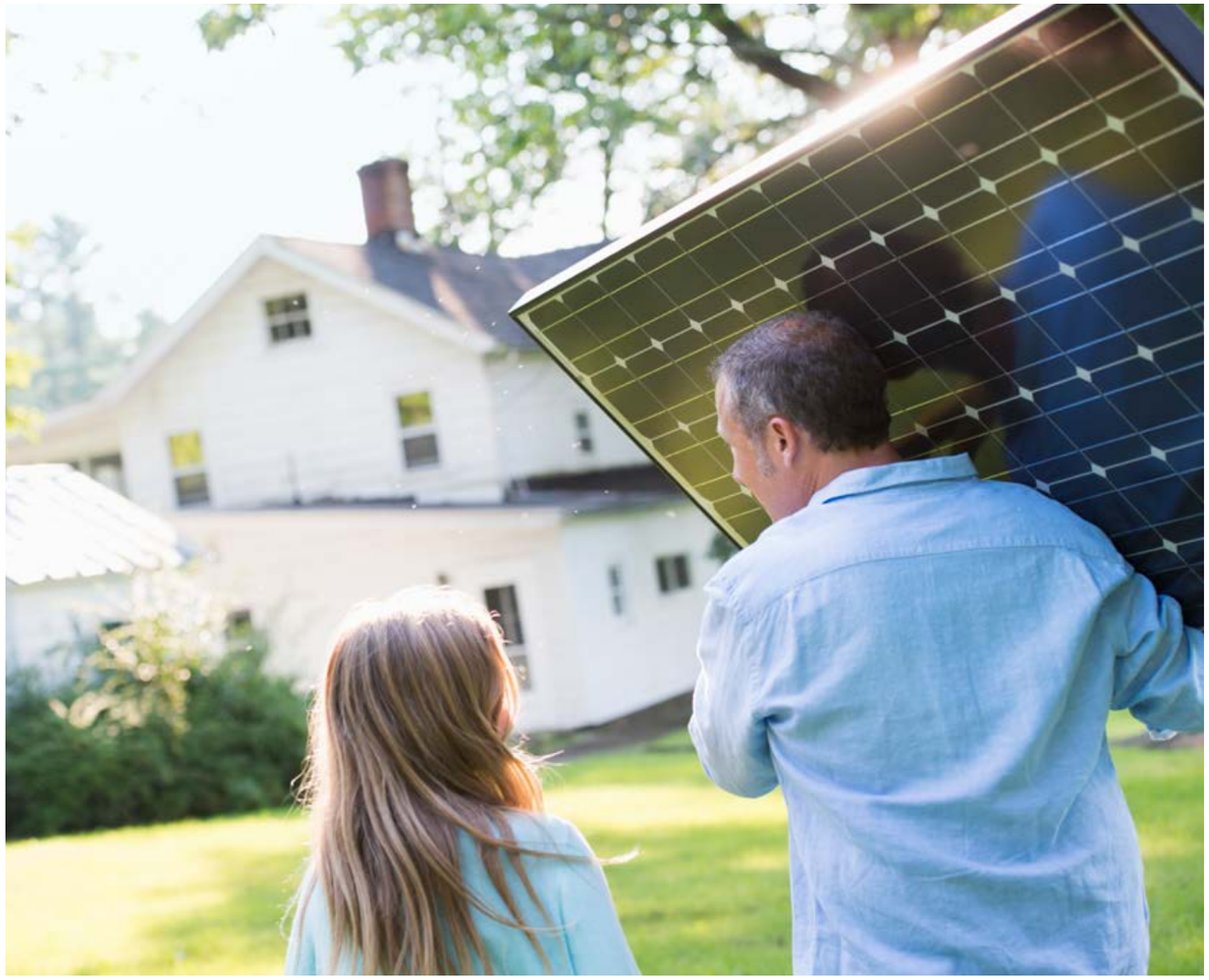
Cybersecurity

CUSTOMER INVOLVEMENT

Customers actively participate in the energy market

Consumers become electricity producers

Every measure improving energy efficiency is important



The development of energy efficiency is part of the national and the European Union's energy and climate policy, the goal being to reduce the volume of energy used. Improved energy efficiency helps reduce energy consumption and, to a certain extent, carbon dioxide emissions. It also helps save costs. Every measure that enhances energy use counts because, taken together, even small measures can have a significant cumulative impact.

Elenia is participating in the national energy efficiency agreement for 2017–2025 to promote the energy efficiency of its customers and of power distribution. Through the agreement, we commit to reducing our annual electricity distribution losses by six per cent by 2025. This translates to a reduction of 13.2 GWh in annual electricity distribution losses by 2025. Our overall target for energy savings in 2017–2025 has been calculated from the 2015 level. Our annually reported measures have already helped us achieve 99 per cent of our 2025 target.

The energy efficiency of our electricity network continues to improve as we build new network sections and replace old network components with more energy-efficient technology.

We have integrated our energy efficiency agreement into our environmental system, which is compliant with the ISO 14001 standard. In the future, we will develop our communications and training related to the energy efficiency agreement in order to deepen our staff's awareness in this respect. →

CALCULATED SAVINGS REGARDING ELECTRICITY LOSSES IN ELENIA'S NETWORK IN 2019

DISTRIBUTION SUBSTATIONS

1,404 MWh

MEDIUM-VOLTAGE LINES

572 MWh

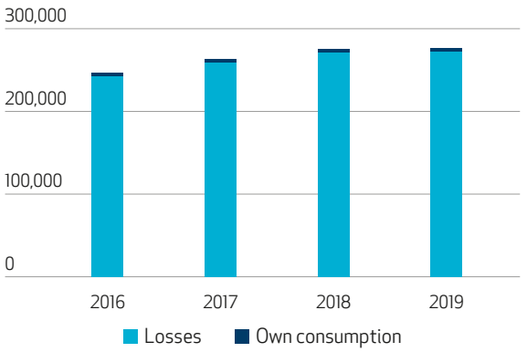
LOW-VOLTAGE LINES

2,800 MWh

Every measure improving energy efficiency is important

The energy efficiency act obligates large companies to carry out an energy survey every four years. The survey provides a picture of energy efficiency and ways to improve it. Elenia's 2019 survey focused on the overall energy consumption of sites, its distribution and ways to reduce energy consumption.

ELENIA'S CONSUMPTION OF ELECTRICAL ENERGY, (MWh)



ENERGY EFFICIENCY BY PROVIDING CUSTOMERS WITH INFORMATION

In addition to adopting energy-efficiency measures in our electricity network, we also aim to promote our customers' energy efficiency. Our customers have access to the free Elenia Aina service, which helps them follow their own energy consumption. A consumption tracker will be offered as part of the service from early 2020 onward. The tracker enables customers to set themselves a monthly consumption limit, defined in euros. When consumption approaches this limit, the tracker sends a message to the customer. Customers can also use an alert to notify them of any notable changes in their electricity consumption over a specific period of time. The consumption tracker makes it easier for customers to follow their energy consumption habits and make changes to them, if required. ■

Planting trees as carbon sinks in return for customers adopting e-invoicing and electronic signatures

We encourage our customers and partners to replace paper invoices with electronic invoices and to use electronic signatures. In 2019, we organised a customer campaign in which we planted a sapling in return for every new e-invoicing agreement. We ultimately planted nearly 12,500 saplings.

We also aim to convince more and more customers to sign land use agreements electronically. As encouragement, we also promise to plant a sapling for every electronic signature. In 2019, electronic signatures were used in around 20 per cent of the more than 14,000 land use agreements made overall. Over 90 per cent of new connection agreements have been concluded electronically.

As our customer promise, we undertake to plant a sapling for every new e-invoice adopted and for every electronic signature. Tree planting offers summer jobs for young people. The planting will be carried out by young people participating in the Finnish 4H Federation. Each new sapling in our woods absorbs carbon and curbs climate impacts.

Our environmental system steers the good level of our environmental action

Elenia's environmental action is steered by our environmental management system certified in accordance with the ISO 14001 standard. We require our cooperation partners to comply with the same quality of operations. We achieved good results in the 2019 external follow-up audit of our environmental system.

We scored highly in the staff's commitment to the maintenance and development of our certified systems, in good document management and in smooth communication with contractors. The verification of subcontracting requirements and the identification of recycling opportunities were pinpointed as areas in need of development.

Our following external audit, to be conducted in spring 2020, will focus on the recertification of our environmental system. We will update our environmental risks and opportunities once our extensive risk management development project has been completed. ■

Land freed up from overhead lines

When overhead lines are dismantled, the space reserved for them is freed up for other purposes. In natural surroundings, animals and plants return over time.

Traditional biotopes in line corridors

The line corridors around electricity networks provide habitats for species that do well in open, sunny areas. Traditional biotopes, in particular, thrive in line corridors, whose regular clearance resembles traditional agricultural mowing and ensures a favourable habitat. Several species from traditional biotopes have been found in line corridors.

Low emissions from electrical power network services

The emissions generated by our electricity network business are low. In early 2018, we launched a systematic calculation of CO_2 emissions and began reporting our emissions on a monthly basis to Elenia's Board of Directors. As the carbon footprint of Finnish electricity production decreases, so do the emissions from Elenia's electricity network losses, since most of Elenia's emissions originate indirectly in network losses. The volume of electricity used by our customers affects our network losses.

Losses in the distribution network are mainly generated in the primary components, that is, in substations and electric lines. These losses can be reduced by replacing network components with new, more energy-efficient components.

As weather-proof cabling is increasingly being deployed in sparsely populated areas, we have expanded our range of distribution substations to 30 kVA substations, which can feed sites that use little electricity at lower losses. Previously, the size of our smallest distribution substation has been 50 kVA.

In addition to electricity network losses, company cars, cars used for work and stand-by generators are the main sources of emissions in our operations. We have replaced our cars to meet the emissions limits specified in Elenia's car policy. Naturally, Elenia supports its staff opting for electric cars. We use stand-by generators only during power outages. Apart from these, only regular test runs are carried out on the generators.

SF6 GASES STORED SAFELY

Greenhouse gas emissions can also come about from leaks in electrical equipment, for example if a tree that falls in a storm damages the network. SF6 (sulfur hexafluoride) is a greenhouse gas that is used for cooling and insulation in various electrical equipment. SF6 insulated equipment can be made smaller than air-insulated equipment. They also operate more reliably, since SF6 gas is used in closed systems. Alternative gas equipment is not yet commercially available on the market.

Elenia's operations only generate minor SF6 emissions, but we take them seriously due to the great atmospheric heating impact of the gas. We place special emphasis on reducing emissions when installing and dismantling equipment containing SF6 gas. We ensure that we capture and recycle the gas and regularly report on the SF6 level. Elenia's recycling partner handles the processing and recycling of SF6 contained in substations and circuit-breakers deployed from the network. ■

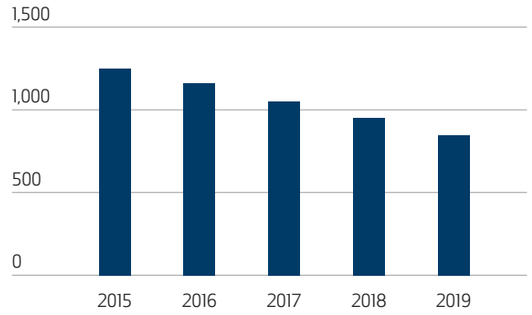
Predictive environment action to prevent oil spill

To prevent any oil spills we inspected nearly 1,700 pole-mounted and kiosk-style transformers in the groundwater area in 2019. We also removed more than 100 pole-mounted transformers from groundwater areas. Over five years, we have reduced the number of pole-mounted transformers by hundreds in environmentally significant areas. In conjunction with underground cabling, old pole-mounted transformers are replaced with new kiosk-style secondary substations with leak basins to prevent oil spill.

Last year, substations in our network area were damaged, for example by lightning, technical faults and small animals. Some substations were vandalised in our partner's storage area. In 2019, we reported 19 instances of oil spill, the overall volume of oil totalling some 1,800 kilograms Following each spill, the soil was restored and the contaminated soil was delivered to a waste treatment facility. Most of the damages relate to the pole-mounted transformers of overhead lines, and only one of the spills took place in a groundwater area.

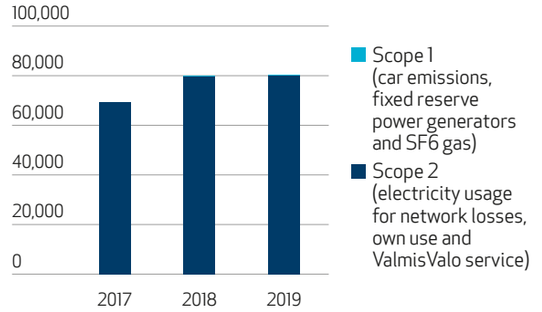
In any damage more extensive than a splash, the contaminated areas are restored in cooperation with our partners. We always aim to decontaminate the area so that there will be no need for further measures or supervision.

POLE MOUNTED TRANSFORMER SUBSTATION IN GROUNDWATER AREA, 2015–2019 (PCS)



The number of polemounted transformers Elenia's network decreases as the overhead lines are replaced with underground cables.

EMISSIONS (tn)



The circular economy is a routine element in the demolition of decommissioned networks

Climate change and the adequacy of natural resources have made material efficiency an important goal also in Elenia's operations. We aim to minimise our use of materials, raw materials and energy. We enhance transport and packaging and have jointly with our materials suppliers reduced the volume of packaging material used for our products.

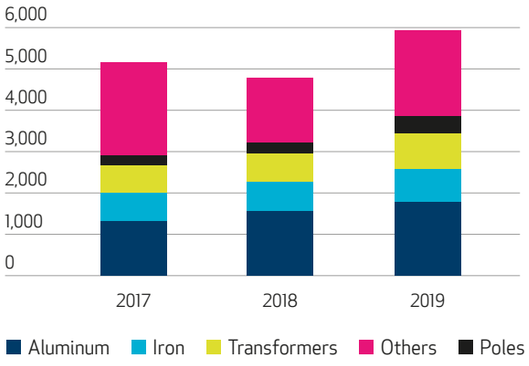
We encourage contractors to quickly return cable drums. We assume responsibility for damage to cable drums procured under agreements with Elenia, if the drums are returned to us within six months of delivery. The goal is to improve the turnaround of cable drums to reduce the number of drums needed.

To minimise transport, we have set up a centralised logistics channel for substation, reactor and cable contracting partners. This channel coordinates the storage of products from different providers and the centralised distribution to Elenia's construction sites. We also follow losses from cable installation in our contractors' work and address large volumes of losses.

The target service life of materials used in the electricity network is very long, typically even up to 60 years. Moreover, the bulk of materials consists of metal, plastic and oil, which are easy to recycle. The most quickly replaced components, such as smart meters, are designed for easy recycling, and in their case, the focus is on easily separable materials.

We work in close cooperation with our recycling partner, who has broad experience in the recycling and reuse of different materials and waste. The collection, sorting and logistics processes for materials dismantled from the network are carefully designed so that transport can be optimised efficiently. Service

RECYCLED MATERIALS (tn)



The circular economy is a routine element in the demolition of decommissioned networks

reports enable us to follow in near real time the volumes of network material delivered to our recycling partner for disposal.

We use circular economy solutions to increase recycling. We cooperate with our partners to seek new opportunities for reusing dismantled materials and their components. Dismantled network components are primarily reused in the electricity network. Another alternative is to recycle materials for other purposes. Poles and oils, for example, can be used as energy in circular economy companies. This helps reduce the use of new fuel in the production of heat and electricity. We support the circular economy whenever possible.

In our agreements, contractors are responsible for the storage and recycling of materials returning from the network. The materials must be dismantled in a way that makes them suitable for reuse and recycling. Stock management enables the volume of reusable material to be monitored and put to efficient use in new network construction, fault management and maintenance. ■

RECYCLED MATERIALS AND ACCIDENTS

(tn)	2017	2018	2019
Aluminum	1,322	1,562	1,775
Iron	686	715	801
Transformers	661	664	861
Others	238	271	418
Poles	2,259	1,582	2,093
Total	**5,166**	**4,793**	**5,948**
Nominal waste (tn/km)	1.7	1.4	1.3
Transformer failures (pc)	30	35	19
Oil leak (kg)	1,292	1,300	1,790

Good service and maintenance restores old to new, environment notification improved packaging

In 2019, Elenia serviced and upgraded some 1,500 automated devices in its network and reinstalled them. Most of the automated devices still had service life left, so they were put back to use instead of acquiring new devices. Older devices and devices in poor condition were recycled appropriately, ensuring information security.

As part of this project we renewed 1,000 IT devices in our overhead line network and in remotely controlled disconnectors of pole-mounted transformers. During the installation stage, our contractor informed that the global supplier, a market leader in the field, packed the device fasteners in multiple plastic packaging. We submitted an environmental notification to the supplier, who made changes to the production process to reduce excess packaging material.

Birds and sheeps as our friends

We cooperate with local residents, bird-watchers and BirdLife Finland to protect our national bird, the whooper swan. This cooperation has increased the number of marker balls to over 3,000 in our network area. Last year, we installed hundreds of marker balls and devices to help swans avoid colliding with overhead lines.

As usual, we had sheep manage the undergrowth around our electricity network on Luoto island in Nokia, where they grazed all summer. Over the years, the sheep have helped clear the landscape on the island and diversify the species in the meadows. This summer job for sheep is a joint project involving Elenia, Fingrid and the City of Nokia. The goal is to promote the diversity of natural meadows. Luoto island is part of the Lumolaidun project run by ProAgria. The project examines the role played by natural diversity in agricultural environments. Elenia is one of the project's cooperation partners. ■

read more about Lumolaidun project

Green Office

Elenia Palvelut has been granted a Green Office certificate by WWF, signalling the company's commitment to adopting concrete measures to reduce its carbon footprint. In 2019, Elenia's Green Office programme focused on transport, communications and food. In our meals, we favour fish and vegetables, the staff are encouraged to have vegetarian days and we serve Finnish oat milk with coffee.

In the spirit of Green Office, members of Elenia' staff took part in the Kilometrikisa company challenge that encourages people to choose sustainable transport options. By choosing to cycle to work and use bikes in their leisure time, our staff rode for a total of 35,400 kilometres. This translates to fuel savings of 2,480 litres and 6,192 kilograms of CO_2 savings compared to travel by car.

New innovations to promote changes in the energy sector

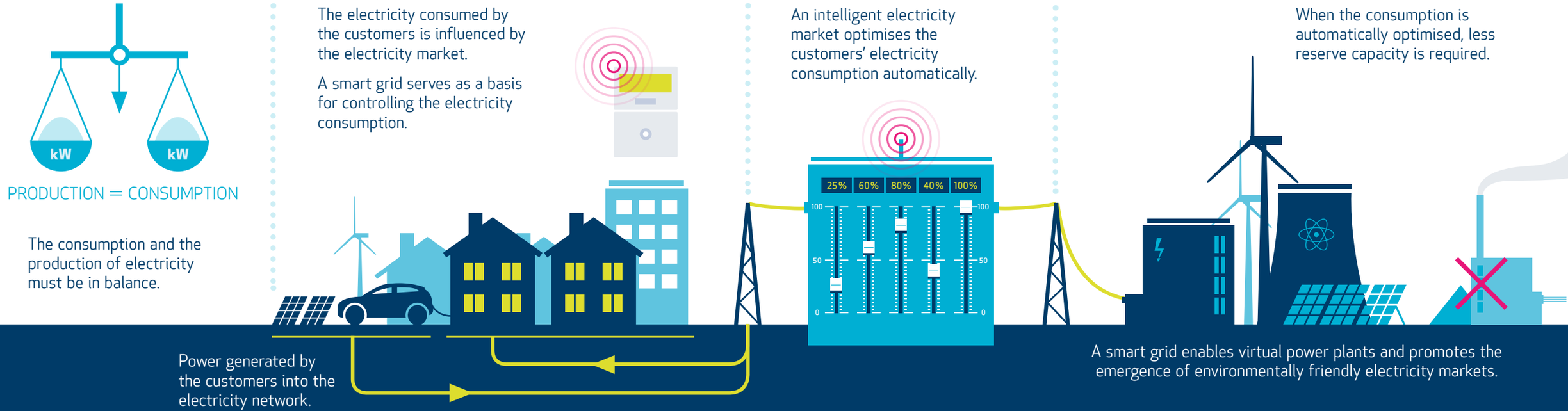
Our new strategy emphasises Elenia's participation in the promotion of major changes in the energy sector. These changes call for broad-based cooperation involving the energy industry, customers, interest groups and partners.

Through the innovation incentives of its regulatory model, the Energy Authority encourages network companies to invest in the development of smart networks as well as other new technologies and operating methods.

The strategic targets of our innovation and development activities that receive special emphasis in this context include combating climate change, renewing energy markets to support this work and creating new business. We engage in broad-based cooperation in our innovation and development activities with our partners and the scientific community. We carry out development projects, performing different roles, such as project initiator, principal coordinator and participant, and publish information, results and final reports related to the projects.

In 2020, we will create a road map to support our development efforts. We use new technology and robotics solutions offered by digitalisation in our electricity network and in our services. It is our responsibility to ensure that customers have equal opportunities to benefit from the developing electricity markets. ■

MARKET PLACE ENABLES CHANGES IN ENERGY SECTOR AND CUSTOMERS' PARTICIPATION



The future is being tested today

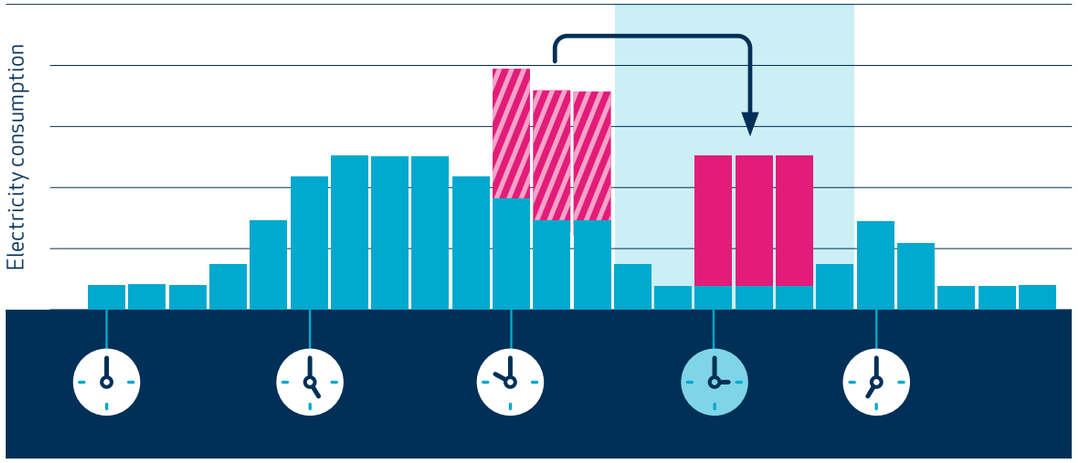
Elenia participates in the development of new solutions for the energy market by testing them in practice. The elasticity of consumers' consumption and the use of batteries during power outages are examples of topics that our innovation activities focus on.

Working with some 80 households and electricity suppliers, we have tested the use of smart meters to control electric heating and the electricity consumption of water boilers. In summer 2019, the households participating in the pilot project received new smart meters for remotely controlling electric heating of water-boilers connected to the meter.

It is our goal to offer smart elasticity of electricity consumption to small customers in Elenia's area by →

FLEXIBLE ELECTRICITY CONSUMPTION WITH THE HELP OF TIMING

Electricity consumption or production can be flexible in terms of time. For example, electric heating of water boilers can be scheduled to a time with more affordable electricity prices without compromising on the comfort of living.



The daily lives of customers continued as normal during elasticity testing

This is the feedback that we received from customers who took part in testing the elasticity of electricity consumption.

This caused no problems for residents. We didn't notice anything

We haven't noticed any difference in the volume of hot water or in temperature compared to the time before testing.

This is the future. Big peaks in electricity consumption can be levelled out so that there will be enough electricity for all. This is a good thing.

Everything went well, and we didn't experience any interference

Elenia kept us well up to date on the pilot and its progress, and even told us of an extra control that had been carried out! It would've gone unnoticed to a normal person. Fair play to Elenia!

After a few initial problems – with the meters and relays of some sort – the pilot ran well and no longer affected the volume of hot water. It was nice to see that you put a lot of effort in the pilot and addressed any problems really quickly.

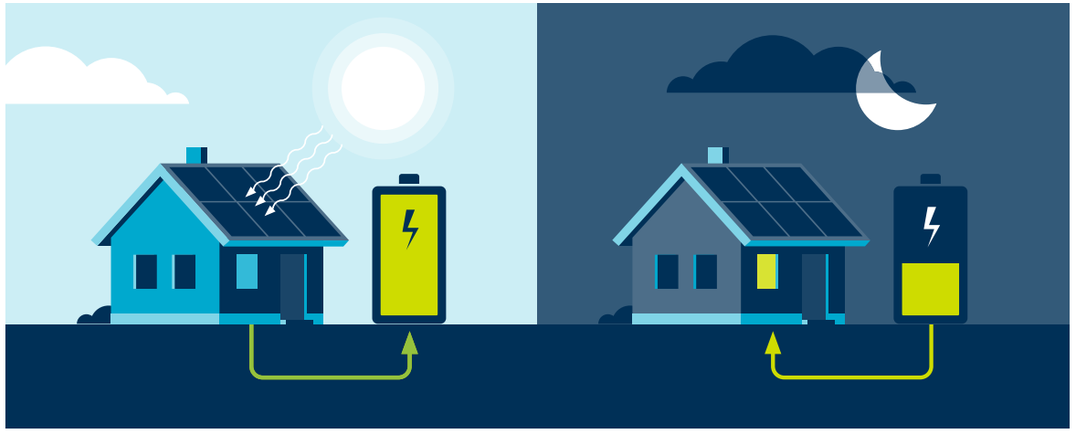
The future is being tested today

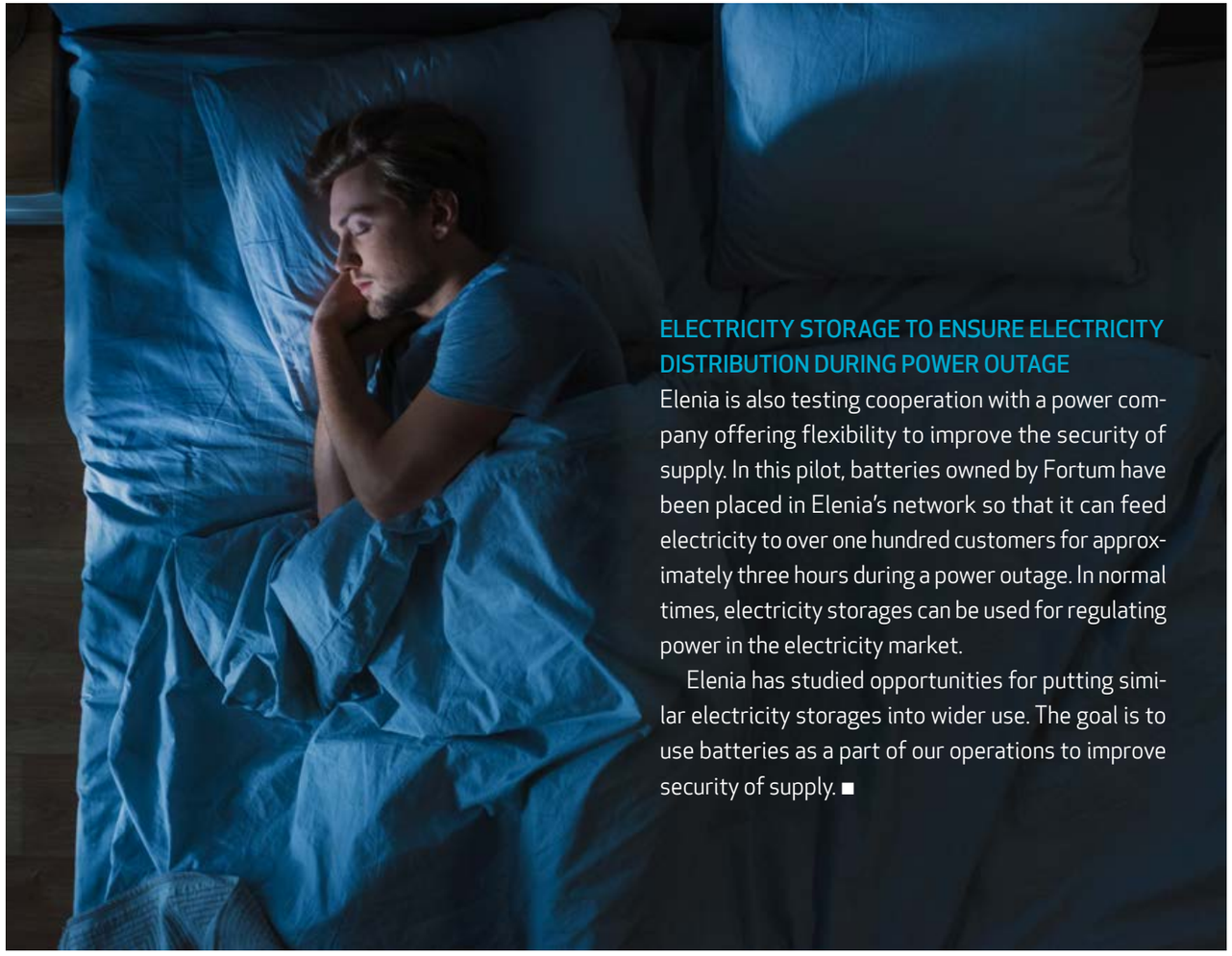
2024. In the future, customers could make an agreement with their electricity supplier or other market player regarding the control of metered electric heating or water boilers in such a way that customers benefit financially from using devices at a time when the market price of electricity is at its lowest. In the electricity market, this would offer new opportunities to electricity suppliers and possibly to entirely new business players.

The idea behind elasticity solutions is to provide new services to customers, create new business on the markets and ensure the overall efficiency of the power system. Elasticity of consumption enables more efficient use of renewable energy and reduces the need for backup power. In addition, elasticity solutions can help to cost-efficiently secure the supply of electricity distribution.

FLEXIBLE ELECTRICITY CONSUMPTION WITH THE HELP OF ELECTRICITY STORAGES

The resource for flexible electricity consumption can be a bank of batteries which is charged and used according to need.





ELECTRICITY STORAGE TO ENSURE ELECTRICITY DISTRIBUTION DURING POWER OUTAGE

Elenia is also testing cooperation with a power company offering flexibility to improve the security of supply. In this pilot, batteries owned by Fortum have been placed in Elenia's network so that it can feed electricity to over one hundred customers for approximately three hours during a power outage. In normal times, electricity storages can be used for regulating power in the electricity market.

Elenia has studied opportunities for putting similar electricity storages into wider use. The goal is to use batteries as a part of our operations to improve security of supply. ■

Elenia's smart grid enables market flexibility

ELENIA

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

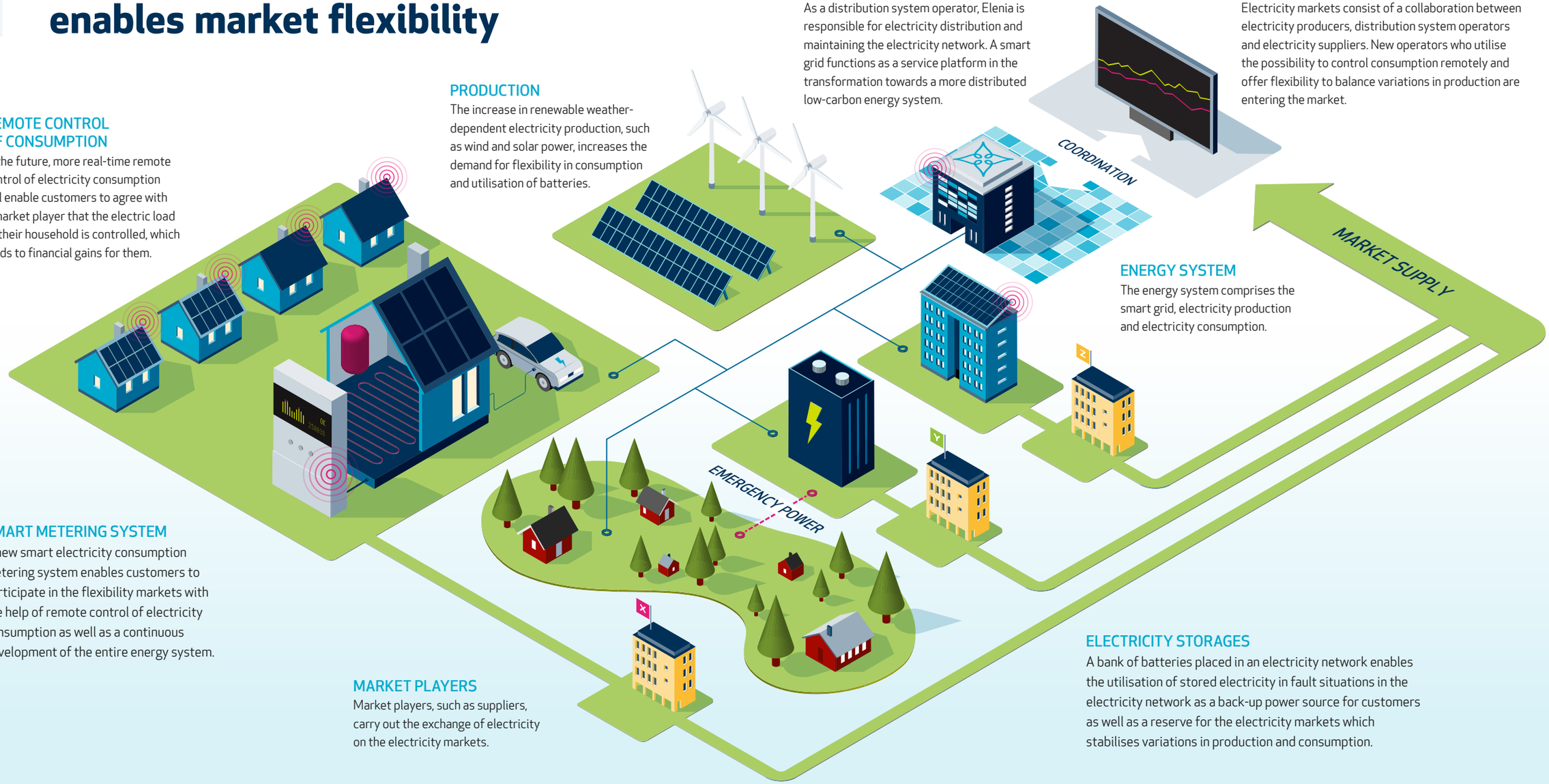
Electricity markets consist of a collaboration between electricity producers, distribution system operators and electricity suppliers. New operators who utilise the possibility to control consumption remotely and offer flexibility to balance variations in production are entering the market.

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.

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.



ENERGY SYSTEM

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

SMART METERING SYSTEM

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.

MARKET PLAYERS

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

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.

Elenia is involved in EU solutions

New elastic market services, business opportunities and more versatile use of elasticity in power system management are increasingly important research topics worldwide. Efforts are also under way to find roles and operating models that can help integrate new operations in a smart way.

Through its development activities, Elenia takes part in discussions about the energy industry's renewal. The goal of the INTERRFACE project, funded by the EU's Horizon 2020 programme, is to coordinate different solutions and best practices in order to enable national, northern European and European development in elastic markets.

A key task in the project is to coordinate different needs to ensure that elastic resources are used efficiently throughout the power system, taking into account the individual needs in different network areas. Another goal is to offer customers more opportunities to benefit from new electricity market services. ■

OBJECTIVES FOR THE DEVELOPMENT SCHEDULE

2019

Our pilot project on demand response examined how customers' electric heating and water boilers can be remotely controlled on the basis of the needs of the electricity markets. We also tested cooperation with an flexibility provider.

2024

Our objective is to enable demand response with new electricity meters for small customers. At the same time, our goal is to use national and European cooperation to create solutions which combine European flexibility solutions, efficiently manage the needs of network companies as well as offer new possibilities for customers and actors in the energy industry.

2030

By the end of the 2020s, the objective is that European flexibility solutions work together, the needs of network companies are efficiently controlled and customers and actors in the energy industry have new operating possibilities.

SOCIAL IMPACT

We create value for the society.

KEY RESPONSIBILITY THEMES

- SUSTAINABLE PROCUREMENT AND SUPPLY CHAINS
- GENERATION OF ADDED ECONOMIC VALUE
- RISKS AND OPPORTUNITIES OF CLIMATE CHANGE TO BUSINESS
- INTERACTION WITH STAKEHOLDERS

SOCIAL IMPACT

Our services and operations create value for society. We distribute electricity to 430,000 household, corporate and community customers in approximately one hundred municipalities, helping to ensure smooth daily life throughout the year.

Our customer service and cooperation with our stakeholders are based on partner and cooperation networks, which strengthen the vitality, entrepreneurial spirit and employment in Kanta-Häme, Päijät-Häme, Pirkanmaa, Central Finland, North Ostrobothnia and South Ostrobothnia. We require all our partners to adhere to responsible procedures, which we do not compromise on.

We are present, as a reliable partner, in the daily lives of our customers, landowners, municipalities and other stakeholders. We maintain this trust through our daily work. Our carefully planned investments aimed at upgrading the ageing electricity network to answer future needs in society generate employment and wellbeing on a wide front.

Elenia provides works for the local SME sector

Sustainable and responsible procurement comprises a fair and good partnership based on Elenia's values and Code of Conduct as well as social responsibility. Procurement is one of the areas in which we contribute to stronger social, environmentally sustainable and economic growth. In terms of sustainability, our procurement complies with the ISO 20 400 standard, and we take the objectives of our safety culture into account in our procurement management. For example, when choosing contractors, a serious safety deficiency may prevent a supplier from participating in Elenia's invitation to tender. In material procurement, we require our suppliers to have OHSAS systems in place and pay attention to the trend in accident-related LTIF. We also require our partners and suppliers to commit to the principles of environmental protection, sustainable development and continuous improvement.

Our contractors must have an environmental management system that supports our ISO 14001-based environmental work. The contractor's staff must be familiar with operations complying with the environmental management system. The system must also encompass all subcontracting chains. The contractor must demonstrate its preventive measures for eliminating environmental risks and its procedures in case of environmental accidents and damage. It must also report any incident of damage to Elenia.

→

Elenia provides works for the local SME sector

We require our contractors to have an occupational health and safety management system, the goal of which is to ensure the wellbeing and continued ability to work of the contractor's own employees as well as to prevent occupational injuries and illnesses. Their occupational health and safety systems must comply with Elenia's operations, based on the ISO 45001 standard. Our contractors provide Elenia with a report of all work-related accidents, near-misses and safety observations. Deficiencies in personal protective equipment can lead to sanctions.

Our procurement is based on diverse partner networks, enabling persistent development with large, medium-sized and small partner companies. We encourage new suppliers to join us and work actively to develop well-functioning and competitive markets. In the field of construction, we cooperate with all stakeholders from village communities to municipalities and take part in developing procurement in the energy sector.

In 2019, Elenia acquired contracting services from some 60 companies, around half of which were small- and medium-sized companies. Fifteen of these were micro-sized businesses, from which we acquired approximately three per cent of our annually procured contracting services, worth EUR 116.5 million. In addition, the construction of Elenia's electricity network provided employment to several local SMEs working as subcontractors for the main contractors, for example in earthworks of the underground cable network. This boosts the region's vitality as well as local entrepreneurship and employment.

Elenia aims to combine the construction of the electricity network with other parties' construction projects and to involve municipal engineering construction as well as water and telecommunications network construction companies as widely as possible in joint construction activities. Joint construction saves the environment and the participants' costs, in addition to improving the satisfaction of landowners and customers. In the past three years, joint construction has accounted for approximately a quarter of the annual underground cable construction of more than 3,000 kilometres. →

PROCUREMENT OF CONTRACTING SERVICE PARTNERSHIPS (%)

- Small enterprises 26%
- Medium-sized enterprises 25%
- Large companies.....49%

The Reisjärvi "miracle" was awarded first place in the national joint construction competition

The Reisjärvi joint construction project came in first place in the business category of the Joint Construction Project of the Year competition organised by the Finnish Transport and Communications Agency Traficom. R-Net, a local fibre network company, Netplaza, in charge of the design and construction of the fibre-optic network, and Elenia jointly constructed a fibre-optic network and weatherproof electricity network in Reisjärvi. The fibre-optic network covers all of the Reisjärvi area, and the share of the weatherproof network rose from slightly over 10 per cent to more than 90 per cent. In North Ostrobothnia, the project has been referred to as the Reisjärvi miracle. Fibre-optic penetration is exceptionally high in the project area, amounting to as much as 90 per cent in some locations.

Elenia's Head of Procurement and Construction Jarkko Kohtala, Netplaza's Business Development Director Hanne Nivala and Head Designer Jouni Vaara as well as R-Net's representative Matti Kangas received the first prize in the Joint Construction Project of the Year competition.

Elenia provides works for the local SME sector

1,000 ANNUAL FULL-TIME EQUIVALENT JOBS FOR PARTNERS

Our target is to achieve a 75% underground cabling rate by 2028. By the end of 2019, cabling covered half of our electricity network. Over a period of ten years, this construction has generated approximately 10,000 full-time equivalent (FTE) jobs for our contractors and other professionals in the energy sector.

Elenia's investment programme provides employment amounting to approximately 1,000 FTE annually. Our contract and agreement models increase the continuity and predictability of operations in our partner companies. The construction of Elenia's electricity network employs several local SMEs as main contractors and subcontractors, which strengthens the vitality of Elenia's area of operations and boosts local entrepreneurship and employment.

Construction involves seasonal variation over the year. To help its contractors plan their resources, Elenia has developed an annual schedule used for predicting and preparing for seasonal variation. For example, the demolition of old overhead lines is scheduled for the winter months. Contractors have also developed methods for laying power cables in the winter and for reducing the impact of weather on construction activities. ■

WHOLESALE AND LOGISTICS
SLO Oy, Finland

MEDIUM VOLTAGE CABLE
Prysmian Group Finland Oy, Finland
Klinkmann Oy - Hellenic Cables SA, Greece

LOW VOLTAGE CABLE
Tele-Fonika, Poland

COMPACT SECONDARY SUBSTATION
ABB Oy, Estonia
KL-Industri AB, Sweden
Satmatic Oy - Harju Elekter, Estonia

DISTRIBUTION CABINETS
Onninen Oy - Emmiter, Poland

DISTRIBUTION TRANSFORMERS
ABB Oy, Poland
Siemens, Hungary
Landis+Gyr Oy - Toshiba, India

SPECIAL TRANSFORMERS
Maviko Oy - Sonmez Transformer Company, Turkey
Zennaro Electrical Constructions, Italy

POWER TRANSFORMERS, REMOTE SUBSTATION AUTOMATION
ABB Oy, Finland

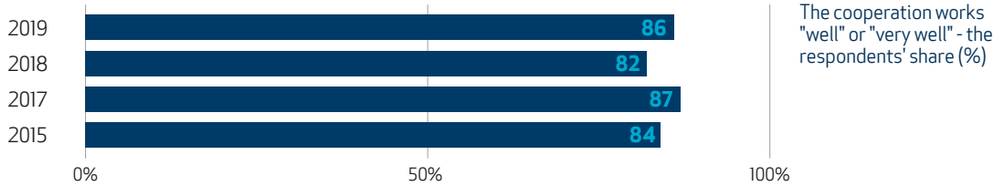
Good satisfaction among partners

Our partners include contracting service providers as well as Finnish and international suppliers of materials and systems. In line with our management model, we carry out both strategic and operational cooperation with our partners. Scorecards, used as our common management tool, promote performance and continuous improvement in our business processes. Elenia's Code of Conduct for partners forms part of Elenia's contract documents in all material and contracting procurement. Elenia's partner event was held at Vierumäki in January. The event has become one of the sector's most important annual gatherings in Finland, attracting a wide range of stakeholders, with nearly 130 participants from 52 partner companies.

We measure our partners' satisfaction annually. Our goal is to determine how Elenia's regional, materials and project partners have experienced cooperation with Elenia. Our partners' assessments regarding the fluency of cooperation and Elenia's corporate image have remained high, and our partners consider Elenia to be a front runner in the sector.

We value our partners' security on our sites and jointly with our partner network, continue our practical efforts to ensure occupational safety. This is reflected in our partners' assessments, according to which the attention given to occupational safety and wellbeing at work

THE FLUENCY OF ELENIA'S COOPERATION



Development project focused on project activities

In 2019, Elenia carried out a development project related to project activities jointly with two of its key partners. The goal was to identify areas of improvement in the participants' collaborative project activities and to boost the competitiveness of operations. A total of 35 personal interviews as well as on-site visits were conducted during the project. The results showed that meeting practices were in further need of improvement and that the focus of meetings and assessments should be shifted towards forecasts for the future. This means better preparation using forward-looking indicators. In the past, meetings have focused on the previous month and on the progress of work in the project portfolio. Now, the goal is to anticipate and more accurately forecast the developments of the following months as well as to make more forward-looking plans for cooperation overall. The flow of information and the use of materials can be improved and enhanced, for example by placing increased emphasis on the electricians' views on materials and methods.

Good satisfaction among partners

has improved considerably from the previous year. Safety and security are considered to benefit from cooperation. Generally speaking, our materials and regional partners are satisfied with cooperation. Our project partners, in turn, are more critical about the fluency of cooperation.

As for contracting, our traditional focus on occupational safety has expanded to also encompass working conditions, the monitoring of any inappropriate behaviour, the threat of violence and the atmosphere in the working community. We also pay attention to hazardous substances and dust in the work environment. We have also agreed on the provision of staff facilities on mobile infrastructure sites. We have discussed these matters jointly with the various main contractors and subcontractors operating on Elenia's construction sites.

AREAS OF DEVELOPMENT RELATED TO PARTNER COOPERATION

Elenia's ability to understand its partners' business, level out seasonal variation and handle problems are the three weakest areas in cooperation. However, we have made progress in all of them. As concerns seasonal variation, as many as two out of five say that the situation has improved over the past year, and none of the respondents considered it to have deteriorated. In terms of business insight and the handling of problems, approximately one-third of the respondents found that the situation had improved in the past year. ■

PARTNER COOPERATION

Our regular partner cooperation is based on the cooperation and management model described below.

PARTNER DAYS	1–5–10 YEARS	• Operating environment targets • Partner network targets • Development
MANAGEMENT MEETINGS	1–5 YEARS	• Targets of a single partnership • Development
NAVIGATIONS SCORECARD	1–2 YEARS	• Monitoring the achievement of targets • Actions • Development
MONTHLY MEETINGS	1 MONTH–1 YEAR	• Monitoring the achievement of targets • Actions
QUALITY AND OPERATIONS CONTROL REPORT	CONTINUOUS	• Continuous • Monitoring and reacting

Clear and uncompromising control of contracting partners

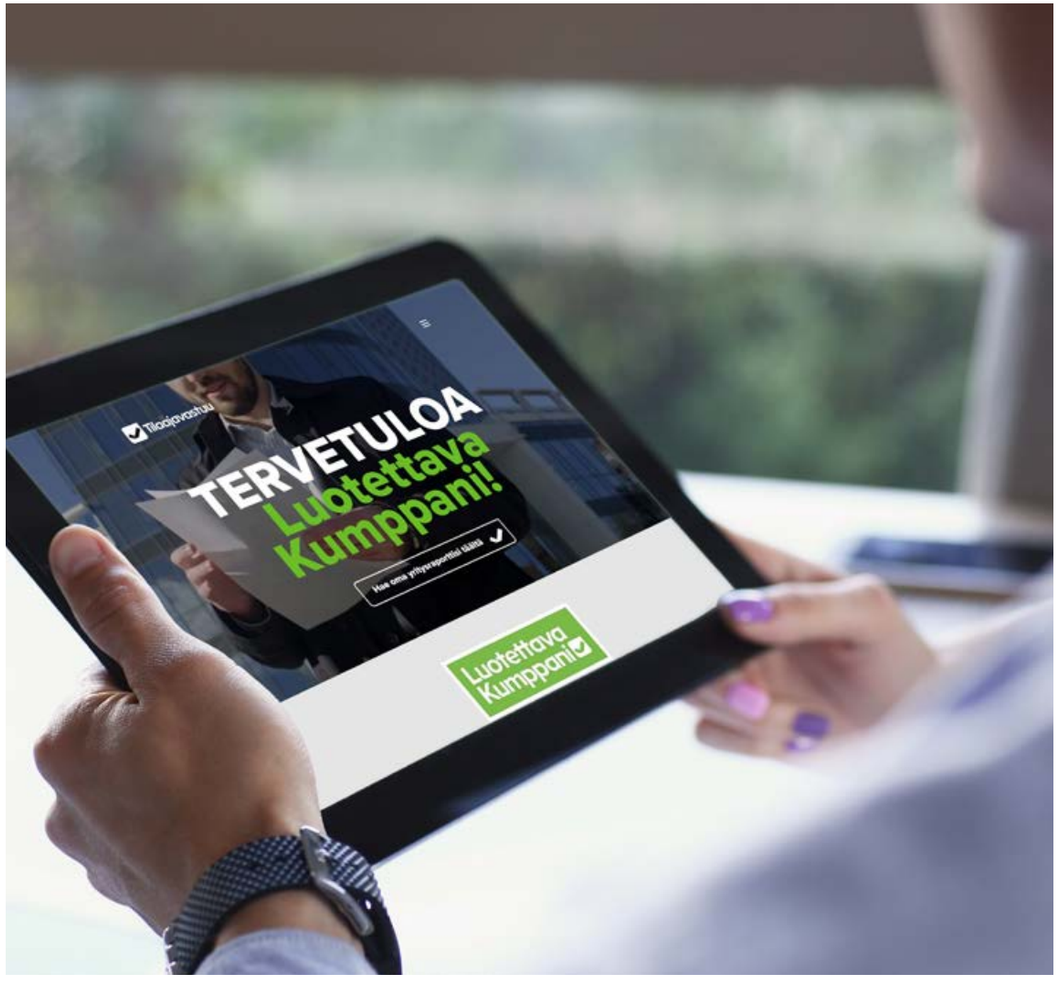
In construction projects, Elenia is the developer that acquires all the contracting services from the open market. We do not accept any form of grey economy or financial crime in our construction projects. A well-functioning market and fair competition improve the equal opportunities of our partner companies and provide opportunities for growth and job creation.

Contracting companies in a contractual relationship with Elenia, as well as all the subcontractors involved in our construction projects must join the Reliable Partner service. This helps us ensure that our partner companies fulfil their statutory obligations as contracting parties and employers.

Our requirement that subcontractors also join the service means that 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. As a developer, we must ensure that our contracting partners fulfil their statutory obligations before concluding an agreement with them. Elenia monitors its partner network to ensure the fulfilment of obligations and detect any negligence in these matters throughout the contractual relationship.

At present, Elenia's Reliable Partner service continuously monitors 450 companies. During contractual relationships, we have addressed negligence in relation to, for example, tax in default, unpaid pension insurance contributions and the provision of statutory occupational health care.

Our partner companies must request our approval for all the subcontractors they use and report any changes in this respect during the agreement period. A subcontractor of our partner company may not, in turn, subcontract any work without Elenia's approval. Restricting subcontracting chains is one of our ways of preventing grey economy.



Each month, we report the contract sums paid per project to the Tax Administration. The main contractors in our projects also submit monthly reports to the Tax Administration about all the employees working at the site. The reporting on contracts and employees has increased the effectiveness of tax supervision and helped combat the grey economy. Elenia applies the VAT reverse charge mechanism for construction services sold to Elenia Palvelut Oy. The mechanism aims to ensure the payment of VAT in subcontracting chains.

Elenia has steered the risk management and insurance cover of its partner network companies to account for any personal injury or damage to property. Our goal is to ensure the livelihood of entrepreneurs and their families in the event of an accident as well as secure the continuity of their business. What this means in practice is that anyone working in Elenia's construction projects who is not covered by statutory occupational injury insurance must be insured through accident insurance for entrepreneurs. Elenia's partners must ensure that the insurance information of the company and its subcontractors can be found in the Reliable Partner register.

With regard to foreign nationals working in Finland, we ensure that all employment relationships comply with at least the minimum requirements and the laws and regulations on occupational safety. In particular, we ensure that foreign employees are covered by adequate accident insurance. We ensure this for each project in connection with the subcontractor approval process. ■

Tax revenue for the state – electricity tax levied on the distribution invoice

Elenia distributes electricity to 430,000 customers in approximately one hundred municipalities. It is domiciled in Tampere, and pays its taxes in Finland. Elenia's revenue from the electricity network business (according to IFRS, including intra-group items and other operating income) in 2019 was EUR 294.3 million and EBITDA amounted to EUR 183.4 million.

A distribution system operator (DSO) is responsible for electricity distribution in its area and charges the customer for electricity tax and value added tax as part of the distribution invoicing, remitting them further to the state. Electricity tax is paid on the consumption of electricity. The collection of electricity tax, on the other hand, is prescribed to be collected by the companies responsible for electricity distribution by law, with Parliament determining the tax rate. The tax is comprised the electricity excise duty and emergency supply fee, collected in full from the DSO.

In recent years, the electricity tax collected in Finland has totalled approximately EUR 1.2 billion per year.

In 2019, Elenia collected and remitted a total of EUR 112.5 million in electricity tax. 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 156.1 million in taxes and tax-like charges. In other words, the taxes and tax-like charges that Elenia collects do not show up in the company's results. Instead, the company serves as a kind of flow-through entity for invoicing.

Distribution system operators are supervised by the Energy Authority. In 2019, the statutory electricity and natural gas network fees that the Energy Authority charges from all distribution system operators in Finland totalled approximately EUR 3.8 million, of which Elenia accounted for slightly over 10%, or nearly EUR 400,000.

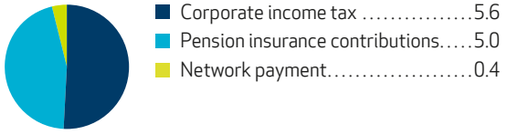
As a business, Elenia paid a total of EUR 11.0 million in taxes and levies in 2019. Based on its result for the financial year 2019, Elenia paid more than EUR 5.6 million in taxes. The paid corporate income taxes include advance payments made during the year, final taxes for previous financial years and allocated taxes, but not deferred taxes.

Elenia invested EUR 151 million in developing electricity networks in 2019. To finance its investment programme, Elenia had approximately EUR 1.6 billion in interest-bearing liabilities from international institutional investors and banks at the end of 2019. The financial costs for these totalled EUR 68 million in 2019.

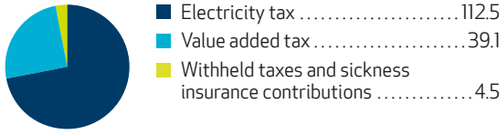
The wage expenses of Elenia Group's personnel on the whole totalled EUR 11.5 million last year.

In 2020, Elenia will spend approximately EUR 160 million on modernising over 3,500 kilometres of its ageing network, making it into a weatherproof underground electricity network. ■

TAXES AND LEVIES PAID (€ MILLION)



TAX COLLECTED AND REMITTED (€ MILLION)



Value creation at Elenia 2019

CREATED VALUE AND IMPACTS

CUSTOMER VALUE

Electricity distribution to 430,000 customers

Reliability of electricity distribution 99.95%

NPS 47

Customer service for 9 companies, for 1.1 milllion end customers

Customer oriented development of the electricity market

PARTNERSHIPS

Over 1,000 man-years

Significant local employment effect

ECONOMIC VALUE

Investments €156 million

EBITDA of electricity network operations €183.4 million

Taxes and levies €11 million

CIRCULAR ECONOMY AND EMISSIONS

All of the materials derived from the demolition of old overhead line networks are recycled or utilised in energy production

CO_2 emissions (Scope1) 93 tonnes, (Scope2) 80,140 tonnes, mainly due to electricity distribution losses

SOCIAL VALUE

Reliability of electricity distribution

Renewal and weatherproofing of the ageing network

Innovation

Direct and indirect employment

Employee experience

LTIF 5.9

Brand equity

BUSINESS MODEL

Vision, mission and strategy
Management model
Values

BUSINESS PROCESSES

ELECTRICITY DISTRIBUTION BUSINESS

Network management process

Electricity distribution process

Outage management process

Connections and supplementary services process

SERVICE BUSINESS

Customer service

Energy sector customer service concept

Procurement and Construction services

Fibre-optic business

SERVICES

Electricity supplied to customers 6,362 GWh

New electricity connections

Connecting renewable energy to the network

E-services

Electricity market services

Energy sector customer service

Fibre-optic connections and construction of fibre-optic network

SUPPORT FUNCTIONS

Finance, HR, Cybersecure ICT Solutions and Services, Legal Affairs and Risk Management, Communications

RESOURCES AND INPUTS

PERSONNEL AND COMPETENCE

287 employees

Training hours 20h/employee/year

70% have university degrees

Professional skills

PARTNERSHIPS

Contractors, service providers, suppliers, ICT-partners, stakeholders, investors, public affairs

ELECTRICITY NETWORK

74,000 km electricity network, underground cabling rate 50%

Replacement value of the electricity network €3.1 billion*

ECONOMIC

Issued bonds €1.6 billion

Adjusted equity tied up in electricity network operations €1.3 billion*

Credit rating BBB+ (S&P)

INTANGIBLES

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

NATURAL RESOURCES

The purchased cables contain 5,130 tonnes of aluminium, 5,805 tonnes of PE plastics and 14 tonnes of copper.

Transformers contain 426 tonnes of oil

Loss electricity 272 GWh

* Energy Authority 2018

Consistent pricing ensures the modernisation of the electricity network to meet the needs of a digital society

We are building a smart, weatherproof electricity network to meet the needs of customers, changing electricity production and an increasingly digitalised society. Daily work and life are becoming increasingly dependent on electricity. The decades-old overhead lines must be replaced in any case, and we have opted for a weatherproof underground cable network that will serve households, companies and society several decades into the future.

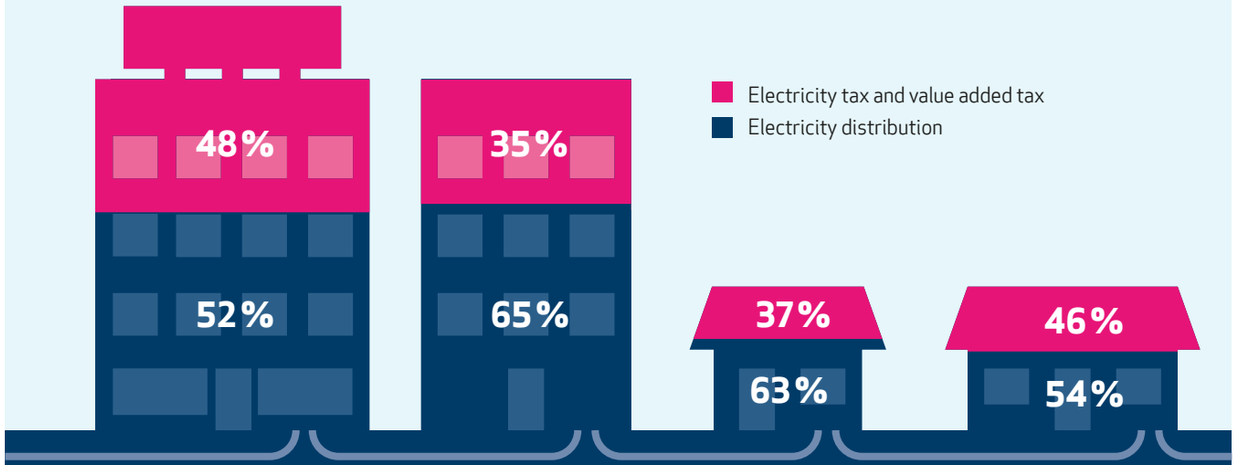
Over the past decade, we have invested over one billion euros in modernising the ageing network. Our weatherproof electricity network now covers nearly 70 per cent of our customers. In 2009, when Elenia introduced its first underground cables, our underground cabling rate was less than 20%. Now it is over 50 per cent. Our work is progressing, and by 2028, 75 per cent of Elenia's network spanning 74,000 kilometres will be underground. This will ensure city-level electricity distribution outside urban areas, as well.

The ongoing transformation in the energy sector also poses new requirements for the reliability of power distribution. In order to mitigate climate change, energy production that emits carbon dioxide must give way to renewable energy. The growth of wind and solar power makes it more challenging to maintain the balance of the electricity system because the output of these energy sources depends on the weather. To maintain a good balance, we need a smart grid and smart metering that enables the efficient use of different forms of energy production and electricity storage.

The construction of a weatherproof smart grid calls for persistent work. As a result of two decades of work, Elenia's smart grid is among the best internationally. Our work continues, now focusing on the development of a next-generation smart metering system.

The modernisation of our ageing network to make it weatherproof has led to an increase in distribution prices, which Elenia has allocated evenly over several years to prevent sudden price hikes. Elenia's steps have been more moderate than the options allowed by the Energy Authority. ■

TAXES IN THE ELECTRCITY DISTRIBUTION PRICE



The electricity distribution price includes the value added tax, 24%, and the electricity tax which consists of excise and the emergency supply fee. Tax category 1 electricity tax 2,79372 cent/kWh, incl. VAT 24%.

Management of risks and opportunities in strategic and operational management

Comprehensive management of risks and opportunities is part of all of Elenia's management and daily operations. The foundation for the identification of risks and opportunities and their processing is laid down by Elenia's risk management policy and separately specified procedures, such as regular measures determined by the annual risk management plan. These guidelines and procedures cover the identification, assessment and reporting of both risks and opportunities, as well as measures to control the risks and seize opportunities.

The group's risk register encompasses the most significant risks and opportunities, their effects, probability and scope on an annual level as well as the measures needed to manage the risks or grasp the opportunities. In addition, management systems, namely the environmental management system, the occupational health and safety management system, and the asset management system, play a significant role with respect to the risk register and risk management activities. Development work to create and adopt an information security management system is underway.

Exceptional weather phenomena and the ensuing disturbances in the electricity network and electricity distribution to customers are concrete examples of Elenia's biggest risks. Underground cabling of the electricity network in accordance with the Elenia Weatherproof concept is effective risk management, and Elenia is committed to its systematic implementation. The increased automation of the electricity network is an example of the opportunities that are related to the management of weather risks and provide significant benefits in the form of shorter power outages.

The annual risk management measures proceed in accordance with the annual schedule and are carried out together with the management teams and key employees. The management of group companies is responsible for embedding risk management into strategic and operative management and business processes. Business units and processes are responsible for risk identification and assessment as well as for planning, implementing and monitoring risk management measures.

The Legal Affairs and Risk Management unit is responsible for comprehensive risk management, reporting and monitoring related to the planned measures and, in particular, the development of the group's risk management.

Elenia has launched a development project aiming to develop comprehensive risk management with the help of an enterprise risk management framework. The aim is to make greater use of the management of risks and opportunities in connection with strategic management. ■

Increasing the impact of local stakeholder cooperation

Elenia aims to increase its cooperation with local stakeholders. We are looking into new forms of cooperation that would benefit various parties and strengthen Elenia's visibility locally.

One example of this is the cooperation that we launched at the beginning of 2020 with schools in our network area. We visit classrooms to talk about electricity, safety and energy conservation. Over the year, we hope to promote the awareness of electricity among children and young people in at least 20 schools.

RESPONSIBLE COOPERATION WITH LANDOWNERS

We take landowners' views into consideration when building our weatherproof network. We do the same for tree management related to maintenance activities carried out on landowners' land. Our goal is that the nearly 20,000 annually concluded land use agreements are based on voluntariness and common approval. We also take into account the opinions and views of residents who come under the scope of our projects. In the future, we will improve our interaction with landowners by developing our communication about the progress of projects and by requesting feedback on the implementation of work at different stages of projects.

We will measure the landowners' satisfaction with planning and construction. We have generally received good results from our satisfaction surveys. We address any shortcomings without delay with our partners.

To improve cooperation, we meet with representatives of landowners, such as the Central Union of Agricultural Producers and Forest Owners (MTK) and the Finnish Road Association, to improve cooperation with landowners and streamline permit procedures.

AIMING AT SMOOTH COOPERATION WITH MUNICIPALITIES

Elenia's network area covers approximately one hundred municipalities. From Elenia's perspective, municipalities have numerous roles: they are customers, authorities, landowners and partners. Good cooperation with municipalities makes for smoother and more efficient operations.

We have joined forces with larger municipalities to prepare policies for permit procedures in cases where the municipality is both the landowner and the authority. We must reach agreements that satisfy all parties, taking into account equal and non-discriminating treatment. We aim to discuss these policies and procedures with all the municipalities in our network area and improve good cooperation practices. Good municipal cooperation ensures that we can take into account local development needs regarding electricity networks and, if required, target our investments in line with future land use planning.

Our cooperation with the Centre for Economic Development, Transport and the Environment also strives to develop practices in the energy sector. We have actively participated in the customer forum of the Pirkanmaa Centre for Economic Development, Transport and the Environment, which has developed good procedures in cooperation with the electricity and telecommunications sector. We also collected ideas from our partner network for this purpose. In addition, we have regularly met with representatives of the Centre for Economic Development, Transport and the Environment to strengthen cooperation and increase information exchange between us. ■

Extensive cooperation

STAKEHOLDERS

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

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

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

ELENIA

OPERATING ENVIRONMENT

REGULATION
EU legislation and regulations
Energy policy
Regulation of network companies

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

TECHNOLOGICAL DEVELOPMENT AND DIGITAL TRANSFORMATION
Technology dependence
Service automation
Rate of change

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

ELECTRICITY MARKETS
Market parties
Renewable energy production
Decentralised small-scale production

PUBLICITY
Informational services
Reputation management
Employer image

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

KEY FIGURES

Reporting principles

This is Elenia's second sustainability report. It covers information about Elenia Oy, Elenia Palvelut Oy and Elenia Finance Oyj. The Group's reporting also encompasses the 2019 Annual Review, which contains the financial information for the Group and its parent company Elenia Oy. The Annual Review is available at https://www.elenia.com/en/investors/financial-reports.

Annual review 2019

Our sustainability report describes Elenia's operations, mainly focusing on 2019. It also provides information about our goals and development trends in the next few years.

We have followed the principles of the Global Reporting Initiative (GRI) as well as the GRI Electric Utilities Sector Supplement concerning themes that we consider material. Our reporting mainly corresponds to the core-level requirements.

DEFINING THE REPORT CONTENT

The content of this report is based on Elenia's sustainability programme approved in the autumn 2019. We began to prepare the programme in 2018 when the management and experts carried out the first materiality analysis of Elenia's sustainability and its key themes. We continued this work in 2019 by more extensively surveying the opinions of staff and stakeholders and by determining the main impacts of our operations on people, society and the environment. We used this information to update the materiality matrix in early 2020.

DATA MEASUREMENT, CALCULATION AND REPORTING PRINCIPLES

This sustainability report describes operations in 2019 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. Any changes in our calculation and reporting methods will be described in future reports.

Personnel and safety

The figures concerning the Group's own personnel include Elenia's own employees and the leased employees at Elenia Palvelut Oy. 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.

Materials and waste

The figures provided for recycled materials mainly depict recycled metals that originate from decommissioned overhead lines. These data are compiled in electronic reporting systems in cooperation with our partners providing recycling services. The figures also include the waste generated at Elenia's office, which is categorised as Other waste.

Air emissions

We report CO_2 emissions from the following emission sources:

- Scope 1: emissions from the company's leased cars, emissions from the fuel consumed by stationary reserve capacity equipment (estimated based on the electricity generated) and SF6 gas leaks
- Scope 2: network losses, emissions from own electricity consumption and the electrical energy used by Elenia's Vierumäki Valmisvalo street lights

The majority of Elenia's 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 289.67 g/kWh in 2018. This the most recent figure available when this report was completed. This coefficient has been used to calculate emissions for 2018 and 2019. The emissions for 2017 have been calculated using the coefficient of 264.04 g/kWh, which the Energy Authority provided retrospectively.

Financial information

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

Sustainability key figures

SAFETY AND WELLBEING AT WORK

ELENIA'S EMPLOYEES

	2017	2018	2019
Employees totally (31.12.)	357	360	311*
Number of new employees	18	10	44**
Employee turnover (%)	4.4	4.8	6.4

* Divestment of heat business in 2019
** of which 16 in the business transfer

HEALTH AND SAFETY AT WORK

Elenia's employees

	2017	2018	2019	Target 2019	Long-term target 2025
Sick leave ((Elenia Oy, Elenia Finance Oyj ja Elenia Group)	1.51	1.16	1.16	-	-
Sick leave (Elenia Palvelut Oy)	4.74	4.4	2.51	-	-
Fatalities, number	0	0	0	0	0
Lost time injuries (over 30 days sick leave), number	0	0	0	0	0
Lost time injuries, number	2	0	0	0	0
Recordable injuries, number	1	0	0	0	0
Lost Time Injury Frequency, LTIF (Injuries/million hours worked)	4.1	0	0	0	0
Total Recordable Incident Frequency, TRIF (Lost time injuries and Recordable injuries / 1,000,000 hours worked)	6.1	0	0	0	0
Total safety observations, number	121	146	178	200	650

Elenia's contractors

	2017	2018	2019	Target 2019	Long-term target 2025
Fatalities, number	0	0	0	0	0
Lost time injuries (over 30 days sick leave), number	1	0	1	0	0
Lost time injuries, number	16	11	13	0	0
Recordable injuries, number	25	18	23	0	0
Lost Time Injury Frequency, LTIF (Injuries/million hours worked)	12.1	7	7.5	3.8	0
Total Recordable Incident Frequency, TRIF (Lost time injuries and Recordable injuries / 1,000,000 hours worked)	29.5	18.4	19.8	-	5
Total safety observations, number	270	373	349	700	2,300

Elenia's customers

	2017	2018	2019	Target 2019	Long-term target 2025
Fatalities, number	0	0	0	0	0
Lost time injuries, number	0	0	0	0	0
Recordable injuries, number	0	0	0	0	0
Total safety observations, number	54	73	62	100	300

Elenia's other stakeholders

	2017	2018	2019	Target 2019	Long-term target 2025
Fatalities, number	0	0	0	0	0
Lost time injuries, number	0	0	0	0	0
Recordable injuries, number	0	0	0	0	0
Total safety observations, number	24	31	27	50	150

Sustainability key figures

CUSTOMER EXPERIENCE AND QUALITY

NET PROMOTER SCORE RESULTS OF THE MEASUREMENT

	2016	2017	2018	2019
Net Promoter Score, NPS	39	41	36	34
Customer service, inbound calls	39	45	44	47
Customer service, e-mails	35	44	45	43
Fault service	63	63	58	56
Landowners' satisfaction	-	-	-	24

ELENIA OY'S UNDERGROUND CABLING RATE (%)

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

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

									Requirement	Requirement	Requirement
	2012	2013	2014	2015	2016	2017	2018	2019	2019	2023	2028
Zoned areas	29%	36%	41%	51%	58%	65%	74%	81%			
Sparsely populated areas	21%	24%	28%	33%	38%	42%	46%	51%			
Customers totally	26%	31%	36%	44%	49%	55%	62%	68%	50%	75%	100%

Sustainability key figures

CONTINUITY OF OPERATIONS AND ROLE AS FORERUNNER

CAPACITY AND ENERGY OF NETWORK OPERATIONS

				Target	Target	Unit
	2017	2018	2019	2019	2023	
Power capacity	2,900,000	2,950,000	2,964,500	2,964,500	3,167,000	kVA
Imported energy	7,535,569	7,802,277	7,711,094	7,601,454	8,800,000	MWh
Exported energy	7,273,132	7,527,398	7,434,975	7,341,471	8,500,000	MWh
Consumed energy	262,437	274,879	276,119	259,983	300,000	MWh

RENEWABLE ENERGY CONNECTED TO ELENIA'S NETWORK (MWh)

	2014	2015	2016	2017	2018	2019
Wind power	32,808	352,275	632,925	1,178,011	1,385,990	1,388,545
Hydroelectric power	160,941	226,931	196,147	192,676	130,125	142,242
Other renewable	25,561	23,969	24,994	23,487	79,370	71,118
Solar power	0	0	402	1,321	3,251	5,680
Renewable energy totally	**219,310**	**603,175**	**854,468**	**1,395,495**	**1,598,736**	**1,607,583**
Energy distributed to customers	6,112,038	5,994,156	6,330,493	6,342,805	6,439,102	6,361,869
Solar energy in Elenia's network (cumul. number)			584	1,498	2,456	3,937

ELENIA'S ENERGY CONSUMPTION (MWh)

	2016	2017	2018	2019
Network losses in Elenia's network	242,500	258,863	271,166	272,430
Own consumption of network operations	3,499	3,574	3,713	3,689
Valmisvalo	589	569	551	550
Total	**246,588**	**263,006**	**275,430**	**276,669**

EMISSIONS (tCO_2e)

				Target	Target
	2017	2018	2019	2019	2024
Scope 1 (car emissions, fixed reserve power generators and SF6 gas)	66	227	576	120	172
Scope 2 (electricity usage for network losses, own use and Valmisvalo service)	69,444	79,784	80,140	66,669	67,177
Total	**69,510**	**80,011**	**80,716**	**66,789**	**67,659**

IMPORTED WASTE (t)

				Target	Target
	2017	2018	2019	2019	2024
Hazardous*	3,376	3,661	4,576	3,786	2,764
Non-hazardous	2,907	3,293	3,938	3,406	2,486
Totally	**6,283**	**6,954**	**8,514**	**7,192**	**5,250**

* includes contaminated soil

Sustainability key figures

EXPORTED WASTE (t)

	2017	2018	2019	Target 2019	Target 2024
Re-use	868	1,894	2,223	1,959	1,430
Recycling	2,907	3,211	3,855	3,321	2,424
Composting	0	0	0	0	0
Waste to energy	2,259	1,582	2,093	1,636	1,195
Incineration	0	0	0	0	0
Landfill	249	267	343	276	201
Totally	**6,283**	**6,954**	**8,514**	**7,192**	**5,250**
Diverted from landfill/incineration (%)	96.0	96.2	95.8	96.0	96.0

BIRD MARKERS INSTALLED IN NETWORK (PCS)

	2017	2018	2019	Target 2019	Target 2023
Bird markers installed	227	309	399	399	50

HABITAT MANAGEMENT (Ha)

	2017	2018	2019	Target 2019	Target 2024
Habitat removed (forest management in side areas of networks)	1,965	2,229	1,089	1,100	200
Habitat enhanced or restored (dismounted overhead network)	749	823	922	860	700
Habitat protected (on-site)	9	9	9	9	9
Habitat protected (off-site)	0	0	0	0	5
Net habitat improved	-1207	-1397	-158	-231	514
Habitat maintained (clearing)	1,625	2,008	2,480	2,485	1,400

TREE MANAGEMENT (KM)

	2016	2017	2018	2019
Low-voltage network clearance (0.4 kV)	1,530	5,024	3,483	1,630
Medium-voltage network clearance (20 kV)	3,940	1,872	2,284	3,279
Pruning with helicopter (20 kV)	184	132	82	-
Forest management in the side areas of mediumvoltage network (20 kV)	1,017	1,089	720	1,033
High-voltage network clearance (110 kV)	460	30	130	187
Forest management in the border zone of high-voltage network (110 kV)	145	306	221	97
Totally	**7,276**	**8,453**	**6,920**	**6,226**

ENVIRONMENTAL INCIDENTS 2019

Cause of the incident	pcs	Measures taken
Vandalism in the contractor's storage area	4	The contaminated soil was cleaned up and transported to the waste management centre
Transformer failure / damage	4	
Transformer was damaged because of thunder	4	
Transformer was damaged because of a squirrel	3	
Transformer was damaged because of an explosion / Transformer exploded	2	
Transformer was damaged during the demolition	1	
Hydraulic hose of an excavator was damaged	1	
Totally	**19**	

Sustainability key figures

SOCIAL IMPACT

TAXES AND LEVIES PAID (€ MILLION)

	2018	2019
Corporate income tax	6.0	5.6
Pension insurance contributions	4.0	5.0
Network payment	0.3	0.4
Totally	**10.3**	**11.0**

TAX COLLECTED AND REMITTED (€ MILLION)

	2018	2019
Electricity tax	112.1	112.5
Value added tax	37.6	39.1
Withheld taxes and sickness insurance contributions	5.3	4.5
Totally	**155.0**	**156.1**

WAGE EXPENSES OF ELENIA GROUP (€ MILLION)

	2018	2019
Wage expenses of Elenia's employees	11.4*	11.5

*Salaries paid in 2018 restated due to the sale of district heating business

PROCUREMENT OF CONTRACTING SERVICES (€ MILLION)

	2017	2018	2019
Procurement of contracting services	97.5	108.5	116.5

ELENIA OY'S INVESTMENTS IN THE ELECTRICITY NETWORK (€ MILLION)

	2012	2013	2014	2015	2016	2017	2018	2019
Investments in the electricity network (€ million)	58.5	81.1	100.5	105.3	114.6	135.8	146.4	151.0

GRI-index

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	102 – GENERAL DISCLOSURES		
	Organizational profile		
102-1	Name of the organization	3	Elenia Group
102-2	Activities, brands, products, and services	3	
102-3	Location of headquarters	3	Tampere, Finland
102-4	Location of operations		Business operations in Finland only
102-5	Ownership and legal form	3	
102-6	Markets served	3	
102-7	Scale of the organization	3	
102-8	Information on employees and other workers	3; 27; 78	
102-9	Supply chain	65–66	
102-10	Significant changes to the organization and its supply chain		Heating business was sold July 22, 2019
102-11	Precautionary principle or approach	37	
102-12	External initiatives	13–14	
102-13	Membership of associations		• Energy Industry • Confederation of Finnish Industries • Electric Heating Forum • The Electrical Contractors' Association of Finland STUL • Enterprise Protection Association • The Federation of Finnish Enterprises • Finnish Association of Purchasing and Logistics LOGY • Finnish Business & Society ry • Finnish Clean Energy Association • Finnish Institute of Occupational Health: Zero Accident Forum • Finnish Quality Association • SESKO the National Electrotechnical Standardization Organization • Tampere Chamber of Commerce • World Energy Council Finland ry WEC
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	Stakeholder engagement		
102-40	List of stakeholder groups	75	
102-41	Collective bargaining agreements		All employees are covered by collective bargaining agreements
102-42	Identifying and selecting stakeholders	74	
102-43	Approach to stakeholder engagement	74	
102-44	Key topics and concerns raised	32–33; 67–68; 74	
	Reporting practice		
102-45	Entities included in the consolidated financial statements	77	
102-46	Defining report content and topic Boundaries	7–8; 77	
102-47	List of material topics	7–8; 18	
102-48	Restatements of information	77	
102-49	Changes in reporting	8	No major changes
102-50	Reporting period		2019
102-51	Date of most recent report		The report is published annually
102-52	Reporting cycle		The report is published annually
102-53	Contact point for questions regarding the report		Heini Kuusela-Opas, Head of Communication heini.kuusela-opas@elenia.fi
102-54	Claims of reporting in accordance with the GRI Standards	83	
102-55	GRI content index	83	
102-56	External assurance		The non-financial information in the Sustainability Report has not been subject to external assurance. Financial information has been audited by authorised public accountants.

GRI	CONTENTS	PAGE	NOTES
	103 – MANAGEMENT APPROACH		
103-1	Explanation of the material topics and their boundary	7	
103-2	The management approach and its components	9–12; 14	
103-3	Evaluation of the management approach	9–12	
	200 – ECONOMIC		
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201-2	Financial implications and other risks and opportunities due to climate change	16–17	
	Indirect Economic Impact		
203-1	Infrastructure investments and services supported	36; 42	
203-2	Significant indirect economic impacts	66	
	Procurement Practices		
204-1	Proportion of spending on local suppliers	65–66	
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205-1	Operations assessed for risks related to corruption	69	
205-2	Communication and training about anti-corruption policies and procedures	29; 69	
	Taxes		
207-4	Country-by-country tax reporting	70; 82	

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300 – ENVIRONMENTAL

GRI	CONTENTS	PAGE	NOTES
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301-3	Reclaimed products and their packaging materials	56	
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302-1	Energy consumption within the organization	80	
302-2	Energy consumption outside of the organization	80	Energy transmitted to network service customers and other networks
302-4	Reduction of energy consumption	51	
302-5	Reductions in energy requirements of products and services	51–52	
	Biodiversity		
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	Emissions		
305-1	Direct (Scope 1) GHG emissions	80	
305-2	Energy indirect (Scope 2) GHG emissions	80	
305-5	Reduction of GHG emissions	54	
	Effluents and Waste		
306-2	Waste by type and disposal method	80–81	
306-3	Significant spills	54; 56	

400 – SOCIAL

GRI	CONTENTS	PAGE	NOTES
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403-1	Occupational health and safety management system	11	
403-2	Hazard identification, risk assessment, and incident investigation	23–25	
403-3	Occupational health services	22	
403-4	Worker participation, consultation, and communication on occupational health and safety	23–25	
403-5	Worker training on occupational health and safety	23–25	
403-6	Promotion of worker health	22	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	23–25; 39; 65	
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403-10	Work-related ill health	78	
	Training and Education		
404-1	Average hours of training per year per employee	28–29	
404-2	Programs for upgrading employee skills and transition assistance programs	28–29; 40	
404-3	Percentage of employees receiving regular performance and career development reviews	21	All personnel are subject to annual development discussions. In addition, 2–3 discussions are held annually with the staff to ensure achieving the goals

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GRI	CONTENTS	PAGE	NOTES
	Diversity and Equal Opportunity		
405-1	Diversity of governance bodies and employees	21; 27	
405-2	Ratio of basic salary and remuneration of women to men	28	
	Supplier Social Assessment		
414-1	New suppliers that were screened using social criteria	69	
	Public Policy		
415-1	Political contributions		Elenia does not support political organizations or their representatives with gifts or benefits
	Customer Health and Safety		
416-1	Assessment of the health and safety impacts of product and service categories	39	
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417-1	Requirements for product and service information and labeling	39	
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418-1	Breaches of customer privacy and losses of customer data	40	

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EU-3	Number of residential, industrial, institutional and commercial customer accounts	32	
EU-4	Length of above and underground transmission and distribution lines	3	Over 74,000 km of networks
EU-10	Planned capacity against projected electricity demand over the long term	16–17; 34–35; 50; 62	
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