

# 99%

## LOW-CARBON ELECTRICITY

PRESENTATION OF THE **GEN GROUP**  
AND RESULTS  
IN 2020





Danijel Levičar, COO, GEN energija d.o.o.

Martin Novšak, CEO, GEN energija d.o.o.

## Nuclear energy in the battle against climate change

**The GEN Group ended the 2020 financial year on a high note, despite the difficult conditions brought about by the epidemic. We generated more than EUR 2.2 billion in turnover. We thus ranked second amongst the largest business groups in Slovenia and as one of strongest business groups in terms of investments.**

**Group companies made investments in the total amount of more than EUR 100 million. The Group's most important investments included the Safety Upgrade Programme at the NEK and the construction of the no. 7 backup gas-fired production unit at the TEB.**

### **Operational efficiency: production of 3,674 GWh of electricity**

We produced 3,674 GWh of electricity and thus exceeded plans. The GEN Group's production units operated safely and reliably in 2020, which is a remarkable achievement given the demanding conditions as the result of the epidemic.

The NEK operated stably, safely and at full capacity for most of the year. It generated 6,040 GWh of electricity, half of which, i.e. 3,020 GWh, is the property of GEN, or effectively the Republic of Slovenia, under the Intergovernmental Agreement on the NEK.

Hydroelectric power plants on the Sava River also operated reliably, despite below-average hydrological conditions, and produced a combined total of 595 GWh of electricity. The Brestanica Thermal Power Plant was started up 27 times for the purpose of balancing the Slovenian electric power grid, and also operated to meet the needs of the market. The latter was facilitated by favourable natural gas prices.

### **COVID-19 epidemic: timelines, efficiency and professionalism**

The GEN Group successfully addressed the adverse conditions through timely and prudent measures that ensured efficient operations and thus uninterrupted production for the reliable supply of electricity to household and industrial customers, the public sector and the transport sector.

### **Low-carbon: 99% of electricity from low-carbon nuclear and hydro energy**

A total of 99% of all the electricity produced by the power plants of GEN Group companies comes from low-carbon, sustainable and renewable sources in the form of nuclear and hydro energy, an energy mix that, according to economic, environmental, climate and social indicators, is the right combination for shaping Slovenia's sustainable energy future.

### **Trading and sales: successful adaptation to epidemiological conditions on the market**

In the area of trading and sales in 2020, GEN-I successfully adapted to dynamic market conditions, and seized market opportunities and effectively managed risks, despite the difficult epidemiological conditions. The company presented the 'CO<sub>2</sub>-free electricity' initiative, through which it actively contributes to the mitigation of climate change.

### **Intensive investment activity**

Our safe, reliable and environmentally friendly production is the result of ongoing investments in knowledge and equipment. GEN Group companies made investments of more than EUR 100 million in 2020.

In 2020, we continued with the active development of the key strategic JEK2 project, which is crucial for the achievement of goals regarding the reliability and competitiveness of supply, and the achievement of climate goals in Slovenia. We submitted an application to the Ministry of Infrastructure for the issue of an electricity generation licence for the construction of JEK2, and supplemented that application with a feasibility study on the connection of the new power plant to the electric power grid. Research confirmed the economic and environmental justification of the project. We also completed the construction of an additional gas turbine unit at the TEB in 2020.

### **Business excellence: EUR 2.2 billion in revenue and EUR 64.2 million in net profit**

The GEN Group generated EUR 2.2 billion in revenue in 2020, and ended the year with a net profit of EUR 64.2 million, which is 20% higher than planned. Added value per employee amounted to EUR 185 thousand. The controlling company generated EUR 231.4 million in revenue, and ended the year with a net profit of EUR 45.7 million, which was more than planned. We thus met the expectations of the owner, SSH.

### **Building a sustainable future with 1,474 employees**

There were a total of 1,474 employees in 2020, with more than 66% of them holding at least higher education qualifications. With our experience, expertise, commitment, diligence and motivation, we are achieving our goals and building a sustainable future, not only for the GEN Group, but also for all the citizens of Slovenia, who benefit from our reliable supply of low-carbon electricity at affordable prices.

# THE GEN GROUP AT A GLANCE

The GEN Group is one of the largest and strongest business groups in investment terms in Slovenia.

We manage an integrated electricity supply chain:

- we **produce** electricity from low-carbon sources: nuclear and hydro;
- we **trade** and **sell** electricity on the domestic market, and on more than 20 retail and wholesale markets across Europe; and
- we channel our capital into **development** and **investments**, in particular the continuous and comprehensive maintenance of existing production facilities, and the responsible planning and construction of new, low-carbon production capacities for the purpose of supplying electricity to Slovenia.

**6,300–6,800 GWh**

Average annual electricity production of our power plants (100 % NEK)

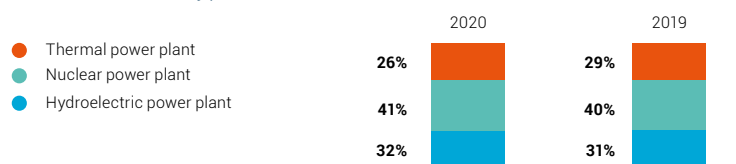
**30%**

share of the Slovenia's total electricity production

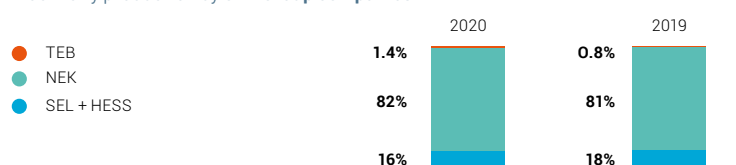
**22**

European markets where we are present with trading and sales activities

Structure of electricity production sources in Slovenia



Electricity production by GEN Group companies



**99%**

Of electricity from low-carbon energy sources

**CLEAN SOURCES  
AND EFFICIENT  
TECHNOLOGIES**

**3,674 GWh**

of electricity produced

**RELIABLE  
AND SAFE  
OPERATIONS**

**64.2 MILLION**

of profit

**STABLE  
ECONOMIC  
BASIS**

Key figures		GROUP		COMPANY	
		2020	2019	2020	2019
Revenue	in EUR thousand	2,193,560	2,246,180	231,350	208,726
EBIT	in EUR thousand	86,192	63,399	53,607	31,051
EBITDA	in EUR thousand	144,526	102,369	54,329	31,907
Net profit	in EUR thousand	64,189	48,488	45,664	27,383
Assets	in EUR thousand	1,223,555	1,158,886	634,934	589,639
Equity	in EUR thousand	912,480	859,836	522,710	486,731
Debt	in EUR thousand	162,269	179,658	11,866	13,069
Investments	in EUR thousand	57,147	57,381	19,160	901
Electricity produced	GWh	3,931	3,672		
Electricity sold	GWh	45,281	41,375	3,930	3,975
Number of employees at year-end		1,159	1,104	64	60

# 100%

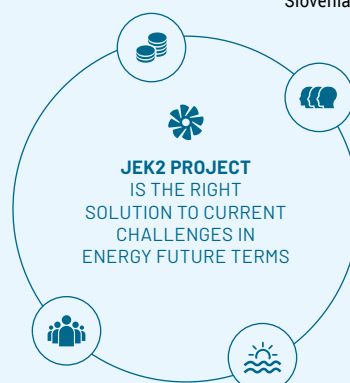
## COMMITTED TO CLEAN AND AVAILABLE ENERGY

The JEK2 is a key measure for accelerating the achievement of the goals of climate neutrality and the decarbonisation of the Slovenian electric power grid, while it will also contribute to reducing Slovenia's dependence on energy imports.

It is important to know that nearly half of the EU's low-carbon electricity is produced from nuclear energy. The situation is similar in Slovenia, where nuclear energy is the largest single source of low-carbon energy. It is increasingly clear that nuclear energy, as the most stable source for the production of low-carbon electricity, and less-stable renewable energy sources represent a winning combination for decarbonisation and the achievement of the objectives of climate neutrality.

It ensures affordable electricity prices for households and the economy

It increases the competitiveness of Slovenia's economy



It strengthens the reliability of customer supply

It is acceptable in climate, environmental and spatial terms and has a positive impact on biodiversity and habitats





# Types of capitals and results in 2020

## Capitals of the GEN Group



### Infrastructural capital

Nuclear power plant, hydroelectric power plants on the river Sava, gas-fired thermal power plant (ancillary services), and distributed renewable sources (solar power plants). Advanced software/IT infrastructure for facilitating effective energy trading and sales at home and abroad.



### Natural capital

Low-carbon energy sources: primarily nuclear and hydro.



### Financial capital

Financial resources (mainly through equity and borrowing) needed for providing comprehensive electricity supply services.



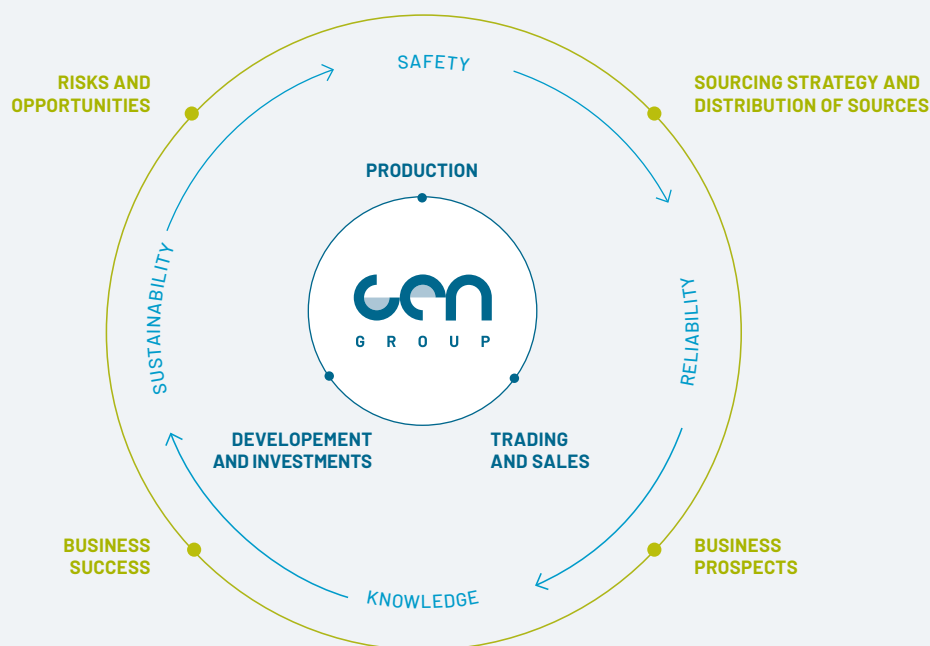
### Employees and intellectual capital

The knowledge, skills and dedication of our employees for performing our principal activities.



### Social capital

Relations with external stakeholders in providing comprehensive electricity supply services. Promoting the understanding and appreciation of the importance of energy supply for our daily lives and enduring social prosperity.



## Results of the GEN Group in 2020

Total production output:

**3,674 GWh**  
of electricity

Production output of NEK:

**6,040 GWh**  
(3,020 GWh for Slovenia)

Production output of HPPs:

**851 GWh**  
of electricity (of which  
595 GWh for the GEN Group)

Low-carbon portfolio of  
energy sources (nuclear  
and hydro):

**99%**

TEB's important role in  
**ensuring power grid stability**

Preparation of research  
studies for the **JEK2 project**

Revenue:

**EUR 2.2 billion**

Net profit:

**EUR 64.2 million**

Implementing the action  
plan for **optimizing  
business operations**

Outlay for R&D, capital  
expenditures and investments  
for ensuring long-term stability:

**EUR 104,59 million**

An application for  
the acquisition of an  
electricity generation  
license for JEK2 was  
submitted

Number of employees:

**1,474**

Employee qualifications

**66%**  
with at least higher  
education qualifications

Advanced services for  
consumers – moving  
towards **green  
transformation**

**Strengthening the  
understanding and  
knowledge of energy and  
the energy sector among  
key stakeholders**

Safe, reliable and  
**environmentally friendly  
supply** of electricity to  
consumers

Through our work, we co-realize the following  
**sustainable development goals:**



# GEN group companies in 2020



- Production of **6,040 GWh** of electricity. The amount of electricity to which GEN is entitled pursuant to the Intergovernmental Agreement on the NEK was **3,020 GWh**.
- Actual results higher than planned: **101.4%**
- Capability factor: **99.51%**
- Availability factor: **99.60%**
- Capacity factor: **103.26%**
- Brief shutdown in December 2020 for safety reasons due to an earthquake in Croatia.



**SEL in 2020**

- **327 GWh** of electricity produced.
- Successful completion of major overhauls and inspections of production units.
- **99%** of plan for 2020 achieved.



**HESS in 2020**

- **268 GWh** of electricity produced (delež GEN).
- **90,9%** plan for 2020 achieved.
- Volume of electricity purchased was down by **3.2%** due to poor hydrological conditions on the Sava River.



**TEB in 2020**

- Reliable provision of ancillary services: **11** activations of manual frequency restoration reserve. Total of **27** start-ups of gas turbine unit 1 to 6.
- Total electricity production of **52.8 GWh** (47.5 GWh net).
- Increase in electricity production by **200%** relative to 2019.
- Construction of new gas turbine unit successfully continued in 2020 and completed in 2021.



- Electricity trading volume: **41.2 TWh**.
- Main purchase and sales markets: Central, Southeast and Western Europe.
- A **25-%** share of the total retail market achieved for the first time (largest electricity supplier in Slovenia).
- New **CO<sub>2</sub>-free electricity** initiative offers customers carbon-free energy from nuclear, hydro and solar sources.
- **EUR 9.30 million** in investments (primarily in information systems and solar power plants).



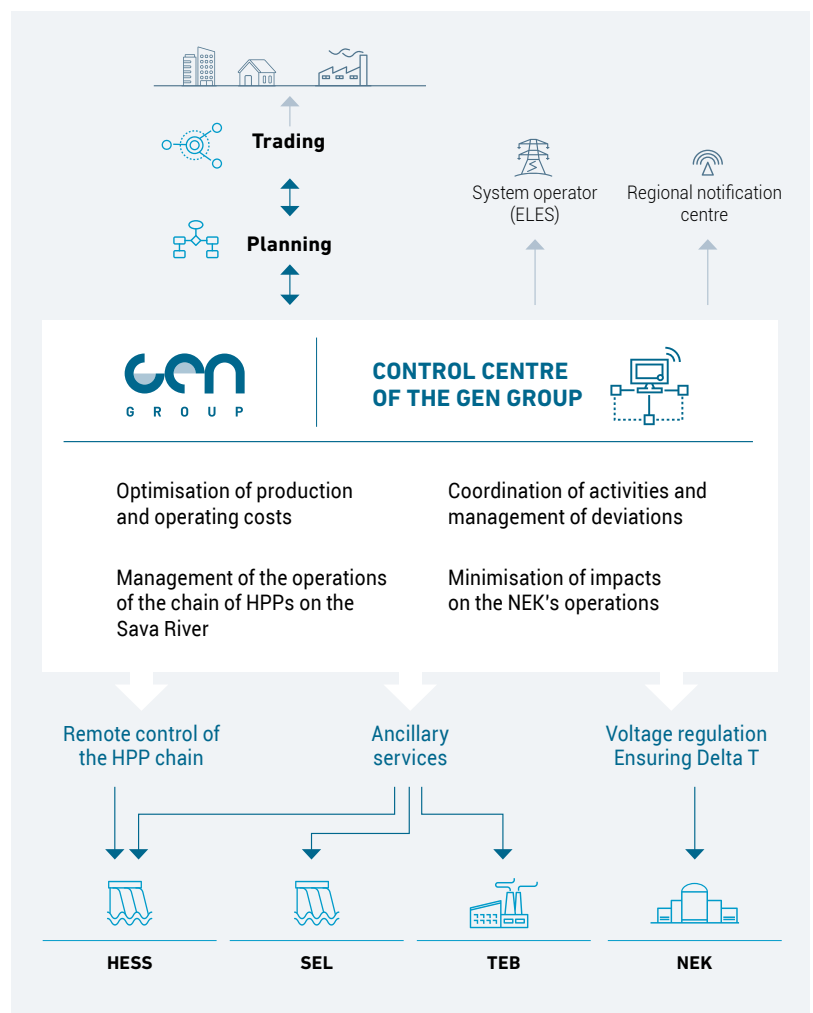
## GEN CONTROL CENTRE

# Reliable supply and the streamlining of operations through coordination

The GEN Control Centre was established in 2007 and received its current name in 2016, when we began the remote control of HPPs on the lower course of the Sava River. The centre is the intersection of the GEN Group's core activities: production, trading, sales and the provision of ancillary services in all processes, which the centre links in one place. At the operational level, the centre ensures the effective and synchronised functioning of the entire Group.

GEN's Control Centre facilitates the achievement of the synergistic effects of electricity production within the GEN Group. It coordinates the production of baseload energy from the nuclear power plant, mid-merit energy from hydroelectric power plants and peak energy from gas-powered thermal power plants.

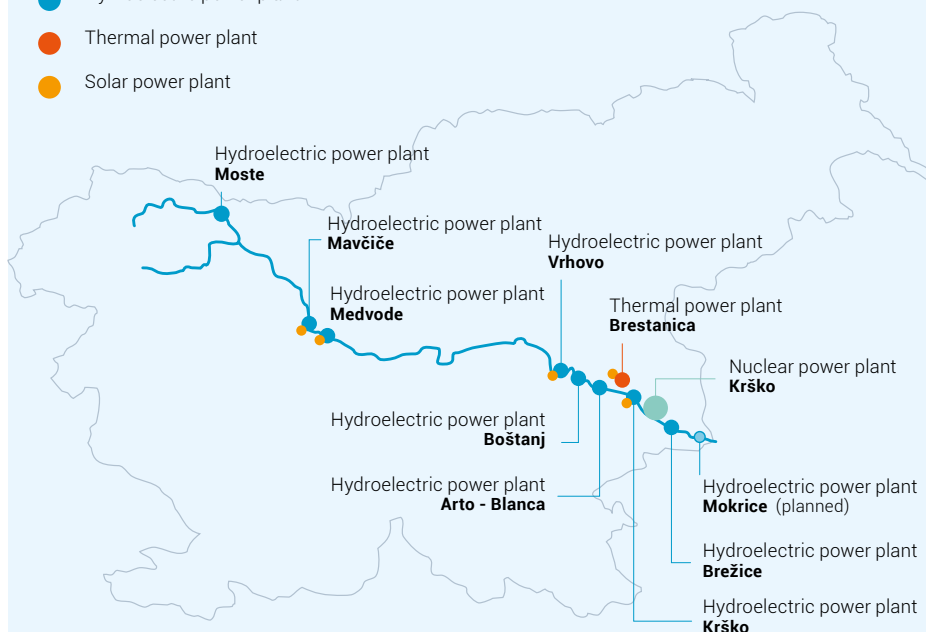
Through coordinated management, we enhance the reliability of electricity supply to customers: we respond more effectively to hydrological conditions and other circumstances, and streamline our own operations.





## OUR GENERATION UNITS – POWER PLANTS

- Nuclear power plant
- Hydroelectric power plant
- Thermal power plant
- Solar power plant

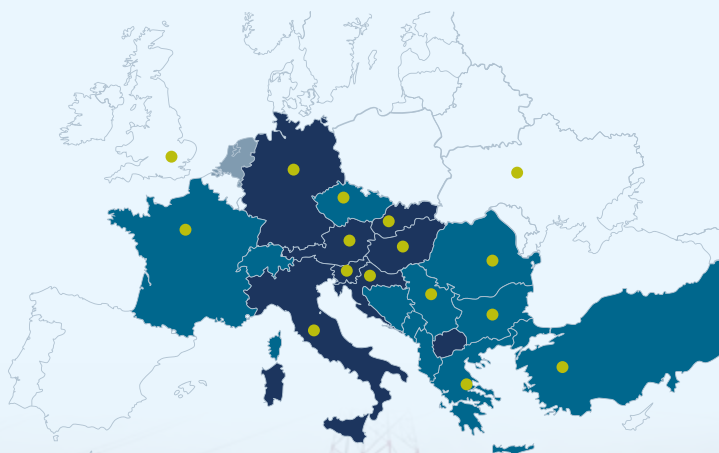


## PRESENCE OF GEN GROUP COMPANIES ON EUROPEAN ELECTRICITY AND NATURAL GAS MARKETS

**22** European markets

**16** Subsidiaries

- Subsidiaries
- Electricity
- Electricity and natural gas
- Natural gas



## PRESENCE OF GROUP COMPANIES ON EUROPEAN ELECTRICITY AND NATURAL GAS MARKETS

### GEN energija d.o.o.

The holding company of the GEN Group  
[www.gen-energija.si](http://www.gen-energija.si)

### PRODUCTION

#### Nuklearna elektrarna Krško d.o.o. (NEK)

Electricity generation at a nuclear power plant  
[www.nek.si](http://www.nek.si)

#### Savske elektrarne Ljubljana d.o.o. (SEL)

Electricity generation at hydroelectric power plants  
[www.sel.si](http://www.sel.si)

#### Termoelektrarna Brestanica d.o.o. (TEB)

Electricity generation at a thermal power plant, a standby energy source for the power grid  
[www.teb.si](http://www.teb.si)

#### Hidroelektrarne na Spodnji Savi, d.o.o. (HESS)

Electricity generation at hydroelectric power plants  
[www.he-ss.si](http://www.he-ss.si)

#### Srednjesavske elektrarne d.o.o. (SRESA)

Electricity generation at hydroelectric power plants

### TRADING AND SALES

#### GEN-I, d.o.o.

Electricity trading, sales and purchasing  
[www.gen-i.si](http://www.gen-i.si)

#### Elektro energija d.o.o.

Sales of electricity and natural gas, purchasing of electricity  
[www.elektro-energija.si](http://www.elektro-energija.si)

### DEVELOPMENT, RESEARCH, SERVICES, AND OTHER

#### ZEL-EN, razvojni center energetike d.o.o.

Research and development for the energy industry  
[www.zel-en.si](http://www.zel-en.si)

#### GEN-EL d.o.o.

Investment management



GEN energija d.o.o., Vrbina 17, 8270 Krško | Phone: 07 49 10 112 | [info@gen-energija.si](mailto:info@gen-energija.si) | [www.gen-energija.si](http://www.gen-energija.si) |  
The Annual Report of the GEN Group is available online at: <http://letnoporocilo.gen-energija.si>