

# Strategy 2024 -2030

## “On the way to a climate-neutral energy system”

Elering AS

October 2023



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## 1. Mission of Elering:

Keep the lights on and  
the rooms warm in  
Estonia





## 2. The vision of Elering:

**“SECURITY OF SUPPLY**  
in a climate-neutral manner,  
supporting the competitiveness  
of the Estonian economy”.

Explanatory description:

Our main mission is to ensure security of supply for Estonian consumers at all times.

Synchronising Estonia with the Continental European electric power system in 2025, whilst maintaining a reliable electricity supply during the transition period, which is the most important step to ensure continuous security of supply for Estonian consumers.

At the same time, we will help Estonia and the wider EU community achieve the 2030, 2035 and 2050 climate policy targets, keeping in mind the competitiveness of the Estonian economy. In order to achieve this, we ensure the availability of network capabilities, keep transmission capacities running and ensure the availability of system management capabilities.



## 3. Our common VALUES will help us to carry out our strategy

### RESPONSIBILITY

- + We realise that we are RESPONSIBLE to the society for ensuring the supply of electricity and gas in an economically efficient manner.
- + A functioning energy market and the EQUAL TREATMENT OF MARKET PARTICIPANTS is the best way to ensure the security of supply.
- + We value each and EVERY EMPLOYEE'S CONTRIBUTION, which helps to fulfil the obligations undertaken in society at a high standard.

### COMMITMENT

- + EVERY SERVICE of Elering HAS A CUSTOMER. We are committed to CREATING VALUE FOR CUSTOMERS and to customers' customers
- + We create value for our customers, by joining our employee's LONG-TERM EXPERIENCE WITH THE MOST UP-TO-DATE KNOWLEDGE.
- + We offer the BEST SOLUTIONS in the energy economy

### OPENNESS

- + Today's energy system is rapidly changing. We are OPEN TO CHANGE and DYNAMIC.
- + We CREATE new possibilities and SUPPORT INNOVATION in the energy economy.
- + READINESS FOR CHANGE begins with our own people. In order to lead change we value each and every one's INITIATIVE, COURAGE AND MOTIVATION TO DEVELOP.

# 4. BUSINESS ENVIRONMENT. SUMMARY OF KEY TRENDS

## 1 DECARBONISATION of the energy sector

CO<sub>2</sub>

1. **REDUCTION IN CONVENTIONAL PRODUCTION OPPORTUNITIES** due to high CO2 prices and climate policy
2. **Rapid increase in wind and solar power capacities (incl. the OBJECTIVE of 100% RES in ELECTRICITY in ESTONIA by 2030) puts pressure on NETWORK DEVELOPMENT**
3. **ELECTRIFICATION OF SOCIETY**, the importance and responsibility of reliable electricity supply will increase. **If there's no electricity, there's nothing. Electricity is the most important vital service for society.**
4. **Electrification leads to a reduction in gas consumption**
5. **The visibility and manageability of the ENERGY SYSTEM is becoming increasingly more complex due to the increase in the DISPERSED and fluctuating energy generation capacities**
6. **RAPID RESERVES incl. FLEXIBILITY that can be moved in time** are a key premise for 2035+ wind energy integration

## 2 INCREASE IN GEOPOLITICAL RISKS



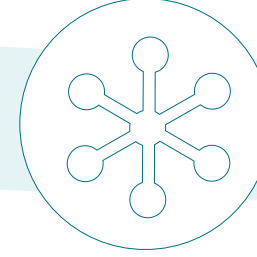
1. Due to the geopolitical situation, there is an urgent need to make the energy system of the **EU/ESTONIA INDEPENDENT FROM RU/BY**, and there is an **increased risk of physical attacks on the energy infrastructure**
2. **The need to replace and own the main SOS capacities in Estonia** (e.g. frequency regulation reserves and management) **in order to maintain the self-sustainability of the power system**
3. **CLIMATE POLICY STRENGTHENS the EU's capacity to free itself from supplies of crude oil, natural gas and solid fossil fuels from third countries**

## 3 A SINGLE ENERGY SYSTEM and MARKET



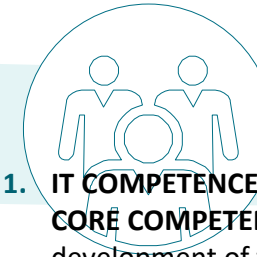
1. The future of Europe: a cross-border **INTEGRATED LOOP** between the land and marine **ENERGY SYSTEM** and the **INTEGRATION OF SECTORS** (electricity, gas, heat, transport, etc.)
2. **CENTRAL EUROPE IS HUNGRY FOR ENERGY**, increasing energy flows from the North to Central Europe. **FUTURE EUROPEAN TRANSIT CORRIDORS ARE BEING POSITIONED.**
3. **Gaseous fuels play an important role in ENERGY STORAGE and TRANSPORT**, with the potential for green gas and green hydrogen.

## 4 Rapid DIGITALISATION



1. **SYSTEM MANAGEMENT becomes MORE COMPLEX and CLOSER TO REAL TIME** due to fluctuating production capacities
2. Variable generation capacity leads to the need to process **LARGER QUANTITIES OF ENERGY DATA**
3. **CYBERSECURITY RISKS and IMPACTS** increase significantly
4. **Rapid advances in artificial intelligence technologies offer the opportunity for a better management of the FUTURE energy system .**

## 5 Growing competition FOR TALENT



1. **IT COMPETENCES ADDED TO TSO CORE COMPETENCE.** The rapid development of the field leads to the **NEED FOR UNIQUE SKILLS –** management of the energy network, development of energy markets, IT, etc.
2. **AGEING POPULATION AND NOT ENOUGH NEXT GENERATION EMPLOYEES IN THE ENERGY SECTOR.** We need more and more new energy specialists, but the number of graduates with degrees in sciences is increasingly smaller.
3. **The fierce competition for talent with both EST and EU energy companies** puts more focus on **keeping existing talent**, and a **competitive value proposition** and **distinctive employer brand** are increasingly more important.

# 5. CHANGES IN THE ENERGY SYSTEM

[energy system = electricity, natural gas/hydrogen, district heating, transport]

## Generation

### Solar energy boom



~ 510 MW of solar energy in the network by the end of 2022

1000+ MW by the end of 2024

The nearly zero-energy requirement for buildings in the Building Act adds PV to roofs

### New wind farms are built again after 10 years

The current capacity of wind farms is 319 MW

315 MW is being built (Purtse, Saarde, Tootsi)



### Planned developments

Three offshore wind developments that could be ready in 2030

~3600 MW

Onshore wind developments ~3700 MW

Two pumped-storage hydroelectric power plant projects



## Consumption

### Transport sector



Passenger cars and vans are becoming electrified

Different fuels and energy carriers in heavy transport, aviation and shipping - electricity / hydrogen / biofuels / synthetic fuels

### District heating



Heat pumps, heat storage devices, electric boilers

Alternative fuel to cover peak consumption?

### Buildings



National building renovation strategy for increasing energy efficiency

### Industries

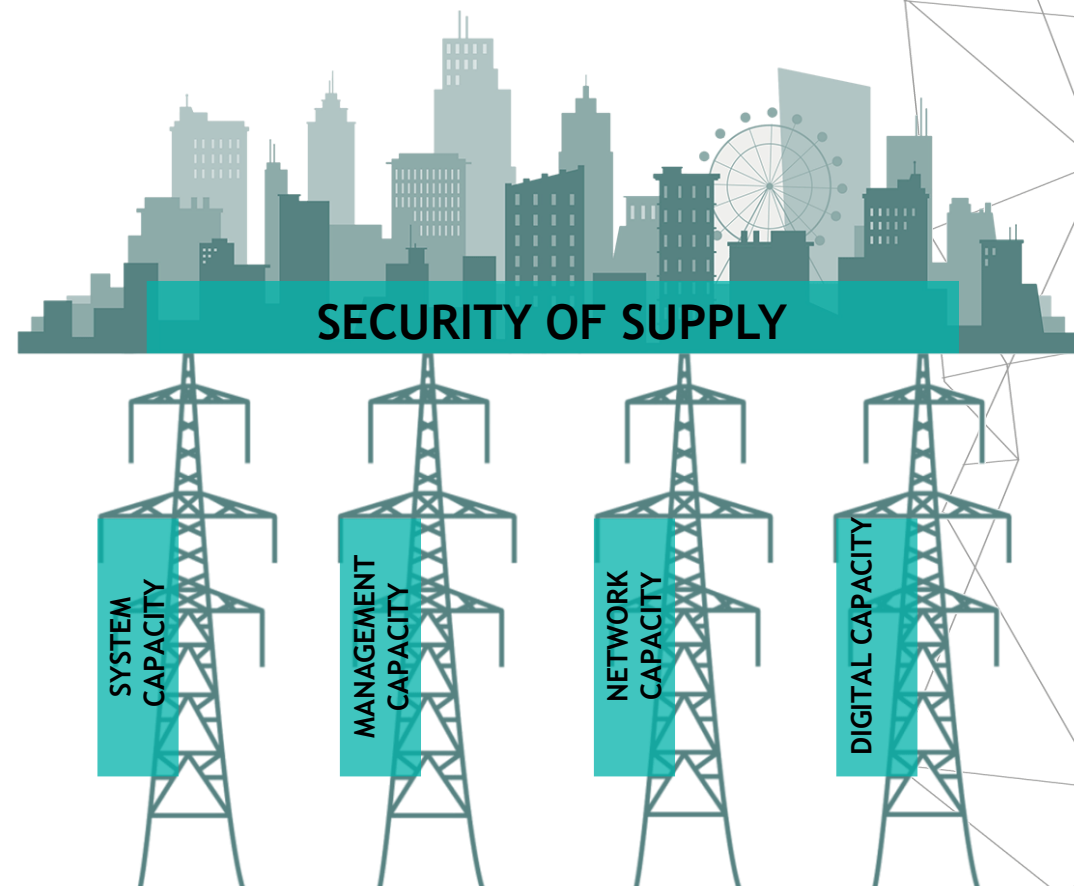


Direction towards clean fuels - electricity, biofuels, hydrogen

# 6. SECURITY OF SUPPLY CAPACITIES

Security of supply consists of four parts - all equally important to keep the lights on for the Estonian energy consumer.

1. **System capacity** - Consumption is covered by production, import and consumption management (including storage).
2. **Management capacity** - The power system can withstand potential disruptions - reliable planning and adequate reserves.
3. **Network capacity** - The electricity network has sufficient throughput capacity and reliability to ensure that electricity reaches consumers.
4. **Digital capacity** - sufficient ability to provide the correct and necessary information to manage the system in a timely manner and the ability to perform the necessary operational activities digitally. This includes resilience to cyberattacks.





# 6. We're facing significant **CHANGES** in capacities in order to ensure our mission and achieve our vision in the light of the trends.

Past

Future

System capacity

Secure central, regular electricity generation



Dispersed variable generation

Management capacity

Well predictable planning a day ahead



Dynamic operational decisions in real time

Network capacity

Centralised grid for transmission and distribution of energy



Network for ensuring energy availability and system reliability

Digital capacity

Support



Data that move together and without energy are the basis for complex real-time decisions. Cybersecurity threat is one of the most important challenges

## 8. Strategic OBJECTIVES 2024-2030

# 8. STRATEGIC OBJECTIVES 2024-2030

Setting strategic objectives is about balancing the interests of different stakeholders

BUSINESS ENVIRONMENT. SUMMARY OF KEY TRENDS

- I INCREASE IN GEOPOLITICAL RISKS
- II DECARBONISATION of the energy sector
- III A SINGLE ENERGY SYSTEM and MARKET
- IV Rapid DIGITALISATION
- V Growing competition FOR TALENT

Quality



SOCIETY

Price



CLIENT



EMPLOYEES

OWNER



Profit

**ELERINGI MISSIOON:**  
*Hoida Eestis tuled põlemas ja toad soojad*

<b>EESMÄRK 1:</b> <i>Tagada igal ajahetkel elektri ja gaasi varustuskindlus</i>	<b>Varustuskindlus</b> Süsteemi võimekus Juhtimise võimekus Võrgu võimekus Digitaalne võimekus
<b>EESMÄRK 2:</b> <i>Tagada elektri- ja gaasihind, mis toetab Eesti majanduse konkurentsivõimet</i>	
<b>EESMÄRK 3:</b> <i>Eesti kliimaneutraalsuse saavutamine</i>	
<b>EESMÄRK 4:</b> <i>Pühendunud töötajad</i>	
<b>EESMÄRK 5:</b> <i>Kliendirahulolu</i>	
<b>EESMÄRK 6:</b> <i>Majandusliku lisandväärtuse loomine</i>	

ACTIVITIES 2024 - 2030

## 8. Strategic objectives of Elering 2024-2030

Objective	Indicator
<b>Objective 1: To ensure security of supply of electricity and gas at all times</b>	
1.1 A well-functioning transmission network	Electricity not provided (10-year average)
1.2 A well-functioning gas transmission network	Gas not provided MWh (10-year average)
1.3 The Estonian power system supply security standard has been met in a three-year horizon.	The security of supply forecast for 3 years exceeds the Estonian SoS standard
1.4 Synchronisation with continental Europe in 2025	Key actions have been completed (approved by the supervisory board with the annex to the annual budget "Key results")
<b>Objective 2: Guarantee electricity and gas prices that support the competitiveness of the Estonian economy</b>	
2.1 Ensuring the same price of electricity in the Estonian bidding area as in the other countries by the Baltic Sea	% of hours without bottlenecks on cross-border lines (less than rated capacity allocated to the border)
2.2 Thin power grid	Ratio: Investment budget for the next 5 years/expenditure in RAB for the next 5 years (excluding synchronisation)
2.3 Ensuring the same price of gas in Estonia as in the FI-3B market region	% of hours without bottlenecks on cross-border lines (less than rated capacity allocated to the border)
2.4 Thin gas network	Ratio: Investment budget for the next 5 years/expenditure in RAB for the next 5 years
2.5 Highly competitive energy market (incl. elimination of cross-border bottlenecks)	Key actions have been completed (approved by the supervisory board with the annex to the annual budget "Key results")
<b>Objective 3: Achieving the climate neutrality of Estonia</b>	
3.1 Sufficient generation capacity of the transmission network	Minimal generation capacity of the Estonian electricity network in the direction of generation (taking into account the Estonian renewable energy 2030 target)
3.2 Climate neutrality of Elering	The direct (including loss of network) emissions of Elering are neutralised (including compensated) compared to the baseline plan
<b>Objective 4: Committed employees</b>	Employee commitment index
<b>Objective 5: Customer satisfaction</b>	Customer satisfaction index
<b>Objective 6: Creation of economic added value</b>	Economic value added (EVA)



# 9. MOST RESOURCE-INTENSIVE WORK STREAMS OF ELERING in 2024-2030, in order to ensure that the vision is achieved

