REPORT ON THE ENERGY SITUATION IN SLOVENIA

2025

Agencija za energijo | 25 let

Agencija za energijo

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2025

TABLE OF CONTENTS

ELECTRICITY 10

Electricity balance 10
Inputs and Outputs of Electricity in the System 10
Electricity losses in the power system 20
Electricity generation 21
Electricity Consumption 24
Demand Covered by Domestic Generation 26
Consumers in the Electricity System 28

Renewable Energy Sources 32
Share of renewables in gross final energy consumption 32
Share of Renewables in the Electricity Sector 33
Production from Renewable Sources 34
Measures to Promote Generation from Renewable Sources 35
RES and CHP Support Scheme 36
Self-consumption of Renewable Electricity 42

Regulation of Network Activities 45
Unbundling of Activities 45
Technical Services by the Operators 45
Ancillary Services 45
Quality of Supply 47
Multi-Year Development of the Electricity Network 56

CASE STUDY
The effectiveness of investments in smart grids based on KPIs 67

CASE STUDY
First-ever detection of concerning cyber incidents in the renewable energy 90

Network Charge for the Electricity Transmission and Distribution System 92
Determination of network charges 92
Regulatory period from 1 January 2024 to 31 December 2028 92
Regulatory year from 1 January 2024 to 31 December 2024 94
Regulatory year from 1 January to 31 December 2025 95
Calculating the Network Charge 96

CASE STUDY
The impact of energy fed into the grid on the methodology for calculating network charges 99

Allocation and Use of Cross-Zonal Transmission Capacities 104

Marker Operations and Outcomes for Consumers 106
Functioning of the Wholesale Market and Market Integrity 107
Electricity prices 107
Transparency of the Wholesale Market 126
Market Effectiveness 130
Imbalance Settlement 142
Retail market 145
Prices 146

CASE STUDY
The effectiveness of price signals in stimulating the potential for implicit flexibility amongst self-supplying household consumers 166

Market Transparency 172
Market Efficiency 178
Measures for Promoting Competition 192
Financial resilience and suppliers risk management 198
Active Consumption, Flexibility Market and Other Development-Related Aspects 200
Aggregation 201
Energy Communities 207
Peer-to-Peer (P2P) Energy Exchange 209
Electromobility 210

Reliability of the Electricity Supply 215
Monitoring the Balance Between Generation and Consumption 216
Monitoring Investment in Generation Capacities to Ensure a Reliable Supply 217
Measures to Cover Peak Demand and Shortages of Electricity 219

GAS 224

Supply of and Demand for Gas 224
Gas Transmission 227
Distribution of gas 231
Other Energy Gases from Distributions Systems 237

Regulation of Network Activities 240
Unbundling 240
Technical services provided by operators 240
Balancing 240
Secondary Market for Transmission Capacity 245
The Multi-Year Development of the Transmission Network 246

Security and Reliability of Operation and the Quality of Supply 249
Network Charges for Gas Transmission and Distribution Systems 252
Setting the Network Charge 252
Network Charge for the Gas Transmission System 255
Network Charges for the Gas Distribution Systems 256
Capacity at Border Points 259
Market Functioning and Outcomes for Consumers 269
Wholesale Market 269
Market Transparency 272
Market Effectiveness 272
Retail Market 275
Gas Prices in the Retail Market 276
Market Transparency 282
Market Effectiveness 283
Measures to Promote Competition 293
Security of Gas Supply 293

CONSUMER PROTECTION 298

The Right to be Informed 298
The Right to Last Resort, Substitute, Basic and Emergency Supply 299
The Right to Last Resort for Electricity Consumers 299
The Right to a Substitute Gas Supply 301
The Right to a Basic Gas Supply 301
The Right to Emergency Supply 302
Disconnection of Consumers 303
Consumers' right to complain 307
Consumer complaints and out-of-court settlement of consumer disputes with electricity and gas suppliers 307
Consumer Complaints to Electricity and Gas Distribution System Operators 310
The Right to the Protection of Rights in Administrative Procedures 311
The Right to the Safe and Reliable Operation of the System and the Quality of Supply 313

ENERGY EFFICIENCY 316

Energy Savings Obligation Scheme and Alternative Measure 316
Target energy savings for obligated parties 317
Activities of Energy Suppliers in Achieving the Energy Savings Target 318
Energy Savings Achieved through Individual Measures 319
Energy Savings by Sector 322
Alternative Measure Energy Savings 322
Energy Audits 324

HEAT 330

Supply of heat 330
Heat Distribution Systems 338
Energy-efficient Heating Systems 342
Price of Heat 342
Regulating the Price of Heat for District Heating 344
Unbundling 344
Complaints from Consumers to Energy Suppliers Providing Heat from District heating Distribution Systems 344

LIST OF ABBREVIATIONS AND ACRONYMS 346

LIST OF TABLES 352

LIST OF FIGURES 354

MAG. DUŠKA GODINA

DIRECTOR

FOREWORD BY THE DIRECTOR

This year, the Energy Agency is celebrating 25 years of operation within the Slovenian and European energy sectors, and this is already its 25th report on the state of the energy sector. Although the report looks back at the past year, its value extends beyond a mere review of past events. Through an in-depth analysis of the results achieved, the challenges identified and the lessons learnt, it provides an important foundation for tackling future challenges and finding effective solutions to achieve our set objectives.

The agency's twenty-five years of operation have coincided with the establishment of the European energy market – a period of exceptional development and profound change. When the market was fully liberalised in 2007, we wondered whether the electricity and gas markets would truly come to life. It was difficult to imagine just how fundamentally the roles and relationships between market participants would change. In less than two decades, energy trading on digital platforms has become almost real-time; anyone can participate in the market, even the smallest player; and we can generate our own electricity and share it with others. These are just a few of the milestones that have marked the development of the energy market in recent years.

When the agency was established and the market was opened up, the main task was to ensure the strict separation of network activities from trading and sales, and to ensure impartial access to the networks. Today, we face entirely different and significantly more complex challenges.

Until 2022, the energy sector operated in relatively stable and predictable conditions. Energy supply was reliable, free from major disruptions and affordable. At the outbreak of the war in Ukraine, the European Union was more than 45% dependent on imports of Russian natural gas; consequently, supply disruptions caused by repeated restrictions on deliveries via Nord Stream 1 have significantly increased the risks to security of supply. As a result, wholesale prices for natural gas and electricity soared, reaching record highs during the period of intensive storage filling ahead of the approaching heating season. The European Union and its Member States responded to the situation swiftly and in a coordinated manner. Measures were adopted to increase the diversification of sources and supply routes, reduce consumption and accelerate the transition to clean energy sources. The gas market underwent a transformation in the following years; dependence on Russian imports was significantly reduced, and wholesale prices gradually fell, though they did not return to pre-pandemic levels.

However, European energy security has not been strengthened; rather, it has taken on a different form of dependency.

Although the European Union has become somewhat more resilient to supply disruptions through greater diversification of sources and a reduction in demand, increased dependence on global liquefied natural gas markets has brought new risks. The European market is now more exposed to price volatility and disruptions to international transport routes. This was particularly evident during the closure of the Strait of Hormuz, through which approximately 20% of the world's daily oil supply and a similar proportion of liquefied natural gas trade had previously passed. Prices on the wholesale oil and gas markets have risen again, but for the time being remain significantly lower than in 2022; as a net importer of these energy sources, the European Union is particularly exposed to these price rises.

The geopolitical situation thus reminds us of the fragility of stability, whilst nature is increasingly reminding us of how vulnerable we are and that energy supply is by no means a given. A sustainable energy supply is therefore no longer a choice, but a necessity and our shared responsibility. However, the energy transition must be socially just. At the start of this year's crisis, the European Commission therefore emphasised even more strongly that low-income households are disproportionately more vulnerable to price shocks, as they spend a larger proportion of their income on energy than households in the middle- or higher-income brackets. Energy supply ensures a minimum standard of a decent life; it is therefore essential to protect vulnerable consumers effectively. Capping energy prices for all household consumers, regardless of their income bracket, does not contribute to reducing energy consumption; for those who need assistance the most, however, the effect of the cap is minimal or virtually non-existent.

The data in this report confirm that in Slovenia, too, we are already on the path to transforming the energy sector towards greater energy independence, a sustainable energy supply and climate responsibility.

Last year, too, electricity generation from solar power stations increased; however, due to lower output from hydroelectric power stations and the Šoštanj Thermal Power Station (TEŠ), total domestic generation was lower, meaning that it covered only 82% of domestic electricity consumption.

According to estimates by the Jožef Stefan Institute, the share of energy from renewable sources in gross final consumption is set to reach 25.4% in 2025, indicating that, for the second time since 2020, domestic production from renewable energy sources could exceed the set target. The reduction in energy consumption in the transport sector has contributed most to this. Despite the progress made, however, the target of a 33% share of renewable sources by 2030 remains some way off. Measures for the transition to a sustainable energy supply will therefore need to be accelerated, but focusing solely on production sources will not be sufficient. One of the key pillars of achieving a climate-neutral society is also reducing energy consumption. In Slovenia, we recorded an increase in the consumption of electricity, gas and heat in 2025.

The 2025 report, which the agency submits to the European Commission, the National Assembly and the Government of the Republic of Slovenia, provides a comprehensive overview of key developments and changes in the supply of electricity, gas and heat. At the same time, it provides an overview of progress in energy efficiency and the protection of consumers' rights.

The agency obtained the exceptionally wide range of data on which the report is based from numerous stakeholders in the energy market, for which I would like to express my sincere thanks. However, simply collecting data is not enough; it must be verified and, on the basis of in-depth analyses, presented to the public in a credible manner. I would therefore also like to express my sincere thanks to all my colleagues for their dedicated, responsible and exceptionally professional work. It is precisely this expertise, independence in decision-making and commitment that enable the agency to be a credible regulator and a respected and trustworthy partner within the European energy sector as well.

ELECTRICITY

ACTUAL SHARE OF PRIMARY SOURCES OF ELECTRICITY GENERATION, TAKING INTO ACCOUNT ONLY 50% OF THE ELECTRICITY GENERATED AND FEED INTO THE SYSTEM FROM NPP

51.8% RES
24.4% FOSSIL FUELS
23.8% NUCLEAR FUEL

82.8%
ELECTRICITY

CONSUMPTION COVERED BY DOMESTIC PRODUCTION

THE SIGNIFICANTLY LOWER ELECTRICITY GENERATION COMPARED TO THE PREVIOUS YEAR IS DUE TO POOR HYDROLOGICAL CONDITIONS AND THE RESTRUCTURING OF THE ŠOŠTANJ THERMAL POWER PLANT

EUR 267 MILLIONS IN INVESTMENT
IN THE DISTRIBUTION SYSTEM – THE LARGEST IN HISTORY, WHICH IS ALSO DUE TO RISING PRICES OF MATERIALS AND SERVICES

13,228 GWh
TOTAL CONSUMPTION

4.2% HIGHER TOTAL CONSUMPTION BY ALL FINAL CONSUMERS

0.4% HIGHER CONSUMPTION BY BUSINESS CONSUMERS

15% HIGHER CONSUMPTION BY HOUSEHOLD CONSUMERS

FOR THE FIRST TIME ACTUAL CONSUMPTION AT METERING POINTS WITH ANNUAL NETTING WAS TAKEN INTO ACCOUNT

56.4% SHARE OF ALL UNDERGROUND LINES

43.1% SHARE OF UNDERGROUND LINES – AN INCREASE OF 1.15 PER CENTAGE POINTS COMPARED TO 2024

98.8%
OF CONSUMERS ON DISTRIBUTION SYSTEMS EQUIPPED WITH ADVANCED METERING SYSTEMS

29,219
ELECTRIC VEHICLES

A SHARE OF JUST **2.05%**
IN THE CATEGORY OF PASSENGER AND LIGHT COMMERCIAL VEHICLES

13.3%
LES

GENERATION FROM RENEWABLE ENERGY SOURCES

2,545
PUBLIC CHARGING POINTS

25.2%
HIGHER

GENERATION FROM SOLAR POWER STATIONS

183
ENERGY COMMUNITIES

64,092
SELF-SUPPLY SYSTEMS – TOTAL CONNECTED CAPACITY 822.1 MW

6.6%
SHARE OF CONSUMERS

WHO ARE ALSO PRODUCERS

4.3%

REDUCTION IN THE AVERAGE ANNUAL FINAL SUPPLY PRICE FOR A TYPICAL HOUSEHOLD CONSUMER

THE FINAL SUPPLY PRICE FOR A TYPICAL HOUSEHOLD CONSUMER IS SIGNIFICANTLY LOWER THAN THE EU AVERAGE AND ALSO LOWER THAN IN ALL NEIGHBOURING COUNTRIES

12.6%
REDUCTION IN FINAL PRICES

OF ELECTRICITY SUPPLY FOR THE AVERAGE BUSINESS CONSUMER

INCREASE IN NEGATIVE PRICES ON THE DAY-AHEAD MARKET – IN APRIL, NEGATIVE PRICES OCCURRED AS MANY AS 72 TIMES

6
ACTIVE AGGREGATORS

IN SLOVENIAN MARKET – THE TOTAL VOLUME OF TRADED ENERGY AMOUNTED TO
255 GWh

ELECTRICITY

Electricity balance

Inputs and Outputs of Electricity in the System

In 2025, 13,720 GWh of electricity was delivered to the power system from generation facilities connected to the transmission or distribution system in Slovenia, which is 1,381 GWh less than in 2024. The electricity balance of intake and output shown in Figure 1 also includes 49 GWh of electricity from battery storage systems, specifically as part of generation on the distribution system and in closed distribution systems. Electricity intake from renewable energy generation facilities totalled 5,480 GWh, which is 567 GWh less than the previous year. Intake from fossil fuel power plants was as much as 820 GWh lower than the previous year, totalling 2,650 GWh. The Krško Nuclear Power Plant supplied 5,541 GWh of electricity to the transmission system, which is nearly the same as in 2024. The energy volumes are derived from the electricity operators' balance sheets based on physical flows; for the first time in 2025, actual electricity intake from metering points with annual net metering was taken into account instead of annual peaks, as had been the case in previous reports.

The amount of electricity delivered to the power system from generation facilities connected to the distribution system–which also includes closed distribution systems (CDS)– increased by 649 GWh compared to 2024, totalling 1,933 GWh, or 1,884 GWh excluding electricity fed in from battery storage systems. The significant increase in electricity uptake into the distribution system is primarily due to the new presentation of the electricity balance, which for the first time takes into account actual electricity consumption and generation even at metering points with annual netting. If annual netting were taken into account, the increase in electricity feed-in to the distribution system in 2025 would amount to only 76 GWh compared to the previous year. In consumers' internal networks with generation facilities connected to their internal installations, an additional 570 GWh of electricity was generated and consumed, representing an additional 29.5% of all electricity fed into the distribution system from generation facilities connected to the distribution system and the CDS. Estimated generation from self-supply facilities amounted to 900 GWh[1], while reports from electricity operators indicate that 714 GWh was fed into the distribution system at the metering points of self-supply consumers, and 720 GWh of electricity was drawn from the distribution system.

13,720 GWh of electricity was delivered to the power system, of which 40.1% came from RES generation facilities

1 The report drafted in accordance with Article 20 of the Decree on the self-supply of electricity from renewable energy sources (Official Gazette of the Republic of Slovenia, nos. 43/22112/25 – ZSROVE-1 and 8/26).

TABLE 1: ELECTRICITY DELIVERED TO THE TRANSMISSION AND DISTRIBUTION SYSTEMS IN THE 2023–2025 PERIOD, IN GWh

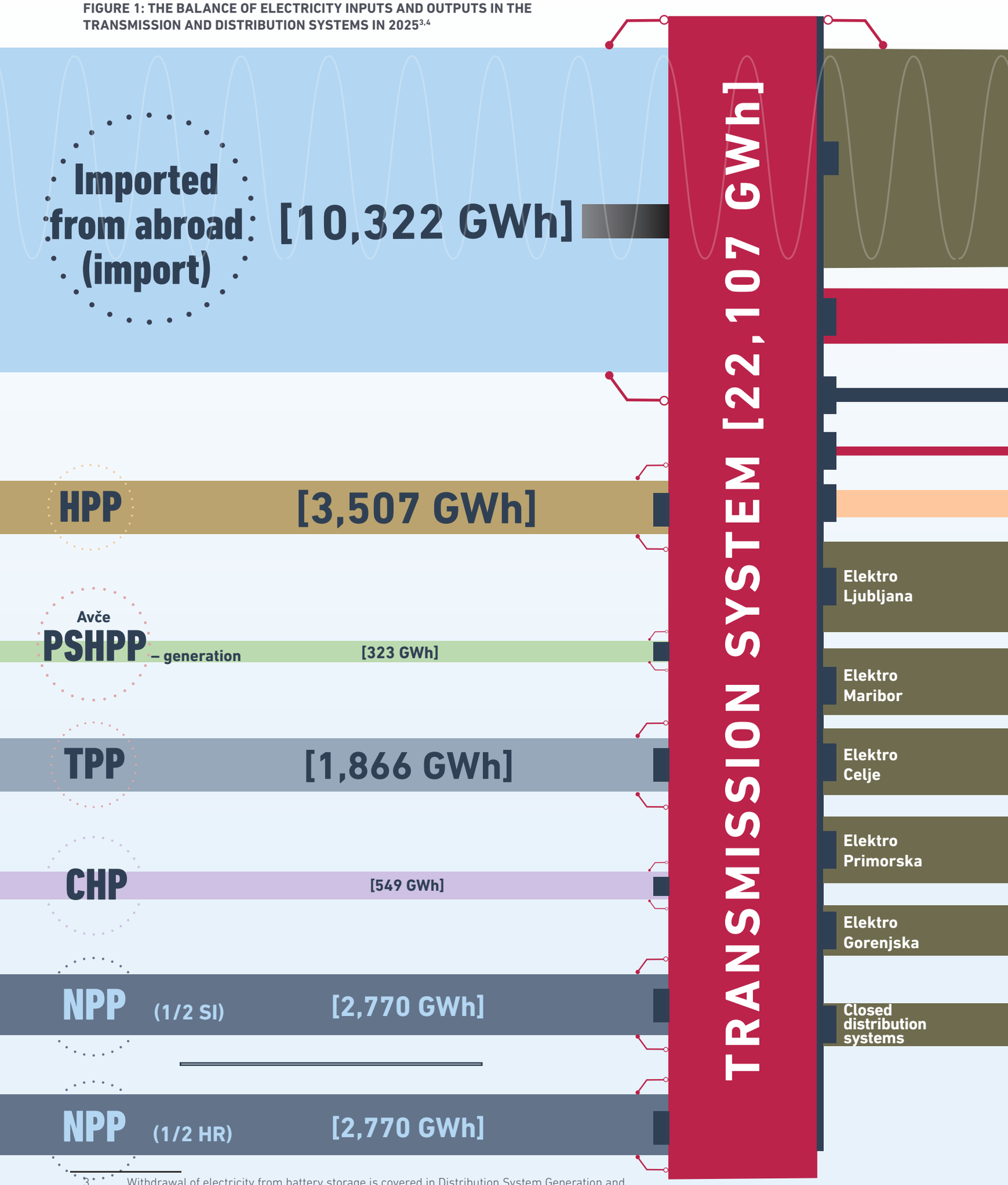
Electricity input into the transmission system [GWh]	**2023**	**2024**	**2025**
Dravske elektrarne Maribor	2,958.6	3,224.8	2,162.5
Savske elektrarne Ljubljana	397.4	387.7	319.4
HPP na spodnji Savi	682.9	641.4	555.5
Soške elektrarne Nova Gorica	452.9	490.4	469.5
Avče PSHPP in the generation regime	300.2	282.0	323.5
Total Hydro	**4,792.0**	**5,026.3**	**3,830.4**
TPP Šoštanj	2,682.9	3,021.4	1,836.2
TPP Brestanica	–0.1	37.2	30.7
TPP Trbovlje	–1.1	0.6	–0.8
Javno podjetje Energetika Ljubljana	159.1	186.7	549.2
Total TPP and CHP	**2,840.8**	**3,245.9**	**2,415.3**
Krško Nuclear Power Plant	**5,323.4**	**5,544.3**	**5,540.7**
Total electricity input into the transmission system	**12,956.1**	**13,816.5**	**11,786.4**
Electricity input into the distribution system [GWh]	**2023**	**2024**	**2025**
HPP up to and including 1 MW	247.3	238.1	208.6
HPP above 1 MW	156.6	163.9	166.5
Woody biomass-fuelled facilities	32.8	34.2	42.8
Wind farms	6.4	6.5	7.3
Solar power plants	361.1	473.0	1,118.3
Facilities using biogas	111.9	104.3	105.5
Waste-to-energy plants	0.1	0.1	0.5
Total RES	**916.2**	**1,020.1**	**1,649.5**
Total conventional sources	**280.6**	**223.92**	**234.8**
Unidentifiable (withdrawal from storage facilities)	**41.3**	**40.1**	**49.0**
Total electricity input into the distribution system	**1,238.1**	**1,284.1**	**1,933.3[2]**
TOTAL ELECTRICITY INPUT	**14,194.2**	**15,100.6**	**13,719.7**

SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

2 The electricity intake balance reflects the actual intake at metering points, adjusted for annual net metering. If only the annual peaks were taken into account, the electricity intake into the distribution system would amount to only 1,360 GWh.

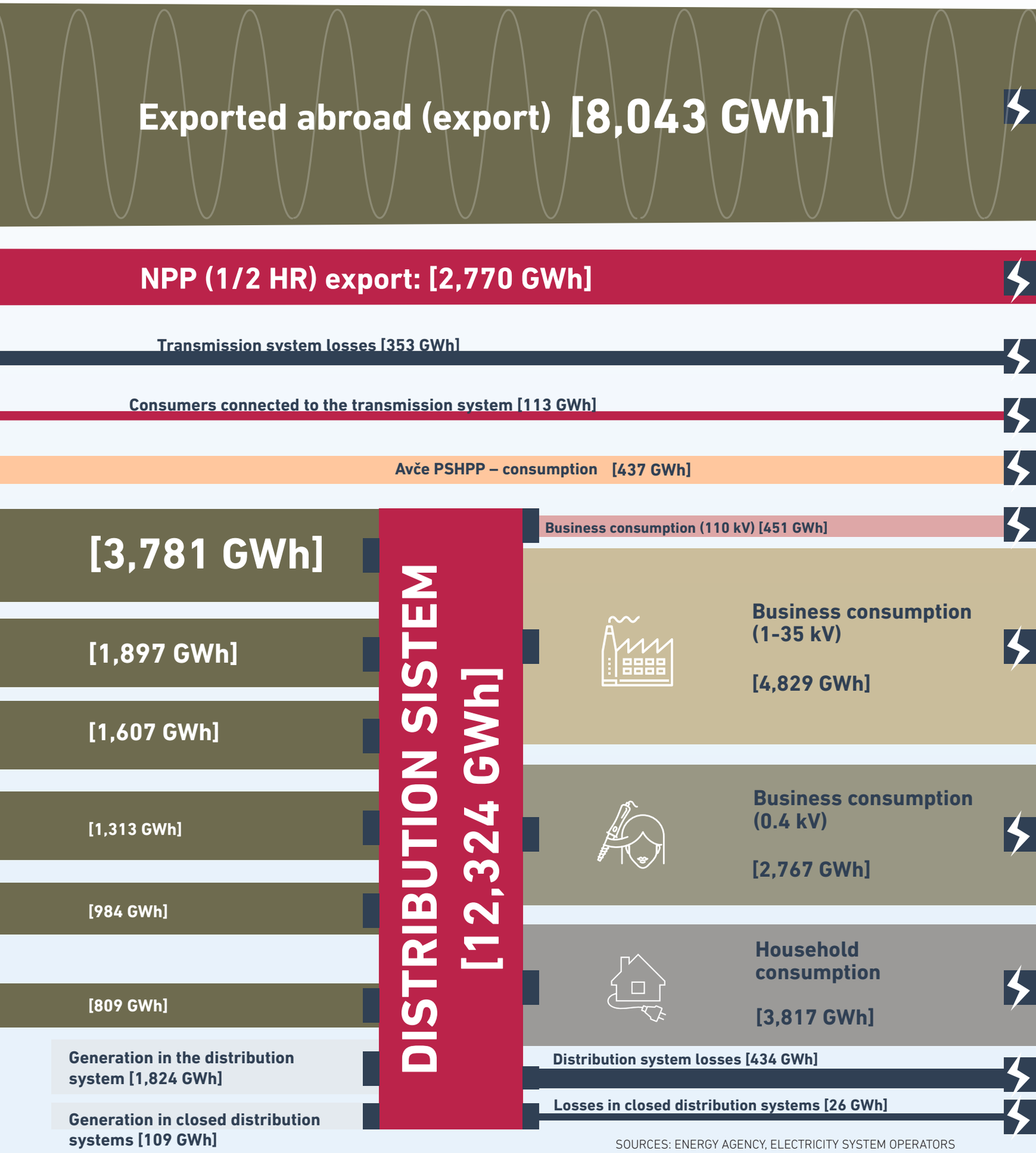
ELECTRICITY

FIGURE 1: THE BALANCE OF ELECTRICITY INPUTS AND OUTPUTS IN THE TRANSMISSION AND DISTRIBUTION SYSTEMS IN 2025[3,4]



3 Withdrawal of electricity from battery storage is covered in Distribution System Generation and Generation in closed Distribution Systems.

4 The values shown are rounded to the nearest whole GWh, so there may be slight differences between the values in the chart and those in the tables.

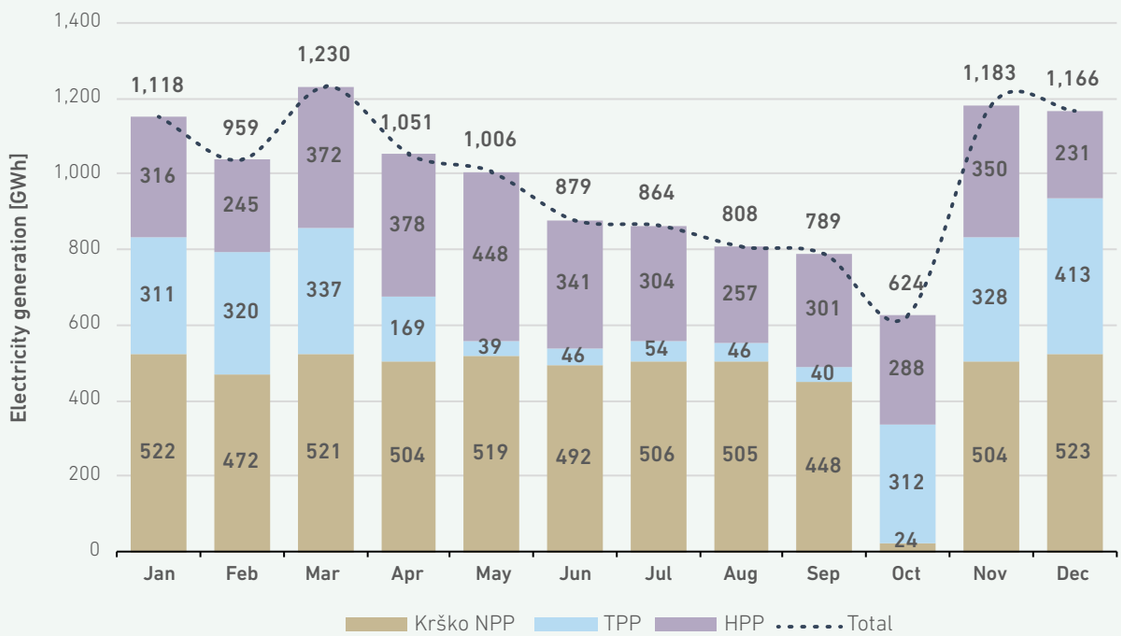


SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

Domestic generation, taking into account half of the output from the Krško Nuclear Power Plant (Krško NPP), contributed 10,948 GWh of electricity to the Slovenian power system. Consumption by end users, including system losses, amounted to 13,228 GWh of electricity. In 2025, domestic production in Slovenia covered 82.8% of end-user electricity consumption.

Figure 2 shows the monthly trend in electricity generation from power plants connected to the transmission system in 2025. The year 2025 was marked by poorer hydrological conditions, which resulted in significantly lower electricity generation at hydroelectric power plants. Production at the (Krško NPP) was suspended from the end of September through most of October due to scheduled maintenance, while the operation of TEŠ 6 was conducted in accordance with the requirements of the public service of heat supply, which is reflected in relatively very low production at thermal power plants during the summer.

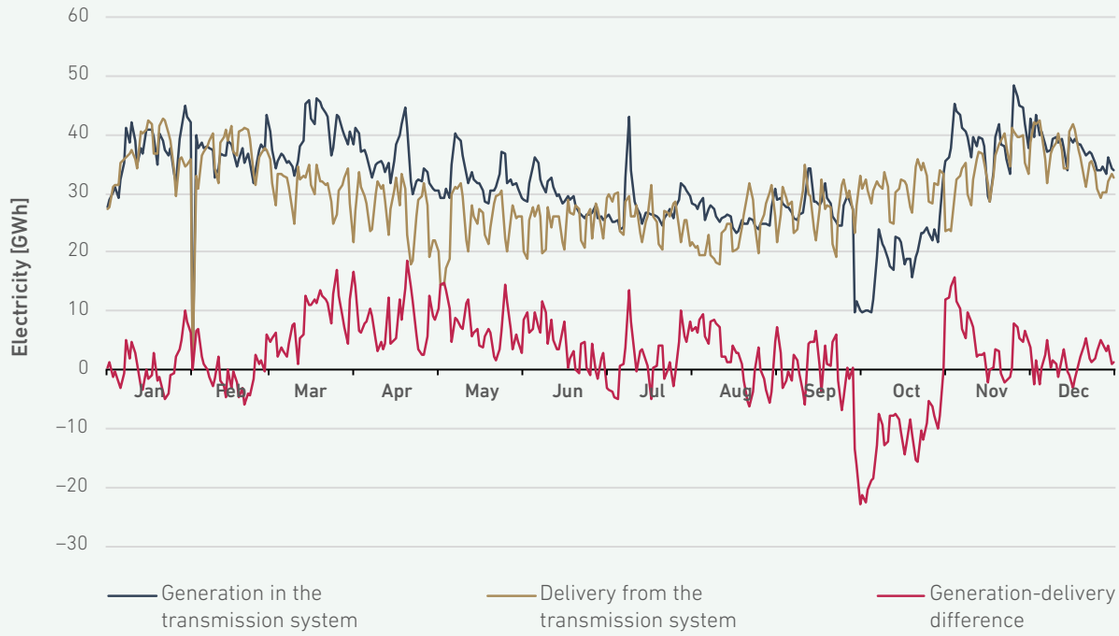
FIGURE 2: MONTHLY VARIATION OF ELECTRICITY GENERATION IN LARGE POWER PLANTS CONNECTED TO THE TRANSMISSION SYSTEM



SOURCES: ENERGY AGENCY, ELES

Figure 3 shows the trends in electricity generation and withdrawal from the transmission system, revealing a generation shortfall that is particularly pronounced due to the shutdown of the Krško NPP for scheduled maintenance from the end of September through most of October. Domestic generation fully covered and exceeded domestic demand only during the period from early March to late May; in the other months, there were deficits of varying magnitudes.

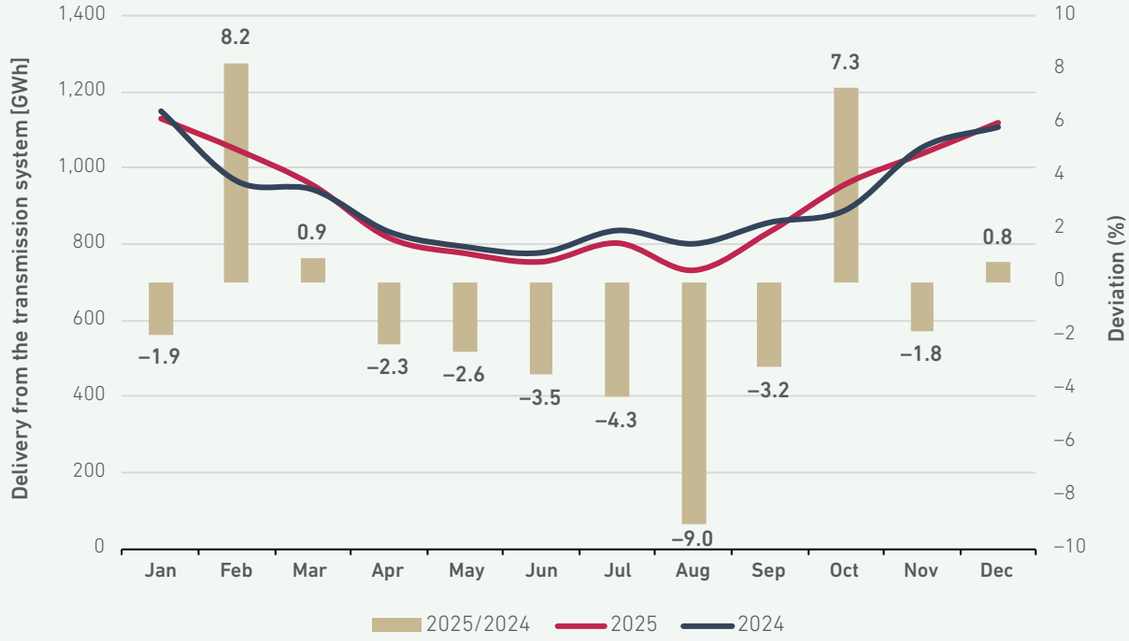
FIGURE 3: DAILY VARIATION OF ELECTRICITY GENERATION AND INPUT INTO THE TRANSMISSION SYSTEM



SOURCES: ENERGY AGENCY, ELES

Figure 4 shows the monthly trend in electricity withdrawal from the transmission system in 2024 and 2025. The monthly ratio of electricity withdrawal in both years is also shown separately, revealing a significant decrease in electricity withdrawal from the transmission system in 2025 compared to the previous year in most months, while a marked increase in electricity intake from the transmission system compared to the previous year occurred only in February and October. In 2025, electricity intake from the transmission system was 84 GWh lower than the previous year, totalling 10,941 GWh.

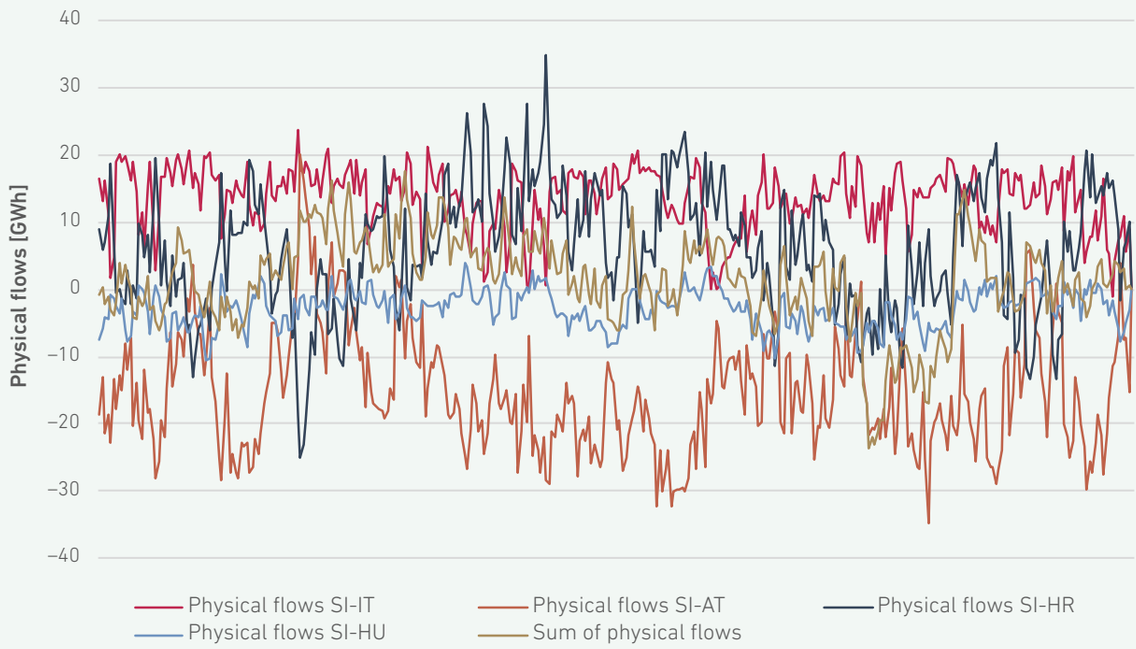
FIGURE 4: MONTHLY DELIVERY OF ELECTRICITY FROM THE TRANSMISSION SYSTEM IN 2024 AND 2025, ALSO SHOWING MONTHLY DEVIATIONS



SOURCES: ENERGY AGENCY, ELES

The Slovenian electricity transmission system is connected to the transmission systems of neighbouring countries at the borders with Austria, Croatia, Italy, and Hungary. Based on the sum of physical flows at the borders, we can determine whether, due to the need to balance the power system at a given moment, there was an import of a deficit or an export of a surplus of electricity from the transmission system. Figure 5 shows the trends in individual physical flows, as well as the total physical flows of electricity across all four borders (SI-AT, SI-HR, SI-IT, and SI-HU).

FIGURE 5: PHYSICAL ELECTRICITY FLOWS AT THE BORDERS WITH NEIGHBOURING COUNTRIES AND THE NET SUM OF PHYSICAL FLOWS

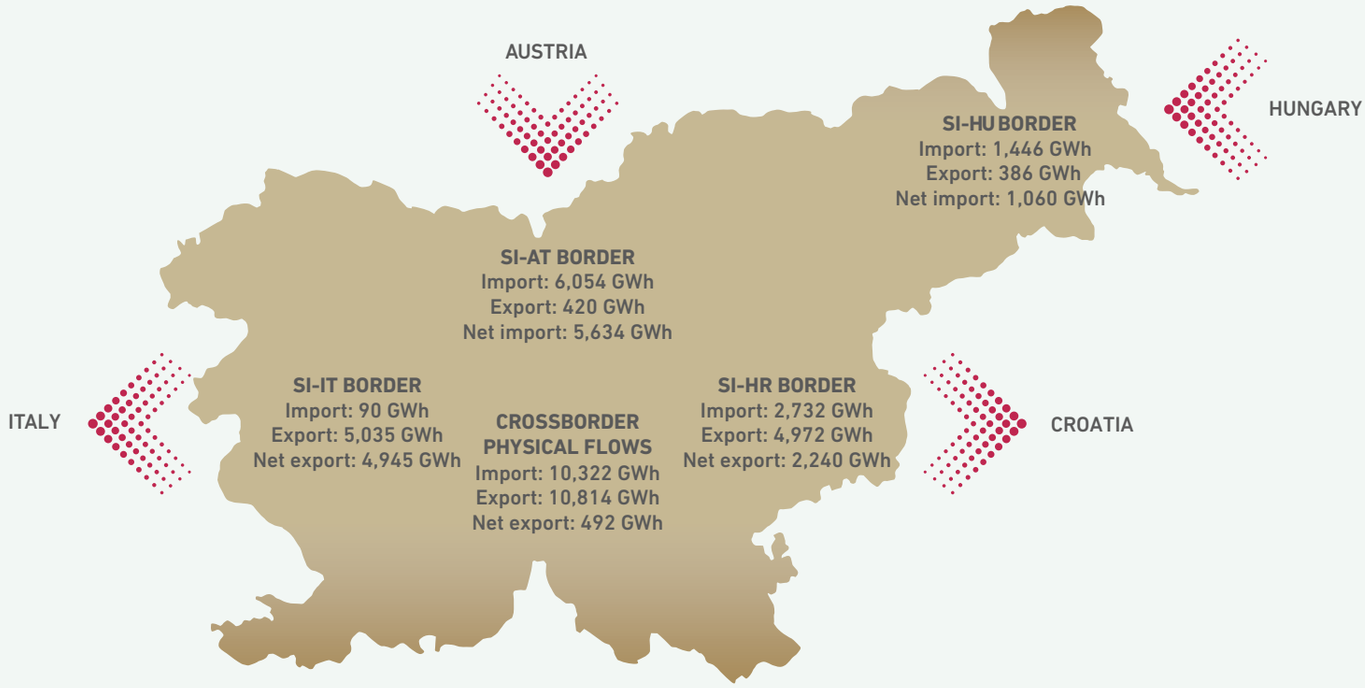


SOURCES: ENERGY AGENCY, ELES

The exchange of electricity with neighbouring countries via international cross-border interconnections is important for maintaining the balance of the electricity system. When looking at physical flows at individual borders with neighbouring countries in isolation, Slovenia was a net exporter of electricity at its borders with Italy and Croatia in 2025, whilst it was a net importer at its borders with Austria and Hungary. In terms of the total volume of electricity exchanged at the borders with neighbouring countries, and taking into account the total electricity generation at the NPP in 2025, Slovenia was a net exporter of electricity. Figure 6shows the annual volumes of physical flows at the borders with neighbouring countries, illustrating that the Slovenian transmission system is a key link in energy flows within the EU internal market, particularly towards Italy, which remains a major importer of electricity on an annual basis due to price differences.

Taking into account total production at the NPP, Slovenia a net exporter of electricity in 2025

FIGURE 6: PHYSICAL ELECTRICITY FLOWS ACROSS THE BORDERS WITH NEIGHBOURING COUNTRIES

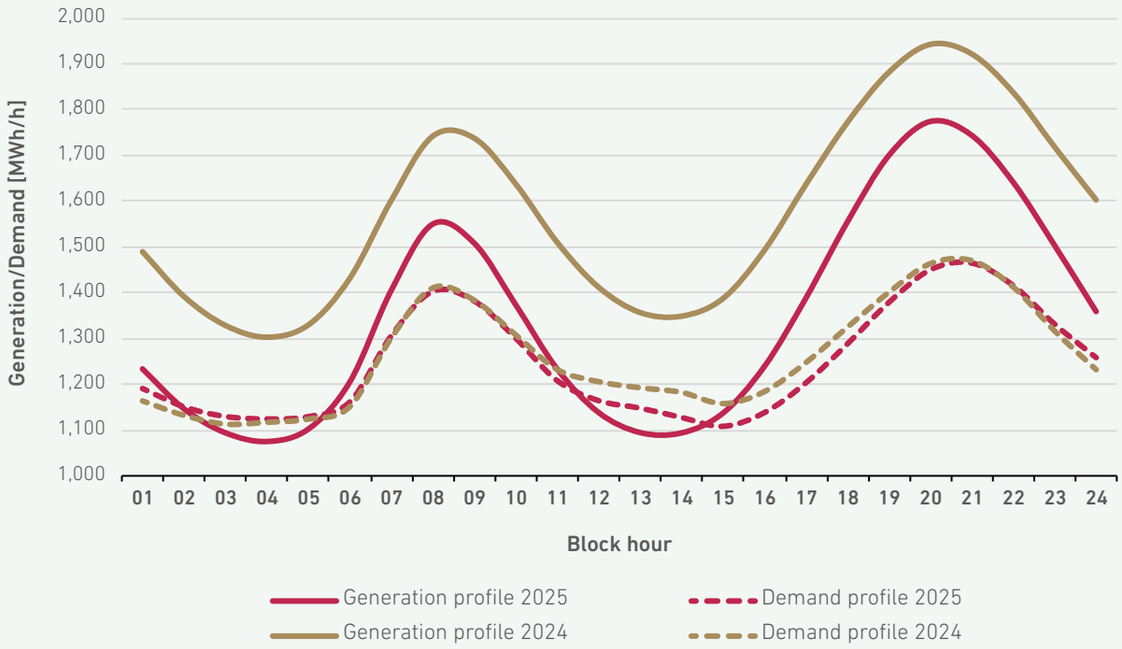


SOURCES: ENERGY AGENCY, ELES

The peak hourly load on the transmission system in 2025, excluding losses, was 2,081 MW, which is 19 MW less than in 2024. It was recorded on Thursday, 20 February 2025, during the 8th hour block (between 7 a.m. and 8 a.m.). For the fourth year running, the peak occurred in the morning, which is becoming the new norm compared with previous years, when the peak usually occurred in the evening or at midday and never in the morning.

Figure 7 shows the average daily profile of electricity generation and off-take from the transmission system in 2024 and 2025. In 2025, the transmission system was under the least load during the night (around 4 a.m.), whilst the highest load occurred twice: first in the morning (around 8 a.m.) and then at a slightly higher level in the evening between 8 p.m. and 9 p.m. A comparison of the generation and consumption profiles for both years shows that, in 2025, generation was on average lower than consumption during the night between 2. am and 5 a.m. and at midday between 12 noon and 2 p.m., whereas in the previous year, generation was, on average, higher than consumption at all times of the day.

FIGURE 7: THE AVERAGE DAILY PROFILE OF ELECTRICITY GENERATION AND DELIVERY FROM THE TRANSMISSION SYSTEM IN 2024 AND 2025

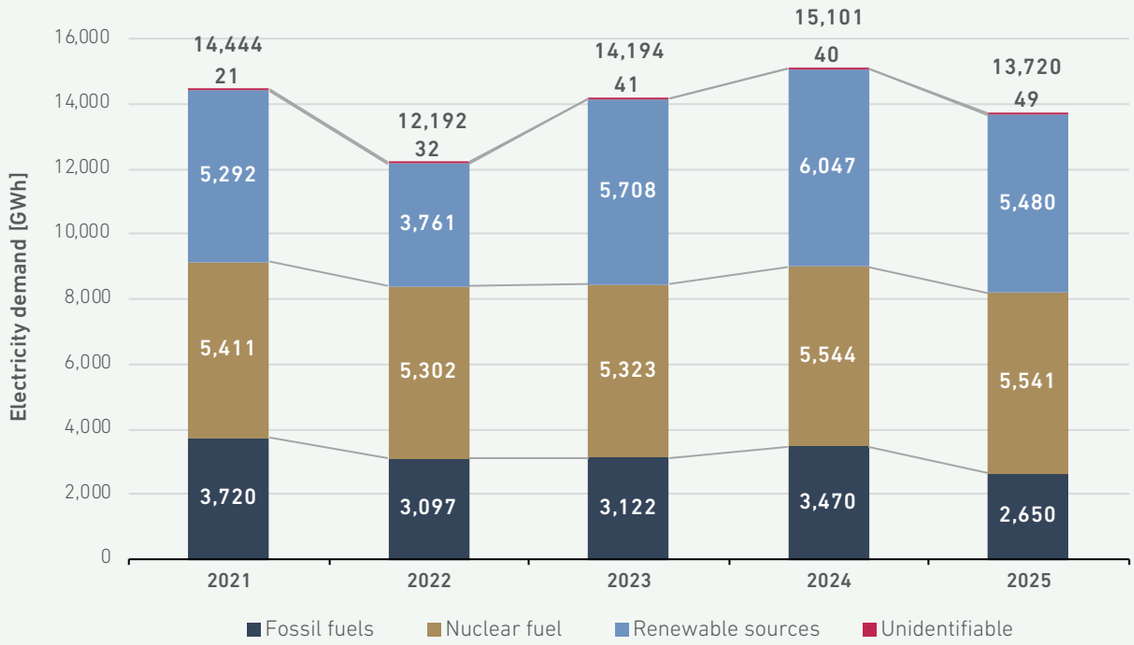


SOURCES: ENERGY AGENCY, ELES

The share of electricity generated by hydroelectric power stations and power stations using other renewable sources varies from year to year, depending on hydrological and other conditions, as well as on the level of investment in the construction of generation units utilising renewable sources. With a reduction in electricity generation from all primary energy sources, the shares of electricity generated and electricity fed into the electricity system in Slovenia in 2025 changed slightly compared with the previous year, standing at 40.1% for renewable energy sources, 19.4% for fossil fuel power stations and 40.5% for the NPP, which also includes the 50% share allocated to Croatia under an intergovernmental agreement.

40.5% of all electricity generated and supplied by the NPP also includes the 50% share allocated to Croatia, 40.1% from RES and 19.4% from fossil fuels

FIGURE 8: ELECTRICITY DELIVERED FROM THE GENERATION FACILITIES TO THE TRANSMISSION AND DISTRIBUTION SYSTEMS IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

TABLE 2: PRIMARY ENERGY SOURCES DELIVERED TO THE TRANSMISSION AND DISTRIBUTION SYSTEMS IN THE 2023–2025 PERIOD

Primary energy sources for electricity generation	2023		2024		2025	
	[GWh]	Share	[GWh]	Share	[GWh]	Share
Fossil fuels	3,122	22.1%	3,470	23.0%	2,650	19.4%
Nuclear fuel	5,323	37.6%	5,544	36.8%	5,541	40.5%
Renewable sources	5,708	40.3%	6,047	40.2%	5,480	40.1%
• Hydro	5,196	91.0%	5,428	89.9%	4,206	76.8%
• Wind	6,36	0.1%	7,00	0.1%	7,00	0.1%
• Solar	361	6.3%	473	7.7%	1,118	20.4%[5]
• Other RES	145	2.6%	139	2.3%	149	2.7%
Unidentifiable	41	-	40		49	
TOTAL ELECTRICITY INPUT	**14,194**		**15,101**		**13,720**	

SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

5 The share of electricity supplied from solar power plants is not comparable with previous years, when only surpluses output from metering points with net metering were included in the electricity balance..

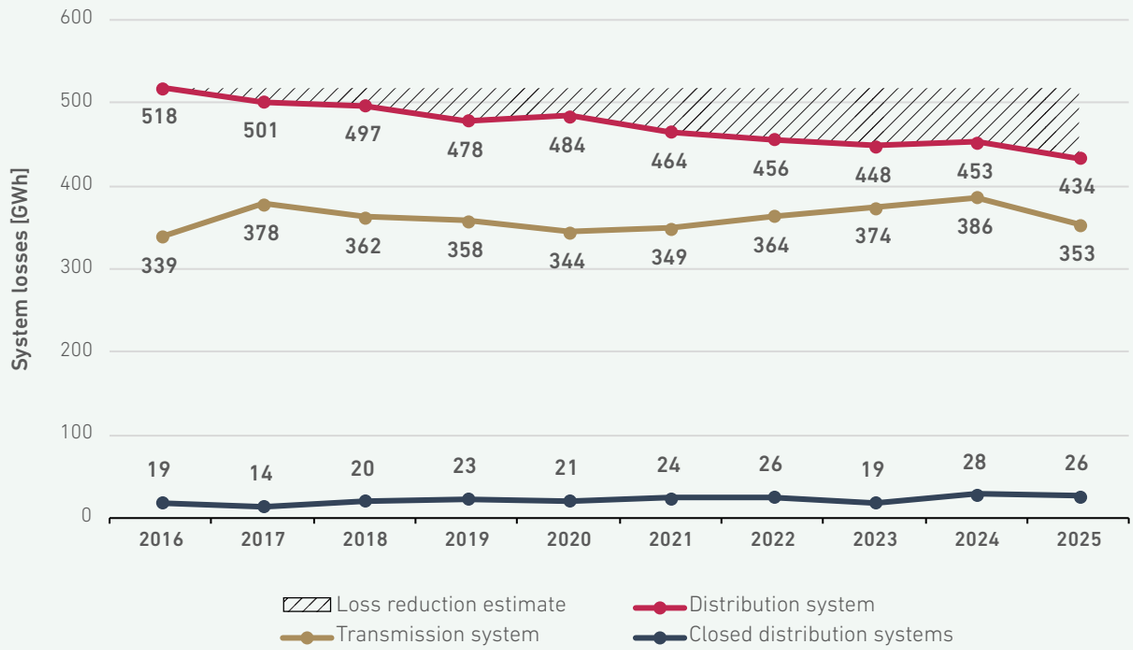
Electricity losses in the power system

The quantities of losses in the transmission system are determined on the basis of the differences between the quantities of electricity generated in the transmission system and the quantities of electricity at the interconnection points between the transmission and distribution systems, as well as the direct consumption of electricity from the transmission system. Losses in the distribution system are determined on the basis of the differences between the quantities of electricity at the boundaries between the transmission and distribution systems and the quantities of electricity measured at end users.

The long-term trend of decreasing losses, shown in Figure 9, is the result of various measures, with an emphasis on the introduction of advanced metering systems, which enable better monitoring and control of commercial and technical losses, and the transition to a higher proportion of cabling in the medium-voltage and low-voltage networks. As a result of the introduction of the above-mentioned measures, the estimated savings in electricity losses in the distribution system for the period 2016–2025 already amount to more than 400 GWh. In 2024, both the proportion of losses and the volume of electricity losses in the distribution system increased, which can largely be attributed to inadequate recording of consumption at the metering points of self-supplied customers with annual net metering, whose actual electricity consumption and generation up to 2025 were not correctly reflected in Slovenia's electricity balance. From 2025 onwards, however, Slovenia's electricity balance will also take into account the actual feed-in to and off-take from the grid at the metering points of self-supplied customers with annual net metering.

The trend in the volume of electricity losses in the transmission system is significantly influenced by the commissioning of the Avče pumped-storage hydroelectric power station after 2014 and the increased share of cross-border electricity trading in exports, imports and transit. The levels of electricity losses in the transmission, distribution and closed distribution systems, together with an estimate of the savings for the period 2016–2025, are shown in Figure 9.

FIGURE 9: ELECTRICITY LOSSES IN THE TRANSMISSION SYSTEM, DISTRIBUTION SYSTEM, AND CLOSED DISTRIBUTION SYSTEMS, AND THE ESTIMATED REDUCTION OF LOSSES IN THE DISTRIBUTION SYSTEM DURING THE 2016–2025 PERIOD



SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

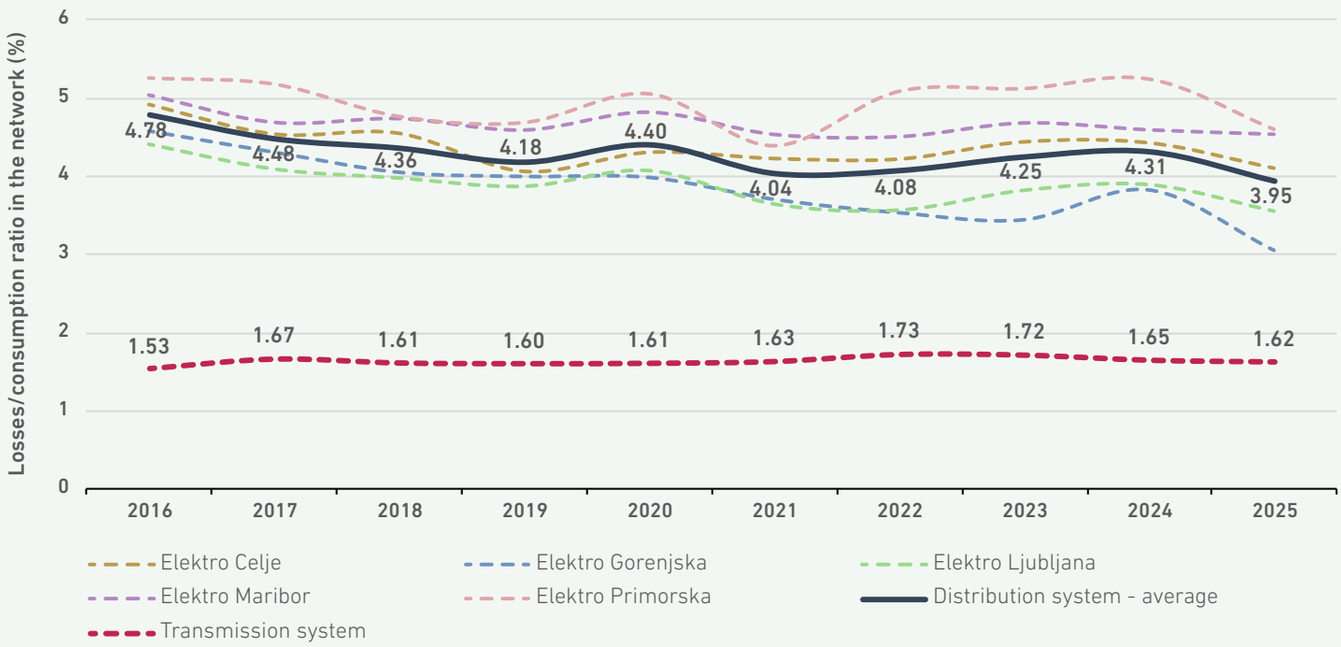
We calculate loss rates based on the volumes consumed from the transmission or distribution system.

The increase in the loss ratio in the distribution system between 2022 and 2024 is partly due to an actual reduction in consumption by business consumers, and partly to a virtual reduction in consumption by domestic and small business consumers due to the annual netting of generation and consumption among self-supplied consumers. In 2025, however, there was a further reduction in the proportion of electricity losses in the distribution system, which is particularly pronounced because actual generation and consumption by self-supplied customers began to be taken into account in Slovenia's electricity balance.

After several years of increase, the loss rate in the distribution system has fallen again

Figure 10 shows the loss rates for ELES, individual distribution companies and the average for the entire Slovenian distribution system over the period 2016–2025.

FIGURE 10: SHARES OF LOSSES FOR THE TRANSMISSION SYSTEM, DISTRIBUTION SYSTEM, AND DISTRIBUTION COMPANIES IN THE 2016–2025 PERIOD



SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

Electricity generation

In 2025, ten companies with generation facilities having an installed capacity of over 10 MW were operating on the Slovenian electricity market. These included Energetika Ljubljana and Thermal Power Plant Šoštanj, whilst the remaining companies are either part of or affiliated with the HSE Group – which constitutes the first energy pillar on the Slovenian wholesale market – or with the GEN energija Group, which is the second energy pillar.

Significantly lower electricity generation than the previous year

TABLE 3: INSTALLED CAPACITIES OF THE GENERATION FACILITIES AND THE QUANTITY OF ELECTRICITY PRODUCED

PRODUCER	Installed capacity [MW]	Share – installed capacity, all producers in Slovenia (%)	Generation [GWh]	Share – generation, all producers in Slovenia (%)
HSE d.o.o.	**970.0**	**19.0%**	**3,274.1**	**28.1%**
Hydropower plants	912.0		3,274.9	
Thermal power plants	58.0		–0.8	
Other (CHP, solar, wind)	0.0		0.0	
GEN energija, d.o.o.	**1,036.0**	**20.2%**	**3,356.6**	**28.8%**
Hydropower plants	274.0		548.1	
Thermal power plants	406.0		30.7	
Nuclear Power Plant*	350.0		2,770.4	
Other (CHP, solar, wind)	6.0		7.4	
TPP ŠOŠTANJ d.o.o.	**942.0**	**18.4%**	**1,836.2**	**15.8%**
TPPs	942.0		1,836.2	
JAVNO PODJETJE ENERGETIKA LJUBLJANA d.o.o.**	**222.2**	**4.3%**	**549.2**	**4.7%**
CHP	222.2		549.2	
- Generation using woody biomass	/		33.4	
Other small producers in the distribution network and in closed distribution systems)**	**1,947.2**	**38.1%**	**2,639.8**	**22.6%**
Hydropower plants	127.1		399.3	
Geothermal power plants	0.05		0.0	
Woody biomass-fuelled facilities	19.5		73.4	
Wind farms	4.5		7.4	
Solar power plants	1,626.1		1,598.1	
Facilities using biogas	36.5		122.3	
Waste-to-energy plants	3.2		3.9	
Facilities using other RES	0.1		0.0	
Facilities using fossil fuels	130.1		435.4	
Total in Slovenia	**5,117.4**	**100.0%**	**11,655.9**	**100%**
- transmission system	**3,170.2**		**9,016.1**	

* Taking into account the 50% share of the Krško NPP's installed capacity and generation
** Other small producers in the distribution system and in CDS (Talum, Acroni, Ravne, Štore, Alpacem and Jesenice) and generation in internal consumers' networks

SOURCES: ENERGY AGENCY, PRODUCERS, BORZEN, ELECTRICITY SYSTEM OPERATORS

Compared with the previous year, the installed capacity at the major producers, namely HSE and GEN energija, as well as at Energetika Ljubljana, did not change significantly, except at Energetika Ljubljana, where the 2025 report takes into account a correction due to a reduction in capacity at steam unit 2, which utilises waste heat from gas-fired units. However, there were more significant changes in the area of generation facilities connected to the distribution network; specifically, the total connected capacity of these facilities increased by more than 200 MW, the vast majority of which are solar power stations. According to data from generation companies and electricity operators, in 2025, 2.6 MW of fossil-fuel-fired combined-cycle power stations, 2.6 MW of solar power stations and a total of 1.4 MW of hydroelectric power stations were decommissioned, landfill gas and biogas power stations, and wood biomass cogeneration plants.

Among smaller producers connected to the distribution system and the CDS, the largest share of electricity was generated by solar power stations, followed by power stations using non-renewable sources and small hydroelectric power stations. In 2025, smaller producers generated 22.6% of electricity, which is 4.9 percentage points more than in the previous year. The increased share of producers connected to the distribution system in total electricity generation is also a result of lower generation at power stations connected to the transmission system.

Due to an inter-state agreement between Slovenia and Croatia, half of Krško NPP's generation is attributed to Croatia, which reduces Krško NPP's share in actual Slovenian electricity generation. Thus, power stations in Slovenia produced a total of 14,426 GWh of electricity in 2025, whilst Slovenian electricity generation was lower, amounting to 11,656 GWh. Domestic production fell by 1,716 GWh, or 12.8%, compared with 2024.

51.8% RES

24.4% fossil fuels

23.8% nuclear fuel –

actual shares of primary energy sources for electricity generation in Slovenia, taking into account only 50% of the electricity generated and delivered to the grid from the Krško NPP

The balance of electricity received and supplied, as shown in Figure 1 and Table 1 and the structure of generation sources, as shown in Figure 8 and Table 2 take into account the electricity generated that was delivered to the electricity system of the Republic of Slovenia. The generation data in Table 3, however, also include electricity generated and consumed within end-users' internal networks, including estimated electricity from self-supply installations. Taking into account the electricity generated by generation facilities connected to end-users' internal networks, and a 50% share of Krško NPP's generation, the primary sources of electricity generation in the Republic of Slovenia in 2025 were fossil fuels (24.4%), nuclear fuel (23.8%) and renewable sources (51.8%). Taking into account the electricity generated within consumers' internal networks, the total share of renewable sources is 0.3 percentage points lower than it was in 2024.

TABLE 4: PRIMARY ENERGY SOURCES FOR ELECTRICITY GENERATION IN SLOVENIA IN THE 2023–2025 PERIOD

	2023		2024		2025	
PRIMARY SOURCE	**Generation [GWh]**	**Share of generation (%)**	**Generation [GWh]**	**Share of generation (%)**	**Generation [GWh]**	**Share of generation (%)**
Fossil fuels	3,271.2	26.6%	3,639	27.2%	2,851	24.4%
Nuclear fuel	2,661.7	21.7%	2,772	20.7%	2,770	23.8%
Renewable sources	6,361.0	51.7%	6,961	52.1%	6,035	51.8%
• Hydro	5,255.0		5,450		4,222	
• Solar	863.8		1,282		1,606	
• Wind	6.4		6.6		7.4	
• Other RES	235.8		223		200	
TOTAL	**12,293.9**	**100.0%**	**13,372**	**100.0%**	**11,656**	**100%**

SOURCES: ENERGY AGENCY, PRODUCERS, ELECTRICITY SYSTEM OPERATORS

Electricity Consumption

Total electricity consumption in Slovenia (including consumption at the Avče hydroelectric power station) amounted to 13,228 GWh in 2025, or 12,414 GWh excluding losses in the transmission and distribution system; this figure does not include electricity generated and consumed at the metering point within customers' internal installations. Total consumption was thus just over 500 GWh higher than the previous year, when it stood at 12,694 GWh; however, it should be emphasised that the 2025 electricity balance sheet takes into account, for the first time, actual consumption at metering points with self-supply and annual net consumption balancing. If, for 2025 as well, we were to take into account only the annual difference between the electricity received from the grid and that fed into the grid, the total electricity consumption of all customers would actually be lower than it was the previous year.

Four end users are connected to the transmission system; in 2025, they consumed 113 GWh of electricity. Consumers in the CDSs consumed 896 GWh of electricity, which is only 2 GWh less than in 2024 and indicates that economic activity within these areas remained unchanged. The Avče Pumped Storage Power Station consumed 437 GWh to pump water for storage, which is 55 GWh more than the previous year. Losses in the transmission and distribution system amounted to 814 GWh; this figure also includes losses due to the import, export and transit of electricity transmitted across the country.

If, in 2025, we were to continue to exclude self-supplying consumers from the annual figures, we would record a lower total consumption by all final consumers on the distribution system than in 2024

Consumption by business and domestic consumers on the distribution system totalled 10,968 GWh, which was just 499 GWh higher than in 2024, when it amounted to 10,469 GWh. Household consumers consumed 3,817 GWh of electricity in 2025, which is 498 GWh more than the previous year. The increase in total consumption by business and household consumers on the distribution system is due to changes in the preparation of the electricity balance sheet, which, for the first time in 2025, took into account actual consumption at metering points with self-supply and annual consumption netting, which amounted to as much as 720 GWh. Consumption by business consumers on the distribution system in 2025 amounted to 7,151 GWh, which is just 1 GWh more than in 2024, whilst the consumption of all business consumers amounted to 8,160 GWh and was 0.4% higher than in 2024. Consumption by all end users (excluding losses and the Avče hydroelectric power station) in 2025 was 532 GWh higher than in 2024, totalling 11,977 GWh, with this increase again attributable to the inclusion of actual consumption at self-supply metering points and annual netting of consumption, in contrast to previous years when only the difference between electricity supplied and received was taken into account on an annual basis. Taking into account annual netting at self-supply metering points, total consumption by end users on the distribution system in 2025 would actually be slightly lower than in 2024.

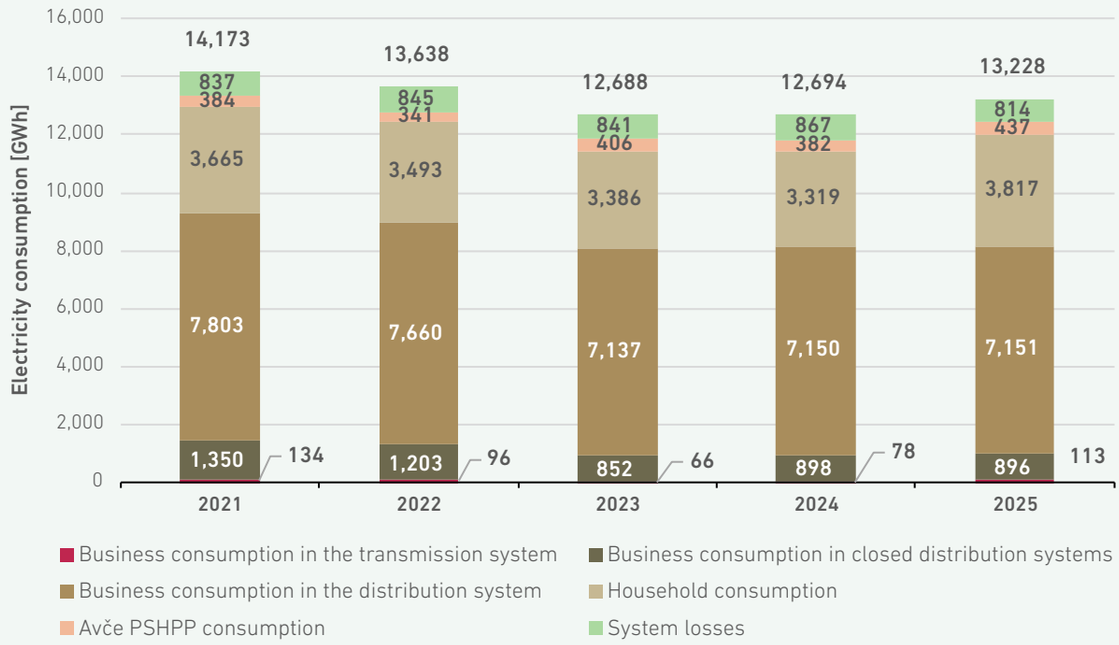
4.2% increase in electricity consumption by all final consumers

15% increase in consumption by household consumers

0.4% increase in consumption by business consumers

– actual consumption at metering points with annual net metering has been taken into account in the electricity balance for the first time

FIGURE 11: ELECTRICITY CONSUMPTION IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

TABLE 5: ELECTRICITY CONSUMPTION IN THE 2023–2025 PERIOD

ELECTRICITY CONSUMPTION [GWh]	2023	2024	2025
Business consumption in the transmission system	66	78	113
Business consumption in the distribution system	7,137	7,150	7,151
Business consumption in closed distribution systems	852	898	896
Total business consumption	**8,056**[6]	**8,126**	**8,160**
Household consumption	**3,386**	**3,319**	**3,817**
Total consumption by final consumers	**11,442**	**11,445**	**11,977**
Avče PSHPP consumption in the pumping regime	406	382	437
Losses in the transmission and distribution systems	841	867	814
Total electricity consumption	**12,688**	**12,694**	**13,228**

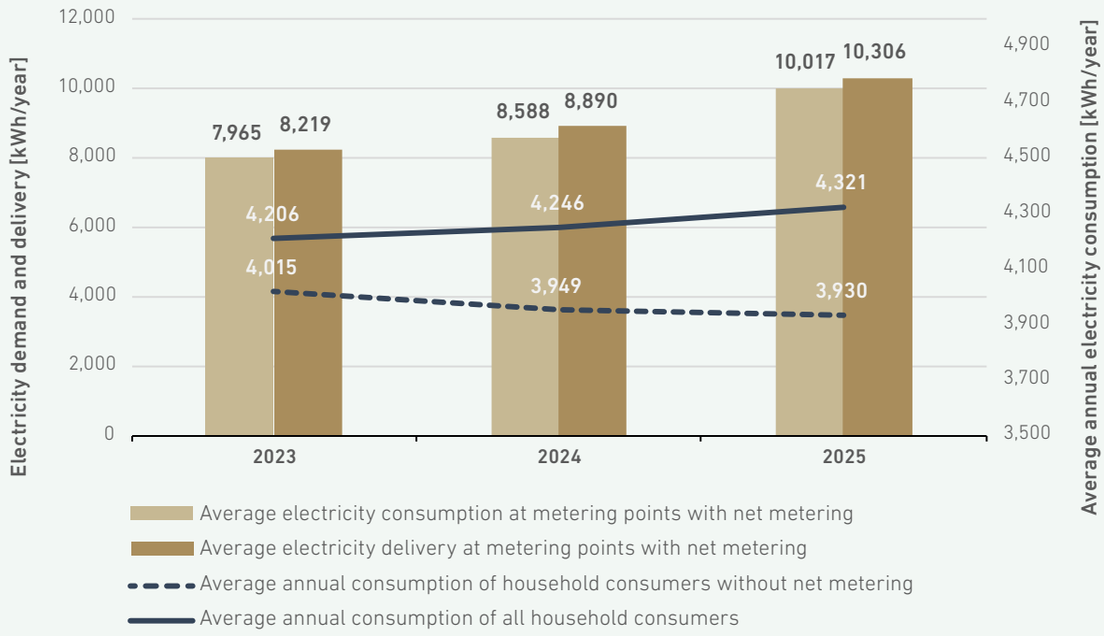
SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

6 Rounding of percentages to whole numbers may result in discrepancies in the totals.

Figure 12 shows the average annual consumption of household consumers and the average electricity received and supplied at the metering points of self-supplying household consumers under the annual net metering system. As the number of self-supplying consumers using the annual netting system has grown, so too has the average capacity of their self-supply installations, which is reflected in an increase in the amount of electricity fed into the grid; whilst, on the other hand, the average electricity consumption at self-supply metering points is also rising and had already exceeded 10 MWh by 2025. As a result, the average consumption of all domestic customers has risen, reaching 4,321 kWh by 2025, whilst for consumers without self-supply installations, average consumption has actually fallen slightly, amounting to just over 3,900 kWh in 2025.

Average consumption by household consumers is rising due to increased consumption among self-supply consumers

FIGURE 12: ELECTRICITY CONSUMPTION, DELIVERY, AND AVERAGE CONSUMPTION OF HOUSEHOLD CONSUMERS DURING THE 2023–2025 PERIOD



SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

Demand Covered by Domestic Generation

Domestic generation coverage is the ratio of end-user electricity consumption to electricity generation in Slovenia. As shown in Table 6, the largest contributors to domestic generation are large hydroelectric power stations, thermal power stations and the nuclear power station (accounting for half of total generation), all of which are connected to the transmission system in Slovenia. A smaller proportion of domestic generation is connected to the distribution system, but this accounts for an increasingly significant share of total electricity generation in Slovenia from year to year.

82.8% of electricity consumption covered by domestic generation

TABLE 6: CONSUMPTION, GENERATION AND COVERAGE OF DEMAND WITH DOMESTIC GENERATION IN THE 2021–2025 PERIOD

	2021	2022	2023	2024	2025
Generation in the transmission system [GWh]	**10,638**	**8,529**	**10,294**[7]	**11,044**	**9,015**
Hydropower plants	4,504	3,037	4,792	5,026	3,830
Thermal power plants	3,429	2,841	2,841	3,246	2,415
Nuclear power plant (50% share)	2,706	2,651	2,662	2,772	2,770
Generation in the distribution system [GWh]	**1,079**	**1,012**	**1,238**	**1,284**	**1,933**
Total domestic generation [GWh]	**11,717**	**9,541**	**11,533**	**12,328**	**10,948**
Total electricity consumption [GWh]	**14,142**	**13,638**	**12,688**	**12,694**	**13,228**
Total consumption by final consumers	12,952	12,452	11,442	11,445	11,977
System losses	837	845	842	867	814
Avče PSHPP consumption	384	341	406	382	437
Demand covered by domestic generation	**82.9%**	**70.0%**	**90.9%**	**97.1%**	**82.8%**

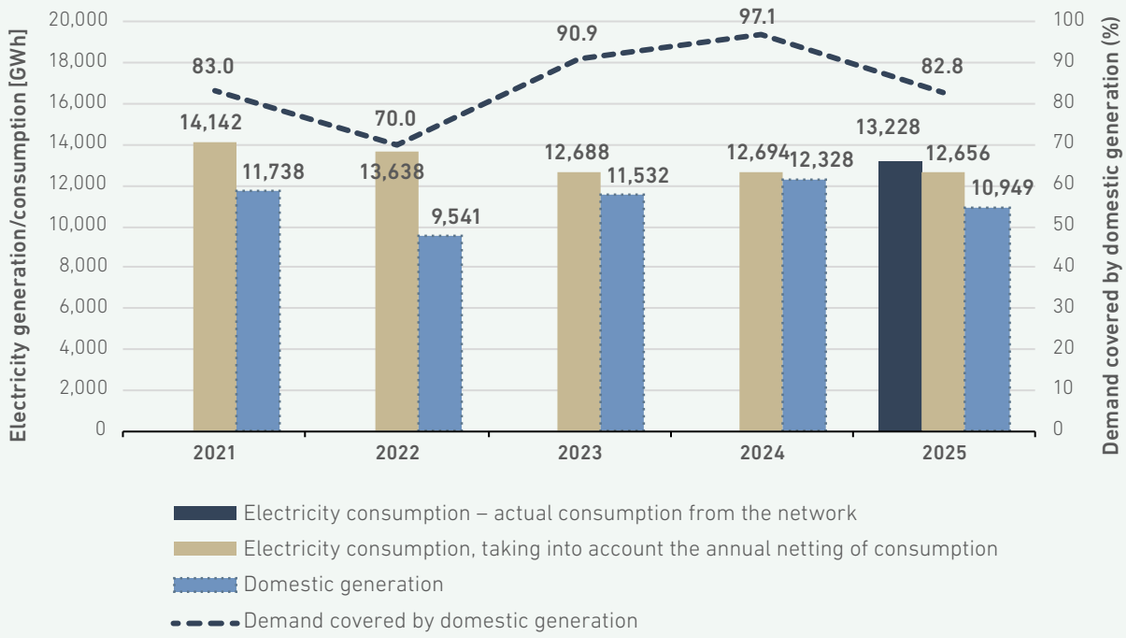
SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

Over the period under review (2021–2025), we observe year-on-year fluctuations in the extent to which consumption is met by domestic generation. The trends and structure of total consumption are presented in more detail in the previous chapter. In addition to end-user consumption on the transmission and distribution networks, total electricity consumption also includes losses across the entire electricity system. The quantities of electricity distributed to Italy via the distribution network from the Vrtojba and Sežana substations are not counted as final consumption in Slovenia.

In 2025, the coverage of consumption by domestic generation stood at 82.8%, which is slightly below the ten-year average of approximately 85%. The lower coverage of consumption by domestic generation was primarily due to reduced output from hydroelectric power stations, resulting from poorer hydrological conditions in 2025, and lower output from thermal power stations following the restructuring of TEŠ into a public service provider for heat supply.

7 Rounding of percentages to whole numbers may result in discrepancies in the totals.

FIGURE 13: CONSUMPTION, GENERATION AND COVERAGE OF DEMAND WITH DOMESTIC GENERATION IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

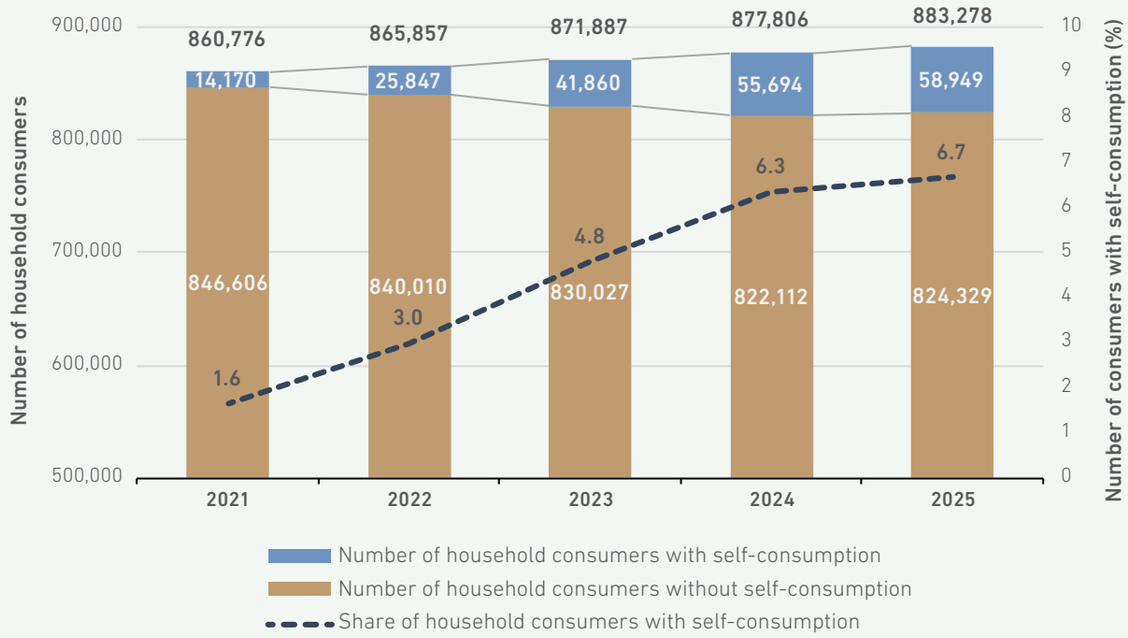
Consumers in the Electricity System

At the end of 2025, there were 995,953 final electricity consumers connected to the Slovenian electricity system. Compared with 2024, their number increased by 6,061, or 0.6%, of which the number of domestic customers rose by 5,472 and the number of business consumers by 589.

0.6% more final consumers

Figure 14 shows the trend in the number of household consumers over the period 2021–2025. The total number of household consumers increased by an average of 0.6% per year during this period, whilst the proportion of household consumers with self-supply devices connected has risen sharply in recent years, reaching 6.7% of all household consumers by 2025. This upward trend slowed noticeably in 2025, due to the termination of annual net metering of consumption volumes.

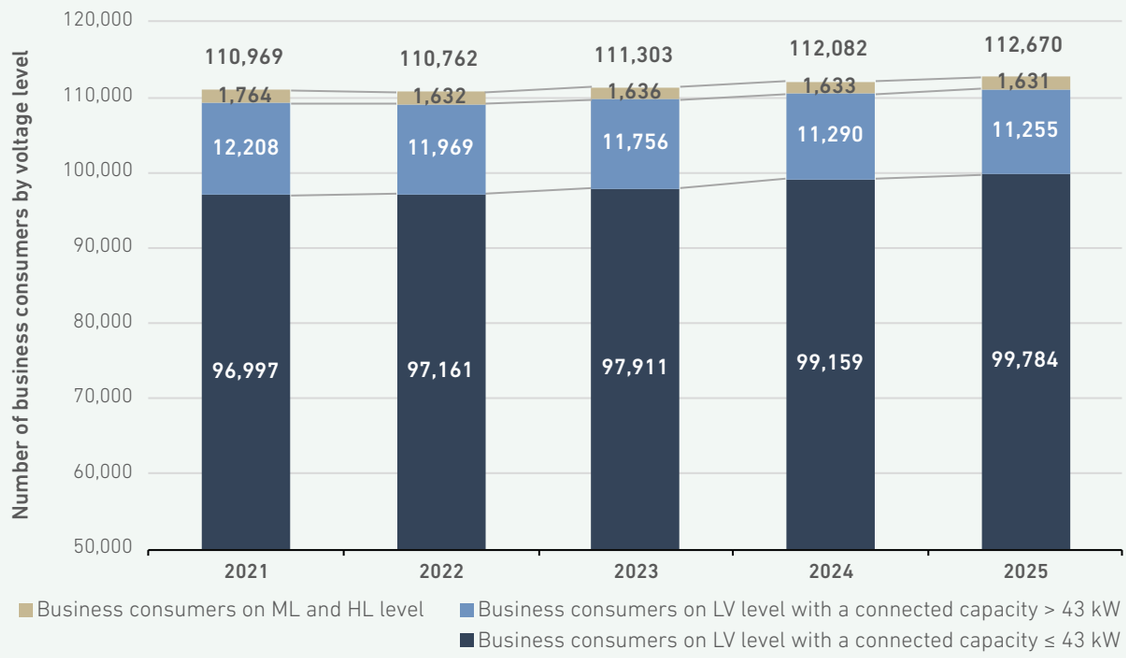
FIGURE 14: NUMBER OF HOUSEHOLD CONSUMERS IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

Figure 15 shows the trend in the total number of business consumers on the distribution system and the CDSs, by voltage level. In 2025, growth in the number of business consumers was slightly lower than in the previous year, with the number of business consumers increasing by 0.5%. The number of consumers with a connected load of 43 kW or less rose by 0.6%, whilst the number of consumers with a connected load of over 43 kW fell by as much as 0.3%.

FIGURE 15: NUMBER OF BUSINESS CONSUMERS IN THE DISTRIBUTION SYSTEM BY VOLTAGE LEVEL IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

In 2025, 1,852 business consumers and 100 household consumers with on-site generation facilities connected to the distribution system via the PS connection scheme.2 connection scheme, as well as 5,111 business and 58,849 household consumers with self-supply installations connected, of whom 57,507 household consumers were on the annual net metering scheme for electricity consumption. Of all consumers on the distribution system, 6.6% were both consumers and producers of electricity, which is 0.4 percentage points more than the previous year.

The number of business consumers on the transmission system increased by one compared with the previous year. Connected to it were four business consumers and the Avče hydroelectric power station, as well as five CDS operators at six locations, which supplied electricity to 241 business consumers, of whom 30 business consumers on the CDS network also had a generation unit connected to their internal electrical installation.

6.6-% share of consumers who are also producers

TABLE 7: NUMBER OF FINAL CONSUMERS OF ELECTRICITY BY TYPE OF CONSUMPTION IN THE 2023–2025 PERIOD

Number of final consumers of electricity by type of consumption	2023	2024	2025
Business consumers in the transmission system	3	3	4
Avče PSHPP consumption in the pumping regime	1	1	1
Total number of final consumers in the transmission system	**4**	**4**	**5**
Business consumers in the distribution system	111,099	111,865	112,429
Household consumers	871,887	877,806	883,278
Total number of final consumers in the distribution system	**982,986**	**989,671**	**995,707**
Business consumers in closed distribution systems	204	217	241
Household consumers	0	0	0
Total number of final consumers in closed distribution systems	**204**	**217**	**241**
TOTAL NUMBER OF FINAL CONSUMERS	**983,194**	**989,892**	**995,953**

SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

TABLE 8: NUMBER OF FINAL CONSUMERS OF ELECTRICITY BY TYPE OF CONNECTION IN THE 2023–2025 PERIOD

TYPE OF FINAL CONSUMER CONNECTION	Final consumers in the distribution system			Final consumers in closed distribution systems			Total		
	2023	2024	2025	2023	2024	2025	2023	2024	2025
Without grid-connected generation facilities									
Business	106,877	105,724	105,496	186	193	211	107,063	105,917	105,707
Household	830,027	822,112	824,329	0	0	0	830,027	822,112	824,329
TOTAL	936,904	927,836	929,825	186	193	211	937,090	928,029	930,036
Installed generation unit									
Business	1,342	1,668	1,836	12	12	16	1,354	1,680	1,852
Household	100	100	100	0	0	0	100	100	100
TOTAL	1,442	1,768	1,936	12	12	16	1,454	1,780	1,952
Consumers with self-consumption									
Business	2,880	4,473	5,097	6	12	14	2,886	4,485	5,111
Household	41,760	55,594	58,849	0	0	0	41,760	55,594	58,849
TOTAL	44,640	60,067	63,946	6	12	14	44,646	60,079	63,960
FINAL CONSUMERS IN THE DISTRIBUTION SYSTEM AND IN THE CLOSED DISTRIBUTION SYSTEMS									
Business	111,099	111,865	112,429	204	217	241	111,303	112,082	112,670
Household	871,887	877,806	883,278	0	0	0	871,887	877,806	883,278
TOTAL	**982,986**	**989,671**	**995,707**	**204**	**217**	**241**	**983,190**	**989,888**	**995,948**
FINAL CONSUMERS IN THE TRANSMISSION SYSTEM							**4**	**4**	**5**
TOTAL NUMBER OF FINAL CONSUMERS							**983,194**	**989,892**	**995,953**

SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

Renewable Energy Sources

Share of renewables in gross final energy consumption

Integrated National Energy and Climate Plan (NECP), The Integrated National Energy and Climate Plan (NEPN), updated in 2024, commits to reducing total greenhouse gas emissions by at least 55% by 2050 compared with the base year of 2005. By 2030, the plan envisages a share of at least 33% of renewable energy sources (RES) in final energy consumption. To achieve this target by 2030, the following sector-specific milestones have been set: a share of at least 55.4% of RES in the electricity sector, a minimum share of 45.2% in heating and cooling, and a share of at least 25.8% in transport.

In 2023, Slovenia achieved the target of a 25% share of RES in gross final energy consumption from its own generation sources for the first time. In 2024, we once again failed to meet the prescribed target, as we achieved only a 24.6% share of RES from our own generation sources. However, as shown in the table below, we did achieve the set 25% share through the statistical transfer of 207 GWh of renewable energy from Croatia. The data by sector for 2024 show that the share of renewable energy in the electricity sector increased by 1.2% compared with 2023, reaching 43.1%, whilst the remaining two sectors recorded a decline – the share in heating and cooling fell to 33.7% compared with 2023, and in transport to 9.24%.

The 2025 forecast, prepared by the Jožef Stefan Institute for the purposes of this report, indicates that a total RES share of 25.4% has been achieved, meaning that Slovenia has exceeded the 25% RES share of total gross final energy consumption for the second time. The main reasons for the increase in the share of RES in 2025 are, above all, lower energy consumption in the transport sector, which has led to lower gross final energy consumption, and an increase in the use of biofuels and electricity generation from RES. The assessment thus shows that the share of RES in the electricity sector increased by 2.2 percentage points in 2025, from 43.1% to 45.3%. In 2025, the share of RES in the transport sector is also higher – estimated at 11.5%, which is 2.3% more than in 2024. However, the share of RES in the heating and cooling sector (31.8%) in 2025 is lower than that achieved in 2024. This is primarily due to lower use of wood for heating in households. It should be noted that, due to incomplete methodological data for 2025 in individual sectors, the uncertainty regarding the total share of RES is estimated at 0.6 percentage points.

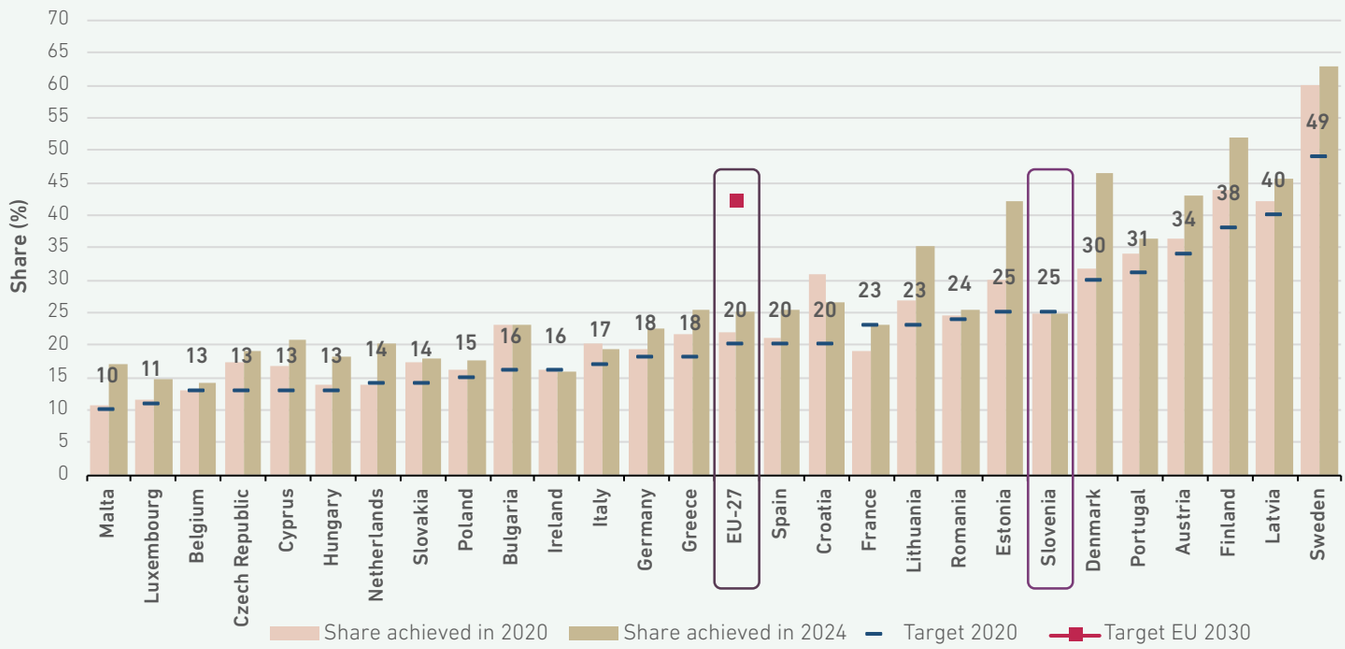
TABLE 9: SHARE OF RES IN GROSS FINAL ENERGY CONSUMPTION

								RES target share 25%						
	2005	**2010**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2030**
RES share (%)	Achieved												Estimate	Target share
Reached with own sources	19.8	21.1	22.9	22.0	21.7	21.4	22.0	24.1	24.6	22.9	25.1	24.6	25.4	
Statistical transfer								0.9	0.4	2.1	-	0.4	?	
RES share	**19.8**	**21.1**	**22.9**	**22.0**	**21.7**	**21.4**	**22.0**	**25.0**	**25.0**	**25.0**	**25.1**	**25.0**	**25.4**	**33.0**
RES – heating and cooling	26.4	29.5	36.2	35.6	34.6	32.3	32.1	32.1	35.2	34.0	34.3	33.7	31.8	45.2
RES – electricity	28.7	32.2	32.7	32.1	32.4	32.3	32.6	35.1	35.0	37.0	41.9	43.1	45.3	55.4
RES –transport	0.8	3.1	2.2	1.6	2.6	5.5	8.0	10.9	10.6	7.8	10.0	9.2	11.5	25.8

SOURCES: INSTITUT 'JOŽEF STEFAN', SURS (STATISTICAL OFFICE OF THE REPUBLIC OF SLOVENIA)

In 2024, the share of renewable energy sources in gross final energy consumption in the European Union reached 25.2%, representing an increase of 0.6 percentage points compared with 2023. Given the projected target share of 42.5% in 2030, very significant progress will be required in the coming years in developing the use of renewable energy across the EU as a whole. This means that, on average, the EU will have to increase the share of RES by approximately 2.9 percentage points each year until 2030. This will require the accelerated deployment of RES across all sectors, including electricity, heating and cooling, and transport. Incidentally, Sweden also achieved the highest share of RES among Member States in 2024, at 62.85%, followed by Finland at 52.1% and Denmark at 46.5%.

FIGURE 16: RES SHARES ACHIEVED BY EU COUNTRIES



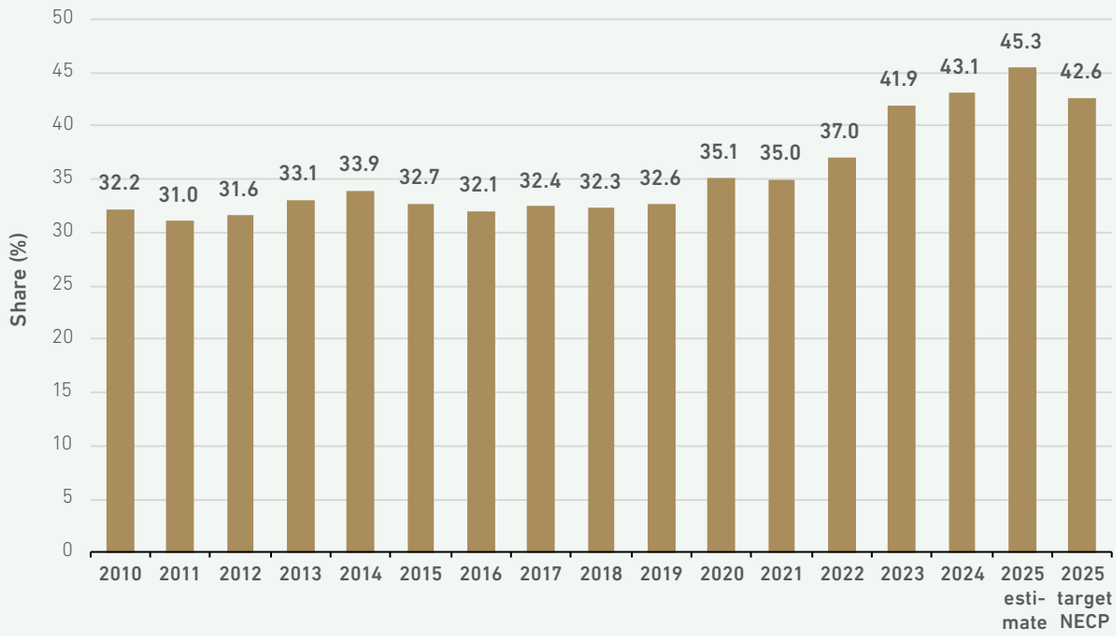
SOURCE: EUROSTAT

Share of Renewables in the Electricity Sector

The updated NECP The updated NEPN includes a commitment for Slovenia to achieve a share of at least 55.4% of renewable energy in the electricity sector by 2030. Looking back, the share of renewable energy in this sector stood at 32.2% in 2010 and 35.1% in 2020. In the years that followed, significant progress was made in the development of renewable energy, increasing the share of renewable energy to 43.1% in 2024. This meant that the sectoral target for 2024 set out in the NECP was exceeded by 2.4 percentage points. This increase was primarily driven by the intensive construction of solar power stations and favourable hydrological conditions.

The estimated share of RES in the electricity sector for 2025 stands at 45.3%, which exceeds the 2025 sectoral target set out in the NEPN by 2.7 percentage points.

FIGURE 17: RES SHARES IN THE ELECTRICITY SECTOR IN THE 2010–2024 PERIOD, AN ESTIMATE FOR 2025, AND 2025 TARGET FROM NECP

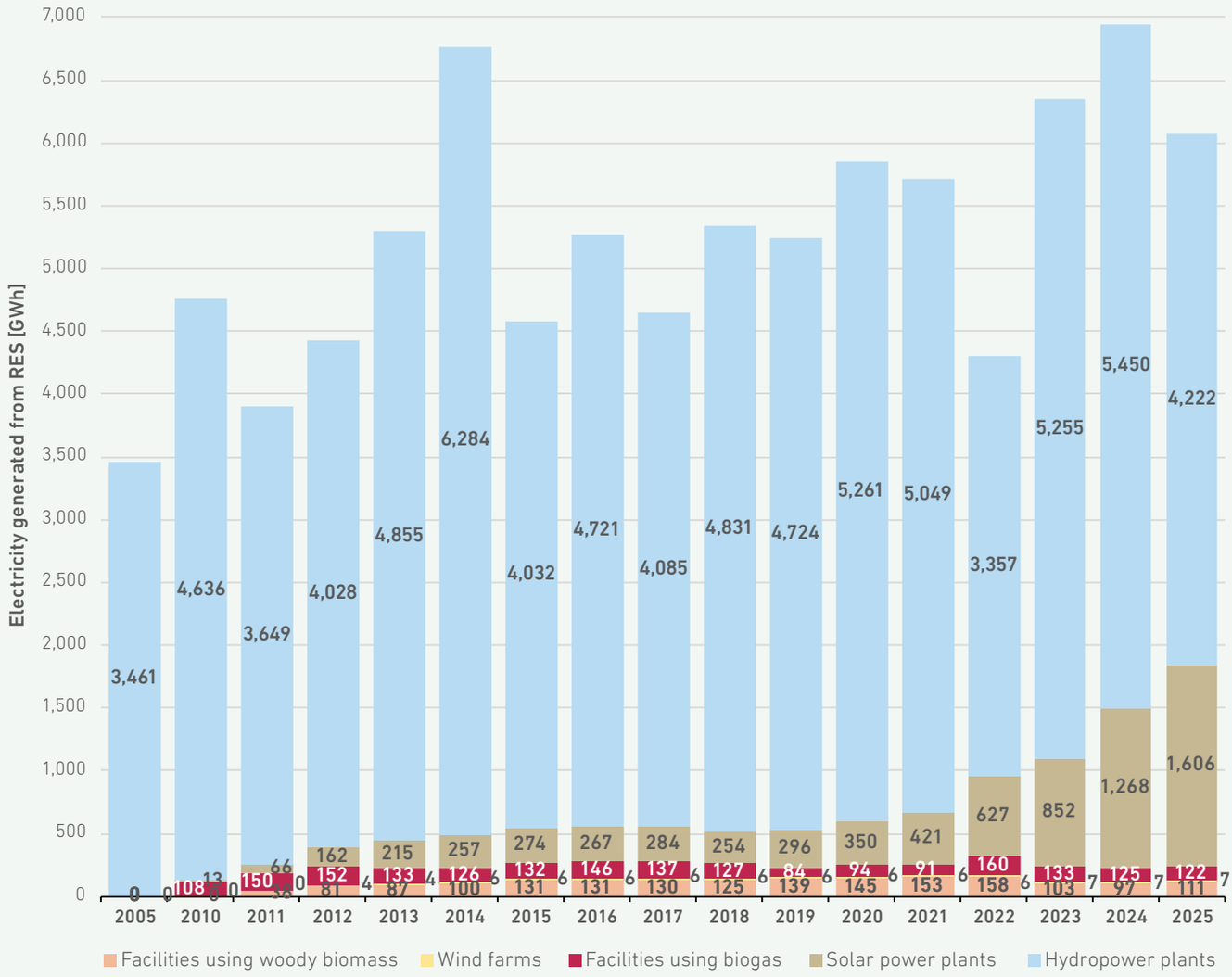


SOURCES: INSTITUT 'JOŽEF STEFAN', SURS

Production from Renewable Sources

Total electricity generation from renewable sources in Slovenia in 2025 amounted to 6,068 GWh, which is just under 13% less than in 2024, when it reached 6,947 GWh. This decline is primarily due to poorer hydrological conditions, as production at hydroelectric power stations in 2025 reached 4,222 GWh, whilst the previous year saw 5,450 GWh of electricity generated at these stations. On the other hand, 2025 saw a continuation of the rapid expansion of solar power generation, with electricity generation from solar power stations rising to 1,606 GWh, representing an increase of almost 27% compared with 2024, when it stood at 1,268 GWh. Generation from other renewable energy sources in 2025 did not differ significantly from that in 2024: biomass power stations generated 111 GWh in 2025 (compared with 97 GWh in 2024), biogas power stations recorded a slight decline to 122 GWh (125 GWh the previous year), whilst generation from wind farms remained unchanged at 7 GWh in both years.

FIGURE 18: ELECTRICITY GENERATION FROM RES IN THE 2005 BASE YEAR AND IN THE 2010–2025



SOURCES: ENERGY AGENCY, BORZEN, ELES, PRODUCERS, SURS

Measures to Promote Generation from Renewable Sources

Electricity generation from renewable energy sources plays a significant role in reducing greenhouse gas emissions and achieving sustainable development goals in the energy sector. For this reason, it is considered one of the priority areas of energy policy. EU Member States can promote the development of this form of generation through various measures and forms of financial incentives.

In Slovenia, a support scheme for electricity generation from RES and CHP was established in 2009, which includes a guaranteed purchase of the electricity generated or operational support, and which expired on 31 December 2025. In addition to the support scheme, investment incentives were also available.

End consumers with annual billing who connect generation facilities – most commonly solar power plants – directly to the internal electrical installations of buildings have also made a significant contribution to the development of RES generation. The highest number of connections of such installations was recorded in 2024, due to the expiry of the annual net metering scheme.

RES and CHP Support Scheme

The RES and CHP support scheme, which came into force in 2009, expired at the end of 2025. Electricity producers already participating in the support scheme will nevertheless be able to exhaust their entitlements within the allocated limits, likewise, investors who have successfully submitted project applications in response to public calls for proposals and hold valid project approval decisions will be able to benefit from the support entitlement arising from those project approval decisions.

EUR 1,7 billion in support payments for 13 TWh of electricity between 2009 and 2025

Between 2009 and 2025, a total of 1,795 million euros was paid out under the support scheme for renewable energy sources (RES) and small-scale thermal power plants (CHP). These funds supported a total of 13,015.7 GWh of electricity generated. The largest share of funding was allocated to solar power generation, namely 842.5 million euros, which resulted in the generation of 3,428.0 GWh of electricity. For electricity generated in fossil fuel-fired combined heat and power (CHP) plants, EUR 406.9 million in support was paid out for 4,770.3 GWh of energy. Funds paid out for electricity generated from biomass amounted to EUR 238.5 million, representing 1,559.6 GWh of electricity generated. Biogas received EUR 215.5 million for 1,732.3 GWh of electricity generated. A total of EUR 88.7 million was paid out for 1,471.6 GWh of electricity generated by hydroelectric power stations. The smallest amount of funding over the entire period was allocated to wind power generation, namely EUR 2.9 million for 53.9 GWh of electricity.

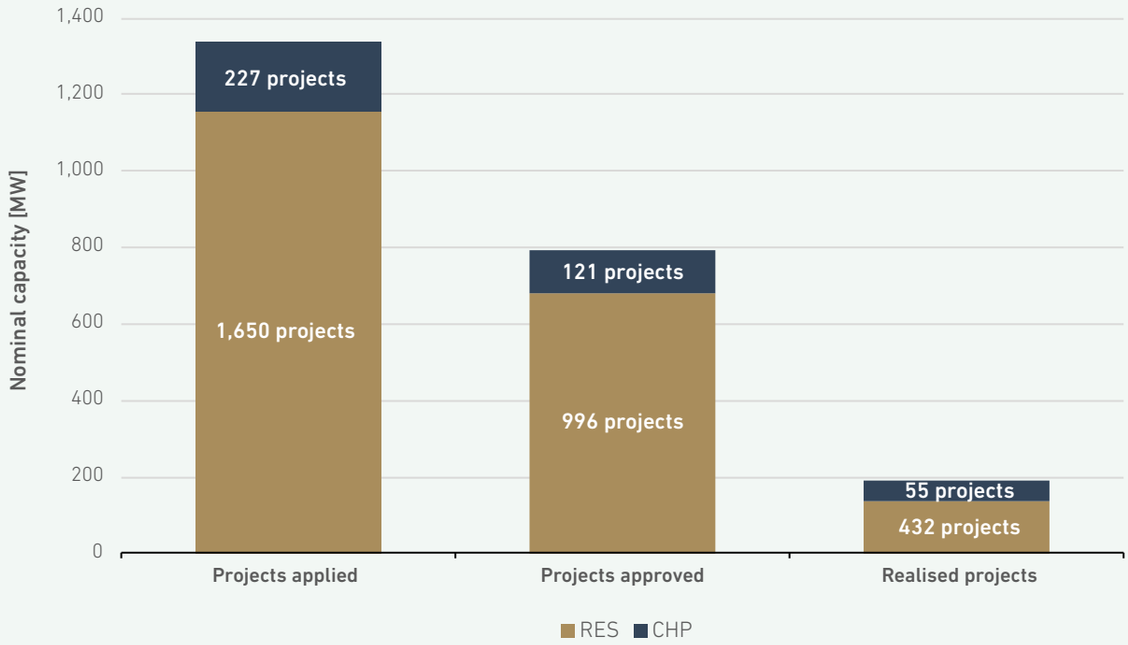
RES and CHP Generation Projects Under Public Calls

The Energy Agency published its latest public call under the RES and CHP support scheme in 2023 and closed it in 2024. Although the support scheme remains in force until the end of 2025, the state has not allocated any further funds for public calls since 2023, neither for 2024 nor for 2025. A total of 13 public calls for applications were conducted for projects involving renewable energy generation facilities and combined heat and power (CHP) plants to join the support scheme. A total of 1,877 projects with a combined rated electrical capacity of 1,335 MW were submitted across all public calls; the majority of these were RES installations (1,650 projects, 1,154 MW), followed by CHP (227 projects, 181 MW). A total of 1,117 projects with a combined rated capacity of 795 MW were selected – of these, 996 were RES projects with a capacity of 682 MW and 121 were CHP projects with a capacity of 113 MW. By the end of 2025, 487 projects with a total rated capacity of 188 MW had been completed, representing 43.6% of all selected projects and only 23.6% of the selected rated capacity.

Among the completed projects, solar power plants stand out in terms of both number and capacity, with 370 projects completed and a total capacity of 117.5 MW, representing 32.9% of all selected projects using this technology. A high implementation rate of selected projects was also achieved by refurbished hydroelectric power stations, with 39 projects (11 MW or 85.0%, respectively), and refurbished fossil-fuel-fired combined heat and power (CHP) plants, with 16 projects (35.5 MW or 77.0%, respectively).

However, applicants were completely unsuccessful in implementing the selected wind farm projects, as not a single project was completed. For the majority of wind farm projects, the period within which applicants were required to implement the projects in order to remain eligible for support has also expired.

FIGURE 19: NUMBER AND NOMINAL CAPACITY OF THE PROJECTS FOR RES AND CHP PRODUCTION FACILITIES THAT APPLIED AND WERE CONFIRMED AND CARRIED OUT IN ALL THE OPEN CALLS



SOURCE: ENERGY AGENCY

Generation Facilities Included in the RES and CHP Support Scheme, Their Total Installed Capacity and Electricity Generation

At the end of 2025, 2,986 generation facilities were included in the support scheme, representing a year-on-year decline of 11.29% or 380 fewer facilities compared with 2024. In terms of the number of units, solar power stations continue to dominate the scheme's technological structure, although their number fell from 3,108 in 2024 to 2,825 in 2025. There has also been a very marked decline in fossil fuel-fired CHP generation units, with the number falling from 137 in 2024 to just 54 in 2025.

A negative trend in net additions, albeit to a lesser extent, is also evident for biomass, biogas and hydroelectric power generation facilities. The key reason for the reduction in the number of generation units in the support scheme remains the expiry of the statutory eligibility period for receiving support, which is limited to 15 years for renewable energy installations and 10 years for CHP installations.

TABLE 10: NUMBER OF GENERATION FACILITIES IN THE SUPPORT SCHEME AND THE DYNAMICS OF THEIR INCLUSION IN THE 2010–2025

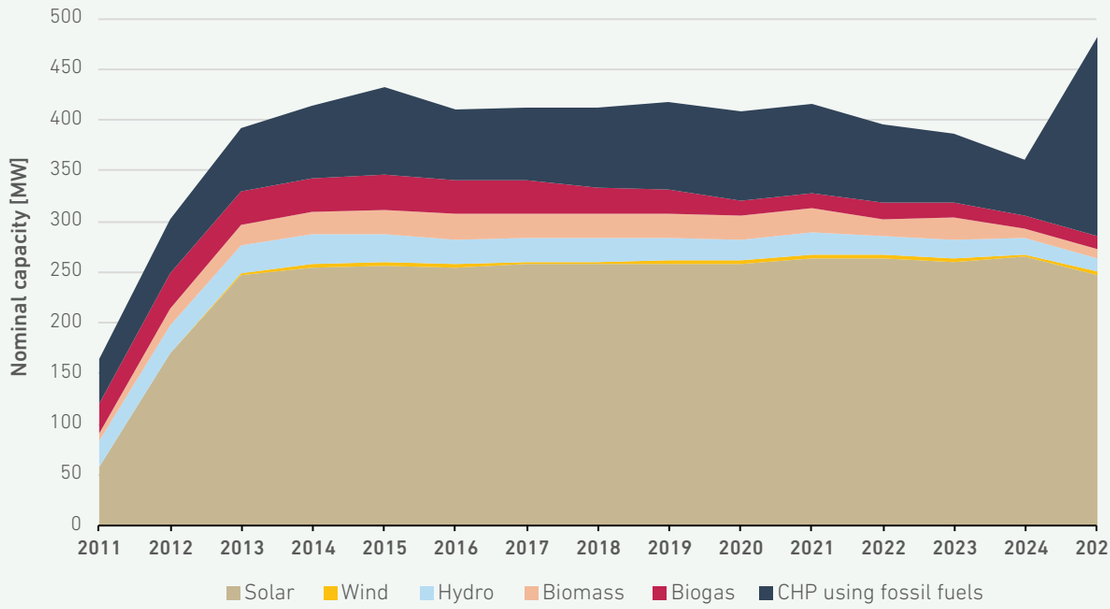
Source	Number of facilities included in the support scheme															
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Solar	381	975	2,406	3,218	3,319	3,339	3,323	3,312	3,301	3,304	3,297	3,286	3,245	3,170	3,108	2,825
Wind	3	4	3	5	4	9	7	7	6	4	4	3	2	2	2	2
Hydro	105	109	108	106	106	106	98	91	93	92	90	92	85	73	68	63
Biomass	0	3	5	10	19	43	44	43	44	46	40	40	38	54	33	26
Biogas	0	0	0	0	0	33	32	31	27	24	22	24	22	20	18	16
CHP using fossil fuels	0	0	0	0	0	390	384	380	388	388	386	366	326	241	137	54
Total	489	1,091	2,522	3,339	3,448	3,920	3,888	3,864	3,859	3,858	3,839	3,811	3,718	3,560	3,366	2,986

SOURCES: ENERGY AGENCY, BORZEN

However, the reduction in the number of generation units in 2025 did not have a proportionate impact on the trend in the total rated electrical capacity of plants under the support scheme. At the end of the year, the total rated electrical capacity of generation units included in the support scheme reached 481.8 MW, which is 120.2 MW more than in 2024, when this capacity stood at 361.6 MW. This is a result of a larger CHP generation facility joining the support scheme.

For the two most widely used RES technologies, the total rated capacity of generation facilities included in the support scheme also decreased in 2025 compared with the previous year. By the end of the year, there were fewer solar power plants included in the scheme, with the total rated capacity falling by 16.6 MW, from 264.7 MW to 248.1 MW; the total rated capacity of hydroelectric power stations fell from 16.6 MW to 12.3 MW, whilst for other renewable energy technologies, no significant changes in the total rated capacity of generation facilities under the support scheme were observed compared with 2024. Thus, at the end of 2025, the total rated capacity of biogas plants under the support scheme stood at 12.0 MW, that of biomass power stations at 9.5 MW, and that of wind farms at 3.2 MW.

FIGURE 20: THE TOTAL RATED ELECTRICAL CAPACITY OF THE GENERATION FACILITIES INCLUDED IN THE SUPPORT SCHEME IN THE 2011–2025 PERIOD

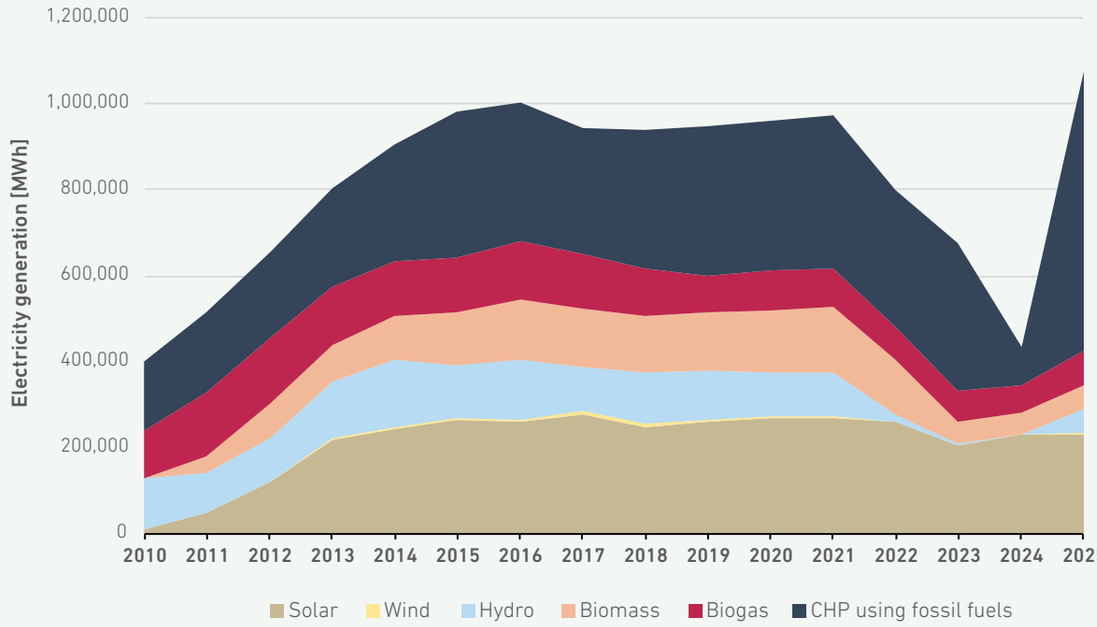


SOURCES: ENERGY AGENCY, BORZEN

In 2025, the downward trend in the amount of electricity for which support was paid under the support scheme reversed. The total amount of supported generation in 2025 stood at just 1,075 GWh, which is 642 GWh more than in 2024, when 433 GWh of electricity was generated under the support scheme for which support was paid to producers. One of the main reasons for this increase is the inclusion of a larger CHP production unit in the support scheme. In addition to this, another reason is the significantly lower reference price for electricity compared with 2024. In 2025, this stood at 79.42 EUR/MWh, whilst in 2024 it was 138.74 EUR/MWh.

Of the total 1,075 GWh of supported generation, 424.6 GWh was generated from RES and 650.4 GWh from CHP. Within RES, solar energy continues to dominate with 231.1 GWh, followed by biogas (78.2 GWh) and biomass (54.5 GWh), whilst support totalling 54.0 GWh was paid out in 2025 for electricity generated in hydroelectric power plants.

FIGURE 21: ELECTRICITY GENERATION ELIGIBLE FOR SUPPORT IN THE 2010–2025 PERIOD



SOURCES: ENERGY AGENCY, BORZEN

In 2025, support payments were made for a total of 1,075 GWh of electricity generated, representing 9.2% of the total electricity generated in Slovenia that year (11,655.9 GWh). In 2024, 432.9 GWh of generation was supported, accounting for 3.2% of total generation.

A similar trend is evident in the share of installed capacity of generation facilities included in the support scheme, relative to the total installed capacity of all generation units. Thus, in 2024, 361.6 MW was included in the support scheme, representing just 7.3% of the total installed capacity in Slovenia (4,972.3 MW). In 2025, the inclusion of a larger combined heat and power (CHP) generation unit also contributed to an increase in the share of installed capacity of generation units included in the support scheme relative to the total installed capacity, namely from 7.3% to 9.4% (481.8 MW).

TABLE 11: SHARE OF THE INSTALLED CAPACITY AND ELECTRICITY GENERATION INCLUDED IN THE SUPPORT SCHEME

Year	Installed capacity, included in the support scheme [MW]	Total installed capacity in Slovenia [MW]	Share of the installed capacity included in the support scheme	Electricity generated for which support is paid [GWh]	Total Slovenian electricity generation [GWh]	Share of the generated electricity included in the support scheme
2018	412.4	3,584.0	11.5%	937.9	12,578.8	7.5%
2019	417.1	3,617.7	11.5%	947.5	12,511.1	7.6%
2020	408.9	3,581.0	11.4%	962.2	13,220.7	7.3%
2021	415.3	3,783.5	11.0%	973.2	12,247.9	7.9%
2022	395.3	3,983.4	9.9%	800.8	10,203.3	7.8%
2023	386.5	4,446.6	8.7%	675.8	12,294.5	5.5%
2024	361.6	4,972.3	7.3%	432.9	13,371.0	3.2%
2025	481.8	5,117.4	9.4%	1,075.0	11,655.9	9.2%

SOURCES: ENERGY AGENCY, BORZEN

Support Paid Out – Support Scheme Costs

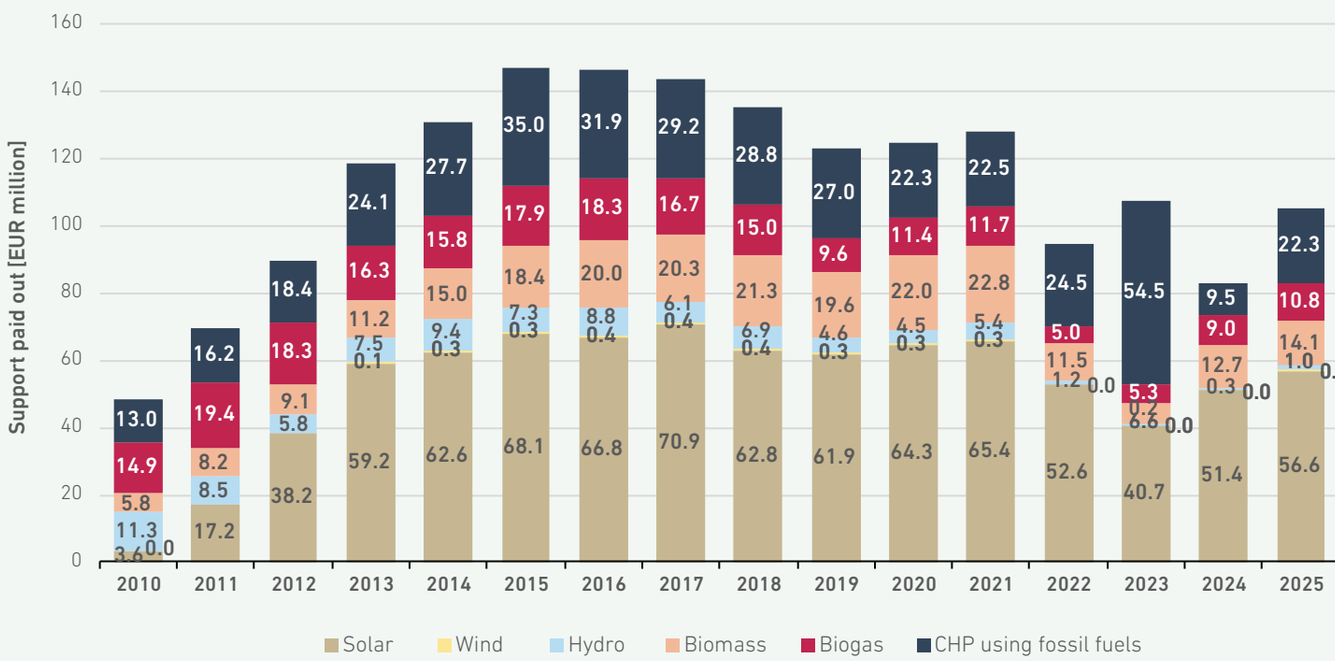
In 2025, EUR 105.07 million in support was paid to producers of electricity from RES and CHP, which is 26.7% more than in 2024, when EUR 82.96 million was paid out. This significant increase is due to a lower reference price for electricity, changes in the trend of market prices for electricity and gas, and the inclusion of a larger CHP generation unit in the support scheme.

A total of EUR 82.8 million was paid out for electricity from renewable energy sources; the largest share in 2025 was again for electricity generated from solar energy, amounting to EUR 56.6 million, which represents 53.9% of all support payments in 2025. This is EUR 5.2 million more than in 2024, when EUR 51.4 million was paid to producers for the same technology. This is followed by support payments for electricity generated from biomass, amounting to EUR 14.1 million (EUR 12.7 million in 2024). For electricity generated from biogas, EUR 10.8 million was paid out, which also represents an increase compared with the EUR 9.0 million paid out in 2024. Support payments for electricity generated in hydroelectric power stations rose to EUR 1 million (from EUR 0.3 million in 2024), whilst payments for wind energy were once again exceptionally low, amounting to just EUR 0.2 million.

EUR 105,07 million of paid support

Payments of support for electricity generated by SPTE also rose significantly in 2025, with EUR 9.5 million paid out in 2024 and as much as EUR 22.3 million in 2025. The main reason for this increase, as already mentioned, is the inclusion of a larger CHP unit in the support scheme.

FIGURE 22: VALUE OF SUPPORT PAY-OUTS IN THE 2010–2025 PERIOD



SOURCE: BORZEN

Self-consumption of Renewable Electricity

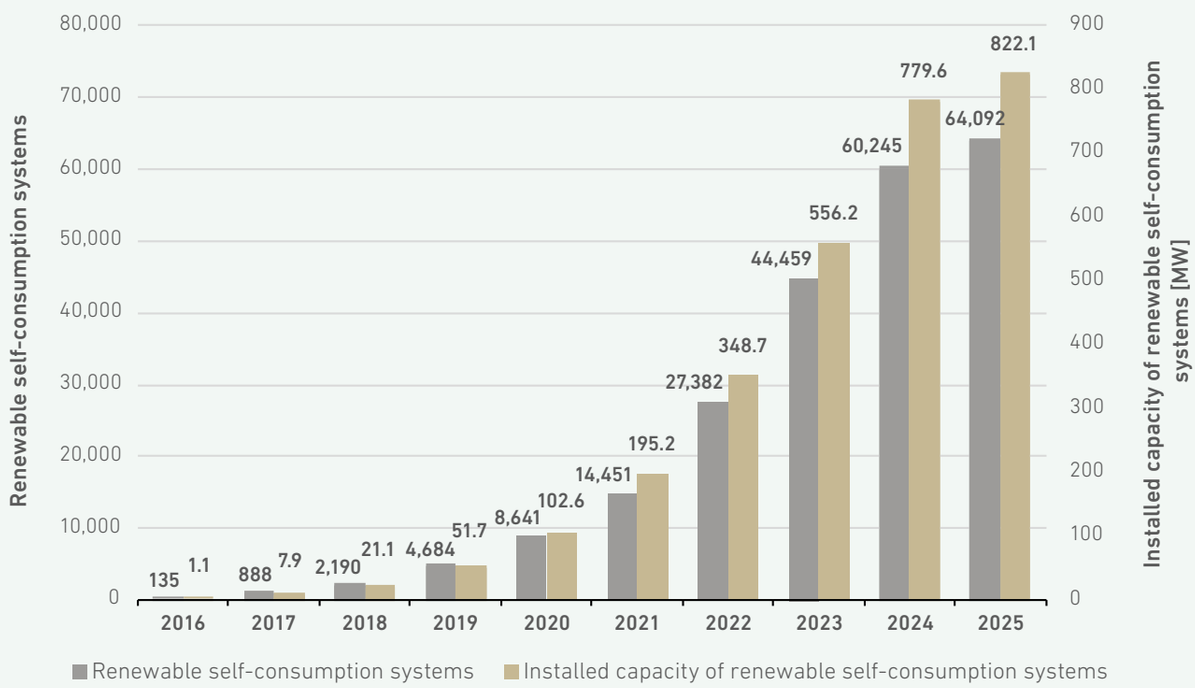
Self-consumption refers to the generation of electricity from renewable sources using a self-consumption facility connected to a building's internal low-voltage installation. It is intended to cover the end consumer's own electricity consumption, namely that of a household or small business. End consumers feed surplus generation into the distribution network and draw any shortfall in generation from the network at times when the self-consumption unit's output is insufficient. In this case, due to the mismatch between the output of the end consumer's self-consumption generation unit and their consumption, the distribution network acts as a virtual storage unit or battery.

The first year of self-consumption units being connected dates back 10 years, to 2016, when the first 135 self-consumption units were connected with a total connected capacity of 1.1 MW, whilst in 2025, 4,658 new units were connected with a total connected capacity of almost 57 MW. By 2025, 64,092 self-consumption installations were already in operation, with a total connected capacity of 822 MW and an average connected capacity of 12.8 kW. Alongside the rise in the number of consumers with self-consumption systems, the average capacity of these systems is also increasing; for example, in 2016, the average capacity of newly connected self-consumption installations was 8.1 kW. The increase in the capacity of these installations can be linked to the ever-increasing use of electricity for heating buildings with heat pumps and the use of own-generation electricity to charge electric vehicles at home.

In accordance with the legislation in force, which abolished the option of joining the system with annual netting of the quantities of electricity fed into and drawn from the grid, there were significantly fewer self-consumption installations connected in 2025, as only those installations for which an application for connection had been submitted by 31 December 2024 for existing generation facilities could still be included in this system.

Following the approval of applications for connection consent submitted after 1 January 2024, self-consumption installations may only be connected in accordance with the legislation in force, which no longer provides for the annual netting system. At the same time, the new legislation allows all other user groups to join the self-consumption system, meaning it is not limited solely to household and small business consumption.

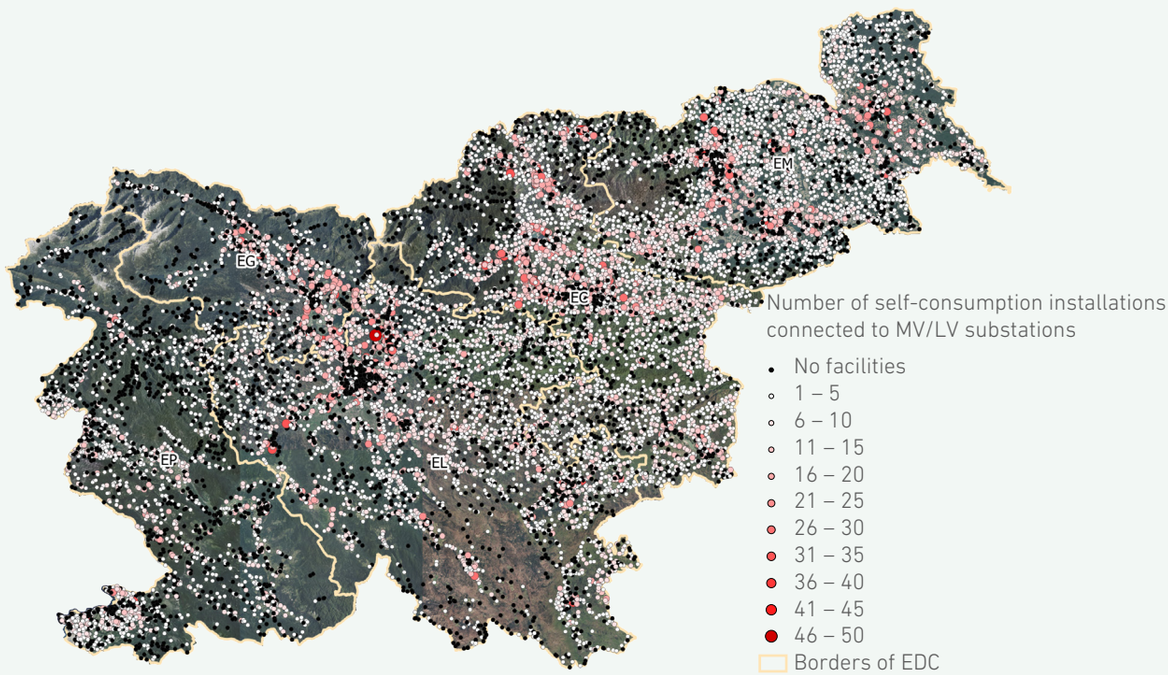
FIGURE 23: NUMBER AND INSTALLED CAPACITY OF RENEWABLE SELF-CONSUMPTION SYSTEMS IN THE 2016–2025 PERIOD



SOURCES: ENERGY AGENCY, ELES, ELECTRICITY DISTRIBUTION COMPANIES, BORZEN

Figure 24 shows the spatial distribution of the number of connected self-consumption generation facilities by individual MV/LV transformer stations across Slovenia. Despite the absence of detailed network topology, such representations are useful for a spatial overview of the penetration rate of self-consumption, the qualitative identification of areas with a higher concentration of connected generation facilities, and the assessment of regional differences in the rate of connection of self-consumption facilities. However, their actual impact on grid operation can only be properly assessed on the basis of more detailed analyses of operational conditions or analyses of time-dependent measurement data.

FIGURE 24: NUMBER OF INSTALLATIONS GENERATING RENEWABLE ELECTRICITY FOR SELF-CONSUMPTION CONNECTED TO MV/LV SUBSTATIONS



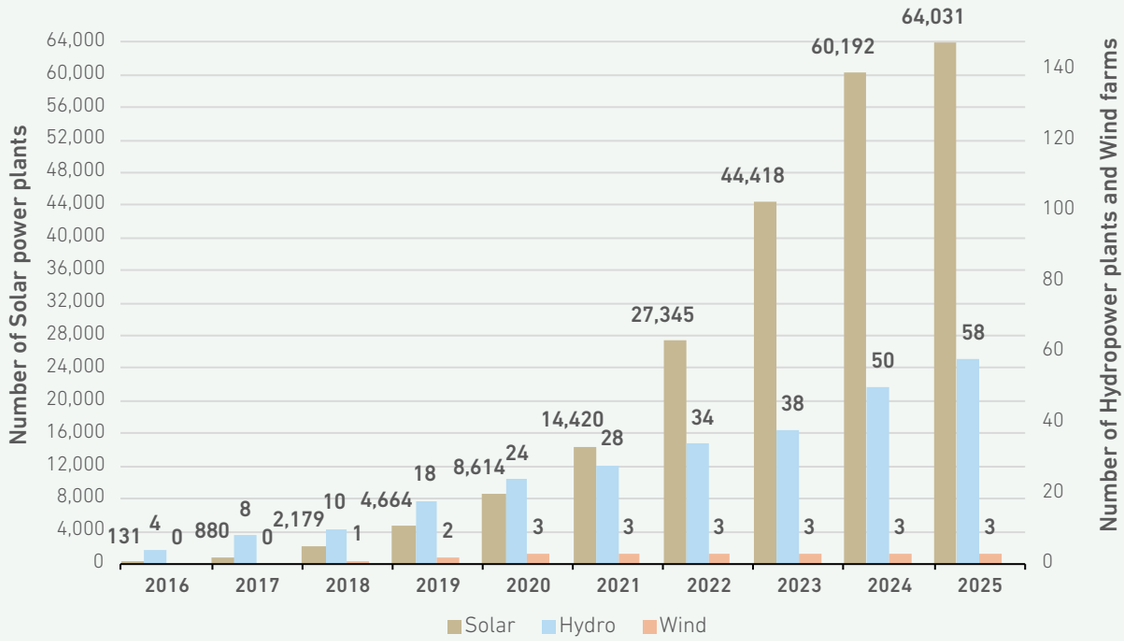
SOURCES: ENERGY AGENCY, ELECTRICITY SYSTEM OPERATORS

In accordance with the legislation, a self-consumption installation may generate electricity using solar, wind, hydro or geothermal energy; it may also be a combined heat and power (CHP) installation that uses renewable energy sources as its primary source. In practice, solar power plants predominate by a large margin (64,031 installations), whilst there are barely 58 installations using hydropower, and only three using wind power.

Among the existing self-consumption installations, there are as yet no installations using geothermal energy as a source, nor are there any CHP installations using renewable sources as their primary source.

In recent years, the number of connections of generation installations for community self-consumption has also increased. The first community self-consumption installation, with a capacity of 14 kW, was connected in 2019. A year later, four such plants with a total connected capacity of 86 kW had already been connected; in 2021, 25 plants with a total connected capacity of 1,100 kW; in 2022, 29 systems with a total connected capacity of 2,000 kW; in 2023, 122 systems with a total connected capacity of 5,000 kW; in 2024, a further 110 units with a total connected capacity of 5,500 kW were connected, whilst in 2025, 127 units with a total connected capacity of 7,700 kW were connected. By the end of 2025, 418 community self-consumption installations with a total connected capacity of 21,500 kW were already in operation.

FIGURE 25: NUMBER OF RENEWABLE SELF-CONSUMPTION SYSTEMS IN THE 2016–2025 PERIOD BY GENERATION SOURCES

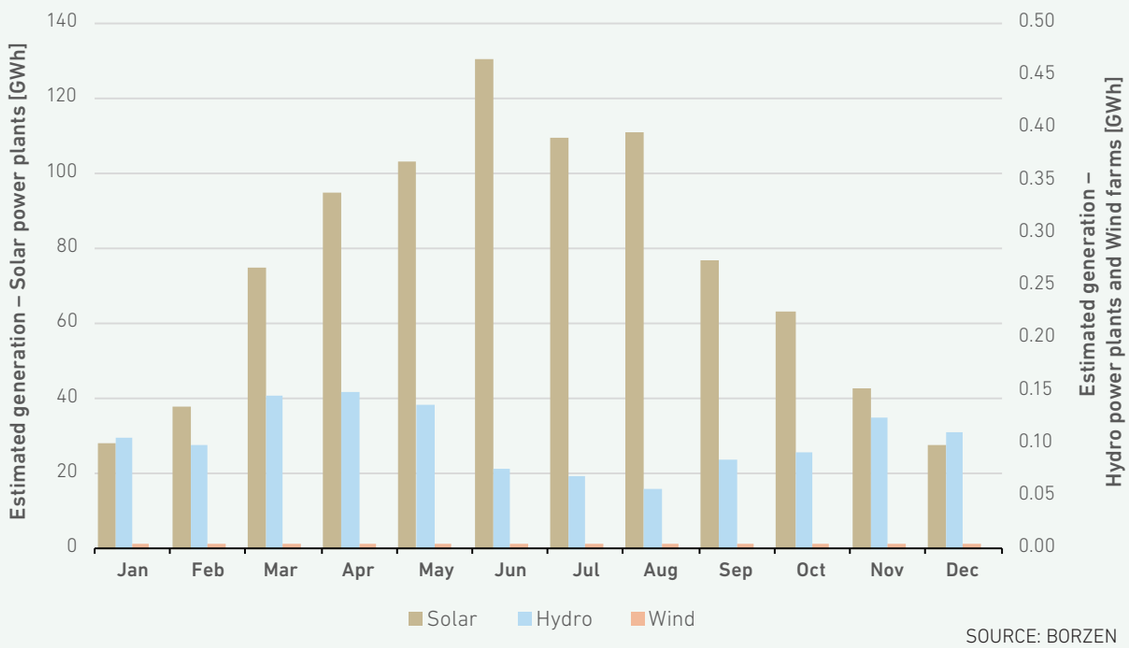


SOURCES: ENERGY AGENCY, ELES, ELECTRICITY DISTRIBUTION COMPANIES, BORZEN

The annual amount of electricity generated by self-consumption installations connected to the end consumer's delivery point can only be estimated, due to the method of metering and the annual netting of the quantities of electricity generated and consumed. This estimate depends on the type of generation installations, their connected capacity and the reference monthly operating hours during which the generation installations may operate.

As much as 99.8% of all self-consumption installations are solar power plants; consequently, the estimated amount of electricity generated depends heavily on the time of year, as well as on geographical and weather factors. In 2016, the estimated amount of electricity generated by self-consumption installations was just 0.6 GWh, whereas by 2025 it is projected to reach 900.4 GWh.

FIGURE 26: ESTIMATED ELECTRICITY GENERATION FROM SELF-CONSUMPTION SYSTEMS IN 2025 BY MONTH AND TECHNOLOGY



SOURCE: BORZEN

Regulation of Network Activities

Unbundling of Activities

Electricity transmission and distribution companies are required to maintain separate accounts for each of their transmission and distribution activities, as would be the case if separate undertakings were to carry out the distribution and transmission activities.

ELES is the operator of the combined system and, in 2025, performed the activities of a public utility service of transmission and distribution system operator. In addition to its utility activities, ELES carries out non-electricity activities. Within its non-electricity activities, ELES also began in 2024 to undertake an initiative under the Act on infrastructure for alternative fuels and the promotion of the transition to alternative fuels in transport, supporting the development of e-mobility (source: ELES unaudited Annual Report). ELES discloses in its Annual Report separate financial statements for these activities, as well as the criteria for allocating assets and liabilities, costs, expenses, and income, which are taken into account in the preparation of the separate accounts and financial statements. ELES also discloses in its Annual Report the separate financial statements for these activities, as well as the criteria for allocating assets and liabilities, costs, expenses, and income.

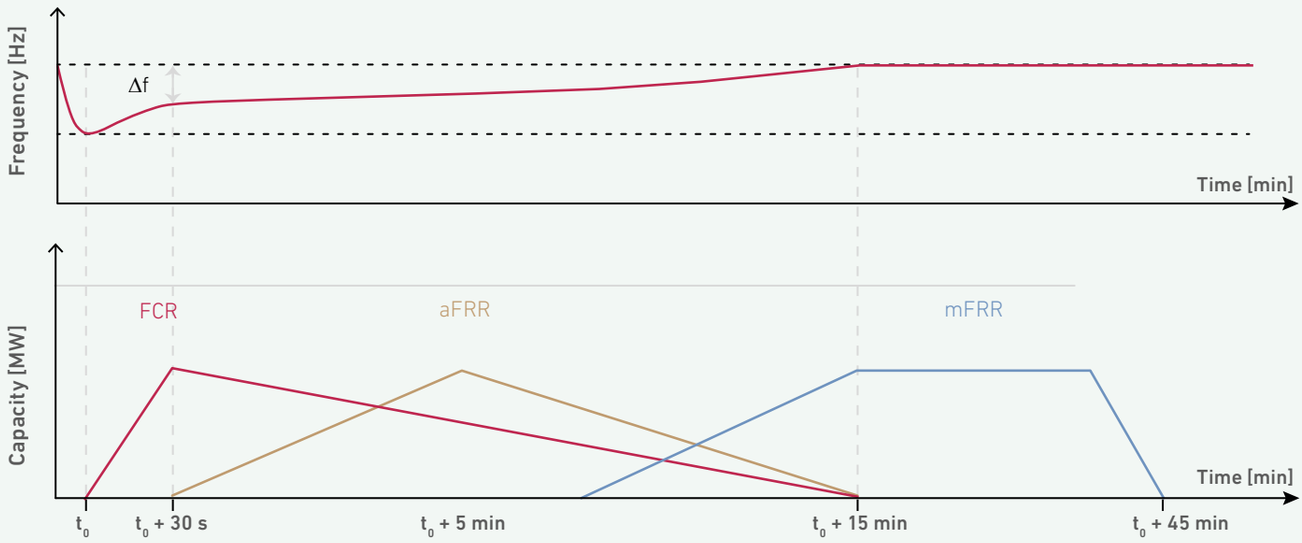
Based on the approval of the Government of the Republic of Slovenia (the Government), SODO–and, since the merger, ELES–delegated the public service activities provided by the DSO to distribution companies. The distribution companies engage in other non-electricity-related activities in addition to the activity contractually delegated to them by the provider of public service activities of the DSO. Therefore, the distribution companies maintain separate accounting records in their books and prepare separate financial statements for the activity contractually delegated to them by the provider of public service activities of the DSO, as well as for their non-electricity-related activities. In their annual reports, distribution companies disclose separate financial statements for these activities, as well as the criteria for allocating assets and liabilities, costs, expenses, and revenues used in the preparation of separate accounting records and financial statements.

Technical Services by the Operators

Ancillary Services

In the event of a significant fluctuation in the operating frequency (50 Hz), which may occur due to an unexpected outage of a generation unit, a significant increase in load, or other unforeseeable changes in the transmission network, or the influence of neighbouring transmission networks (the ENTSO-E network) (Figure 27), each transmission system operator within the control area takes action using its primary control, which is available almost immediately. The amount of system services contributed by individual transmission system operators is determined by voluntary agreement and calculated on the basis of the relevant generation volumes using a jointly agreed formula.

FIGURE 27: RESERVE ACTIVATION PROCEDURES



SOURCE: ENERGY AGENCY

The system services that the transmission system operator must provide to facilitate the normal operation of the entire electricity system are divided into:

- frequency containment reserve (FCR),
- automatically activated frequency restoration reserve (aFRR),
- manual frequency restoration process (mFRR),
- voltage and reactive power control and
- provision of a black start.

The transmission system operator purchases all system services from market providers, and the costs of providing these services are financed from the network charge for the transmission system.

Ancillary services are divided into frequency-related services, which include FCR, aFRR and mFRR, and non-frequency-related services, which include voltage and reactive power control, as well as the start-up of generators without an external power source (a black start). Frequency system services are a type of balancing service within the electricity system and include processes for maintaining frequency and processes for restoring frequency through automatic and manual activation. The required scope of frequency system services can be assessed by the amount of reserve capacity, expressed in MW, while for non-frequency system services, the key factor is the appropriate geographical distribution of their providers across the entire transmission system area.

ELES has set the following level of reserve capacity for frequency system services for 2025:

- FCR: ±14 MW,
- aFRR: +60 MW, –60 MW,
- mFRR: +190 MW, –66 MW.

The projected volume of frequency system services for 2025 was the same as in previous years in the area of automatic frequency maintenance and activation, while the requirement for manual activation increased, primarily due to changes in the system caused by renewable energy sources, and the operating agreement of the SHB control block (Slovenia, Croatia and Bosnia and Herzegovina), which sets out how reserves are to be allocated among the partners.

In the area of frequency system services, the provisions of European legislation were implemented in 2025, as in the previous year, in particular the Network Code on System Operation (Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on the operation of the electricity transmission system), the Network Code on Emergency and Restart Procedures (Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity supply emergencies and restoration of supply) and the provisions of the SAFA Agreement. The requirements set out in the network codes stipulate that services must be procured for the shortest possible period, with aFRR and mFRR procure-

ments to be carried out separately for positive and negative balancing directions; a further requirement stipulates that the procurement of balancing power must be separate from the purchase of balancing energy. In 2025, ELES selected aFRR and mFRR service providers locally via the Balancing System platform, while the FCR providers were selected via the international FCR Cooperation platform, in which it has been participating since 2021.

Quality of Supply

Continuity of Supply

Data on supply continuity are collected, reported and analysed on the basis of a uniform methodology. This ensures the comparability of supply quality data between individual distribution companies, as well as the international comparability of the achieved supply continuity parameters with other EU countries.

Outages caused by the fault of electricity operators or distribution companies are classified as internal causes, whilst outages caused by the fault of a third party are classified as external causes. In the case of unexpected or unforeseen events that are not attributable to the fault of the electricity operator, distribution companies or third parties, outages may be classified as force majeure depending on the cause.

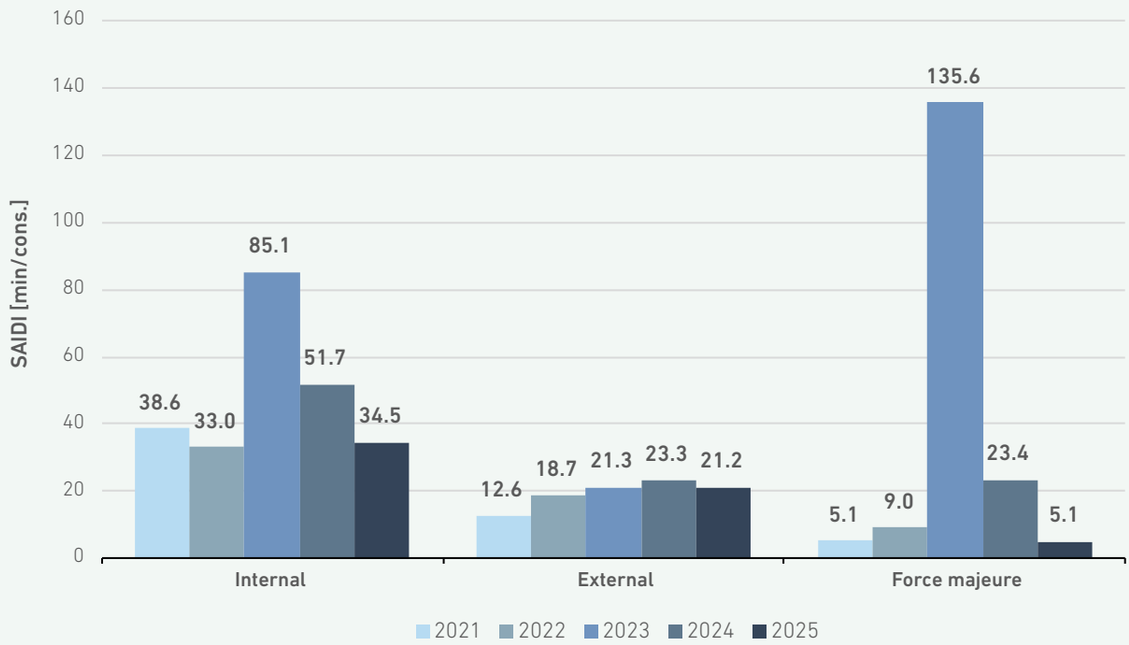
In 2025, consumers were without supply for an average of 187 minutes due to all outages

The Energy Agency calculated the aggregated values of the SAIDI and SAIFI parameters, based on data calculated at the level of individual distribution companies, relative to the total number of consumers in Slovenia. Monitoring of the SAIDI and SAIFI parameters over the period under review indicates a gradual improvement in the quality of supply. In 2025, the electricity supply to each customer was interrupted on average 2.2 times, with a total duration of 187.2 minutes.

The Energy Agency also monitors the MAIFI parameter for short-duration interruptions, which is calculated in a similar way to the SAIFI parameter but is based on the number of short-duration interruptions lasting less than three minutes, without distinguishing between their causes. The value of the MAIFI parameter has shown some volatility in recent years.

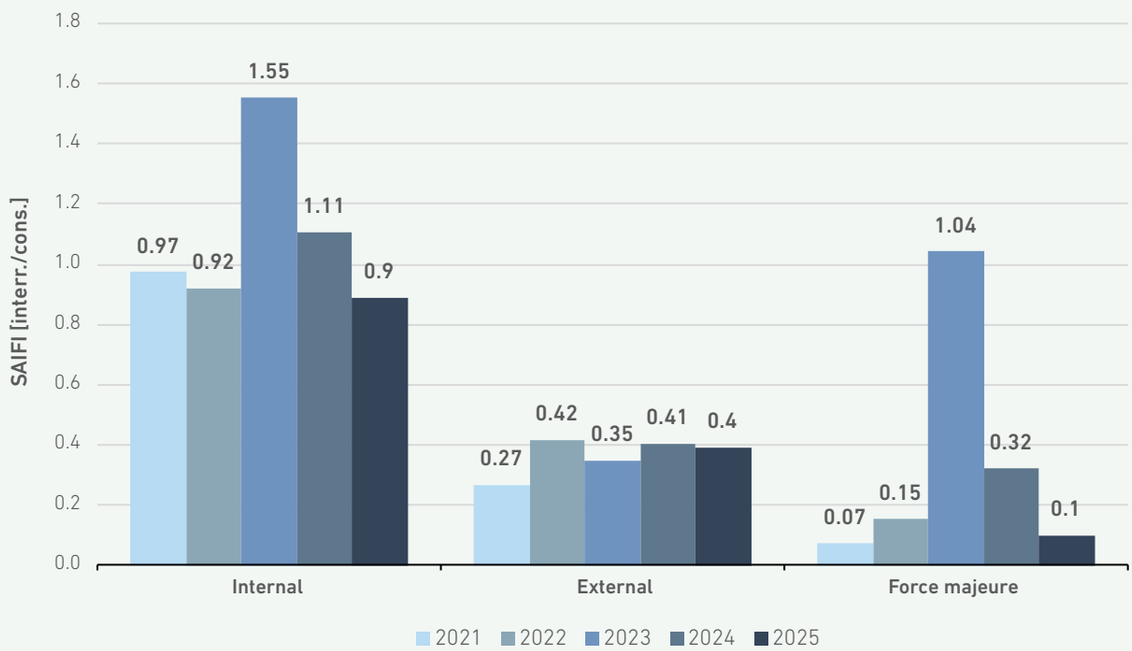
Figures 28 and 29 show the values of the SAIDI and SAIFI parameters for the period 2021–2025 for unplanned long-term interruptions, broken down by cause into internal causes, external causes and force majeure, while Figure 30 shows the MAIFI for the same period. All parameters are calculated at the national level.

FIGURE 28: SAIDI FOR UNPLANNED LONG-TERM INTERRUPTIONS, CLASSIFIED BY CAUSES, IN THE 2021–2025 PERIOD



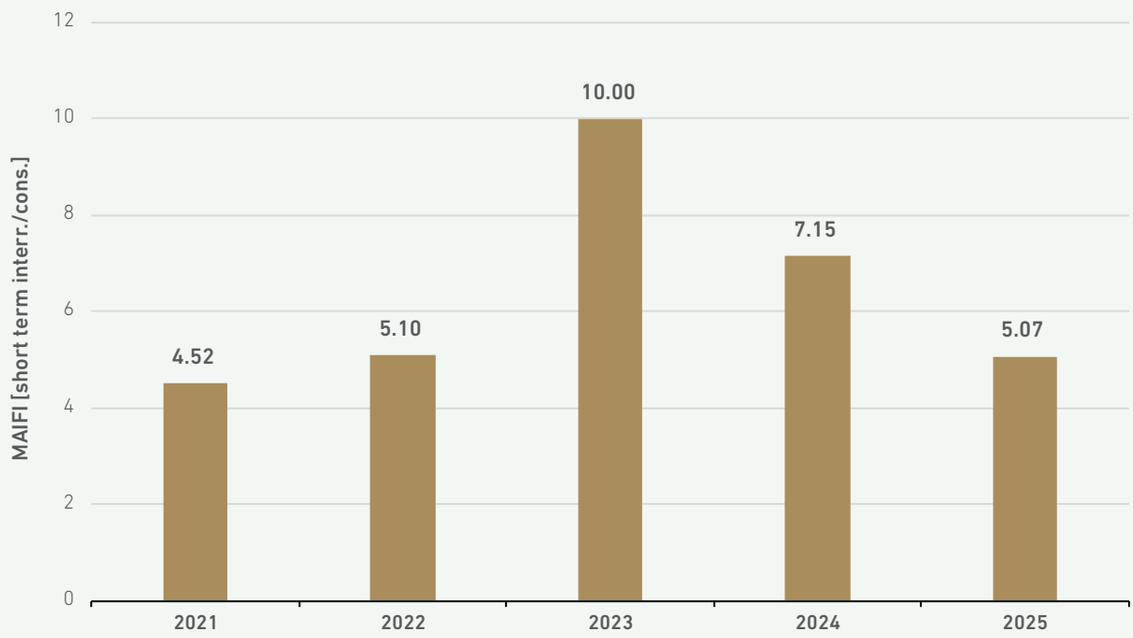
SOURCE: ENERGY AGENCY

FIGURE 29: SAIFI FOR UNPLANNED LONG-TERM INTERRUPTIONS, CLASSIFIED BY CAUSES, IN THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

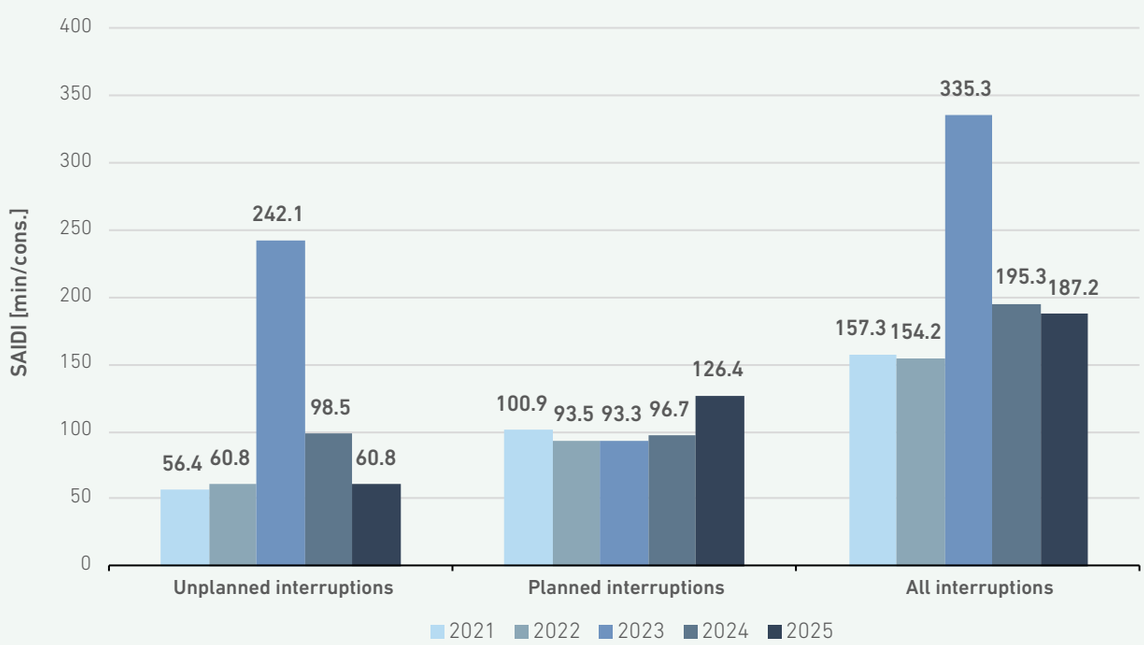
FIGURE 30: MAIFI IN THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

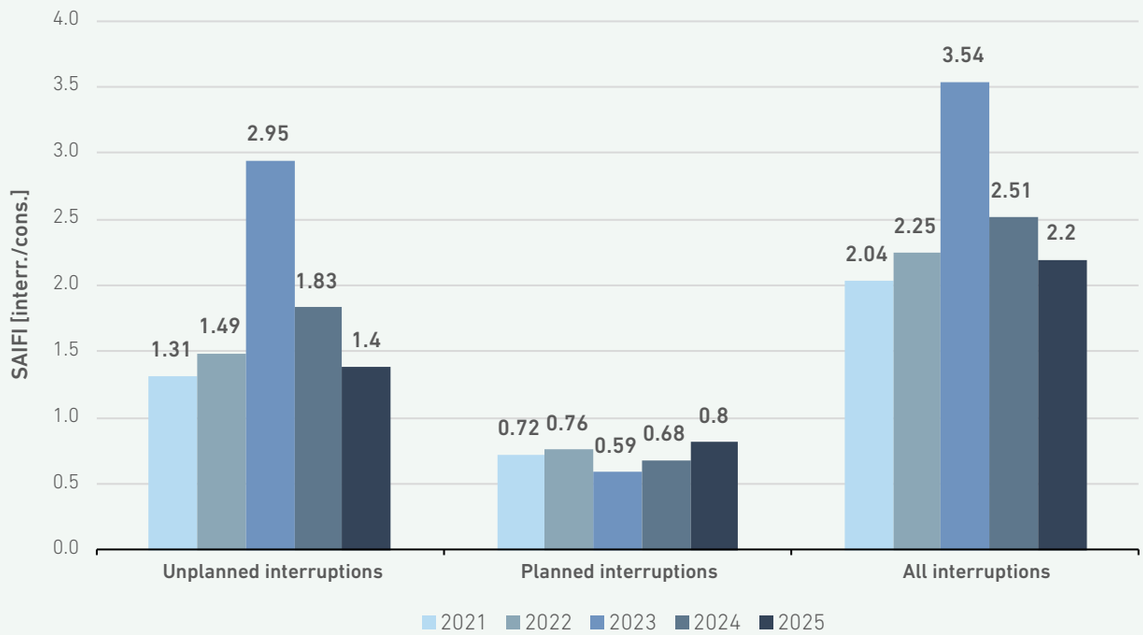
Figures 31 and 32 show the aggregate values of the SAIDI and SAIFI parameters for the period 2021–2025 for unplanned, planned and all outages in Slovenia.

FIGURE 31: SAIDI FOR ALL LONG-TERM INTERRUPTIONS, CLASSIFIED BY CAUSES, IN THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

FIGURE 32: SAIFI FOR ALL LONG-TERM INTERRUPTIONS, CLASSIFIED BY CAUSES, IN THE 2021–2025 PERIOD

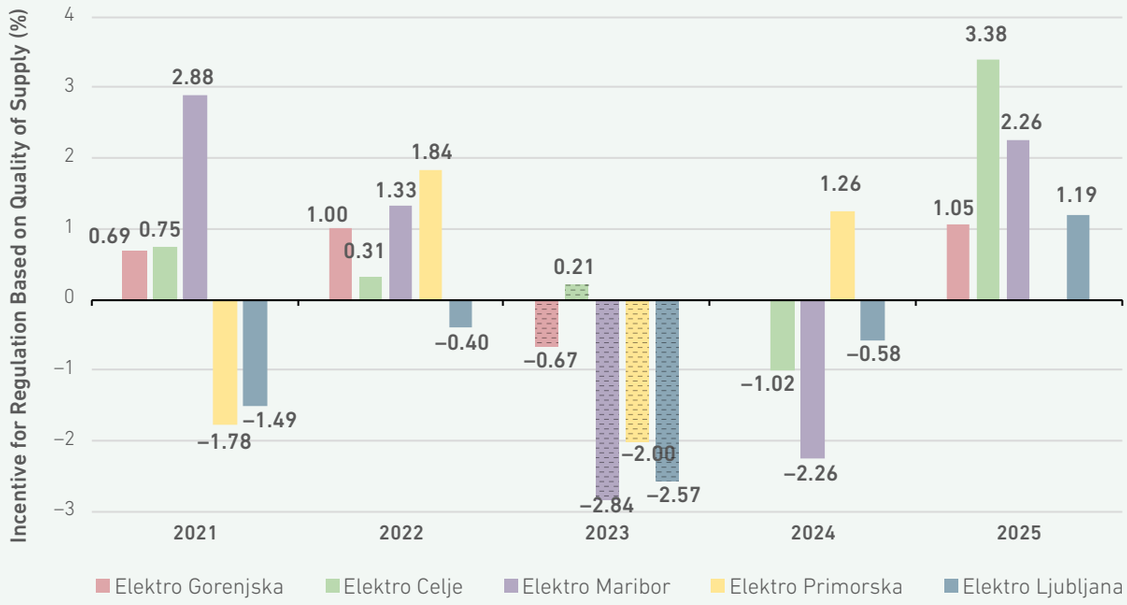


SOURCE: ENERGY AGENCY

The Energy Agency carries out economic regulation of supply quality by using a reward-and-penalty scheme based on the functional link between continuity of supply and the distribution operator's eligible costs, specifically for individual distribution companies, based on the values of the SAIDI and SAIFI power supply continuity system parameters, which reflect unplanned prolonged outages resulting from the companies' own causes. Through supply quality regulation, the Energy Agency encourages investment in system development that yields the greatest benefits and ensures the rational management, operation and maintenance of the system. The impact, in the form of incentives for better quality or penalties for poorer quality for each year of the regulatory period, is calculated on the basis of the achieved system parameters for power supply continuity, specifically on the basis of the eligibility factor q, which represents the proportion of recognised controlled operating and maintenance costs, capped at +4.5% and –3%, and the value of electricity infrastructure equipment and replacement parts commissioned for use in that year.

Figure 33 shows the incentive for supply quality regulation for electricity distribution companies for the period 2021–2025.

FIGURE 33: INCENTIVE FOR REGULATION BASED ON QUALITY OF SUPPLY IN THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

Due to the exceptional circumstances in 2023, when distribution companies were, quite justifiably, unable for an extended period to ensure adequate levels of efficiency in their supply quality control processes and, consequently, the required quality and integrity of the supply quality data provided, the Energy Agency, on the basis of the act governing the methodology for determining the regulatory framework, exempted the year 2023 from supply quality regulation.

In 2025, the Energy Agency continued to monitor data on power supply continuity at the ZDS as well. The CDSs are characterised by a relatively low recorded number of outages, which is a result of the methodology used to monitor the continuity of the electricity supply, under which outages are recorded at the medium-voltage feed-in point. Consequently, in 2025, the CDSs did not handle any user complaints regarding power supply continuity, and only the Jesenice CDS recorded a higher number of power cuts.

Commercial Quality

The required level of commercial quality is determined by the system-wide and guaranteed commercial quality standards. A breach of the guaranteed commercial quality standards set by the Energy Agency may have financial consequences for the provider of a particular service in the form of compensation payable to the user in respect of whom the breach was established. Users can draw conclusions about the expected quality on the basis of the values of the system standards, as these reflect the average level of service quality or the proportion of all system users who are guaranteed the required level of service quality.

In 2025, 12 compensation payments were made to users due to breaches of the guaranteed standard for the time required to rectify supply voltage deviations. Based on the three-year trend in the values of commercial quality parameters, we note that the level of commercial quality is improving slightly.

The level of commercial services quality in the area of connection is improving slightly

Table 12 shows the ranges (minimum and maximum values) of commercial quality parameters for the period 2023–2025.

TABLE 12: RANGE OF THE COMMERCIAL QUALITY INDICATORS IN THE 2023–2025 PERIOD

Commercial quality parameters	2023		2024		2025	
	Min.	Max.	Min.	Max.	Min.	Max.
Connection-related services						
Average time to issue an approval for connection (days)	21.2	68.1	22.1	62.8	15.3	59.7
Average time to issue a cost estimate or pro forma invoice for simple works (days)	2.4	7.2	2.8	6.6	3.1	8.8
Average time to issue a contract for connection to the LV system (days)	4.3	12.5	3.4	10.9	0	22.3
Average time to activate a connection to the system (days)	2.5	19.3	2.4	32.1	2.5	25.2
Customer service						
Average response time to consumers' written questions, complaints, or enquiries (days)	0.5	5.2	1.9	6.4	2.6	5.6
Average hold time in the call centre (s)	5.0	107.8	7.0	150.2	14.0	120.6
Call centre performance indicator (%)	86.8	90.8	74.0	93.1	85.5	94.2
Technical services						
Average time to restore supply following a failure of a current limiting device (06:00 - 22:00)	0.8	2.0	0.8	2.6	0.8	2.2
Average time to restore supply following a failure of a current limiting device (22:00 - 06:00)	1.4	2.1	0.8	2.5	0.7	1.8
Average response time to voltage quality complaints (days)	11.9	27.6	9.9	28.7	14.5	26.3
Average time to resolve voltage quality inconsistencies (months)	0.2	32.5	0.4	23.0	0.0	15.0
Metering and billing						
Average time to remedy meter failures (days)	1.1	20.5	2.9	9.1	1.1	7.4
Average time to restore supply following disconnection due to non-payment (hours)	0.1	0.3	0.1	0.2	0.1	1.2

SOURCE: ENERGY AGENCY

With regard to commercial quality, data on user complaints are also collected on the basis of a standardised procedure. The most common reasons for complaints are delays in issuing connection authorisations, which are mostly related to the connection of self-supply devices (a figure that has been falling since 2023), and exceeding the maximum time limit for resolving power supply voltage deviations; both of these were already the most common reasons for complaints in the past. While the total number of complaints has fallen, the share of justified complaints decreased in 2025 compared with 2024. Data on complaints regarding commercial quality for the period 2023–2025 are summarised in Table 13.

The overall share of valid complaints decreased in 2025 compared with 2024

TABLE 13: NUMBER AND SHARES OF JUSTIFIED COMMERCIAL QUALITY COMPLAINTS IN THE 2023–2025 PERIOD

Reason for complaint	Total number of complaints			Number of justified complaints			Share of justified complaints		
	2023	2024	2025	2023	2024	2025	2023	2024	2025
Connection activations									
Exceeding the time to activate the connection to the system	6	2	11	5	2	11	83.3%	100%	100%
Inadvertent disconnection due to an error by the maintenance crew	1	4	4	1	3	3	100%	75%	75%
Quality of supply									
Exceeding the maximum time to resolve voltage quality deviations	25	26	16	21	12	12	84%	46.15%	75%
Exceeding the time limit to respond to a voltage quality complaint	3	1	2	3	1	1	100%	100%	50%
Exceeding the maximum permitted duration and number of unplanned long-term interruptions (applies only to end- consumers on the MV system)	0	0	0	0	0	0	-	-	-
Metering									
Delay in repairing a meter malfunction	16	2	4	0	0	3	0%	0%	75%
Billing, invoicing and debt collection									
Delay in responding to consumers' written questions, complaints, or enquiries	19	28	14	7	11	8	36.8%	39.29%	57.14%
Connection-related services									
Delay in issuing a connection approval	531	398	201	83	232	93	15.6%	100%	46.27%
Customer services									
Failure to notify consumers about a planned interruption in time	5	20	17	0	2	0	0%	10%	0%
TOTAL	**606**	**481**	**269**	**120**	**263**	**131**	**19.8%**	**54.3%**	**48.7%**

SOURCE: ENERGY AGENCY

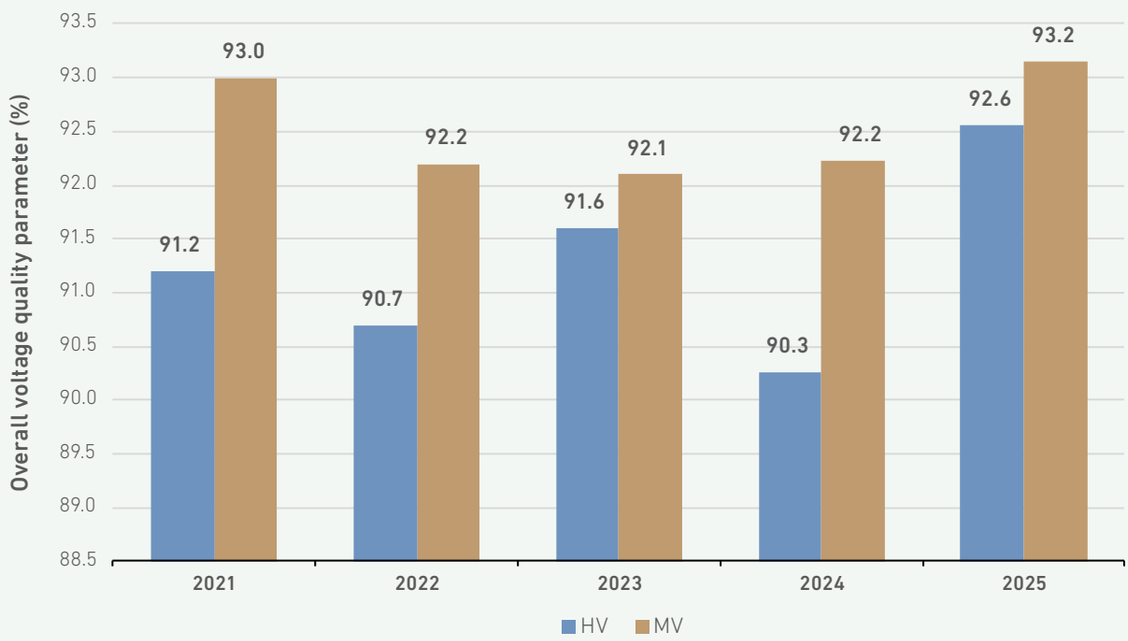
In 2025, CDSs continued to monitor the quality of service in the area of commercial quality. Owing to the greater rigidity of the systems and the relatively small number of users, CDSs did not receive any user complaints regarding commercial quality that year.

Voltage Quality

The electricity operator and distribution companies must carry out continuous monitoring at the boundary between the transmission and distribution systems and at the delivery and collection points of major consumers, whilst periodic monitoring is carried out in accordance with a pre-determined schedule. When dealing with a consumer's complaint, voltage quality monitoring is carried out for a period of at least one week. Voltage quality monitoring is also carried out prior to the connection of a new consumer as part of the connection approval process.

On the basis of continuous voltage quality monitoring, an aggregate voltage quality status parameter is calculated, reflecting the proportion of weeks in a calendar year during which the voltage quality parameters comply with the requirements of the technical standard. Figure 34 shows the overall voltage quality status parameter for the period 2021–2025.

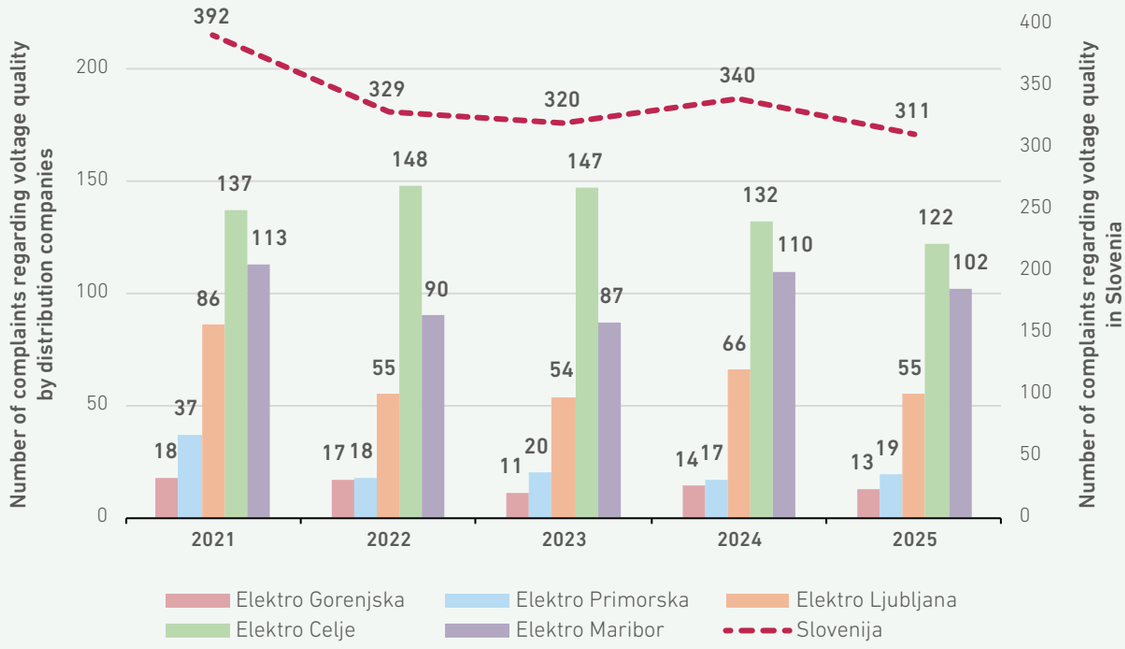
FIGURE 34: THE OVERALL VOLTAGE QUALITY PARAMETER BY INDIVIDUAL VOLTAGE LEVEL IN THE DISTRIBUTION SYSTEM OVER THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

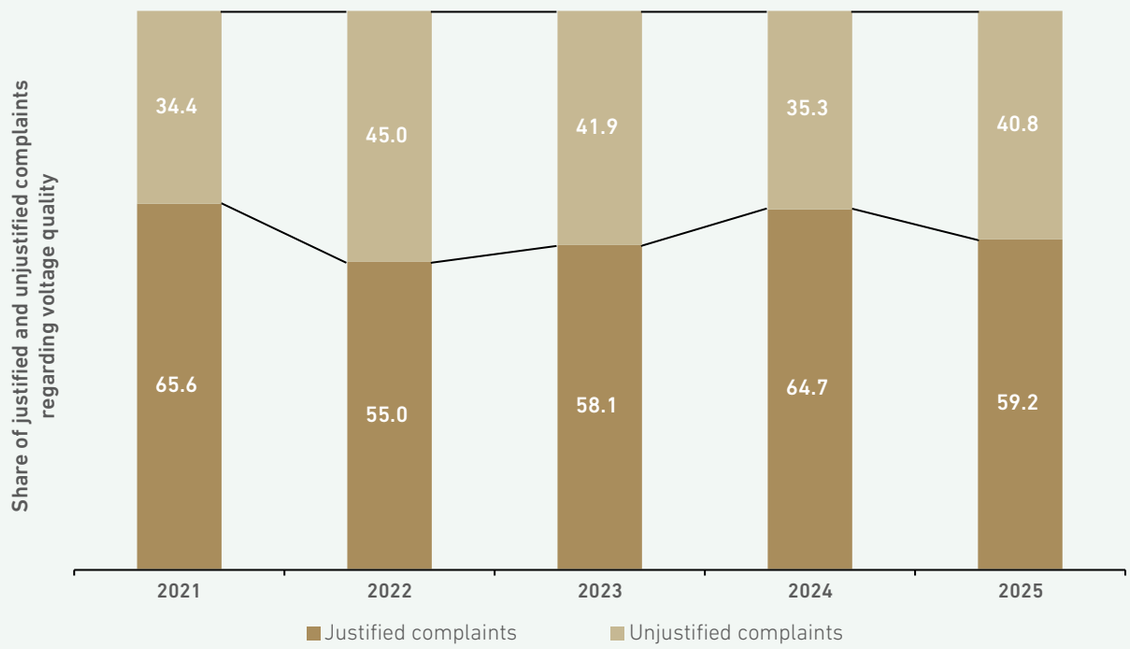
Figure 35 specifically shows the trend in the number of complaints relating to voltage quality by individual distribution companies and for Slovenia as a whole, which fell in 2025 and correlates with the overall voltage quality status parameter for the MV network shown in Figure 36, where a slight decline in the share of justified complaints is evident.

FIGURE 35: NUMBER OF COMPLAINTS REGARDING VOLTAGE QUALITY BY DISTRIBUTION COMPANIES AND IN SLOVENIA IN THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

FIGURE 36: SHARE OF JUSTIFIED AND UNJUSTIFIED VOLTAGE QUALITY COMPLAINTS IN THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

ELES carried out continuous monitoring of voltage quality on the high-voltage system at 197 measurement points, namely at the boundaries with distribution systems, generation facilities and direct customers. As in previous years, there have been repeated breaches of the standard due to the occurrence of flicker. Non-compliance with the standard regarding flicker was identified at as many as 120 measurement points, where prolonged flicker exceeded 1 for at least one week; on average, 8.9 non-compliant weeks were recorded per measurement point. No other instances of non-compliance with voltage quality standards on the transmission system were recorded.

Voltage quality monitoring in accordance with the standard was also carried out in 2025 by CDS operators, who did not record any complaints that year.

Multi-Year Development of the Electricity Network

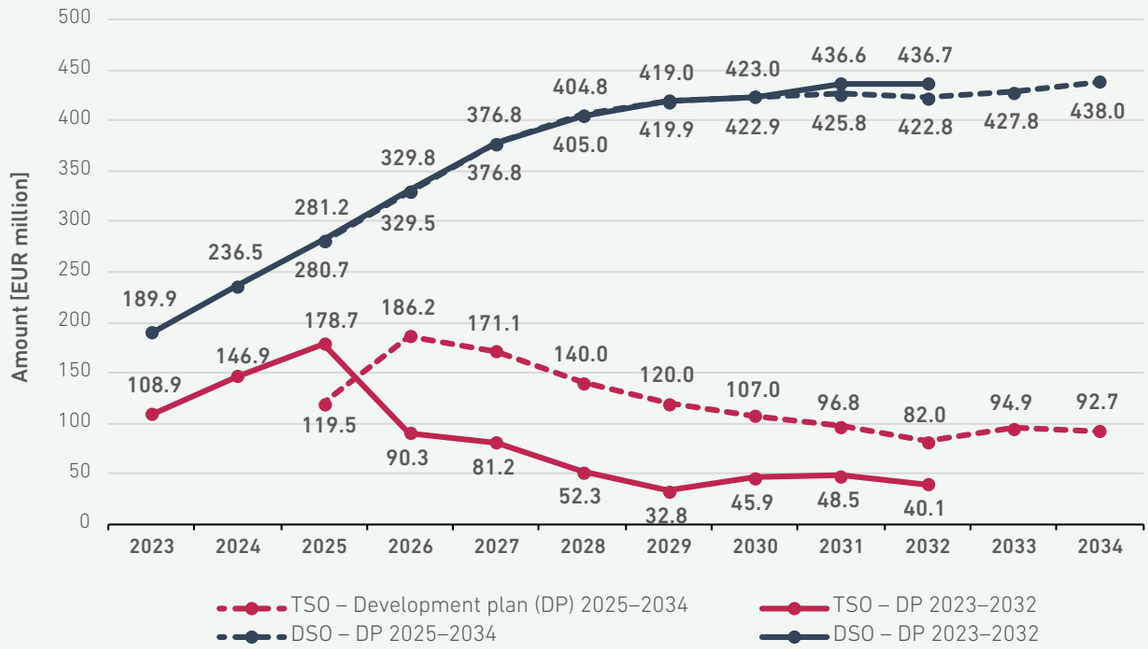
The operator of the combined electricity transmission and distribution network must draw up 10-year development plans for the electricity transmission and distribution systems every two years and obtain the Energy Agency's approval for them. The plans must be developmentally coordinated and take into account the state's strategic guidelines in the field of energy. When drawing up the plans, the electricity operator shall use a prescribed standard methodology that takes into account long-term consumption forecasts, analyses of expected operating conditions, the level of reliability of supply to consumers, economic analyses and the potential locations of new generation sources. The development plan must be based on existing and projected supply and demand, and the electricity operator is obliged, when drawing up the development plan, to take into account the national energy and climate targets set out in the Integrated National Energy and Climate Plan (NECP); should any changes be made to the NECP, the operator must, within nine months, review the development plan for compliance and, where necessary, amend or supplement it.

The starting point for planning in the transmission system development plan is an analysis of the situation in the transmission system. The development plan must include an assessment of the potential for increasing the energy efficiency of the electricity infrastructure through load balancing, an analysis of the coverage of consumption by generation sources and the adequacy of generation sources, and an assessment of transmission capacity requirements, which form the basis for defining the timing of planned investments and their financial valuation.

In the distribution system development plan, the operator must analyse the period covered by the previous development plan, carry out an analysis of forecasts for electricity consumption and power demand, and draw up a plan for investment in the distribution infrastructure covering the whole country, which must also be financially evaluated, giving priority to measures to increase the energy efficiency of the existing electricity infrastructure through load balancing and demand response, as well as the purchase of system services.

In its development plans for the period from 2025 to 2034, the electricity operator has, amongst other things, taken into account the scenarios for the transition to a low-carbon society set out in the NECP and the associated necessary investments in electricity infrastructure, which are estimated at EUR 1.2 billion for the transmission system, and at more than EUR 3.9 billion for the distribution system over the ten-year period covered by the development plan.

FIGURE 37: ASSESSMENT OF INVESTMENT PLANS FROM THE DEVELOPMENT PLANS OF ELECTRICITY OPERATORS FOR THE PERIOD 2025–2034 AND COMPARISON WITH THE NEW DEVELOPMENT PLAN FOR THE 2023–2032 PERIOD



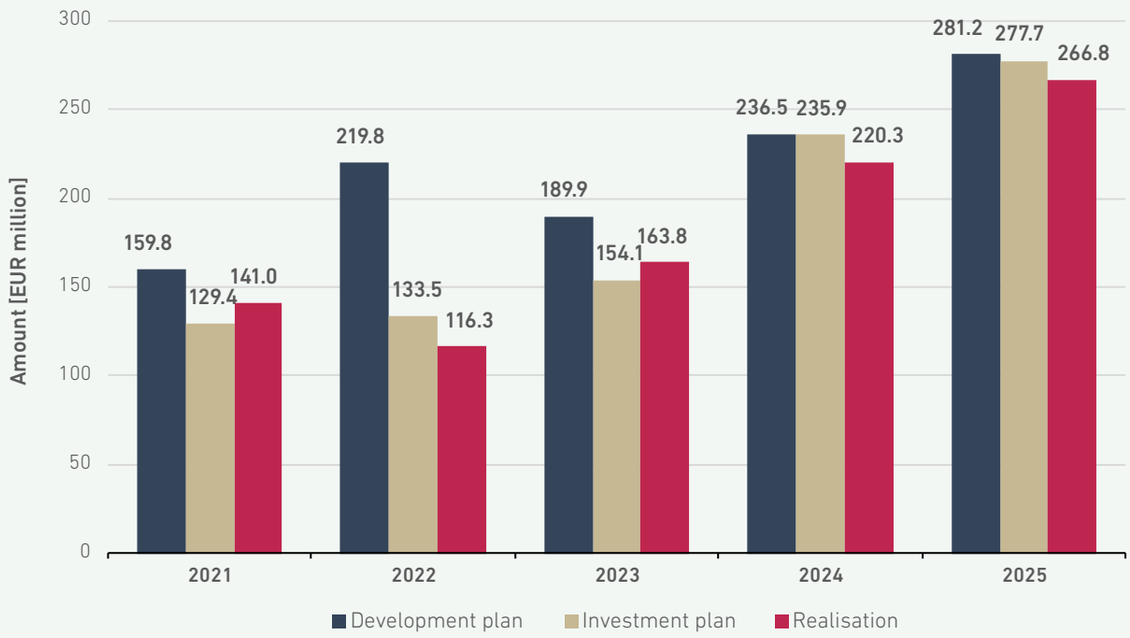
SOURCE: ELES

At the end of 2024, the Energy Agency received the development plans for the period 2025–2034 from the electricity operator and granted its approval for them in early 2025. The distribution system operator's development plan for the period 2025–2034 shows consistency in investment levels and a growth trend compared with the previous development plan. On the other hand, each new development plan for the distribution system follows a recurring pattern of lower total investment in the early years of the ten-year cycle and the postponement of major network development interventions to the final years of the ten-year cycle. A comparison of the transmission system operator's development plan for the period 2025–2034 with the previous development plan (Figure 37) reveals not only an absolute increase in the value of planned investments but also a shift of major investments further and further into the future.

Supervision Over the Implementation of Electricity System Operators' Development Plans

For the transmission system, the operator allocated EUR 83.8 million to investments in 2025, which represents just over 70% of the funds envisaged in the development plan, or just under 47% of the funds envisaged in the regulatory framework. Of this, EUR 30.3 million was allocated to new investments, EUR 40.3 million to refurbishments and EUR 13.2 million to other business-necessary investments. The largest share, namely almost 50%, was allocated to investments in the network, followed by investments in other business-related assets at 15.8% and investments in smart grids at 31.1%. The remainder was allocated to investments in operations, secondary equipment and telecommunications. Among new construction projects, the power control system (SSSC) at the Podlog substation, costing EUR 19.7 million, and the high-voltage connections for high-load charging stations, with a total value of EUR 3.7 million, stand out in terms of value. Among the refurbishment projects, the most significant investments were in the renovation of the 110 kV Hudo–Kočevje transmission line, worth EUR 11.2 million; the 2x110 kV Brestanica–Hudo transmission line, worth EUR 5.7 million; and the 2x110 kV Divača –Pivka–Ilirska Bistrica, worth EUR 4.7 million, as well as the refurbishment of the 110 kV substations at the Formin and Doblar hydroelectric power plants, with a combined value of EUR 6 million, and the refurbishment of the Luka Koper substation, worth EUR 2.4 million.

FIGURE 38: COMPARISON OF THE AMOUNTS IN THE DEVELOPMENT AND INVESTMENT PLANS FOR THE ELECTRICITY DISTRIBUTION SYSTEM ALONG WITH THE REALISATION



SOURCES: ELES, EDP

For distribution system operations, the distribution system operator and owners allocated EUR 266.8 million to investment in 2025, which is 3.9% less than planned under the regulatory framework, or 5% less than envisaged in the development plan. Of this, EUR 139.8 million was allocated to new investments, EUR 92.3 million to refurbishments and EUR 34.7 million to other business-related investments. The total value of investments in smart grids amounted to EUR 12.4 million, representing a share of almost 4.6% of all investments in the distribution system. Table 14 provides a more detailed breakdown of investments in smart grids on the distribution system carried out by distribution companies and the distribution operator in 2025.

TABLE 14: INVESTMENTS IN SMART GRIDS IN THE ELECTRICITY DISTRIBUTION SYSTEM

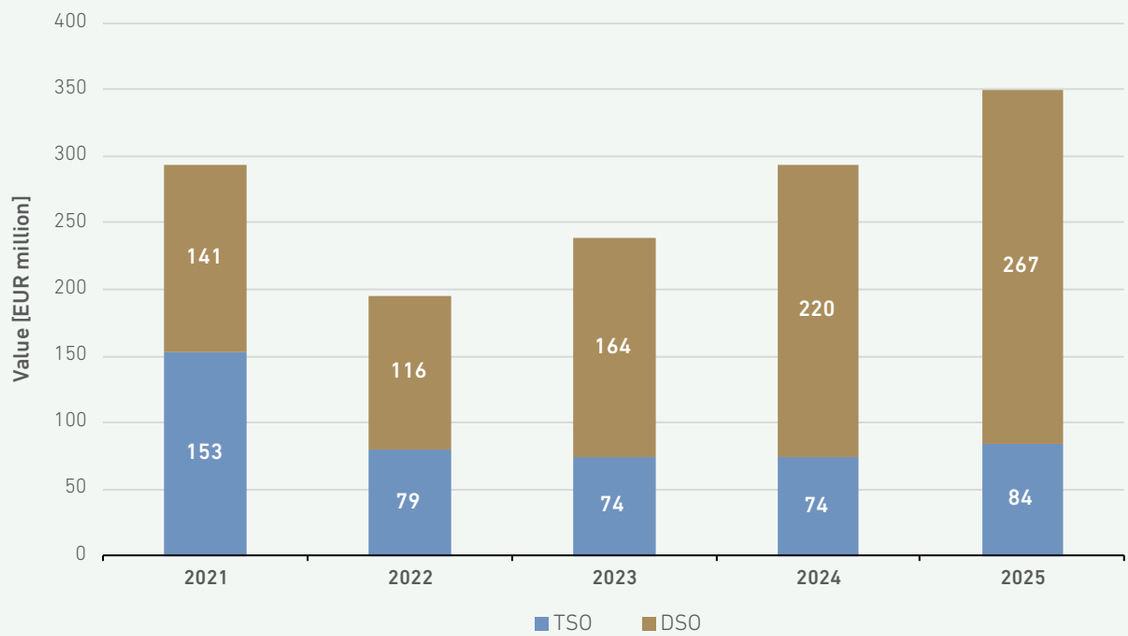
	Elektro Celje	Elektro Gorenjska	Elektro Ljubljana	Elektro Maribor	Elektro Primorska	DSO	TOTAL
Investments total [EUR million]	51.9	38.9	73.0	64.6	38.1	0.3	266.8
Investments in smart grids [EUR million]	6.2	2.4	1.3	0.0	2.4	0.0	12.4
Share of investments in smart grids	12.0%	6.1%	1.8%	0.0%	6.4%	0.0%	4.6%

SOURCES: ELES, EDP

With regard to voltage levels, the largest share – 38% – of investments was made in the medium-voltage network, 26.1% in the low-voltage network and 12.9% in the high-voltage network. The remainder comprises investments in secondary equipment, accounting for 10%, and other business-related investments. The year 2025 saw the highest value of investments in the distribution

system in history; however, this does not necessarily correspond to a proportionally larger physical volume of investment, as operators in this sector are also facing significant increases in the prices of materials and services for the construction of electricity infrastructure. Regardless of any deviations in implementation, 2025 once again shows alignment between the implementation of the development and investment plans in recent years (Figure 38).

FIGURE 39: TRANSMISSION SYSTEM OPERATOR AND DISTRIBUTION SYSTEM OPERATOR INVESTMENTS FOR THE 2021–2025 PERIOD



SOURCES: ELES, EDP

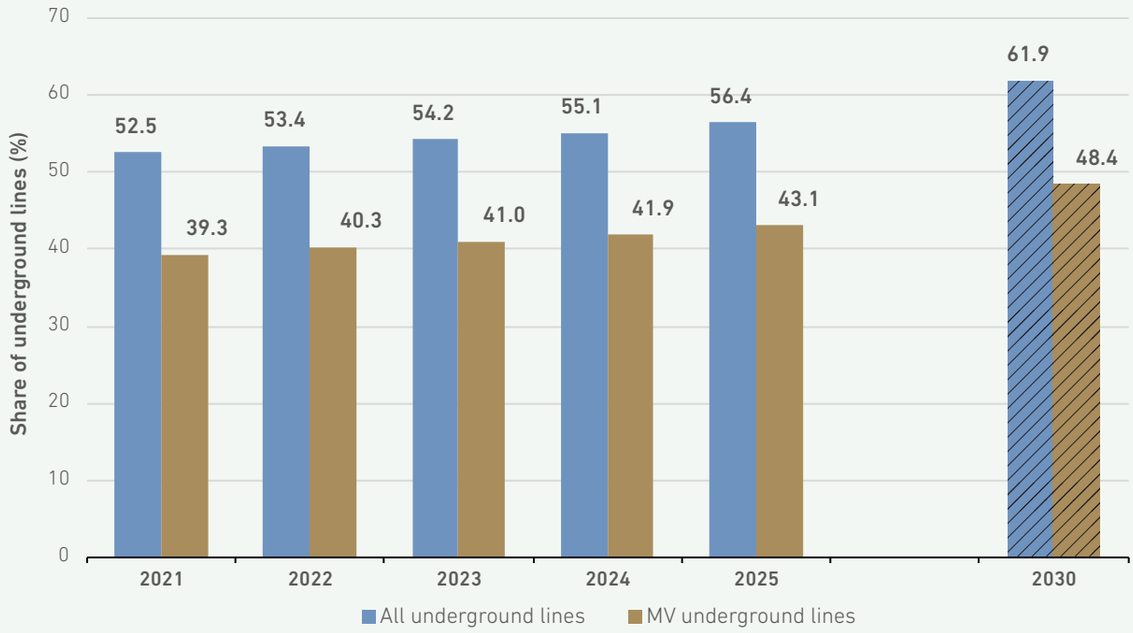
Following several years of slower growth in the share of underground cables in the distribution system, a significant increase was recorded again in 2025, with the share of all underground cables rising by 1.28 percentage points to a total of 56.4%. The share of medium-voltage underground cables increased by 1.15 percentage points and now stands at 43.1%, while the share of low-voltage underground cables increased by as much as 1.36 percentage points to 68.5%. Data on the upward trend in the share of underground cables confirm a record level of investment in the distribution system in 2025, however, electricity distribution companies will need to continue this trend if they are to meet the target set out in the NECP of at least a 50% share of underground MV cables by 2030.

Faster growth in the share of underground cables once again

56.4% of all underground cables

43.1% of MV underground cables – a 50% NECP target by 2030

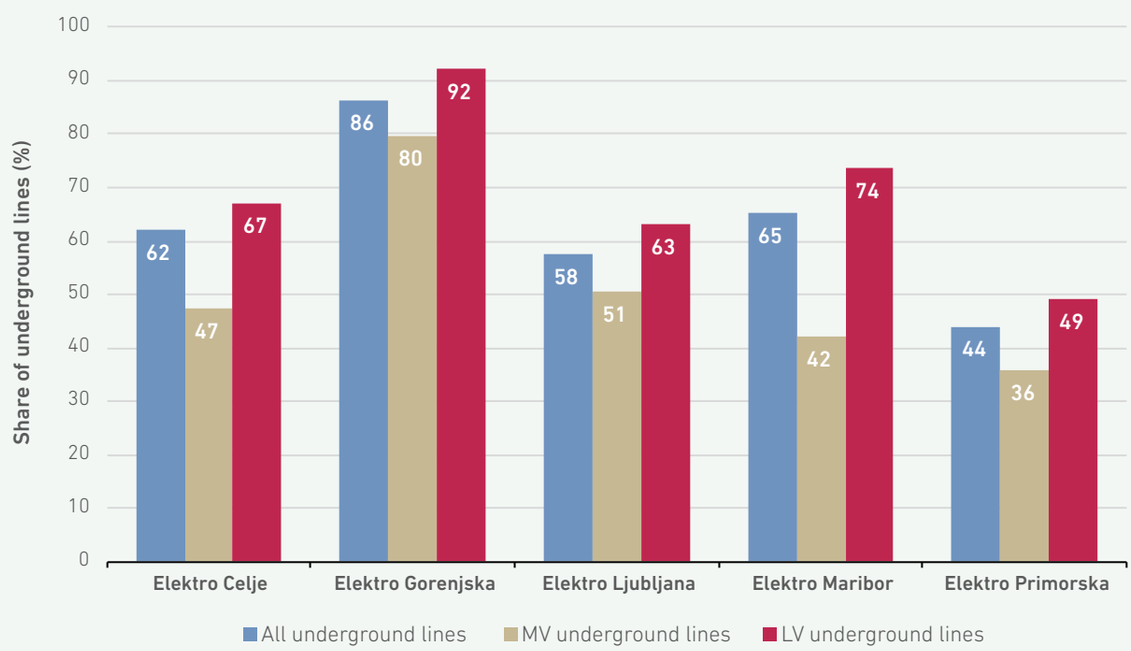
FIGURE 40: GROWTH IN THE SHARE OF UNDERGROUND DISTRIBUTION LINES IN THE 2021–2025 PERIOD AND THE PROJECTION FOR 2030



SOURCES: ENERGY AGENCY, ELES, ELECTRICITY DISTRIBUTION COMPANIES

Data on the growth trend in the share of underground cables confirm a record level of investment in the distribution system in 2025; however, this trend will need to be sustained, particularly by electricity distribution companies, which are still lagging behind in terms of the share of underground cables (Figure 41).

FIGURE 41: SHARE OF UNDERGROUND DISTRIBUTION LINES IN ELECTRICITY DISTRIBUTION COMPANIES



SOURCES: ELECTRICITY DISTRIBUTION COMPANIES

TABLE 15: TRANSMISSION AND DISTRIBUTION ELECTRICITY INFRASTRUCTURE IN SLOVENIA AT THE END OF 2025

Transmission system	
400 kV lines	828 km
220 kV lines	328 km
110 kV lines	2,015 km
HV/HV DTS	9
110 kV DS	1
Distribution system	
110 kV lines	892 km
35 kV, 20 kV, 10 kV lines	18,929 km
0.4 kV lines	46,872 km
110 kV/MV DTS	97
MV/MV	7
MV DS	75
MV/LV TS	18,968

SOURCES: ELES, ELECTRICITY DISTRIBUTION COMPANIES

Development of the Advanced Metering System in Slovenia

The Government Decree on Measures and Procedures for the Deployment and Interoperability of Advanced Electricity Metering Systems[8] (hereinafter referred to as 'the decree' in this chapter) and the Plan for the roll-out of an advanced metering system in Slovenia's electricity distribution system (hereinafter referred to as the 'plan') define, amongst other things, the architecture of the advanced metering system (AMS), roles and responsibilities, minimum functionalities, and aspects of implementing data exchange based on relevant standards (CIM and similar).

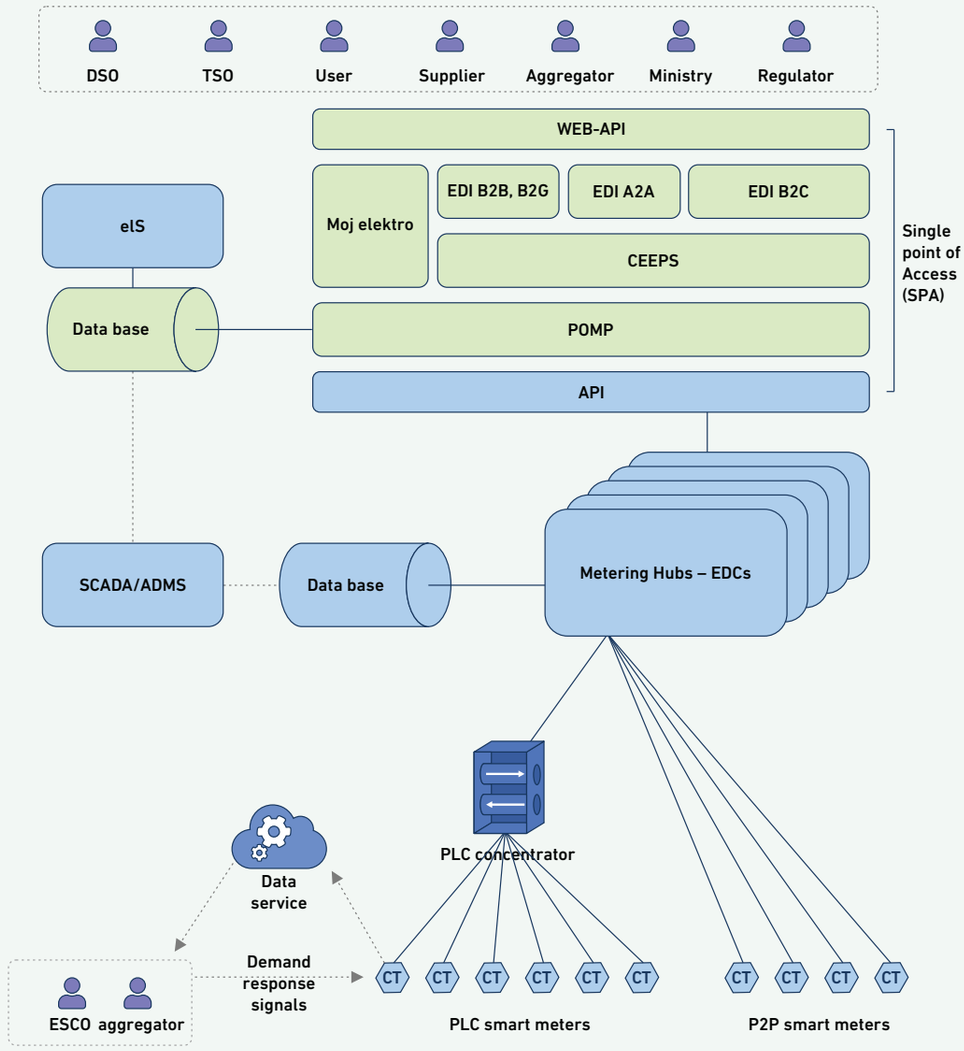
On the basis of the decree, the distribution system operator has established a single point of access to metering data from the advanced metering system, which has been implemented as a central system for accessing metering data (the single-entry point of the national data hub (EVT)).

The system provides data services for data exchange with authorised parties in the B2B and B2C sectors, and there are plans to extend the scope of data exchange to the B2G segment as well.

The EVT is a hub that facilitates data exchange between electricity distributors and suppliers, end users and their authorised representatives (e.g. aggregators, system service providers), whilst also serving as the central data hub for data exchange within the electricity market. The EVT enables secure access to available metering data, regardless of the electricity distribution area or supplier. The transfer of metering data from the lower architectural layer – comprising the Head End Systems (HES) of electricity distribution companies – to the POMP platform takes place via real-time data feeding (a 'push' mechanism) and the retrieval of historical data.

8 Official Gazette of the Republic of Slovenia, Nos. 79/15 and 172/21 – ZOEE; this decree, which ceased to apply on the date of entry into force of the ZOEE, remains in force until the entry into force of the government regulation referred to in the fourth paragraph of Article 31 of the ZOEE

FIGURE 42: HIGH-LEVEL ARCHITECTURE OF THE EXISTING AMS



SOURCE: ENERGY AGENCY

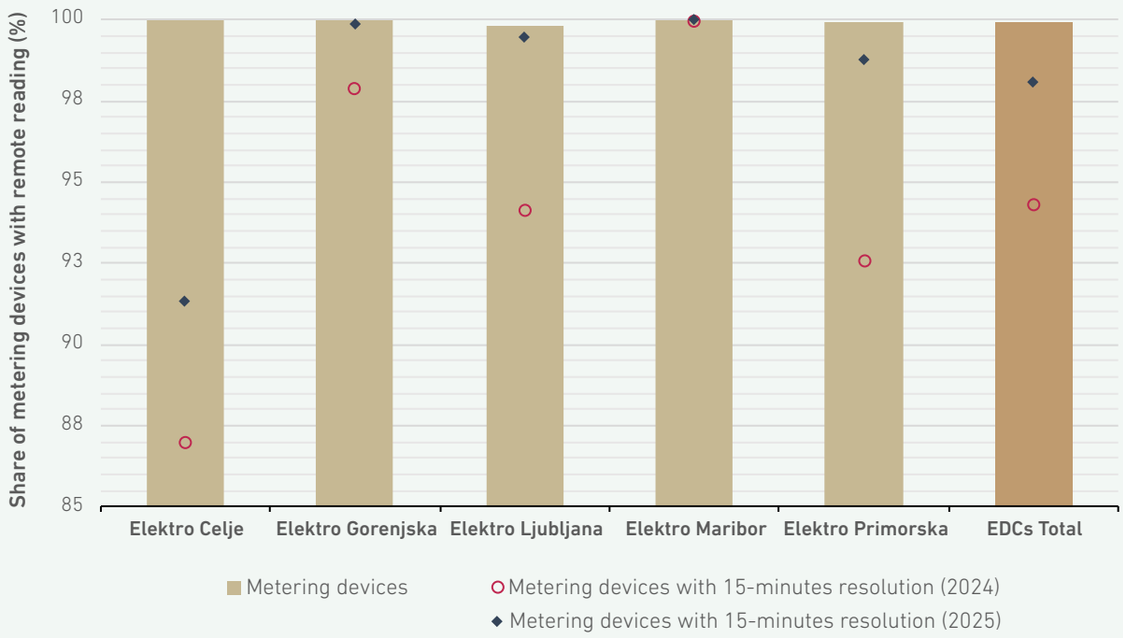
At EVT level, development activities took place in 2025 to support adjustments to the network charge calculation methodology and other key process innovations in the area of metering and billing data processing.

98.8% of consumers on the distribution system equipped with smart meters

In terms of the level of deployment of smart meters capable of recording meter readings at 15-minute intervals, Slovenia ranks among the very top European countries. By the end of 2025, 98.8% of users on the distribution system had already been fitted with smart meters, and 99.3% of these were actually connected to the remote meter data collection system[9]. Of these, approximately 98.1% enable the collection of detailed metering data at 15-minute intervals and are already compliant with the revised network charge methodology. The percentage of smart meters that do not yet support 15-minute measurements is already negligible for certain electricity distribution companies, with the largest deviation not exceeding 9% (Figure 43).

9 Note: The system still contains a certain number of meters which, while not advanced metering infrastructure (AMI), are automatic meter read (enabling remote data collection); consequently, the percentage quoted for AMI meters is lower

FIGURE 43: SHARE OF METERING DEVICES WITH REMOTE READING CAPABILITIES AND 15-MINUTE RESOLUTION (INCLUDING AMR)



SOURCES: ELECTRICITY DISTRIBUTION COMPANIES

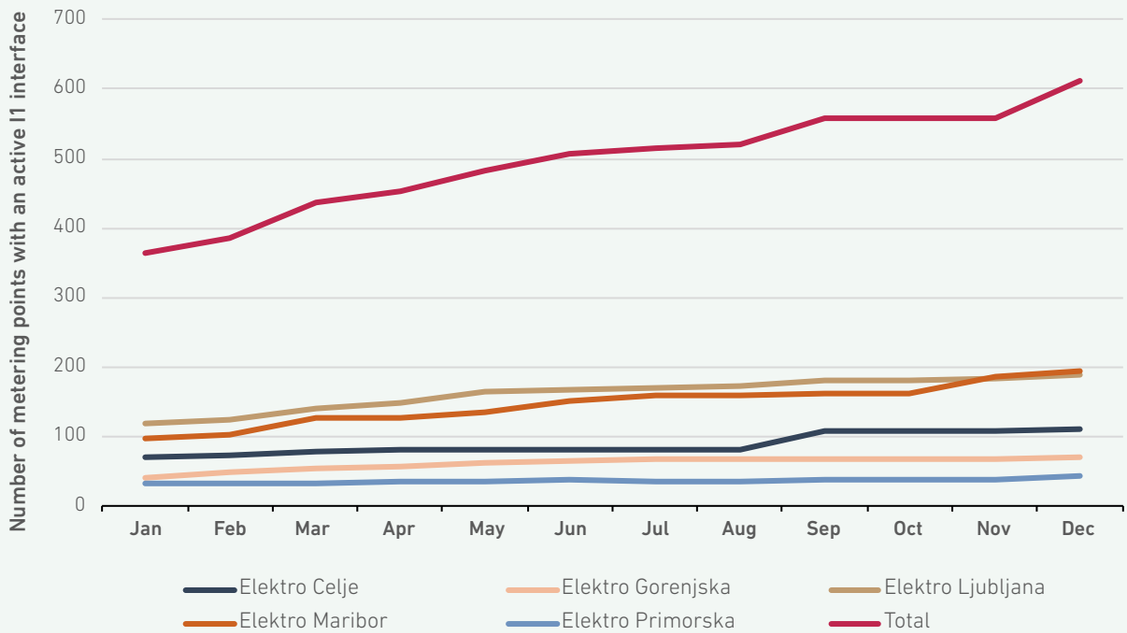
Almost two-thirds of metering devices with a 15-minute sampling resolution (62.5%) are equipped with a dedicated local I1 interface, which enables the processing of detailed metering data in near real time[10]. This functionality is important for advanced end-users involved in system-level and other advanced energy services. Any active consumer who is not provided with an I1 interface or whose interface does not comply with the legislative framework for interoperability, is entitled to a free replacement of their metering equipment with a suitable one.

62.5% of advanced metering devices are ready for parallel reading in near real time

For the time being, only a small number of consumers are taking advantage of this option, but their numbers are increasing.

10 Note: The stated percentage of meters allows for different parallel reading intervals (due to generational differences in time intervals of 1 s or 5 s)

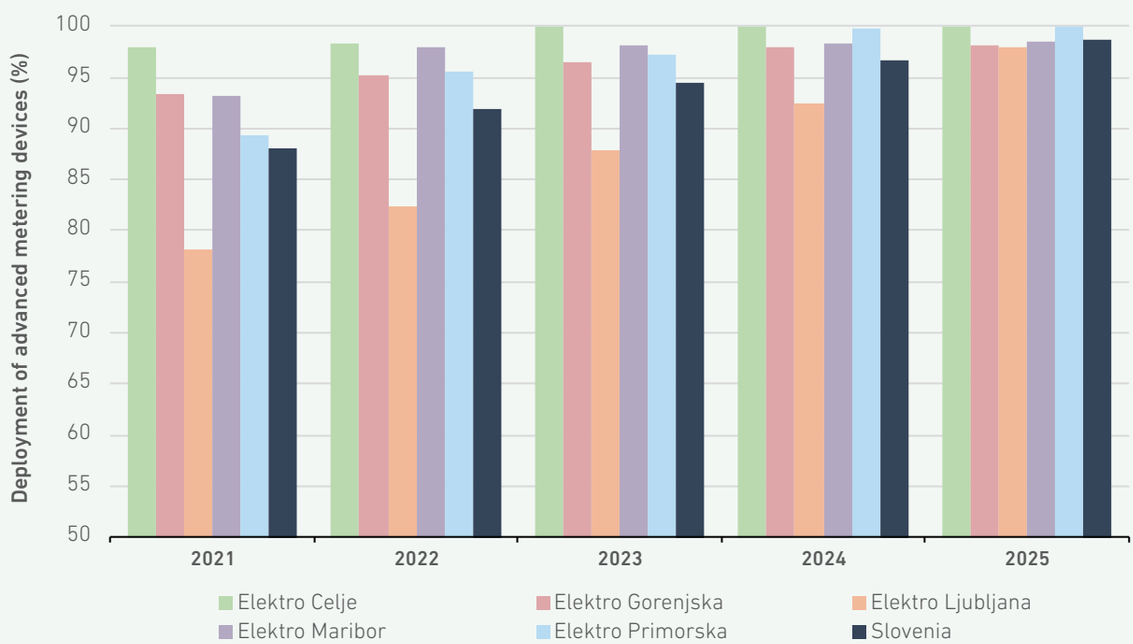
FIGURE 44: DEVELOPMENT OF THE USE OF PARALLEL LOCAL ACCESS TO NEAR REAL-TIME METERING DATA IN 2025



SOURCES: ELECTRICITY DISTRIBUTION COMPANIES

The installed smart meters comply with MID requirements in the context of the new network charge calculation methodology.

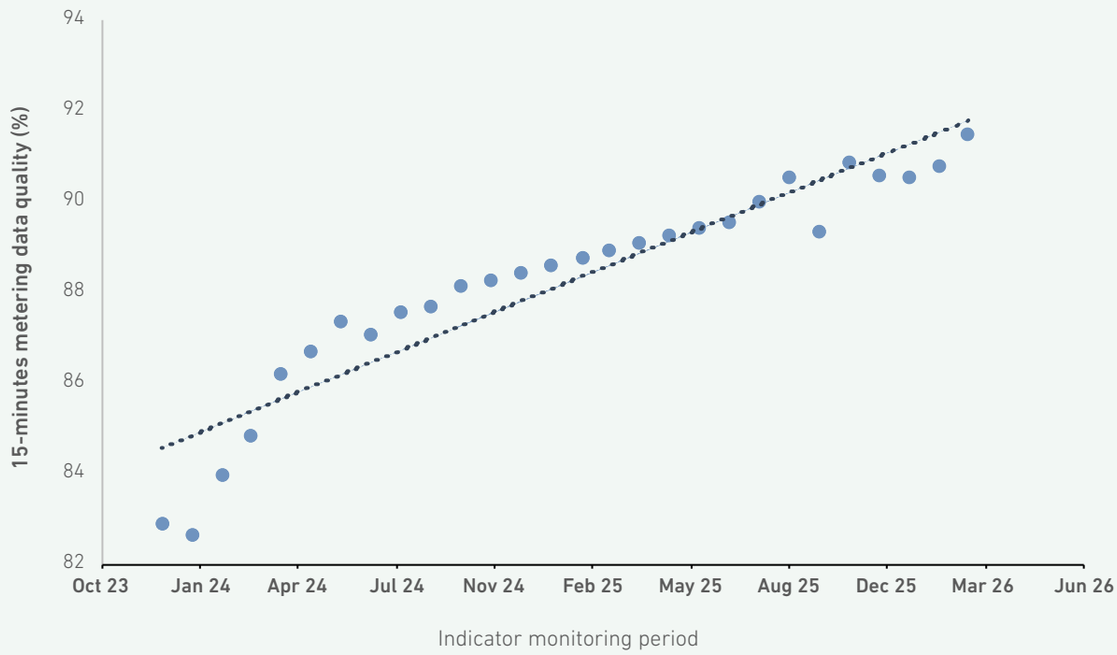
FIGURE 45: TREND OF DEPLOYMENT OF ADVANCED METERING DEVICES IN THE 2021–2025 PERIOD



SOURCES: ELECTRICITY DISTRIBUTION COMPANIES

The proactive implementation of measures to improve the quality of metering data by eliminating or minimising sources of interference at end users' premises – which affect communication channels or the transmission of metering data to metering centres – has contributed to the predictability of network charge billing based on 15-minute measurements (significantly fewer than 1% of consumers switch between different billing methods each month, i.e. between network charge billing based on 15-minute meter readings and billing without such data).

FIGURE 46: TREND IN THE SHARE OF POINTS OF DELIVERY (PODS) WITH ASSURED 15-MINUTE METERING DATA QUALITY AT M-1 LEVEL



SOURCE: ELES

The graph in Figure 46 The graph in Figure 46 shows the long-term trend of improvement in the indicator, which assesses the proportion of PPMs with 15-minute metering data of assured quality at the M-1 level (previous month). The indicator indirectly measures the impact of the network tariff reform, which established the systematic use of the relevant metering data. Throughout the monitoring period, a gradual and relatively stable improvement in the indicator can be observed, reaching over 91% at the time of the last sampling.

The initial phase of monitoring shows faster growth in the indicator, which can be attributed primarily to the stabilisation of the AMS, improvements to the communications infrastructure, and the optimisation of processes for the collection, validation and processing of metering data. Subsequently, the rate of improvement slows as expected, but the trend line still shows a positive slope. The logarithmic approximation used suggests that the system has not yet reached its developmental peak and that, within the framework of the existing AMS architecture, there is still some potential for further improvements in the quality and availability of metering data.

It is important to emphasise that, as the indicator grows, the nature of the challenges is also gradually changing. Whilst systemic and organisational improvements were key in the initial phases, further improvement of the indicator increasingly requires the targeted optimisation of individual communication segments, the removal of local communication constraints, and upgrades to data validation and processing procedures. The trend thus indicates that the Slovenian Advanced Metering System has reached a relatively high level of maturity, with the focus of development gradually shifting from the phase of mass roll-out of metering devices to the phase of optimising the quality of the data and communications infrastructure.

At the same time, the results suggest that the key challenges for the further development of the Advanced Metering System (AMS) are no longer primarily linked to the installation of metering devices, but rather to ensuring the reliable, high-quality and timely availability of metering data. It is precisely these aspects that will be crucial in the future for supporting advanced power system functionalities, such as dynamic tariffs, active user engagement, flexibility services and the gradual introduction of grid operation processes that require significantly more efficient data processing in terms of time.

The current state of development in the field of smart grids and the roll-out of new technologies

Development in the field of smart grids in Slovenia is outlined in the study Update of the National Smart Grid Programme[11]. It lists key projects which, through the use of the technologies identified in the study, are expected to contribute to the achievement of the set national targets and to support the green transition in the most effective way. For distribution companies, the focus is on new approaches to planning and operations, supported by smart grids, whilst for the transmission network, the emphasis is on cross-sector integration. With the implementation of the GreenSwitch project, alongside ELES, some EDPs have also begun the accelerated roll-out of smart grid solutions. Follow-up activities in the area of monitoring the performance of investments in smart grids, based on a limited set of key performance indicators (KPIs) at the system level included an update to the general act governing the methodology for establishing the regulatory framework for electricity system operators, which also involves updating the definitions used to determine the KPIs. These have been harmonised on the basis of findings from a sample of available data used to calculate the aforementioned indicators at EDP and ELES for the separate roles of ODS and OPS. In 2025, the first reporting of KPI data for the years 2023 and 2024 was carried out. Consequently, the appropriate conditions were established for regulating the performance of investments in smart grids on the basis of KPIs. This incentive scheme complements the incentive schemes for investment projects in smart grids and the incentive scheme for research and innovation projects, both of which were presented in detail in the Report on the State of the Energy Sector in Slovenia in 2020. For smart grid projects, appropriate restrictions are in place to prevent any duplication of financial incentives for delivering the same benefits.

Establishment of periodic reporting of data on the effectiveness of investments in smart grids based on KPIs

A significant step forward in the introduction of new technologies into the Slovenian electricity grid was the public consultation held in 2025 on the introduction of a financial incentive for the most efficient investments based on the so-called 'benefit-sharing' principle. In practice, this means that the substantial net benefits that may arise from investments in advanced and efficient technologies (e.g. smart grids) are shared in a specified proportion between the electricity operator and consumers (reducing or maintaining network tariffs at the lowest possible levels). This is a new, innovative approach based on delivering net benefits through the most innovative projects. These benefits significantly exceed the maximum benefits achievable through existing incentives, meaning that the benefit-sharing incentive is substantially stronger, though it is a one-off for each specific technology used. By obtaining this incentive, the electricity operator undertakes to implement such innovative solutions as standard investments in the future. In 2026, an amendment to the general act was adopted, regulating the methodology for determining the regulatory framework for electricity operators and introducing the described financial incentive for the most efficient investments based on benefit-sharing. The first applications for approval of this incentive can also be expected in 2026. The use of dynamic transmission capacity (DTR) solutions is proving to be one of the most promising avenues. Among the first examples of implementation, the national DTR project at distribution level stands out, as does the cooperation between the transmission system operators TERNA and ELES, which aims to increase cross-border transmission capacity on the Slovenian-Italian border.

Introduction of a financial incentive for the most efficient investments based on "benefit sharing"

On the Energy Agency's website are published calls for research and innovation projects, basic information on investment projects, and reports on all projects that the agency has assessed under its regulatory methodology. The agency also monitors all qualified projects.

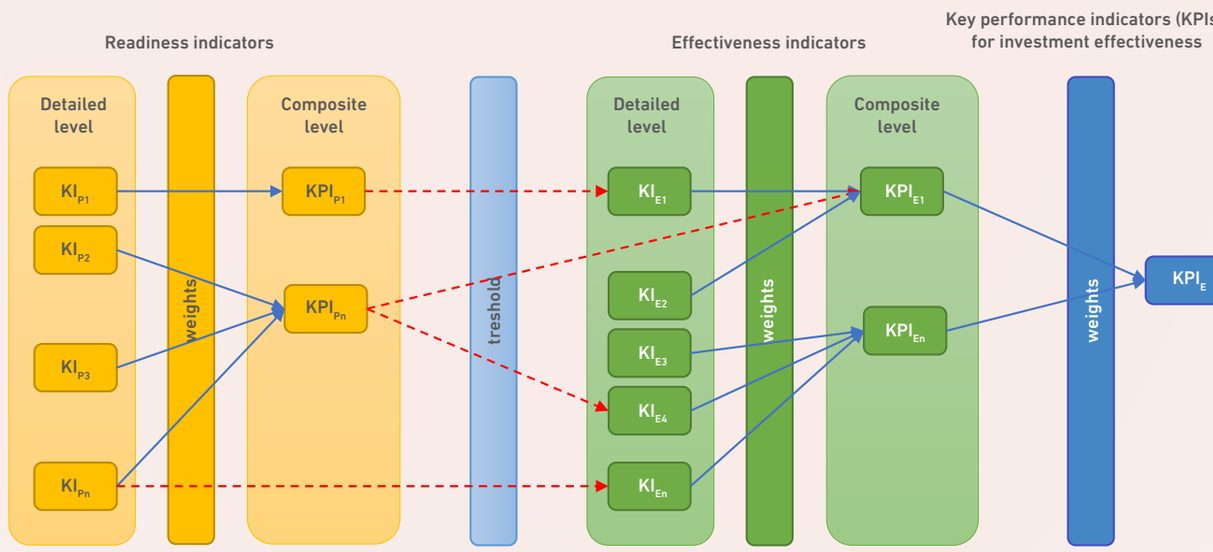
11 Update to the National Smart Grid Programme, Study No.: 2444, EIMV, FE, FERI, Ljubljana, November, 2020

CASE STUDY
The effectiveness of investments in smart grids based on KPIs

Pursuant to point 1 of the third paragraph of Article 55 of the EZ-2, the Energy Agency is tasked with monitoring and assessing the performance of the system and distribution operators in relation to the development of an advanced grid that promotes energy efficiency, including the balancing of loads and demand response, and the integration of renewable energy sources, based on a limited set of indicators; and to publish a national report every two years, including recommendations for improvements, which the operators are required to take into account in their development plans.

The Energy Agency's methodology for monitoring KPIs is based on the interdependence of readiness KPIs and efficiency KPIs across specific thematic areas, which address, for example, the utilisation of electricity infrastructure, the efficiency of integrating renewable energy sources into the grid, and so on. Readiness KPIs are used to monitor the provision of appropriate conditions where it is appropriate to monitor the effectiveness of investments in smart grids. Until the prescribed minimum value of the readiness KPI (threshold) is reached in a specific thematic area or for a subordinate readiness indicator, the thematically related efficiency KPI or subordinate efficiency indicator is not monitored, or its value is set to zero. The overarching key readiness indicator is constructed as a logical composite of specific readiness KPIs relevant to the TSO, DSO or EDC. All efficiency KPIs contribute to the overarching key performance indicator for investments in smart grids as a weighted composite across the individual thematic areas relevant to TSO, DSO or EDC. This, in turn, links the effectiveness of investments in smart grids to the corresponding financial incentive for TSO, DSO or EDC The indicator of the deviation in readiness from the minimum standards for ensuring the quality of data and data services also has a direct impact on the size of the financial incentive for DSO and EDC.

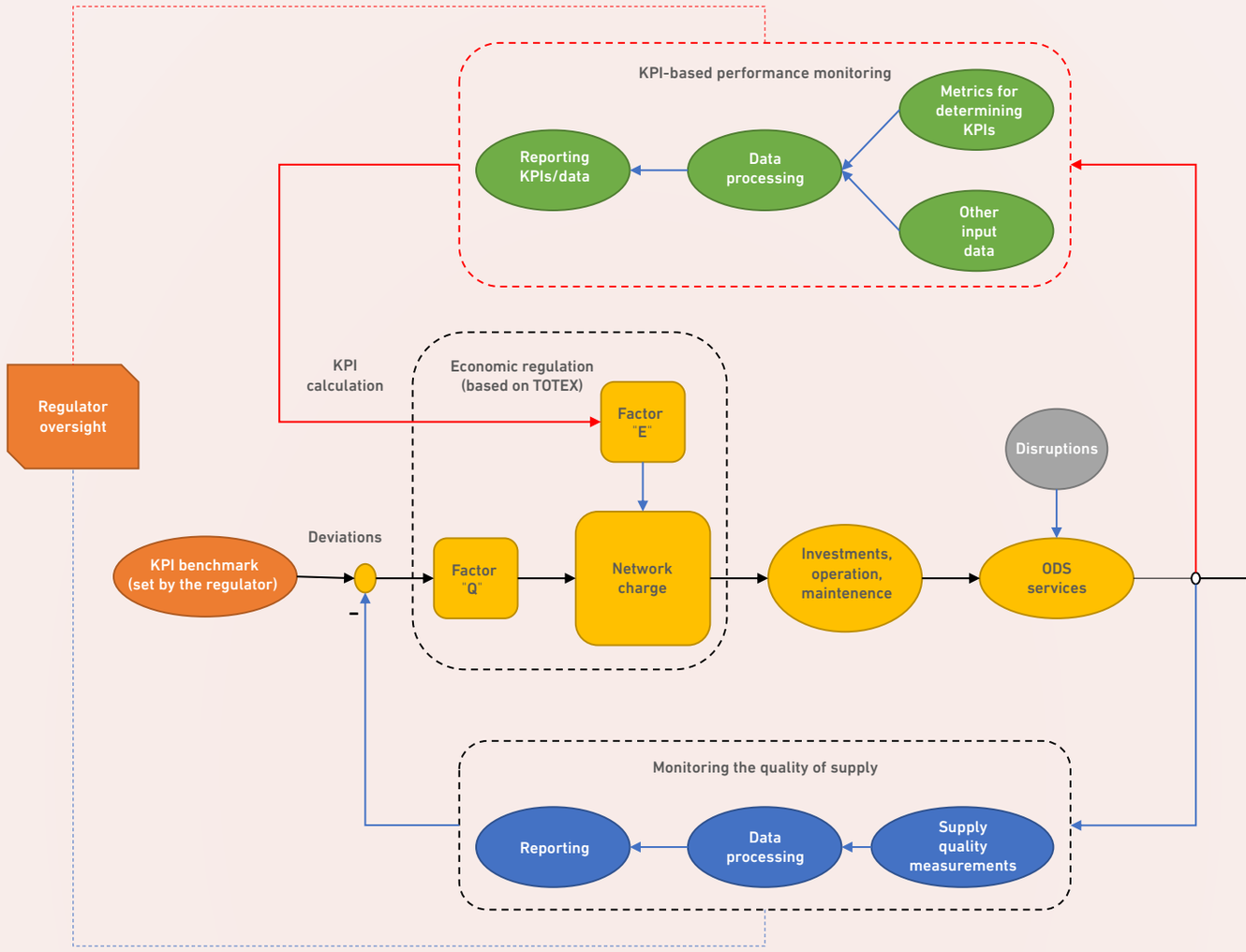
FIGURE 47: A CONCEPTUAL REPRESENTATION OF THE RELATIONSHIPS BETWEEN READINESS INDICATORS (KI_P) AND KEY READINESS INDICATORS (KPI_P), AS WELL AS EFFECTIVENESS INDICATORS (KI_E) AND KEY EFFECTIVENESS INDICATORS (KPI_E)



SOURCE: ENERGY AGENCY

By integrating financial incentives into the regulatory framework, the Energy Agency has incorporated the impact of KPIs into the methodology for determining the regulatory framework for electricity operators and established a functional link between the efficiency of investments in smart grids and the electricity operator's eligible costs. This has established a feedback-loop regulatory process in which eligible costs are adjusted in line with the level of efficiency achieved, with the aim of encouraging its continuous improvement.

FIGURE 48: CONCEPTUAL REPRESENTATION OF FEEDBACK CONTROL BASED ON KPIs



SOURCE: ENERGY AGENCY

By thematic area, the following have been defined in total:

- ten readiness KPIs relevant to EDC, four of which are also relevant to DSO;
- ten effectiveness KPIs relevant to EDC, three of which are also relevant to DSO;
- six readiness KPIs relevant to TSO;
- six effectiveness KPIs[12], relevant to TSO.

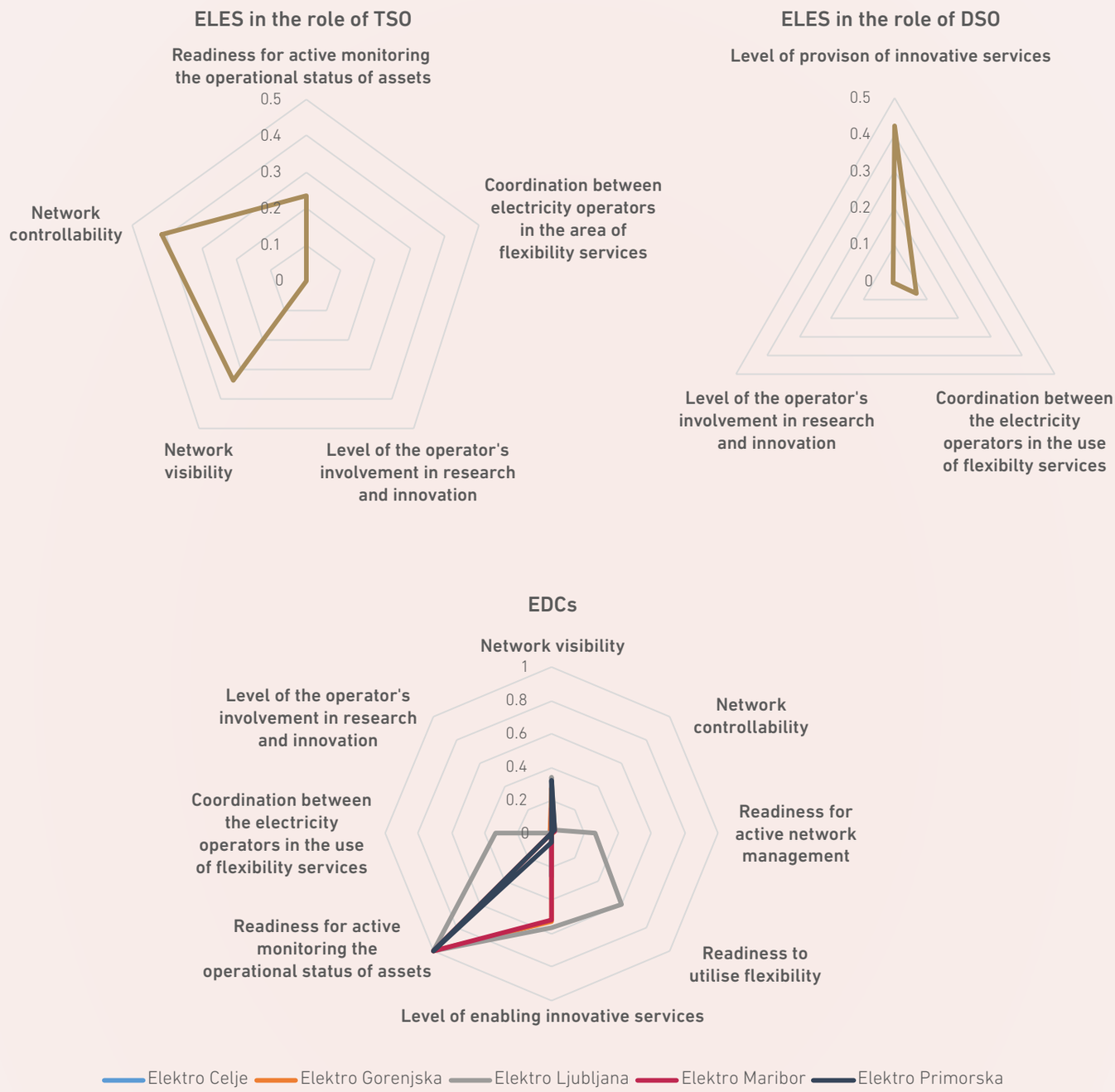
The Energy Agency monitors the readiness indicator in the field of cyber security, but does not publish the data. The remaining thematic areas for KPI monitoring are shown in the figures that follow. The results of the first reporting of data on the achieved KPI values for 2024 are also provided below. Data for 2025 are not yet available due to the inclusion of this incentive scheme in the mechanism for settling deviations from the regulatory framework.

The effect of the efficiency KPIs on the financial incentive for TSO, DSO and EDC begins when the specified KPIs for readiness[13] reach a value above zero.

12 Annex 5 of the Energy Agency's general act, which sets out the methodology for determining the regulatory framework for electricity system operators, lists three additional KPIs that are used to determine the individual efficiency of TSO and do not contribute to the overarching key performance indicator for investments in smart grids, and are therefore not discussed here.

13 In the areas of network visibility, network controllability and cyber security for TSOs, DSOs and EDCs; for EDCs, additionally in the area of readiness for active network management.

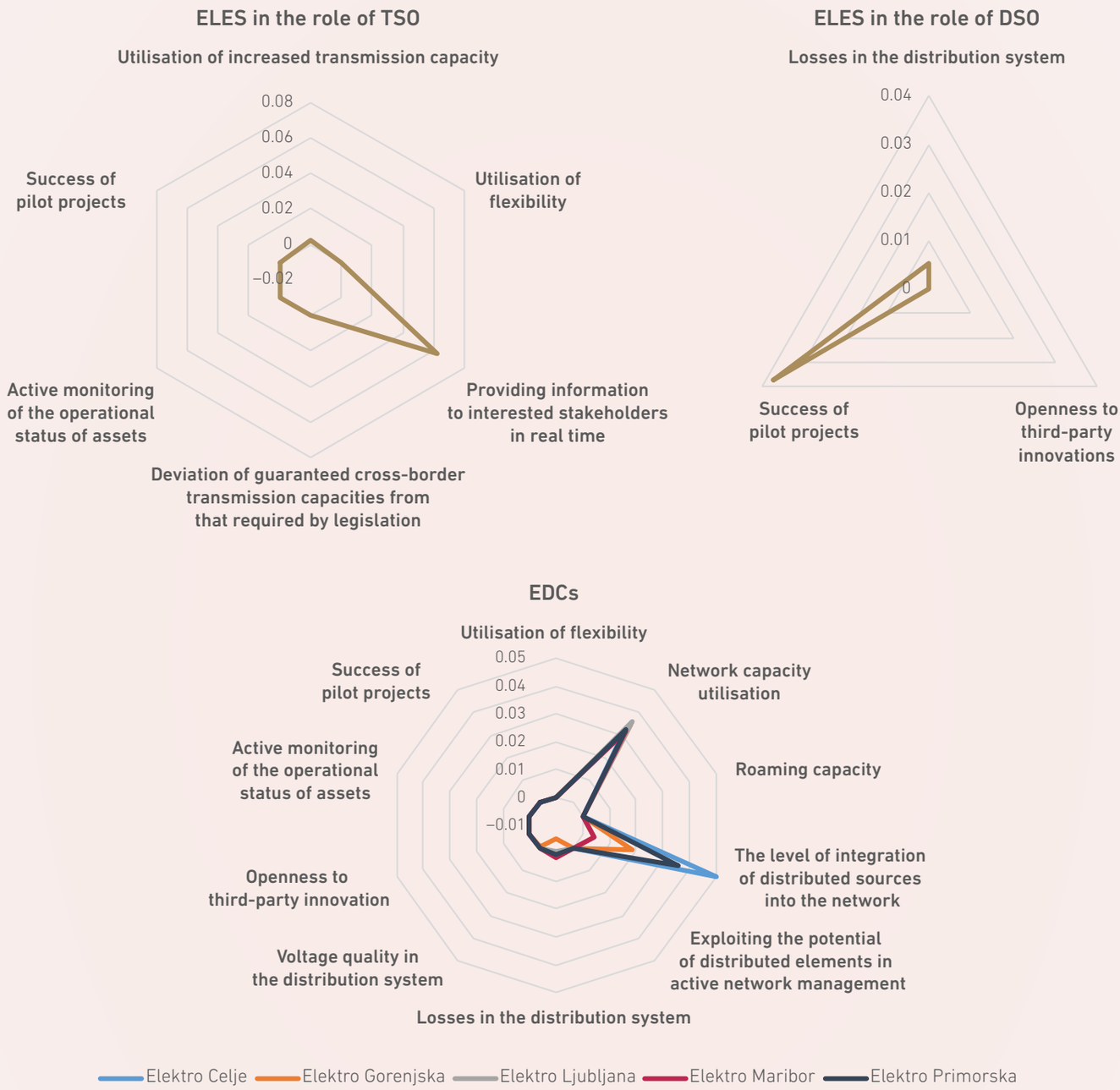
FIGURE 49: OVERVIEW OF KPI VALUES ACHIEVED FOR TSO, DSO, AND EDCs READINESS BY INDIVIDUAL TOPIC AREAS



SOURCE: ENERGY AGENCY

The overarching key performance indicator for each company is calculated as a weighted composite of the subordinate KPIs for performance across individual thematic areas. In doing so, the Energy agency determines the weightings for each area based on an analysis of development plans, supervisory procedures carried out and national development priorities. The values shown in the next Figure already take into account the weightings for each thematic area.

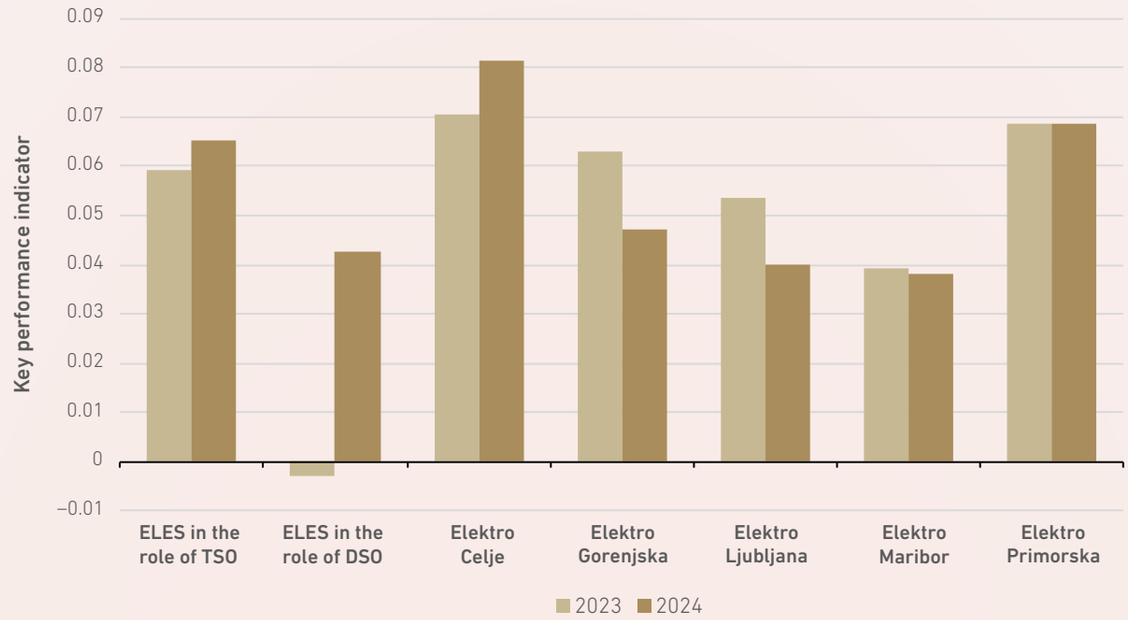
FIGURE 50: OVERVIEW OF THE WEIGHTED KPI VALUES ACHIEVED FOR THE EFFECTIVENESS OF TSO, DSO, AND EDCs BY INDIVIDUAL TOPIC AREAS



SOURCE: ENERGY AGENCY

The following figure shows a comparison of the achieved overall key performance indicator by individual companies for 2024 and 2023, which serves as the basis for determining the deviation from the overall key performance indicator for 2024.

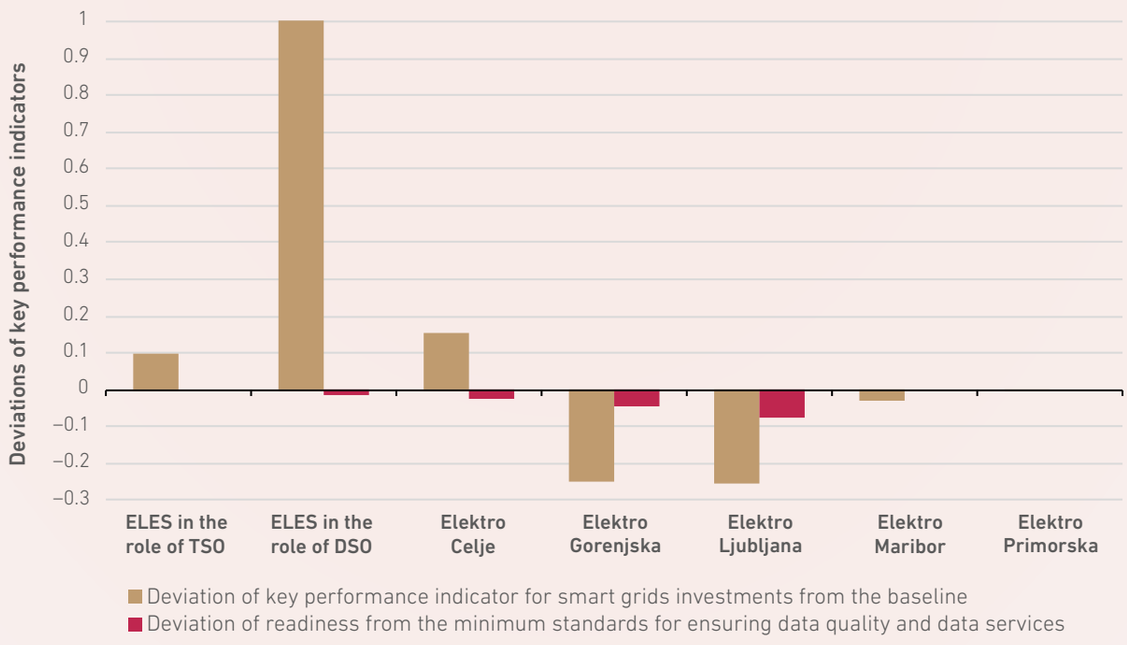
FIGURE 51: KEY PERFORMANCE INDICATOR VALUES BY INDIVIDUAL COMPANIES



SOURCE: ENERGY AGENCY

Figure 51 shows that a positive increase in the overall key performance indicator between 2023 and 2024 can be observed at two companies: ELES (for the roles of TSO and DSO) and Elektro Celje. This is reflected in the positive value of the deviation of the overarching key performance indicator, as shown in Figure 52. The latter, together with any deviation in compliance with the minimum standards for ensuring the quality of data and data services[14], is directly linked to the size of the financial incentive based on the effectiveness of investments in smart grids, as determined by KPIs.

FIGURE 52: THE VALUE OF THE DEVIATION FROM THE OVERARCHING PERFORMANCE INDICATOR FOR INVESTMENTS IN SMART GRIDS AND THE DEVIATION IN READINESS FROM THE MINIMUM STANDARDS FOR ENSURING THE QUALITY OF DATA AND DATA SERVICES



SOURCE: ENERGY AGENCY

14 This does not affect the financial incentive for the TSO.

The remaining companies – Elektro Gorenjska, Elektro Ljubljana, Elektro Maribor and Elektro Primorska – show a negative increase in the overall key performance indicator between 2023 and 2024 and, consequently, a negative value for the deviation of the overall key performance indicator. Until the end of the 2024–2028 regulatory period, the financial incentive is capped at 0 EUR, which means that a negative increase for the companies in question does not result in a negative financial incentive or a financial penalty.

The following figure shows the value of the financial incentive for the efficiency of investments in smart grids, based on the KPI values achieved for 2024, broken down by individual companies.

FIGURE 53: FINANCIAL INCENTIVES BASED ON THE EFFICIENCY OF SMART GRID INVESTMENTS

SOURCE: ENERGY AGENCY

On the basis of the detailed analysis of the current status of the KPIs presented, the Energy Agency will issue recommendations for improvements to individual companies, which they are required to take into account when drawing up their development plans.

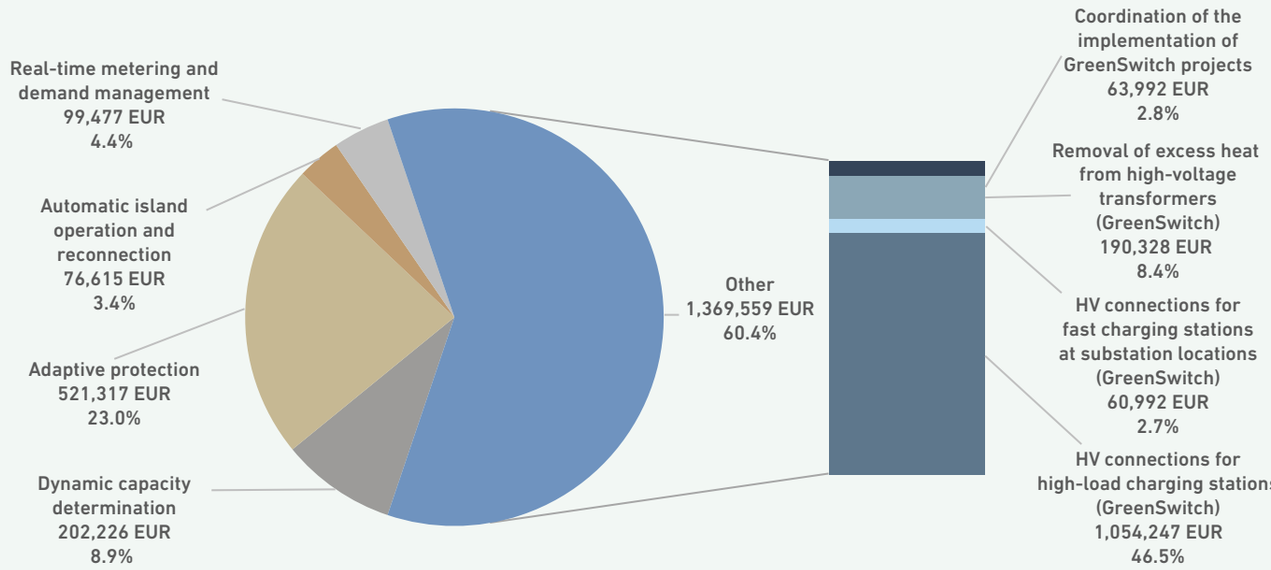
Smart grid investments

In 2025, the GreenSwitch project was implemented, with a total investment value of EUR 146.2 million. The GreenSwitch project is classified as a Project of Common Interest (PCI) in the field of smart grids; it is coordinated by ELES and was presented in more detail in the Report on the State of the Energy Sector in Slovenia in 2023. Data on the implementation of investments for 2025 are not available due to the mechanism for settling deviations from the regulatory framework; therefore, all figures below refer to the year 2024.

Figure 54 shows the structure of TSO investment realisation by individual smart grid functions. The total value of TSO investments in smart grids amounted to approximately EUR 2.27 million, representing 3.08% of total realised investments. Of this, 92.2% of the investments were made as part of the GreenSwitch project. In future, greater TSO investments can be expected within the framework of the GreenSwitch project's activities.

Most investments in smart grids within the framework of the GreenSwitch project

FIGURE 54: STRUCTURE[15] OF TSO' INVESTMENTS IN 2024 BY SMART GRID FUNCTIONS



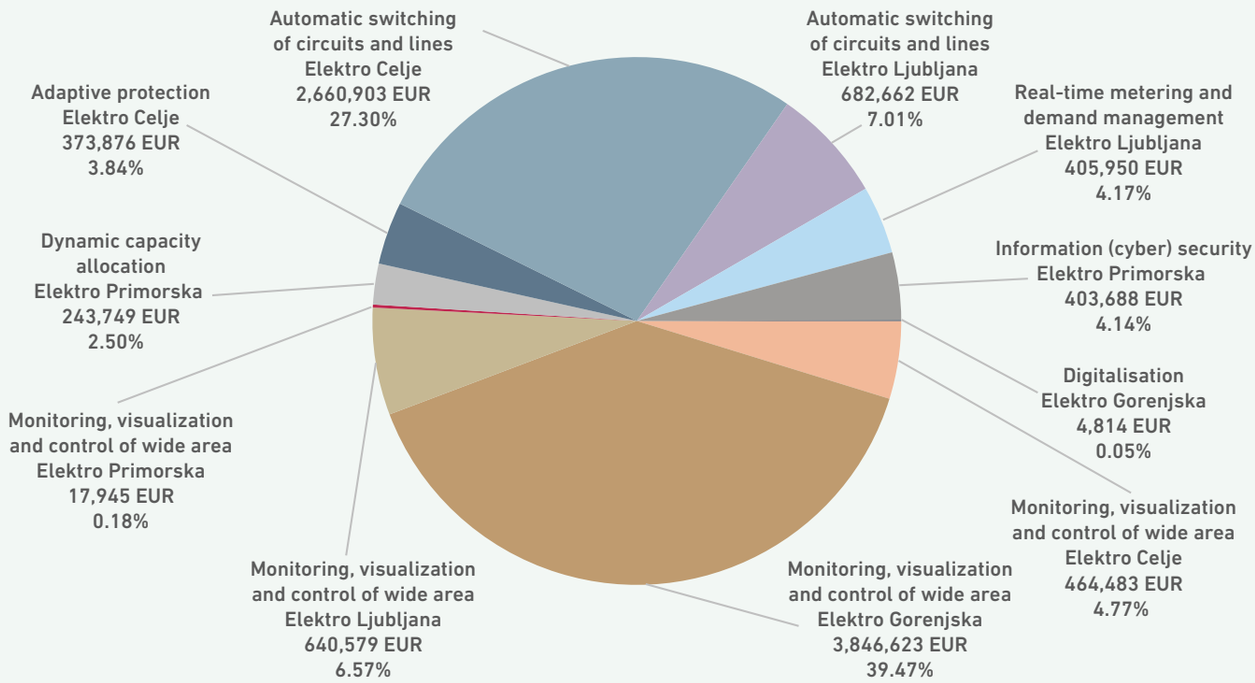
SOURCE: ENERGY AGENCY

The following figure shows the breakdown of distribution investments by individual smart grid functions. The total value of investments in smart grids amounted to approximately EUR 9.75 million, representing 4.42% of the total value of distribution investments and covering investments by Elektro Celje, Elektro Gorenjska and Elektro Ljubljana, which are being carried out as part of the GreenSwitch project, as well as investments by Elektro Primorska. Elektro Maribor did not report any investments in smart grids in 2024. The implementation of the GreenSwitch project has led to a significant increase in distribution investments in smart grids.

GreenSwitch has led to a significant increase in distribution activity in relation to investments in smart grids

15 The difference between the total and the sum of the individual percentages is due to rounding.

FIGURE 55: STRUCTURE OF DISTRIBUTION INVESTMENT REALISATION IN 2024, DIVIDED BY SMART GRID FUNCTIONS

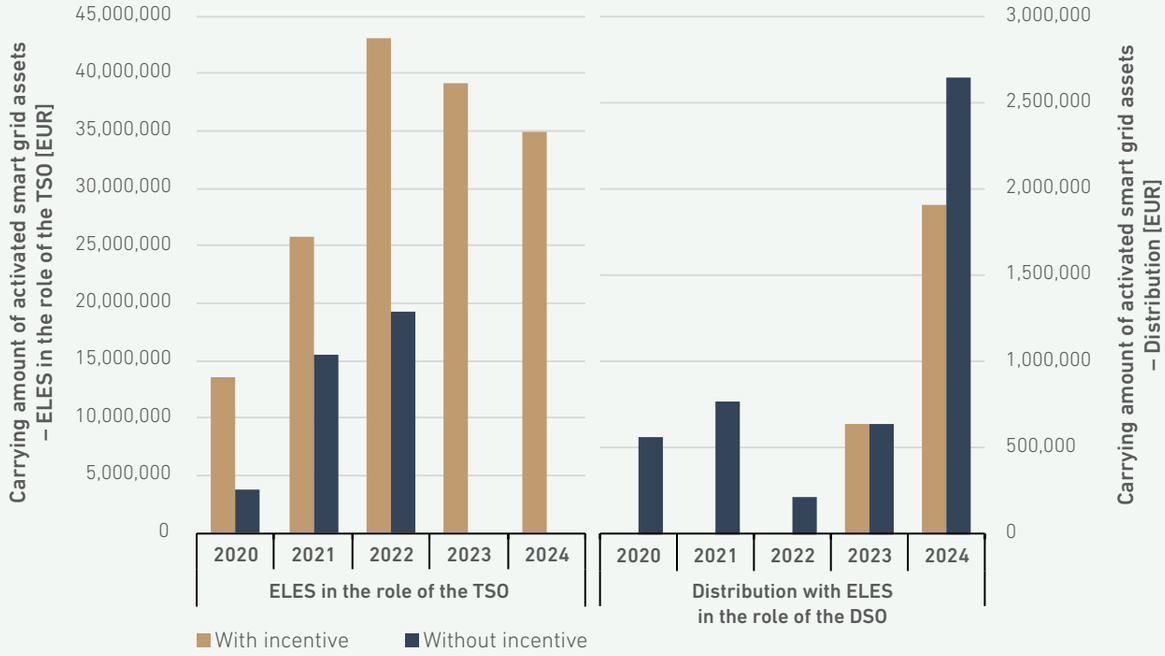


SOURCE: ENERGY AGENCY

Projects under the incentive scheme for investment in smart grids qualify for implementation on the basis of a project application submitted to the Energy Agency. The incentive is granted on the basis of the project's eligibility and an assessment of the related capitalised assets, which must comply with the definition of smart grids and smart energy infrastructure set out in the general act governing the methodology for determining the regulatory framework. The agency awards the incentive on the basis of an assessment of the actual capitalised assets of an eligible smart grid project, which are reported by the obligated parties during the annual settlement of deviations from the regulatory framework. Figure 56 shows a comparison of the net book values of capitalised assets relating to smart grid projects as of 31 December of each year for which an incentive has been granted, and the net book values of smart grid assets for which regulated companies do not receive incentives[16] or for which regulated companies have not submitted an application for project qualification under the smart grid investment incentive scheme. In 2024, ELES, in its capacity as the System Operator, received an incentive for capitalised assets relating to the NEDO, SUMO and SINCRO.GRID projects. On the distribution side, the companies Elektro Celje, Elektro Gorenjska and Elektro Ljubljana have capitalised assets relating to the GreenSwitch project and, on this basis, are receiving an incentive for investments in smart grids.

16 The companies classify these projects internally as smart grid projects, but they do not meet the Energy Agency's formal criteria.

FIGURE 56: OVERVIEW OF THE CARRYING AMOUNT OF ACTIVATED SMART GRID ASSETS AS OF DECEMBER 31 OF EACH YEAR



SOURCE: ENERGY AGENCY

The data presented indicate that investment in smart grids has gained new impulse with the GreenSwitch project. Alongside ELES, the companies Elektro Celje, Elektro Gorenjska and Elektro Ljubljana are also involved in the project. As project activities progress, investments under this project are expected to intensify in the coming years, covering both the transmission and distribution sections of the grid. On the other hand, despite the revised smart grid development strategy, investment levels are falling short of the targets set out in the strategy, which consequently affects the pace of grid development required to achieve the green transition targets. Elektro Maribor also does not report on the implementation of investments in smart grids.

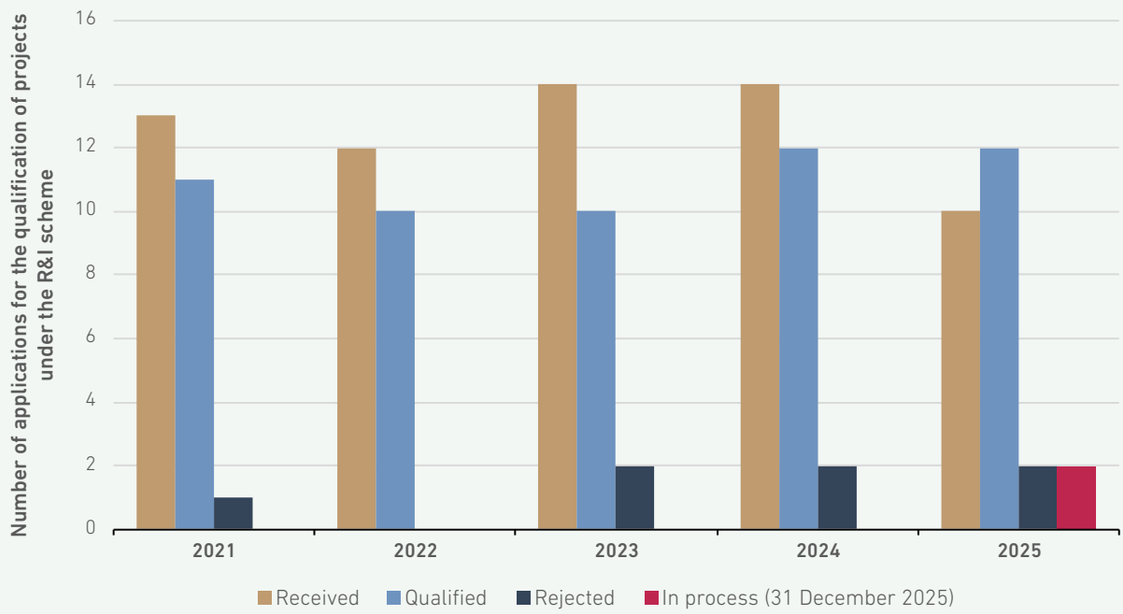
Projects under the Research and Innovation Scheme

In 2025, the agency received ten applications for the qualification of projects under the Research and Innovation (RI) scheme; 12 projects were qualified[17] and 11 projects were completed. At the end of 2025, two projects were still undergoing the qualification process. The following figure shows the number of applications for project qualification under the RI scheme by year.

12 projects qualified for the RI scheme

17 Some applications were submitted in 2024.

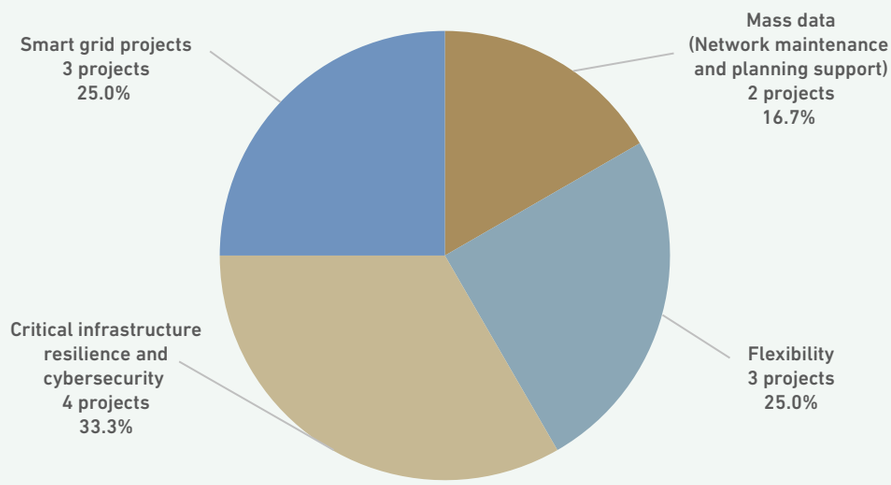
FIGURE 57: OVERVIEW OF THE NUMBER OF APPLICATIONS FOR THE QUALIFICATION OF PROJECTS UNDER THE RESEARCH AND INNOVATION INCENTIVE SCHEME



SOURCE: ENERGY AGENCY

The following figure provides an overview of the key themes of the projects approved in 2025. Compared with the previous year, there has been a noticeable increase in the share of projects addressing critical infrastructure resilience and cyber security, while the number of projects in the field of smart grids is levelling off following last year's sharp rise. The share of projects addressing flexibility and the use of big data for the benefit of the electricity system remains at a level comparable to last year's.

FIGURE 58: STRUCTURE OF THE MAIN TOPICS OF QUALIFIED PROJECTS UNDER THE RESEARCH AND INNOVATION INCENTIVE SCHEME IN 2025



SOURCE: ENERGY AGENCY

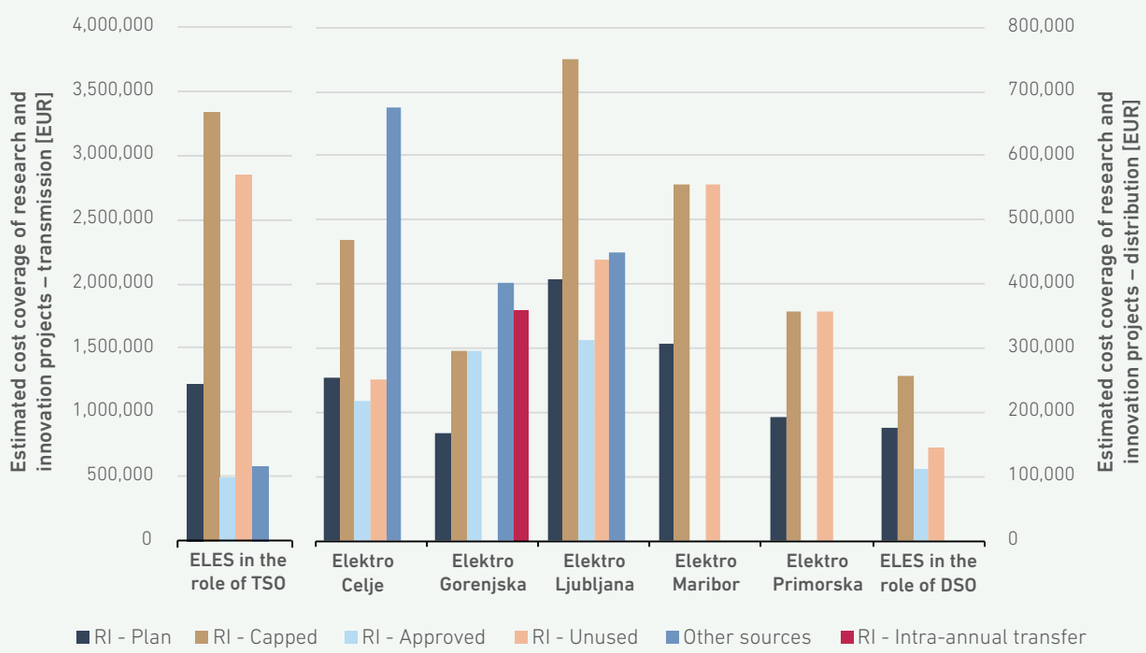
Data on the actual expenditure for RI in 2025 are not available due to the mechanism for settling deviations from the regulatory framework, therefore the data presented below refer to cumulative figures for the period 2023–2024, which already include unutilised costs up to the cap or uncovered costs from previous years.

The planned costs for implementing RI projects amounted to 0.25% of the planned resources for covering eligible costs (labelled 'RI-Plan' in Figure 59). The cap on the total value of research and innovation costs covered by the network charge (hereinafter the 'RI scheme') is set at 0.5% of the recognised resources for covering the company's eligible costs (labelled 'RI-Capped' in Figure 59). During the period 2023–2024, ELES and EDCs carried out activities under RI projects, the cumulative[18] value value of which amounts to approximately EUR 1.43 million, funded from the RI scheme, and approximately EUR 2.11 million from other sources (funds received free of charge from the Horizon Europe, ARIS and others, labelled 'Other sources' in Figure 59).

Compared with the previous year, EDCs has seen an increase in the funding of project activities from sources other than the RI scheme. At ELES, in its capacity as a TSO, there has been an increase in the funding of project activities from the RI scheme compared with other sources. ELES, in its capacity as DSO used only the RI scheme to cover the costs of its projects, without any other sources. Elektro Gorenjska continues to incur costs that exceed the limit, which indicates inadequate cost planning and means that costs exceeding the limit will be taken into account in the following year. The companies Elektro Maribor and Elektro Primorska did not carry out any project activities under the RI scheme.

Figure 59 shows a comparison of the absolute values of planned, capped, actual and unutilised (labelled 'RI-Unused' in Figure 59) costs under the RI scheme, while Figure 60 shows the utilisation rate of the RI scheme relative to the level of the aforementioned cap.

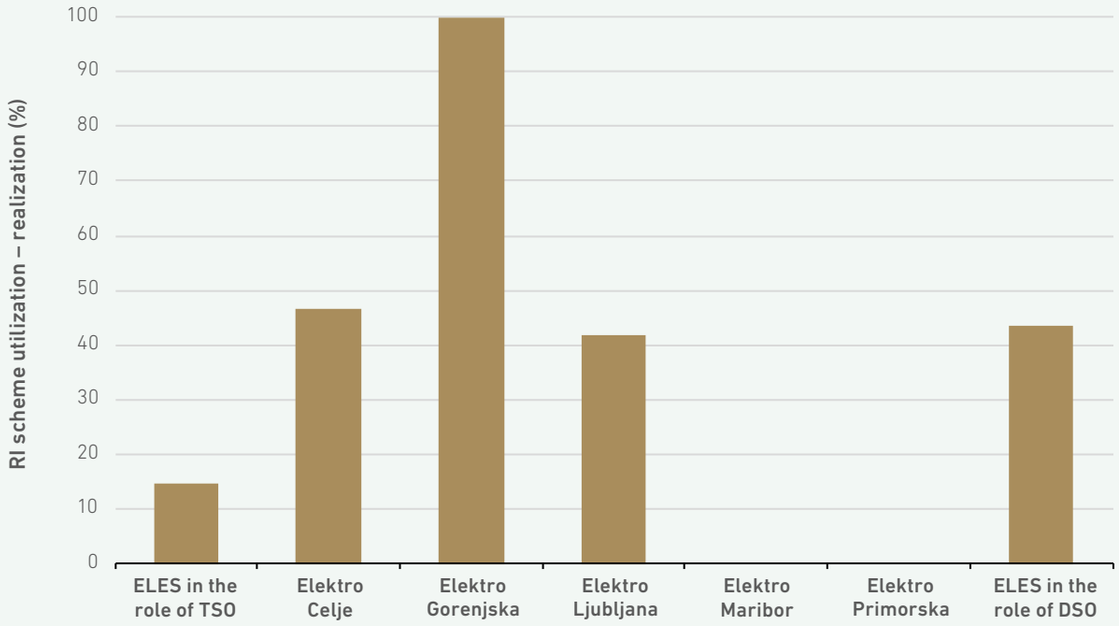
FIGURE 59: UTILIZATION OF THE RI SCHEME BY INDIVIDUAL COMPANIES IN RELATION TO THE PLANNED VALUES FROM THE REGULATORY FRAMEWORK AND THE NON-REPAYABLE FUNDS OBTAINED FROM OTHER SOURCES



SOURCE: ENERGY AGENCY

18 Cumulative values are linked to the regulatory period and are added each year within the regulatory period to the values from the previous year of the regulatory framework.

FIGURE 60: SHARE OF RECOGNIZED RI COSTS BY INDIVIDUAL COMPANIES IN THE REGULATORY FRAMEWORK DEVIATION PROCEDURE IN RELATION TO THE CAPPED VALUE



SOURCE: ENERGY AGENCY

Cybersecurity of the Power System

The electricity system forms the foundation of the modern way of life, economic development and the achievement of climate targets. Its reliable operation is increasingly dependent on digital technologies, advanced communications networks and the processing of large volumes of data. Digitalisation, which enables more efficient system management, greater integration of renewable energy sources and the development of new energy services, simultaneously increases exposure to cyber risks and systemic vulnerabilities.

During the period 2024–2025, the electricity sector found itself at the intersection of three key dynamics: further electrification, accelerated digitalisation and a more tense geopolitical and security environment. Digital infrastructure is becoming an integral part of critical energy infrastructure; consequently, its security is increasingly directly linked to the reliability of the physical energy supply[19].

The cyber landscape during this period remains complex and is evolving dynamically. There is evidence of the continued professionalisation of actors, the rapid exploitation of vulnerabilities, and the growing interconnection between different types of threats. Ransomware attacks remain a central element of cybercrime, while phishing and related techniques continue to represent the predominant initial attack vector, increasingly supported by the use of artificial intelligence. Exploitation of dependencies on digital supply chains, cloud services and outdated infrastructure is also on the rise, increasing systemic risks to critical infrastructure.

An additional dimension is the geopolitical context, in which state-sponsored groups are carrying out long-term and targeted operations against critical infrastructure sectors. The boundaries between cybercrime, hacktivism[20] and state-sponsored activities are becoming increasingly blurred, making it more difficult to detect and respond effectively to incidents and highlighting the need for a comprehensive approach to risk management.

19 https://www.enisa.europa.eu/publications/enisa-threat-landscape-2025
20 Hacking activities aimed at promoting views or achieving political objectives

Another significant factor driving these changes is the accelerated adoption of advanced digital technologies, particularly artificial intelligence. This enables more efficient management of complex electricity systems, optimisation of operations and better detection of anomalies, whilst at the same time raising new questions regarding security, reliability and risk management. The dual nature of artificial intelligence – as a tool for strengthening system resilience and, at the same time, a potential vector for new threats – is becoming one of the key characteristics of the modern cyber landscape in the energy sector.

Artificial intelligence is therefore no longer merely a technological innovation, but an increasingly important systemic element of the electricity sector, influencing its planning, operation and regulation[21].

At the same time, the growing digitalisation and complexity of the system also require an appropriate regulatory response. At EU level, this is reflected in the establishment of a unified framework for the cyber security of the electricity system, which complements the broader framework of Directive (EU)2022/2555[22] (hereinafter NIS 2) and addresses the sector's specific needs. The adoption of the Network Code on Cyber Security (hereinafter NCCS[23]). The NCCS marks a transition from general requirements to a more structured and coordinated implementation of measures at sector level, with cooperation between national regulators, system operators and European institutions playing a key role. Its role and implications are addressed in more detail in the sub-chapter on the Network Code on Cyber Security (NCCS).

In such an environment, ensuring the information and cyber security of the electricity system is becoming a key prerequisite for a reliable energy supply and the stable functioning of society. This requires a comprehensive approach that encompasses technological, organisational and regulatory aspects, as well as continuous adaptation to the rapidly changing landscape of cyber threats.

Regulatory Aspects

In 2025, the field of information and cyber security of the electricity system entered the phase of operational implementation of the European regulatory framework. In particular, the requirements of the NCCS Regulation began to take on a more concrete implementation framework, as reflected in the gradual development of national methodological, data and supervisory frameworks for managing cyber risks in cross-border electricity flows. Consequently, the regulatory focus is shifting from monitoring and drafting rules to establishing the conditions for their comparable, verifiable and data-driven implementation.

The Energy Agency is temporarily acting as the national competent authority for cyber security within the scope of the NCCS Regulation

At national level, continuity in the performance of the tasks of the competent cyber security authority, within the scope of the NCCS Regulation, was ensured in 2025. This enabled the Regulation to begin to be implemented, including in the areas requiring the harmonisation of methodologies, the preparation of data sets and the establishment of a basis for future comparative analyses of costs, measures and their effectiveness. A transitional institutional framework has been established, which reduces the risk of regulatory gaps during the period of transposing European requirements into national practice.

A significant step forward is the introduction of cyclical monitoring of a key strategic security indicator, which enables a more structured assessment of the electricity sector's preparedness for cyber risks. The indicator links tactical and operational indicators and also incorporates an evaluation of major security events and incidents. On this basis, a longer-term insight is formed into trends in cyber resilience, the link between measures implemented, investments and the actual level of risk, and the effectiveness of existing security practices.

Systematic monitoring of public utility service providers in 2025 further improved the overview of the maturity of information and cyber security practices within the sector. This approach enables a more comprehensive assessment of whether organisational, technical and procedural measures are evolving in line with the power system's growing digital dependency and the requirements of the European regulatory framework. At the same time, it strengthens the basis for a more targeted approach to risks that are significant for the reliable operation of the electricity system.

21 ETIP SNET. Unlocking the Potential of AI and Generative AI in European Smart Grids A Strategic Position Paper and Guide for Action. 2025.
22 Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive)
23 Commission Delegated Regulation (EU) 2024/1366 of 11 March 2024 supplementing Regulation (EU) 2019/943 of the European Parliament and of the Council by establishing a network code on sector-specific rules for cybersecurity aspects of cross-border electricity flows.

At EU level, the Slovenian regulatory environment was involved in 2025 in the harmonisation of approaches to the implementation of the NCCS Regulation. This has contributed to greater comparability of national solutions with European methodological frameworks, particularly in the areas of risk assessment, the classification of cyber incidents, data exchange and the preparation of comparative analyses. The focus was on developing a common understanding of how cyber security costs, the effectiveness of measures and the level of residual risk should be addressed in a way that allows for comparability between Member States whilst taking into account the specific characteristics of national electricity systems.

In 2025, the regulatory framework was also upgraded in view of future comparative analyses of cyber measures and investments. The foundations were established for reporting on costs, prices, residual risks and the incorporation of cyber security requirements into public procurement. This is an important step towards a more transparent assessment of the cost-effectiveness of cyber security measures, as the analysis is not limited only to the level of investment, but also takes into account their link to risk management and the maturity of security practices.

Technological factors are also becoming increasingly important, particularly artificial intelligence, automation and advanced data analytics. These factors enhance the potential for more effective risk detection, incident response and support for regulatory decision-making, whilst at the same time raising new questions regarding trust, control, transparency and the resilience of digital solutions. Consequently, the regulatory approach to cyber security is becoming increasingly intertwined with the broader issues of the digitalisation of the electricity system.

By the end of 2025, a more integrated regulatory framework for the cyber security of the electricity system will thus be in place, combining risk monitoring, methodological harmonisation, the collection of comparable data and the evaluation of the effectiveness of measures. Such a framework provides the basis for the continued implementation of the NCCS Regulation, for the development of more advanced regulatory tools, and for more systematic monitoring of the cyber resilience of the electricity system in the coming years.

The Network Code for Cybersecurity (NCCS)

The NCCS Regulation, which was adopted in 2024, establishes the EU's first unified regulatory framework for addressing cyber security in the electricity sector. The Regulation implements the NIS 2 requirements for cross-border electricity flows and sets out obligations for electricity system operators (TSOs/DSOs) and competent national authorities.

Under the NCCS Regulation, Member States were required to designate a competent national authority for cybersecurity within the scope of the NCCS (CS NCA) by December 2024[24]. As no formal decision on the competent authority had been adopted in the Republic of Slovenia by the deadline, the transitional mechanism provided for in the Regulation came into force in 2025, under which the tasks of the CS NCA are temporarily carried out by the national regulatory authority. This ensured continuity in the implementation of the initial obligations under the NCCS and prevented any delay in Slovenia's integration into the European implementation cycle for the cyber security of the electricity system.

In 2025, the transition from the preparatory to the initial implementation phase of the NCCS was therefore achieved. A basic framework was established within the Slovenian electricity sector for addressing the entities, processes and assets relevant to ensuring cross-border electricity flows at Union level. The scope of implementation has focused on entities or processes with a high or critical impact, as determined by the provisional index of impact on the cyber security of the electricity system (ECII), which enables a more targeted approach to those parts of the system where a cyber incident could significantly affect operational reliability and cross-border electricity flows.

Significant progress has also been made in the methodological regulation of this area. Work has begun on harmonising the methodology for assessing cyber risks at Union, regional and Member State levels; this methodology includes an assessment of threats, probabilities and consequences, and specifically addresses risks related to suppliers and the supply chain. In parallel, a framework for classifying cyber attacks and incidents was also established, based on a five-level severity scale, with the highest two levels defined as 'major' and 'critical'. This laid the foundations in 2025 for a more uniform assessment of cyber risks and incidents in connection with cross-border electricity flows.

Of particular importance is the preparation for the implementation of Article 13 of the NCCS Regulation, which introduces a comparative analysis (benchmarking) of cyber security measures, associated costs and the effectiveness of investments in cyber security. This mechanism goes beyond traditional compliance assessment, as it is designed to evaluate whether the processes, services,

24 Cybersecurity National Competent Authority

systems and solutions used contribute to the effective mitigation of risks and whether the costs of their implementation are reasonable, proportionate and comparable. In its guidelines on comparative analysis, ACER emphasises that the purpose of comparison is to facilitate learning, set targets and support the assessment of cost-effectiveness and the justifiability of costs that may be taken into account in the regulation of network activities.

An implementation framework for collecting the data required for a comparative analysis has therefore been drawn up, to be in place by the end of 2025. This includes data on CAPEX/OPEX costs for services, systems and products that make a significant contribution to managing cyber risks in cross-border electricity flow processes. A standardised template is to be used for reporting, enabling a comparable treatment of assets and costs in accordance with the ENTSO-E and EU DSO registers. In addition to the cost aspect, a framework has also been developed for the self-assessment of residual risks relating to assets associated with critical or essential processes for ensuring cross-border electricity flows.

The status achieved by 2025 can therefore be summarised as the establishment of the initial implementation architecture for the NCCS in Slovenia. This comprises defining the relevant scope of obligated entities and processes, preparing methodological frameworks for risk assessment and incident classification, the establishment of a data framework for the comparative analysis of the costs and effectiveness of measures; and the commencement of the systematic integration of cyber security into investment and procurement decisions in the electricity sector.

Despite the progress made, the question of a permanent institutional framework for the implementation of the NCCS in Slovenia remains an important open issue. A clear division of responsibilities between the national regulatory authority and the national cyber security authority will be crucial for the long-term effective implementation of the Regulation, particularly with regard to the approval of methodologies, the processing of security-sensitive data, cooperation with European institutions, and the enhancement of the national cyber resilience of the electricity system. In 2025, therefore, a fundamental shift in implementation was achieved: from the legislative adoption of the NCCS to the establishment of the conditions for its operational implementation in the Slovenian electricity sector.

Operational aspects of activities

In 2025, the Energy Agency, in its capacity as the NRA and, on a temporary basis, also as the CS NCA, moved into the phase of carrying out the tasks set out in the NCCS Regulation, following ACER's guidelines for conducting a comparative analysis of cyber security. The key focus was on the timely and coordinated implementation of the obligations under the Regulation, ensuring comparability of approaches at the EU level.

Overview of the implementation of the NCCS

Status of the NRA's role

In its role as the national regulatory authority, the baseline for carrying out a comparative cyber security analysis in accordance with Article 13 of the NCCS was established in 2025. This analysis does not constitute a traditional compliance audit, but rather an analytical tool for assessing the costs, effectiveness and proportionality of cybersecurity measures. It is based on the question of whether investments in cyber security actually contribute to reducing risks to cross-border electricity flows and whether these investments are comparable and cost-effective in relation to the effects achieved.

In 2025, a framework was therefore established for the collection and comparison of data on cyber security costs, including CAPEX/OPEX data, data on relevant services, systems and products, and a self-assessment of residual risks. A key element of this framework is the use of standardised templates and methodological guidelines, as comparative analysis requires data to be collected in a way that allows for comparability within the country and, subsequently, at the EU level.

This laid the foundations in 2025 for a more data-driven assessment of cyber security investments in the energy sector. The operational significance of this shift lies in the fact that cyber security is no longer treated merely as a technical or organisational requirement, but also as an area of regulated costs and investments, where the link between the cost, the measure, residual risk and the impact on the reliability of cross-border electricity flows must be demonstrated step by step.

It is particularly important that the framework for comparative analysis was designed as a supporting analytical mechanism rather than as a means of directly determining compliance or non-compliance with binding requirements. This approach enables a gradual comparison of the maturity of measures without reducing reporting to a formal check of compliance with individual requirements. In operational terms, this represents a shift towards assessing the effectiveness, proportionality and replicability of investments in cyber resilience.

Status of the Interim Role of the CS NCA

In 2025, while acting in the interim capacity of the competent national cybersecurity authority within the scope of the NCCS, the initial national implementation of sector-specific cybersecurity rules for cross-border electricity flows was established. The key operational outcome of this role was the identification of entities with a significant or critical impact on the cyber security of the electricity system, based on the provisional ECII index. This identified the entity subject to further obligations regarding methodologies, reporting and risk management within the scope of the NCCS.

On this basis, a methodological framework was established in 2025 for two key areas: the classification of cyber attacks and incidents, and the assessment of cyber risks at Union, regional and Member State level. This has strengthened the national environment's capacity to address cyber events and risks in a manner comparable to European methodological approaches and suitable for joint decision-making by the competent authorities of the Member States.

The operational significance of this role lies primarily in the fact that, by 2025, the conditions had been established for a more uniform classification of incident severity, for a more consistent assessment of risks, and for the integration of national findings with methodologies harmonised at European Union level. This is particularly important because the NCCS does not treat cyber security merely as an internal security issue for individual operators, but as an issue with systemic implications for cross-border electricity flows.

Participation in the coordination processes of the competent authorities of the Member States in 2025 helped ensure that the national implementation of the NCCS was not developed in isolation, but as part of a harmonised European framework. In operational terms for Slovenia, this means that methodological requirements, terminology, deadlines and key focus areas are being gradually aligned with the approaches of other Member States, thereby reducing the risk of a fragmented application of sector-specific cybersecurity rules.

The Combined Effect of Both Roles

The combined effect of both roles of the agency in 2025 is the establishment of an initial operational and regulatory framework for monitoring cyber security in that part of the electricity system which is relevant to cross-border electricity flows. The NRA's role contributes primarily to understanding the cost-effectiveness and proportionality of measures, whilst the CS NCA's role contributes to methodological and procedural preparedness for dealing with incidents, risks and obligated parties under the NCCS.

This has laid the foundations for the next phase of development, in which the key question will be how to use the collected data and methodological frameworks to assess the actual level of cyber resilience. Further development will therefore need to integrate three levels of assessment: costs and investments in cyber security, the assessment of residual risks, and the operational impact of risk mitigation measures on cross-border electricity flows.

The approach outlined here complements the content of the previous section on the NCCS Regulation. While the focus there is on the regulatory and methodological framework of the network code, from an operational perspective the emphasis is on the situation established by the regulator in 2025 and the conditions this creates for the continued monitoring of the cyber resilience of the electricity system.

Public Service Providers

In 2025, the transition from individual security measures to a more systematic approach to managing cyber resilience was further consolidated amongst providers of public services. In this regard, the SEVF maintained its role as a sectoral platform for the exchange of information, best practices and alerts on current cyber threats; at the same time, based on a preliminary pilot sampling of readiness indicators, a more regular framework for monitoring the maturity of security practices in the sector was established.

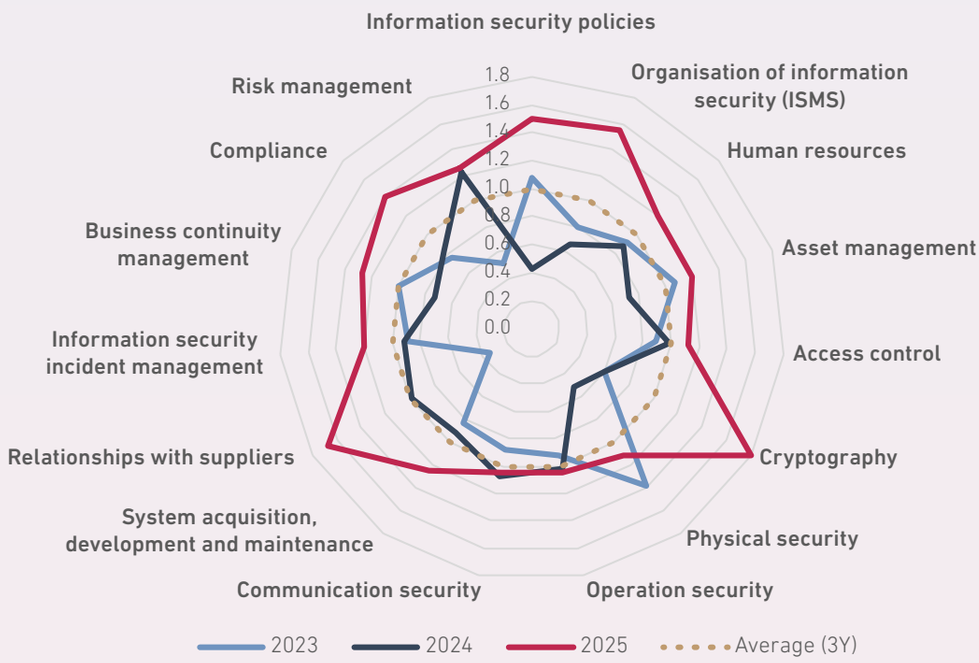
The overall picture among public service providers shows that 2025 was marked by a further strengthening of security controls, particularly in business IT, which remains the key area for action. 55% of additional activities were focused on IT, 24% on OT, 8% on the area of measurements, whilst 13% of activities were classified under 'other' or 'unclassified' areas. Compared with 2024, the total volume of additional activities increased by approximately 10%, indicating continued growth in security engagement and exceeding the 2023 level.

The structure of activities shows that the sector is achieving the greatest maturity in areas directly related to the management of operational risks. The most prominent focus areas are access management, operational security, incident management, compliance and communications security. This means that security priorities are shifting from the general establishment of rules and organisational frameworks towards more operational controls:

access restriction, monitoring of operational processes, incident detection and response, and ensuring compliance. From the perspective of cyber resilience, this distribution can be seen as intentional, as it addresses areas that directly reduce the likelihood of unauthorised access, the spread of incidents and operational disruptions.

At the same time, the distribution shows that the sector is not equally active across all domains of ISO 27002|27019. The share of OT is significant, but still substantially lower than that of IT, indicating that the strengthening of process informatics is continuing, yet remains an area of development with greater potential for further improvement. Similarly, the field of metering is gaining importance, but given the role of advanced metering systems, data nodes and network digitalisation, it is still addressed to a relatively limited extent. Further insight into the normalised three-year average of activities is provided in the graph in Figure 61, while the most frequently addressed sub-areas of ISO 27002 are shown in a multi-tiered pie chart (Figure 62).

FIGURE 61: NORMALISED[25] DISTRIBUTION OF ACTIVITIES AND DEVIATIONS IN THE VOLUME OF ACTIVITIES BY PUBLIC SERVICE COMPANIES BY DOMAIN



SOURCES: ENERGY AGENCY, ELES, EDCs, PLINOVODI

25 Aggregated activities are normalized to a three-year average.

FIGURE 62: THE MOST IMPORTANT SUB-AREAS OF ADDITIONAL ACTIVITIES BY PUBLIC SERVICE COMPANIES BY SUB-AREA ACCORDING TO ISO 27002

SOURCES: ENERGY AGENCY, ELES, PLINOVODI, EDCs

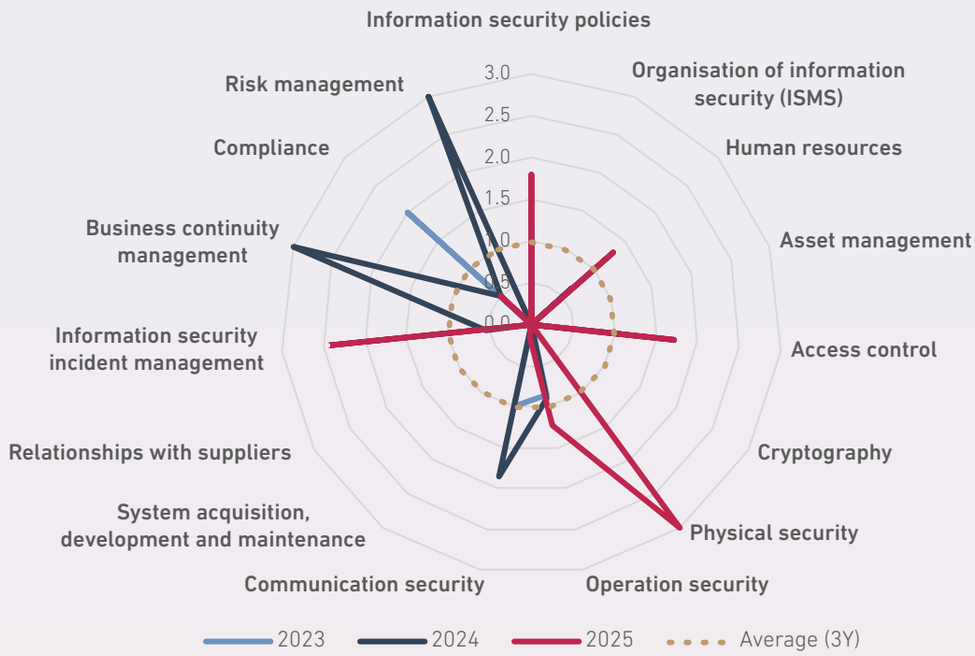
ELES

At ELES, 2025 was marked by a noticeable increase in security efforts and a stronger focus on operational maturity. The volume of additional activities was 37% higher than in the previous year, with the majority of activities focused on business IT, which accounted for 65% of all additional activities. Business process IT accounted for 21%, metering for 2%, and unclassified activities for 12%.

The current status indicates that ELES is strengthening its cyber resilience primarily in areas that are crucial for the stability and control of critical systems. The continued growth in activities in the field of operational security signifies the consolidation of controls that support the secure operation of information and support systems. The strengthening of human resources reflects the recognition of the human factor as a key element of resilience, whilst the increase in incident management activities indicates a shift in maturity from preventive measures towards a more structured capability to detect, respond to and learn from security incidents.

Compared with the previous period, ELES therefore demonstrates a more balanced security maturity profile: in addition to technical measures, response processes and organisational preparedness are also being strengthened. This is particularly important given ELES's role as a combined transmission and distribution system operator and its exposure to the NCCS requirements for cross-border electricity flows. The increased focus on incident management, operations and human resources indicates that the security function is gradually being positioned closer to the core of continuous operations and is no longer merely a supporting IT function. The graph in Figure 63 provides a further standardised insight into activities based on a three-year average.

FIGURE 63: NORMALISED[25] DISTRIBUTION AND DEVIATIONS IN THE VOLUME OF ELES ACTIVITIES BY ISO 27002 AREA

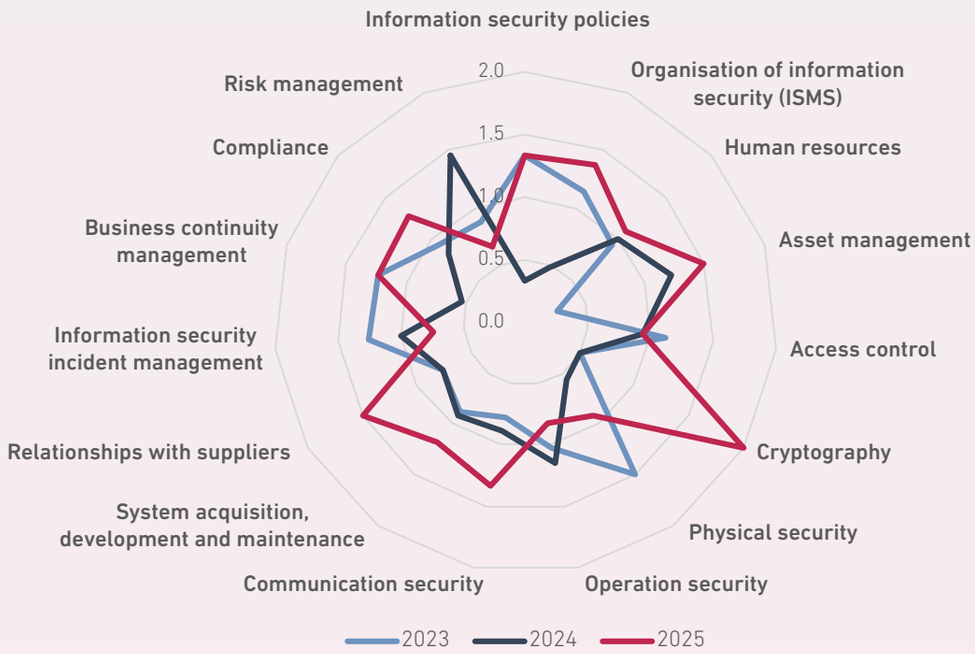


SOURCES: ENERGY AGENCY, ELES

Distribution companies

In 2025, distribution companies further expanded the scope and scale of their security audits. In total, they carried out 285 additional information security activities. Their distribution is similar to the sector average: 55% of activities were carried out in the IT sector, 24% in the OT sector, 8% in the metering sector and 13% in other or unclassified areas. A comparison of the normalised distribution of activities is shown in the polar chart in Figure 64.

FIGURE 64: NORMALISED[25] DISTRIBUTION OF EDCs AGGREGATED ACTIVITIES BY ISO 27002 AREAS



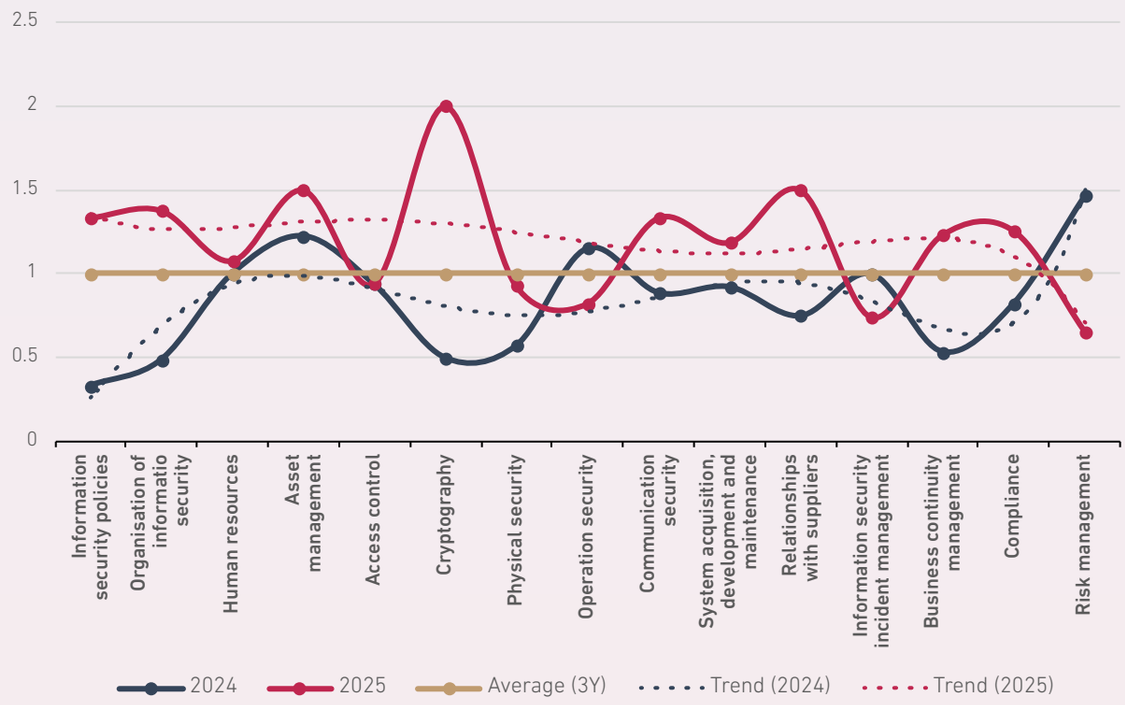
SOURCES: ENERGY AGENCY, EDCs

The current situation shows that distribution companies are strengthening their security maturity primarily in those areas where this is most closely linked to operational reliability and the digitalisation of the distribution network. Most activities were focused on operational security, incident management, access management, the acquisition, development and maintenance of systems, and business continuity management. This distribution indicates a shift towards more operationally useful security capabilities: safer execution of day-to-day processes, better access control, greater preparedness for incidents, and greater resilience of business and technical processes in the event of disruptions.

It is particularly important that activities no longer focus solely on traditional IT security, but increasingly incorporate process informatics and metering and data functions as well. This is in line with developments in distribution networks, where advanced metering systems, data nodes, automation and active demand response are increasing the dependence of operations on available, comprehensive and timely data. Although the proportion of activities in the field of metering is not yet high, it indicates that the security of the metering infrastructure is gradually being integrated into the broader framework of the distribution system's cyber resilience.

A comparison between individual distribution companies reveals varying degrees of focus across different domains, but the overall trend indicates an increase in overall maturity. By 2025, it can therefore be concluded that distribution companies are gradually developing a more comprehensive security profile, which, in addition to the protection of information systems, also includes the resilience of operational processes, incident management and the continuity of public service tasks. A comparison of the combined scope of activities of distribution companies with annual trends, presented in normalised form, is shown in the graph in Figure 65.

FIGURE 65: NORMALISED[25] COMPARISON OF THE COMBINED VOLUME AND TRENDS IN EDCs ACTIVITIES



SOURCES: ENERGY AGENCY, EDCs

Plinovodi

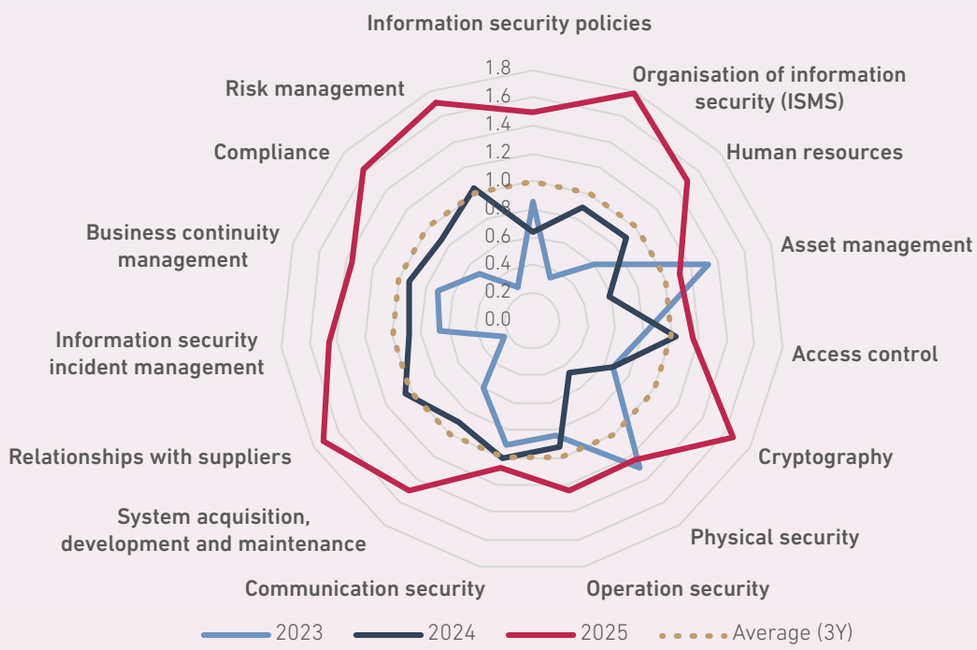
Among the stakeholders under consideration, the gas transmission system operator is expected to see the most significant volume of additional activities in 2025. A total of 449 additional activities were carried out, of which 45% were focused on business IT, 28% on process IT and 27% on other or unclassified areas.

This distribution indicates a relatively broad-based approach to strengthening cyber resilience. Compared with stakeholders in the electricity sector, the proportion of IT is lower, whilst the proportion of OT and other areas is relatively higher, indicating a more pronounced focus on supporting operational, organisational and systemic aspects of security. It is also significant that, compared with the three-year average, additional activities were observed across all ISO 27002 domains under consideration, indicating a diversified and comprehensive approach to improving the maturity of controls.

The current status at Plinovodi therefore indicates not merely an increased volume of activities, but above all an expansion of the security profile across the entire range of domains covered. This means that resilience is being strengthened not only through additional technical measures, but also through the enhancement of processes, organisational practices and controls that support the reliable operation of the gas transmission system. Given the role of the gas transmission system in security of supply, such a comprehensive approach is also important from the perspective of the cross-sectoral resilience of the energy system.

In future developments, it would be appropriate to maintain the focus on technical operations and operational aspects, whilst at the same time further categorising unclassified activities by subject area. This would allow for better comparability with other public service providers and a more precise assessment of whether the strengthening of oversight is primarily directed towards the organisational, technical, response or continuity dimensions of cyber resilience. The graph in Figure 66 also provides a normalised overview of activities based on a three-year average.

FIGURE 66: NORMALISED[25] COMPARISON OF THE TOTAL VOLUME AND TRENDS OF ACTIVITIES BY THE PLINOVODI COMPANY



SOURCES: ENERGY AGENCY, PLINOVODI

Cyber Incidents in the Energy Sector

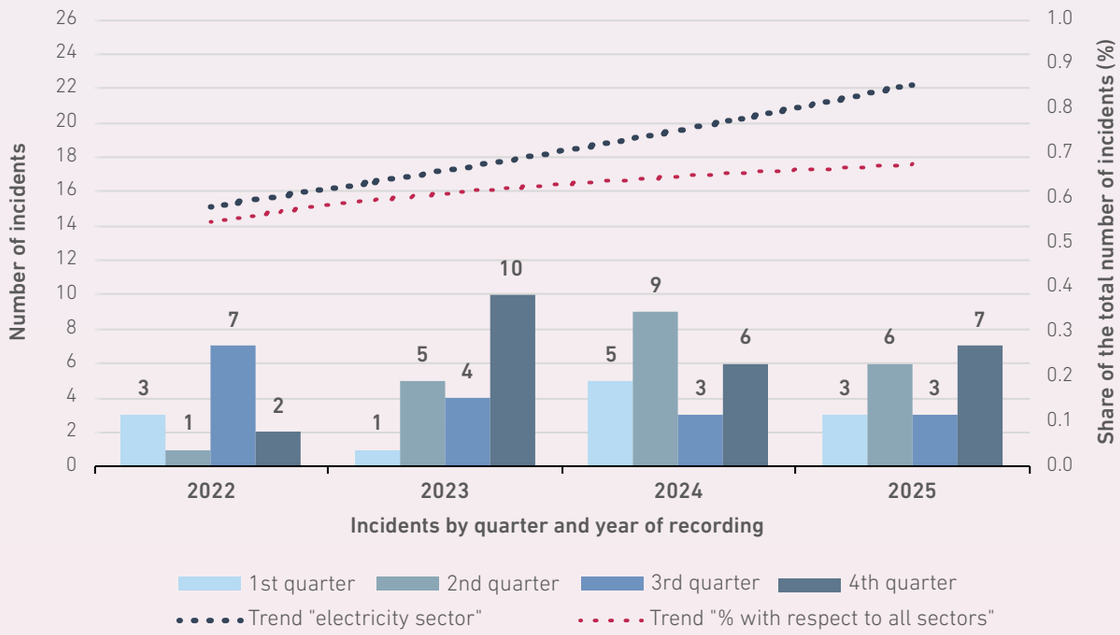
Analyses of global and European threats confirm a further intensification of cyber-attacks on the energy sector and its increasing exposure to various types of actors. The ENISA report[26] highlights the increasing complexity of the cyber environment, driven by the professionalisation of attackers, the use of advanced tools (including artificial intelligence), the rapid exploitation of vulnerabilities, and the intertwining of criminal and state actors. Ransomware remains a key threat, with attacks increasingly being carried out within the framework of decentralised and service-oriented models (e.g.

26 ENISA Threat Landscape 2025

ransomware-as-a-service), which further lower the barriers to entry for attackers, whilst hacktivist activities account for a large proportion of detected incidents, particularly in the form of distributed denial-of-service (DDoS) attacks. These findings are further supported by a report from CYBLE[27], which highlights, within the energy sector, a marked increase in attacker activity across all levels of the cyber landscape – ranging from the trade in credentials for unauthorised access to energy companies' networks to ransomware attacks, data theft and attacks on industrial control systems. A large number of incidents involving ransomware, as well as cases of breaches and data leaks, have been detected, with attacks increasingly involving access to operational technology (OT) environments and critical infrastructure. Of particular concern is the development of a criminal ecosystem in which specialised intermediaries market access to energy systems, further lowering the threshold for carrying out complex attacks.

In the Slovenian energy sector, both the first and second halves of 2025 were marked by cyber activity, to which the increasingly tense geopolitical situation most likely contributed further. Compared with similar periods in the past, the number of incidents[28] was lower in the first half of the year and similarly lower in the second half of the corresponding period last year. The upward trend in incidents in the energy sector, compared with the growth in all reported incidents (an aggregate of more complex technical incidents and less serious incidents) in the report by the National Cyber Security Response Centre (SI-CERT), remains evident. A slight short-term decline is no longer discernible in the aggregate of incidents; nevertheless, it appears to have emerged in the energy sector with a one-year lag. Nevertheless, this change cannot be attributed any significant importance, as it merely reflects a statistical deviation. Incidents reported to SI-CERT remains evident. A slight short-term decline is no longer discernible in the aggregate of incidents; nevertheless, it appears to have emerged in the energy sector with a one-year lag. Nevertheless, this change cannot be attributed any significant importance, as it merely reflects a statistical deviation. There were 4,199 incidents reported to SI-CERT (excluding phishing), assessed according to NOKI[29], which is approximately a quarter higher than in the previous observation period. Despite a significant cumulative increase in the number of reported incidents (Figure 68) the share of incidents in the energy sector – which also includes public service providers – shows only a slight upward trend (Figure 67) Compared with other sectors, the trend can even be assessed as downward, whilst the share of incidents over the entire observation period remains largely stable.

FIGURE 67: CYBER INCIDENTS IN THE ENERGY SECTOR AND THE SHORT-TERM TREND

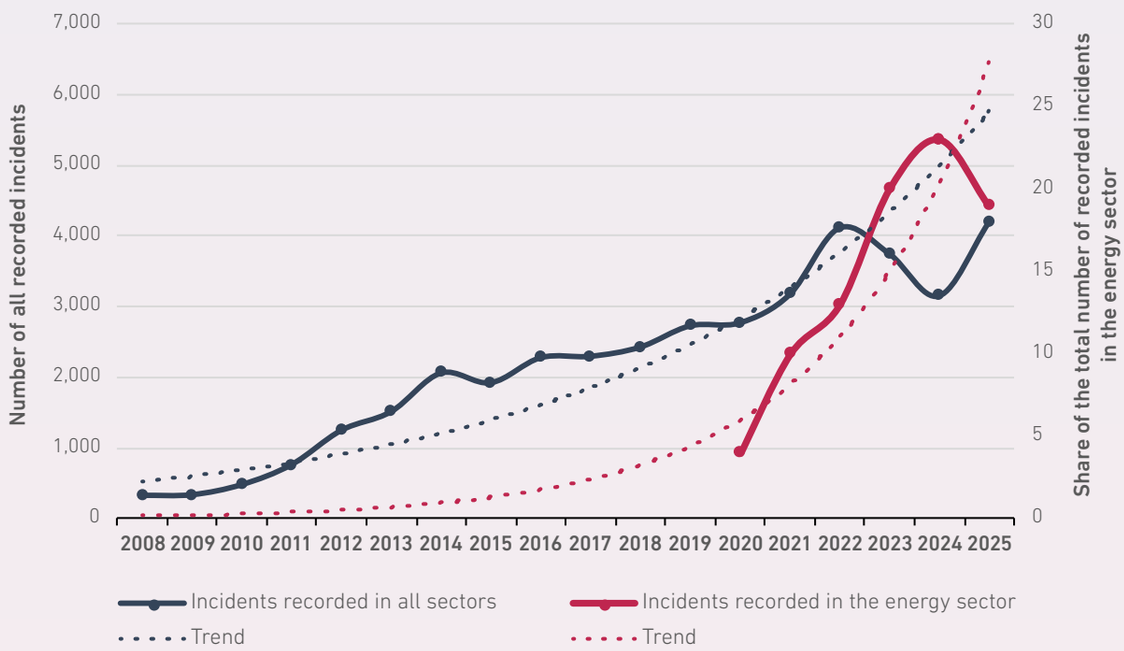


SOURCES: ENERGY AGENCY, URSIV, SI-CERT

27 CYBLE Energy & Utilities Threat Landscape Report 2025
28 Incidents that are more technically complex, as defined by SI-CERT in its 2025 annual report.
29 National Cyber Incident Response Plan

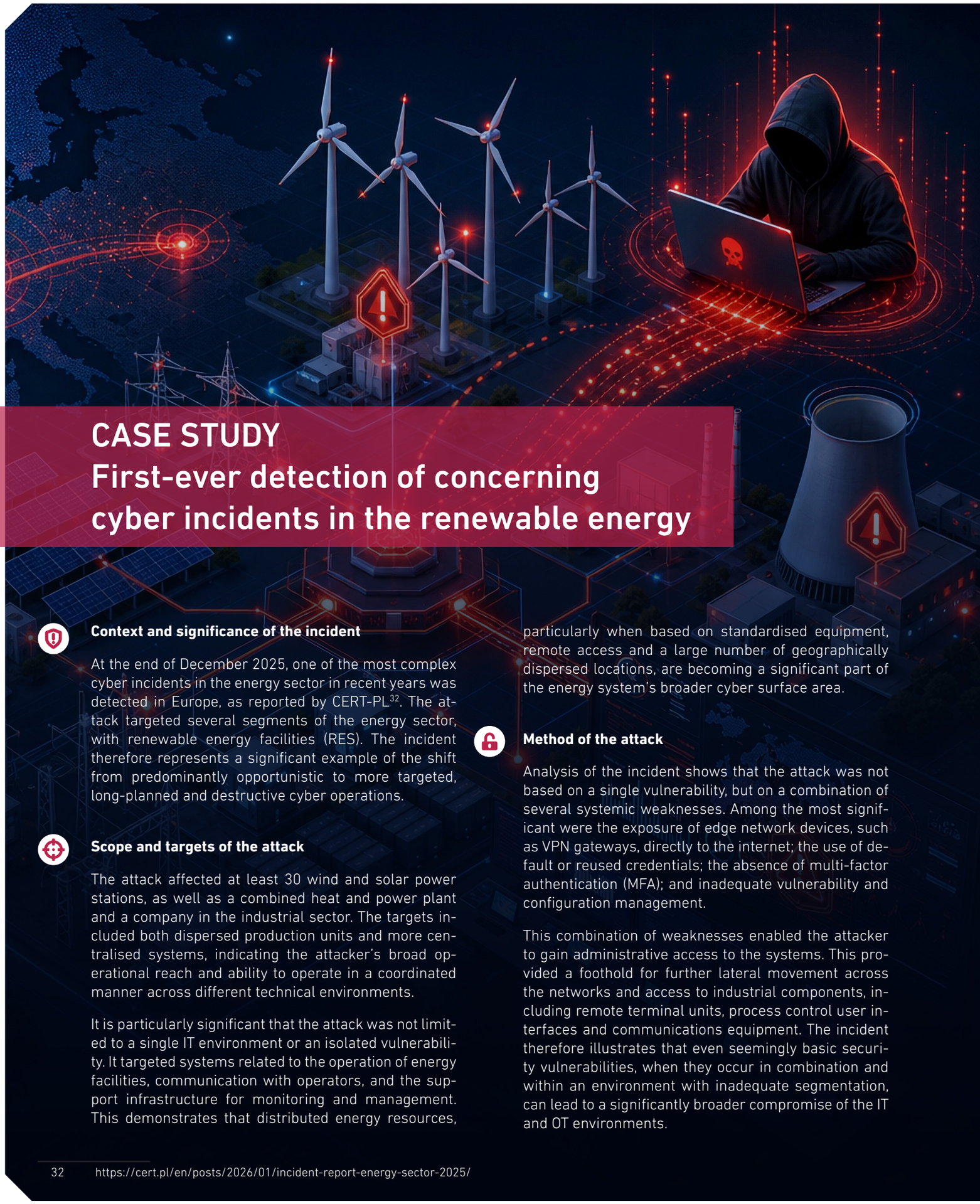
From a comparison of the share of incidents in the energy sector relative to the total number of incidents reported to SI-CERT – which, in the 2025 cyber security report[30] does not exceed 1% – there is no longer any short-term correlation with the overall growth trend in other sectors, as the number of cumulative reported incidents has stabilised in recent years (Figure 68). Despite the relatively small but not insignificant share of incidents compared with all sectors, there is a slight upward trend. Although a marked increase, such as that observed between 2022 and 2023, is no longer evident, a worrying upward trend is nevertheless apparent under the most pessimistic (exponential) interpolation. Compared with the total number of incidents reported to ENISA[31] for the energy sector in the European area (NIS 2 scope), the national share has increased by approximately two percentage points compared with the previous year to 13.5%, which in no way confirms the previously observed pessimistic trend.

FIGURE 68: LONG-TERM PROJECTION (EXPONENTIAL – WORST-CASE – APPROXIMATION) OF THE GROWTH OF INCIDENTS IN THE SECTOR



SOURCES: ENERGY AGENCY, URSIV, SI-CERT

30 https://www.cert.si/kibernetska-varnost-2024-v-stevilkah/
31 https://ciras.enisa.europa.eu/



CASE STUDY
First-ever detection of concerning cyber incidents in the renewable energy

Context and significance of the incident

At the end of December 2025, one of the most complex cyber incidents in the energy sector in recent years was detected in Europe, as reported by CERT-PL[32]. The attack targeted several segments of the energy sector, with renewable energy facilities (RES). The incident therefore represents a significant example of the shift from predominantly opportunistic to more targeted, long-planned and destructive cyber operations.

Scope and targets of the attack

The attack affected at least 30 wind and solar power stations, as well as a combined heat and power plant and a company in the industrial sector. The targets included both dispersed production units and more centralised systems, indicating the attacker's broad operational reach and ability to operate in a coordinated manner across different technical environments.

It is particularly significant that the attack was not limited to a single IT environment or an isolated vulnerability. It targeted systems related to the operation of energy facilities, communication with operators, and the support infrastructure for monitoring and management. This demonstrates that distributed energy resources, particularly when based on standardised equipment, remote access and a large number of geographically dispersed locations, are becoming a significant part of the energy system's broader cyber surface area.

Method of the attack

Analysis of the incident shows that the attack was not based on a single vulnerability, but on a combination of several systemic weaknesses. Among the most significant were the exposure of edge network devices, such as VPN gateways, directly to the internet; the use of default or reused credentials; the absence of multi-factor authentication (MFA); and inadequate vulnerability and configuration management.

This combination of weaknesses enabled the attacker to gain administrative access to the systems. This provided a foothold for further lateral movement across the networks and access to industrial components, including remote terminal units, process control user interfaces and communications equipment. The incident therefore illustrates that even seemingly basic security vulnerabilities, when they occur in combination and within an environment with inadequate segmentation, can lead to a significantly broader compromise of the IT and OT environments.

32 https://cert.pl/en/posts/2026/01/incident-report-energy-sector-2025/

Course of the attack

The attack unfolded gradually and in several phases. First, the attacker carried out a prolonged infiltration, during which they remained present within the systems for several months. During this time, they conducted reconnaissance, gathered accessible data and assessed opportunities for further propagation within the compromised environments. This prolonged presence within the systems indicates a high degree of patience and preparation, as well as an approach characteristic of more sophisticated, targeted cyber operations.

In the next phase, the attacker escalated privileges and moved laterally towards key systems, including domain environments and SCADA or OT systems. In this way, they gradually gained control over parts of the infrastructure that are important for monitoring, managing and communicating with energy facilities.

Before carrying out the final attack, mechanisms were established to enable remote access to and control of the compromised infrastructure. In doing so, the attacker laid the groundwork for the coordinated execution of the destructive phase across multiple locations. This involved the use of so-called 'wiper' malware[33], designed to irreversibly destroy data and render devices inoperable. The attack also involved the manipulation of industrial control systems and communications infrastructure, resulting in a loss of control and communication with operators.

Impact on system operation

The immediate consequence of the attack was the loss of communication between the affected distributed energy resources and the distribution operators. Nevertheless, the attack did not directly affect electricity generation itself, nor was the stability of the electricity system as a whole compromised.

However, this does not diminish the seriousness of the incident. Analysis shows that the attackers had the potential to cause significantly greater disruption, as they gained access to environments critical to the control and operation of energy facilities. The incident therefore serves as a reminder that the impact of cyber-attacks must be assessed not only in terms of the actual damage caused, but also in terms of the degree of compromise achieved, the extent of access gained and the potential for further disruption to system operations.

Key findings

The incident confirms that the energy sector is increasingly exposed to attacks that bridge information technology (IT) and operational technology (OT). The boundary between IT and OT environments is becoming increasingly blurred; consequently, vulnerabilities in the IT part of the infrastructure can enable access to systems critical to the operation of energy facilities.

Renewable energy sources represent a particularly vulnerable segment. Their distributed architecture, the use of standardised equipment, dependence on communication links and the need for remote monitoring increase the number of potential entry points. In such an environment, basic security weaknesses – such as inadequate access management, the absence of multi-factor authentication, exposed edge devices and poor configuration management – can escalate into systemic risk.

At the same time, the case study shows that attacks on the energy sector are increasingly being carried out as long-term operations involving a high degree of preparation. It is no longer simply a matter of quickly exploiting a single vulnerability, but rather of gradually gaining access, establishing a persistent presence, analysing the environment and preparing for the coordinated execution of an attack. Such an approach requires a different defence strategy, which, in addition to preventive measures, also includes advanced anomaly detection, monitoring of lateral movement (network traffic), regular assessment of exposure, and readiness to respond.

Regulatory implications

The incident highlights the importance of systematic cyber risk management across the entire energy sector. Particular attention must be paid to verifying the implementation of basic security measures, such as identity and access management, multi-factor authentication, network segmentation, edge device protection, vulnerability management and configuration control.

It is also important for regulatory oversight that distributed energy resources are not treated merely as generation units, but as part of digitally connected critical infrastructure. Their sheer number, geographical dispersion and technical standardisation mean that individual weaknesses can escalate into broader sector-wide risks. It therefore makes sense to develop comparable analytical tools to monitor the preparedness of obligated parties, including indicators of cyber resilience, risk management maturity and the effectiveness of fundamental security controls.

In this context, regulatory mechanisms – including the implementation of the NCCS Regulation and the development of proprietary analytical approaches to monitor sectoral preparedness – provide an important foundation for strengthening the resilience of the electricity system. Their value lies not only in the formal assessment of compliance, but above all in the creation of a comparable picture of risks, the identification of weak points, and the channelling of investment towards measures that contribute most to reducing the likelihood and consequences of similar incidents.

33 CISA, Destructive Malware Targeting Organizations in Ukraine, Cybersecurity Advisory AA22-057A in MITRE ATT&CK, Data Destruction – T1485.

Network Charge for the Electricity Transmission and Distribution System

Determination of network charges

The Energy Agency carries out economic regulation of the activities of electricity system operators on the basis of the regulated network charge method. This ensures that the electricity operator, through the setting of network charges and other revenues, and taking into account any network charge surplus from previous years, is able to cover all eligible costs for the regulatory period and any network charge deficit from previous years.

Through regulation, the Energy Agency promotes the efficiency of electricity system operators and system utilisation, research and innovation, and investment in new or innovative technologies; it ensures the sustainable and stable operation of electricity system operators, a stable environment for investors and owners, and stable and predictable conditions for system users.

Before the start of the regulatory period, the Energy Agency determines, on the basis of criteria, the planned eligible costs and the planned sources for covering them, within the framework of which the network charge – and consequently the tariff items for the network charge – are determined, taking into account the regulated network charge method.

Eligible costs are the costs necessary to perform an activity and they are determined on the basis of criteria set out in the general act governing the methodology for determining the regulatory framework. Eligible costs include operation and maintenance costs (SDV), costs of electricity losses in the system (SEEI), ancillary services costs (SS), flexibility services (SSP), depreciation (AM), research and innovation costs (RI), the regulated return on assets (RDS), quality of supply (Q) and incentives (S), and incentives for the perfomance of investments in smart grids (E).

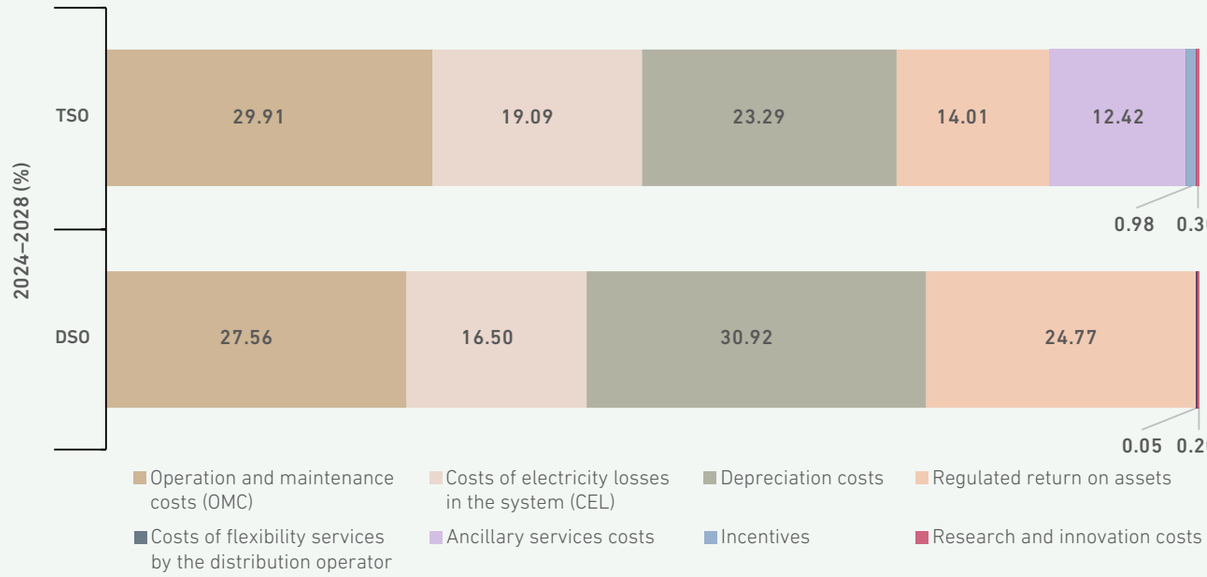
At the end of each year of the regulatory period, deviations from the regulatory framework are determined as the difference between the electricity operator's recognised eligible costs and the recognised sources for covering those eligible costs. Deviations from the regulatory framework result in a deficit or surplus in the network charge, which is taken into account when determining the next regulatory framework.

Regulatory period from 1 January 2024 to 31 December 2028

A five-year regulatory period began on 1 January 2024 and will run until 31 December 2028. In 2023, the Energy Agency set out the regulatory framework for the regulatory period from 1 January 2024 to 31 December 2028 (hereinafter the 2024–2028 regulatory period) for the transmission and distribution system operators by means of decisions. The Energy Agency established the regulatory framework for the aforementioned regulatory period on the basis of the Act on the Methodology for Determining the Regulatory Framework for Electricity Operators, which it issued in 2022.

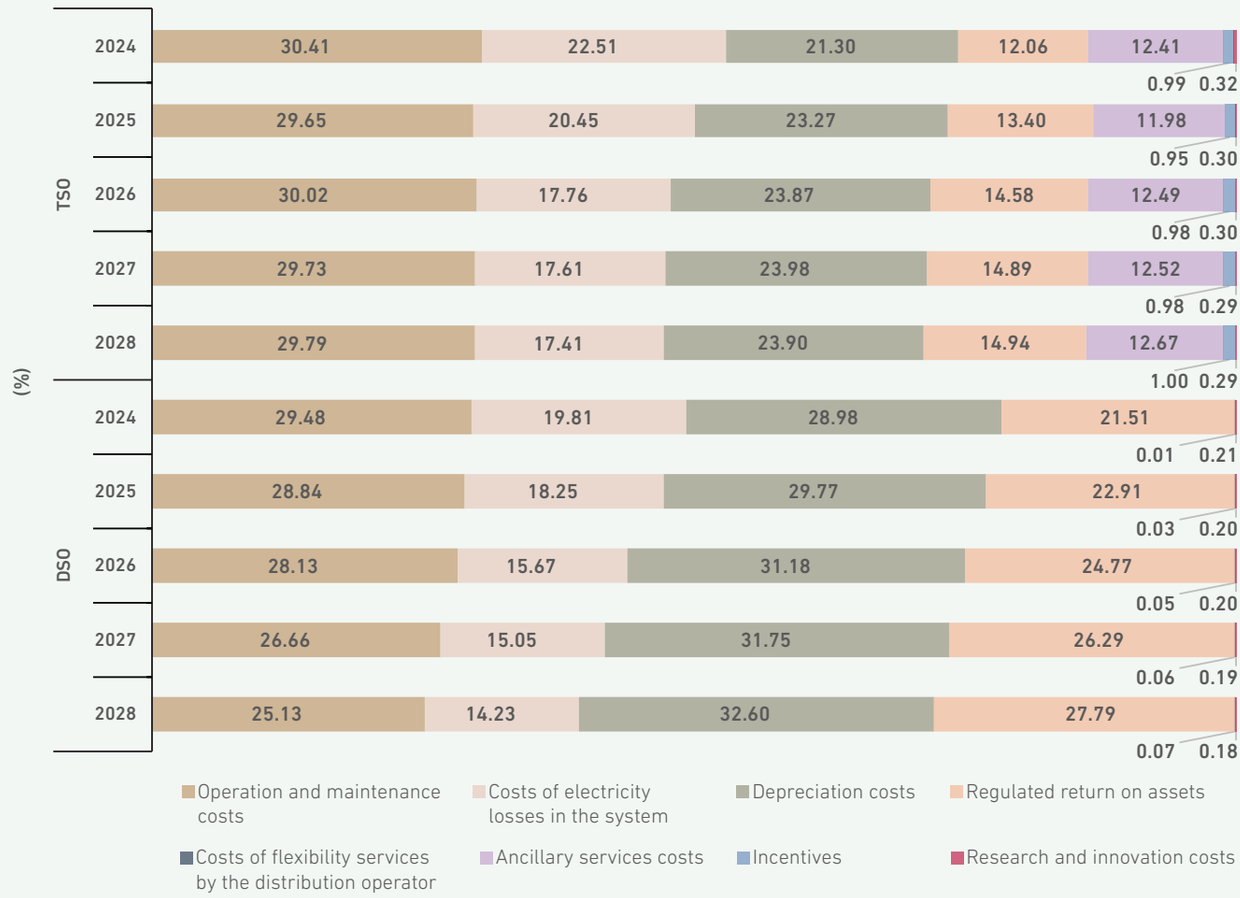
For the 2024–2028 regulatory period, the Energy Agency has set eligible costs at EUR 1,214 million for the transmission system operator and at EUR 1,929 million for the distribution system operator.

FIGURE 69: THE STRUCTURE OF THE ELIGIBLE COSTS OF THE ACTIVITIES OF THE TRANSMISSION AND DISTRIBUTION SYSTEM OPERATOR FOR THE 2024–2028 REGULATORY PERIOD



SOURCE: ENERGY AGENCY

FIGURE 70: THE STRUCTURE OF THE ELIGIBLE COSTS OF THE ACTIVITIES OF THE TRANSMISSION AND DISTRIBUTION SYSTEM OPERATOR FOR THE INDIVIDUAL YEAR OF THE 2024–2028 REGULATORY PERIOD



SOURCE: ENERGY AGENCY

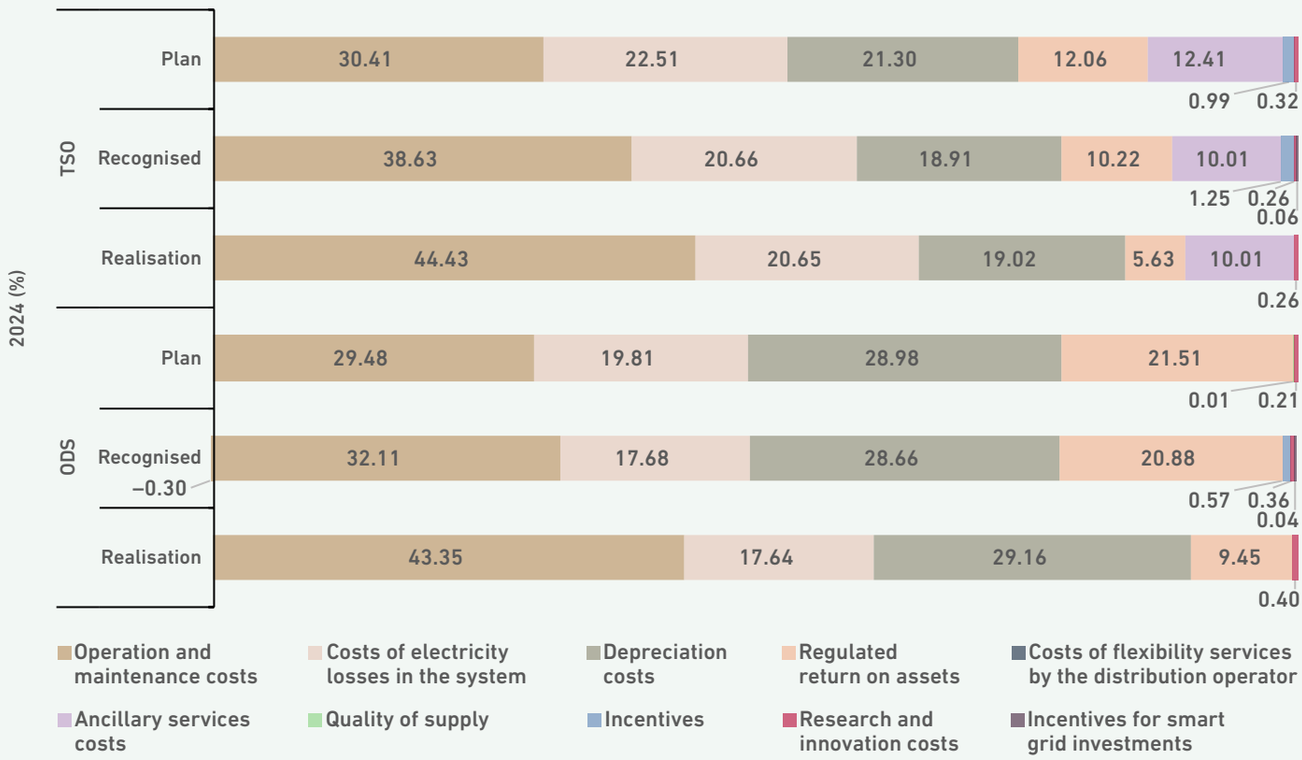
The structure of the transmission and distribution system operator's planned eligible costs (Figure 70) broken down by year for the 2024–2028 regulatory period, shows that the structure is changing, with the share of planned depreciation and the planned regulated return on assets increasing. This is a consequence of the planned investments in the assets of both the transmission and distribution systems during the 2024–2028 regulatory period, aimed at achieving the green transition targets.

Regulatory year from 1 January 2024 to 31 December 2024

In 2024, ELES recalculated the planned eligible costs for the regulatory period from 1 January to 31 December 2024 (hereinafter the '2024 regulatory year') into costs recognised by regulation specifically for the transmission system operator's activities (EUR 261.5 million) and specifically for the distribution system operator's activities (EUR 359.8 million). The Energy Agency verified the calculation, issued its decisions and, on the basis of data from the accounts of electricity transmission system operators and distribution companies, also calculated the actual eligible costs.

Figure 71 shows the structure of eligible costs for the transmission and distribution system operator activities, with the costs of the distribution system operator calculated as the sum of the eligible costs of EDP and the distribution system operator.

FIGURE 71: THE STRUCTURE OF THE ELIGIBLE COSTS OF THE ACTIVITIES OF THE TRANSMISSION AND DISTRIBUTION SYSTEM OPERATOR IN THE 2024 REGULATORY PERIOD



SOURCE: ENERGY AGENCY

A comparison of the structure of the planned and recognised eligible costs (Figure 71) A comparison of the structure of the planned and recognised eligible costs (Figure 71) for the transmission and distribution system operator in the 2024 regulatory year shows that the recognised SDV are higher than planned, which is a result of the adjustment of the SDV to account for inflation in 2022 and 2023. However, the transmission system operator's recognised eligible costs are also higher due to higher electricity costs for system balancing than had been planned.

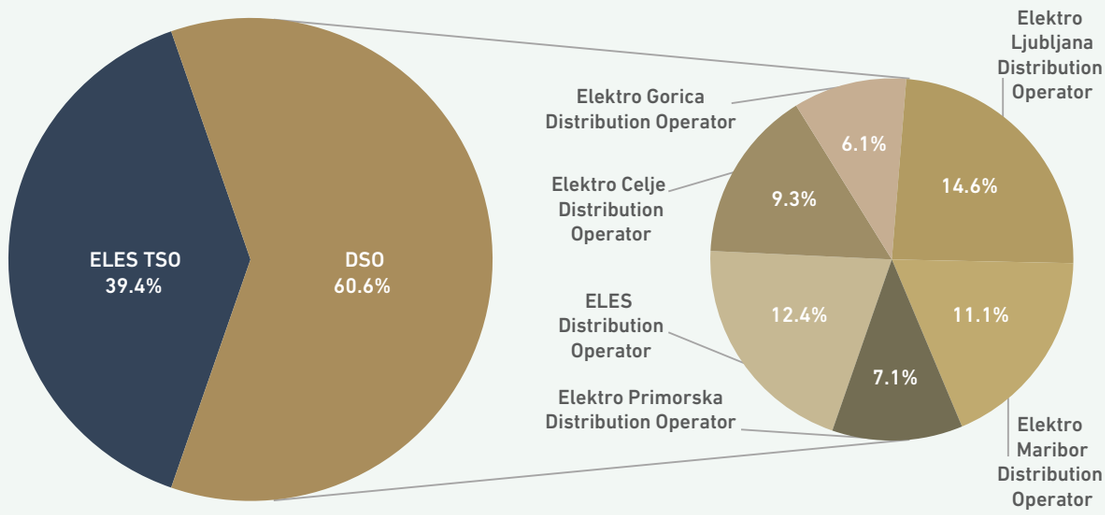
As in previous regulatory periods, the share of actual operating and maintenance costs in total actual eligible costs is higher than that of recognised eligible costs. This means that the transmission and distribution system operator's activities under the operating and maintenance cost item are operating in a cost-inefficient manner and, as a result, the realised regulated return is lower than that recognised under the regulation.

In addition to operational efficiency, the level of the transmission and distribution system operator's realised regulated return is also influenced by incentives and the level of other revenues.

Regulatory year from 1 January to 31 December 2025

For 2025, which is the second year of the 2024–2028 regulatory period, the Energy Agency has set the transmission system operator's planned eligible costs at EUR 239.9 million. For the distribution system operator, planned eligible costs for 2025 amounted to EUR 369.4 million. Figure 72 shows the breakdown of planned eligible costs as a proportion of the total eligible costs of the transmission and distribution system operators' activities for each company.

FIGURE 72: STRUCTURE OF THE PLANNED ELIGIBLE COSTS OF THE ACTIVITIES OF THE TRANSMISSION AND DISTRIBUTION SYSTEM OPERATOR IN THE 2025 REGULATORY PERIOD BY INDIVIDUAL COMPANY



SOURCE: ENERGY AGENCY

To cover the transmission system operator's planned eligible costs (EUR 239.9 million), planned sources of funding for eligible costs totalling EUR 213.5 million were identified, namely a planned network charge of EUR 96.4 million and planned other revenue of EUR 117.1 million. A network charge shortfall of EUR 26.4 million was therefore projected for the transmission system operator's activities.

In 2025, EUR 87.0 million in network charges was collected (source: unaudited ELES data) to cover the transmission system operator's recognised eligible costs, which is 9.7% less than planned. ELES also generated EUR 221.8 million in congestion revenue in 2025, which is EUR 150.8 million more than planned. Due to higher realised congestion revenue, the transmission system operator's operations ended 2025 with a network charge surplus; however, this is not equal to the difference between the realised and planned congestion revenue. The network charge surplus from the transmission system operator's operations will be used to cover the network charge deficit of the distribution system operator's operations.

In 2025, the regulatory framework for the distribution system operator provided for a network charge

of EUR 295.4 million and other planned revenue of EUR 18.3 million. These planned sources for covering eligible costs do not cover the total planned eligible costs for 2025 (EUR 369.4 million) and the network charge shortfall from previous years (EUR 5.3 million), therefore, a network charge deficit of EUR 61.0 million was projected for the distribution system operator's activities.

In 2025, EUR 242.7 million in network charges was levied (source: unaudited ELES data) to cover the distribution system operator's recognised eligible costs, which is 17.8% less than planned.

Network charges for the transmission and distribution systems were lower than planned in 2025 due to lower actual electricity consumption compared with the forecast and reductions in the tariffs for capacity charges for the transmission and distribution systems, namely:

- intervention law - a reduction in the capacity charge tariffs for time block 1 to the level of time block 2 tariffs in January and February 2025 for household consumers,
- introduction of a graduated pricing signal for the high season:
  - a 50% reduction in the capacity tariff rates for time block 1 in November and December 2025 for all system users with guaranteed 15-minute metering; and
  - a 30% reduction in the capacity charge tariff rates in November and December 2025 for all system users without guaranteed 15-minute metering.

In 2025, the network charge was lower than planned due to lower consumption and temporary reductions in the tariffs for the network charge for capacity

Due to the above measures and lower actual electricity consumption than planned, the transmission and distribution system operator's operations resulted in a network charge deficit. The network charge deficit for the transmission and distribution system operator's operations for the period from 1 January to 28 February 2025 will be covered by ELES, in accordance with the Act on Urgent Measures to Mitigate the Consequences of High Network Charges for Household Customers. The remaining network charge deficit for the transmission system operator's activities will be covered by congestion revenue, whilst the source for covering the remaining network charge deficit for the distribution system will be the surplus from the transmission system operator's network charges in 2025.

Calculating the Network Charge

To calculate the network charge, the Energy Agency uses a non-transaction postage-stamp method, which means that the tariffs for calculating the network charge are unified for the whole territory of Slovenia within each consumer group.

To cover the eligible costs of the electricity system operator that are funded from the network charge, the Energy Agency determines network charge tariffs for individual consumer groups. The tariffs are divided into:

- the network charge for the transmission system,
- the network charge for the distribution system,
- the network charge for excessive reactive power, and
- the network charge for connected load.

In 2025, the method of calculating network charges was in force whereby the network charge tariffs for the transmission and distribution systems were divided on the basis of time blocks. Time blocks represent defined periods of the day lasting at least one hour and are determined on the basis of the system's peak load. The calendar year is divided into two seasons:

- The peak (or winter) season includes January, February, November and December.
- The off-peak (or summer) season includes February, March, April, May, June, July, August, September and October.

In 2025, time blocks 2, 3, 4 and 5 applied during the low season, while time blocks 1, 2, 3 and 4 applied during the high season. The breakdown by day of the week is shown in the next Figure.

FIGURE 73: TIME BLOCKS IN 2025

TIME BLOCK B

SEASON		PERIOD	1	2	3	4	5
HIGH	Working day		7.00 to 14.00 16.00 to 20.00	6.00 to 7.00 14.00 to 16.00 20.00 to 22.00	0.00 to 6.00 22.00 to 24.00		
HIGH	Non-working day			7.00 to 14.00 16.00 to 20.00	6.00 to 7.00 14.00 to 16.00 20.00 to 22.00	0.00 to 6.00 22.00 to 24.00	
LOW	Working day			7.00 to 14.00 16.00 to 20.00	6.00 to 7.00 14.00 to 16.00 20.00 to 22.00	0.00 to 6.00 22.00 to 24.00	
LOW	Non-working day				7.00 to 14.00 16.00 to 20.00	6.00 to 7.00 14.00 to 16.00 20.00 to 22.00	0.00 to 6.00 22.00 to 24.00

Peak hours Medium-load (shoulders) hours Off peak hours

SOURCE: ENERGY AGENCY

Consumers who do not have access to 15-minute meter readings, and consumers who do not meet the 90% quality threshold for 15-minute data on a monthly basis, will have their energy consumption billed according to higher, lower or standard daily tariff periods. Network charge tariff items are divided within the day into:

- higher daily tariffs during peak tariff periods (HT), which are charged from Monday to Friday between 06:00 and 22:00, and
- lower daily tariffs during off-peak hours (LT), which are charged at all other times and on Saturdays, Sundays and public holidays from 00.00 to 24.00, or
- uniform tariffs (UT), which are charged every day from 00.00 to 24.00.

For end users at all voltage levels, the billed capacity for 2025 was determined on the basis of 15-minute data from the metering point during the most recent winter season (for 2025, data from the winter season from 1 November 2023 to 28 February 2024) and any excess power. Any excess power exceeding the agreed capacity was charged only to those consumers who did not agree with the contracted capacity proposed by the electricity operator and changed it of their own will.

For users without 15-minute meter readings, the billing power was determined on the basis of the rated capacity of the device designed to prevent the agreed load from being exceeded (billing fuses) and the type of connection (single-phase or three-phase connection).

New users of the system[34] due to the absence of previous metering data, have their billing power determined on the basis of the maximum 15-minute peak power within the billing month and retain their status as new customers for as long as they meet the conditions for determining the contracted capacity in accordance with the fourteenth paragraph of Article 12 of the Act on the Methodology for Calculating Network Charges for Electricity Operators.

The new network charge calculation methodology entered its second seasonal cycle at the end of 2025 and has been in use for over a year. Minor adjustments have been made based on monitoring the effects and feedback from the public. The Energy Agency carries out periodic analyses of the state of the network, on the basis of which it has planned an update of the time blocks in 2027. In addition, it periodically monitors the state of reverse energy flows, which influence the extent to which tariffs reflect costs.

34 New users are defined as metering points where less than 70% of data from the previous winter season is available; where the connection is being made for the first time; where the user is a new payer; or where the user is being reconnected if the metering point has been disconnected for more than 30 days; or where a self-supply system has been connected to the metering point.

The Energy Agency also monitors the effects of the new method of calculating network charges on the basis of selected performance indicators, which are based on data from the electricity operator at monthly level. The set of indicators has been selected in accordance with the principle of proportionality (in terms of the necessary scope of data processing activities) and is largely based on aggregated data at the level of user groups. In addition, the Energy Agency carries out specific analyses of network usage by consumer groups and analyses of the network status, which are necessary for any decisions on adjusting the methodology. The minimum conditions for certain analyses have not yet been met, i.e. the availability of all necessary data; therefore, it will only be possible to assess the effects more accurately after several years of use.

The key performance indicators, which the Energy Agency monitors on a monthly or annual basis, are:

- **quality of metering data processing:**

- share of delivery points (DPs) with billing based on 15-minute meter readings: > 90%,
- share of DPs with a monthly transition between M1 (billing based on 15-minute meter readings) and M0 (billing without 15-minute meter readings): < 1%;

- **development of active demand response:**

- ≈ 9-fold growth in active demand in the area of efficient grid use (consumers who adjust their contracted capacity),
- ≈ 50%overall average success rate in demand response (excluding excess power) based on network charge tariffs,
- ≈ 45,000 newly registered users on Moj elektro,
- ≈ 120% more users are actively processing real-time data from the I1 interface on the smart meter;

- **reduction in system peak load:**

- an indicative year-on-year reduction in system peak load (24/25) has been observed: ≈ 2.2% (indicative saving of ≈ EUR 250 million in incremental network development costs). A comparison of raw system peaks on 22 January 2024 and 20 February 2025 is not in itself sufficient to attribute the effect of tariff signals. As the analysis reveals deviations in influencing factors in opposite directions, which largely offset one another (weather/outdoor temperatures, intensity of industrial activity, final electricity consumption, reductions/increases in contracted billing capacities, etc.), we make the qualified assumption that the conditions for an indicative comparative analysis of system peak load were sufficiently comparable;

- **development of energy services and solutions:**

- system-wide processing of detailed metering data for billing services at 15-minute intervals,
- development of energy services and solutions for consumption management, energy management and optimisation of supply costs,
- public publication of aggregated data at the network node level (OPSI); customer information and awareness,
- gradual improvement in customer information (analysis of usage of the URO.si portal and the URO AI chatbot).

Identified positive effects of the network charge reform

CASE STUDY
The impact of energy fed into the grid on the methodology for calculating network charges

In developing the methodologies for calculating network charges, the Energy Agency envisaged a gradual transition between different charging models. To this end, two methodologies were defined: the currently applicable methodology (M1) as a transitional solution, and the target methodology (M2), which is expected to be introduced once certain conditions have been met, likely around 2035. The currently applicable methodology (M1) introduces time-differentiated tariffs for power and energy in accordance with the recommendations of ACER and the European Commission. Empirical studies now confirm it as one of the most effective approaches in use across the EU in terms of cost reflection and its impact on demand response[35, 36]. However, to ensure a cost-effective network system in the future, periodic analyses must examine not only the suitability of time-differentiated tariffs but also the impacts of integrating renewable energy generation and battery storage systems. These impacts are crucial for assessing the suitability of the approach to cost allocation among user groups and for evaluating the sustainability of the asymmetric M1 design, which is based on billing only for energy drawn from the grid, rather than energy fed into it. While certain adjustments to the cost allocation approach can be made within the framework of the existing methodology, the need to bill for energy fed into the grid would require a transition to the M2 methodology, which will introduce the concept of a peak coincident dynamic tariff, as well as the removal of legal restrictions in ZSROVE-1.

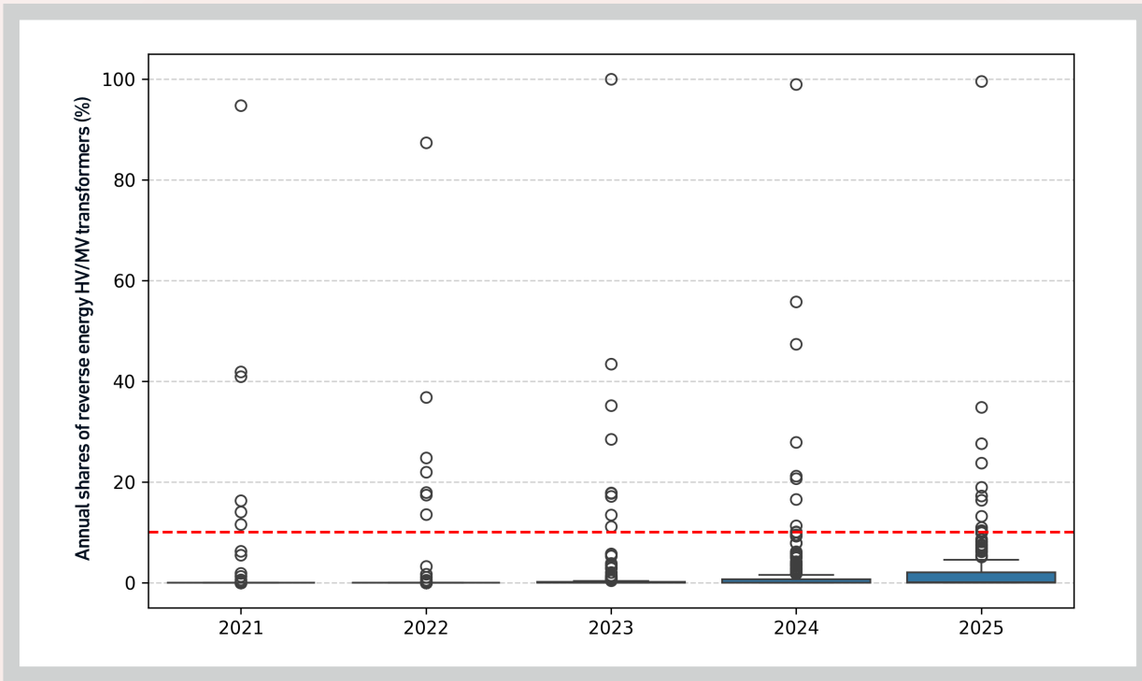
A key element in the design of methodologies for calculating network charges is the method of allocating costs across individual voltage levels or user groups. Cascading cost allocation is an approach whereby network users cover the costs of the voltage level at their connection point, as well as the costs associated with higher voltage levels involved in the transmission of energy to their delivery points. According to ACER data[35] in 2025 network costs in the methodologies for calculating network charges in all Member States were allocated exclusively on a 'top-down' basis, i.e. from higher to lower voltage levels. Reverse flows, which are occurring on an ever-increasing scale due to the accelerated connection of distributed generation sources, distort the established cost allocation and reduce the extent to which actual network use is reflected in costs. In systems where reverse flows are frequent and significant in volume, there may be a need to introduce partial or reverse cascade cost allocation. ACER therefore recommends carrying out regular reviews of the approach to cascading cost allocation, particularly where the annual (gross) energy transfer to the higher voltage level exceeds 10% of the annual (gross) energy consumption between the two voltage levels[35].

In accordance with these guidelines, in 2025 the Energy Agency began developing a methodology and indicators for monitoring reverse energy flows from the low-voltage to the medium-voltage grid (LV→MV) and from the medium-voltage to the high-voltage grid (MV→HV) based on data provided by the transmission and distribution system operator, including measurements on the primary side of HV/MV transformers and measurements of the total meters at MV/LV transformer substations (MV/LV TS). The 'reverse energy share' is defined as the key indicator for assessing reverse energy flows; it expresses the ratio between the energy transmitted from a lower to a higher voltage level, and the total energy flowing through the node in question (e.g. a transformer or a transformer substation). The selected indicator enables the monitoring of trends in annual reverse energy shares for the purpose of ongoing assessment of the adequacy of the network charge allocation methodology.

Using the example of reverse flows from MV to LV, we demonstrate that the share of reverse energy can be monitored at various levels of spatial granularity, namely at the level of an individual LV/MV transformer (Figure 74), a selected area (e.g. at the level of electricity distribution companies – Figure 75) or as a single-figure system indicator for reverse flow from the entire distribution system into the transmission system (Figure 75) or as a single-figure system indicator for reverse flow from the entire distribution system into the transmission system (Figure 76).

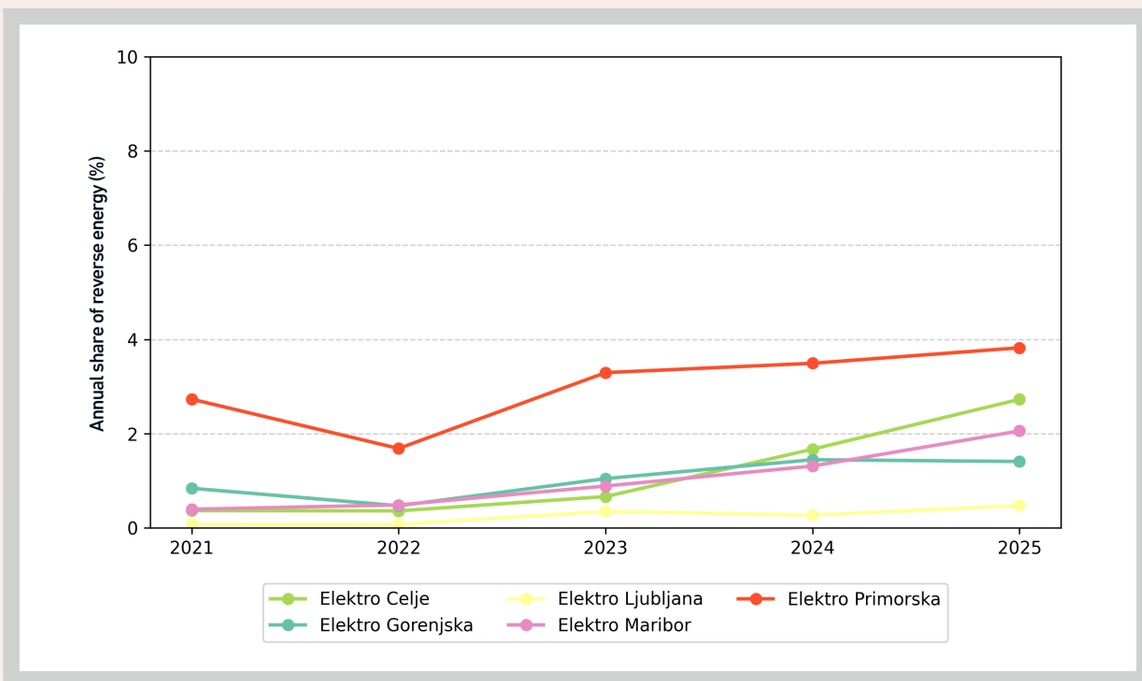
35 ACER, 'Getting the signals right: Electricity network tariff methodologies in Europe. ACER report on network tariff practices', 2025
36 An FTI Consulting report for smartEn, 'A roadmap for cost-reflective electricity network tariffs in the EU', FTI Consulting LLP, 2025

FIGURE 74: DISTRIBUTIONS OF THE ANNUAL SHARES OF REVERSE ENERGY BY INDIVIDUAL HV/MV TRANSFORMERS FOR THE 2021–2025 PERIOD



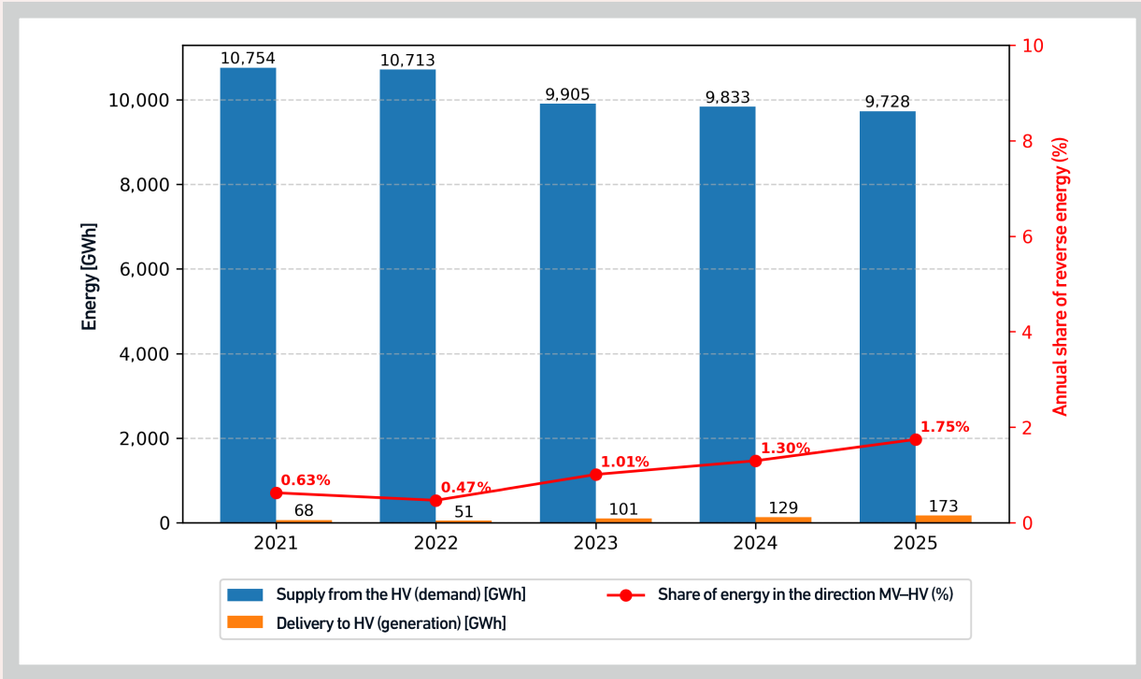
SOURCES: ENERGY AGENCY, EDCs

FIGURE 75: ANNUAL TRENDS IN THE SHARE OF REVERSE ENERGY FLOW BY ELECTRICITY DISTRIBUTION COMPANY FOR THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, EDCs

FIGURE 76: DEVELOPMENT OF REVERSE ENERGY FLOWS FROM THE DISTRIBUTION NETWORK TO THE TRANSMISSION NETWORK OVER THE 2021–2025 PERIOD

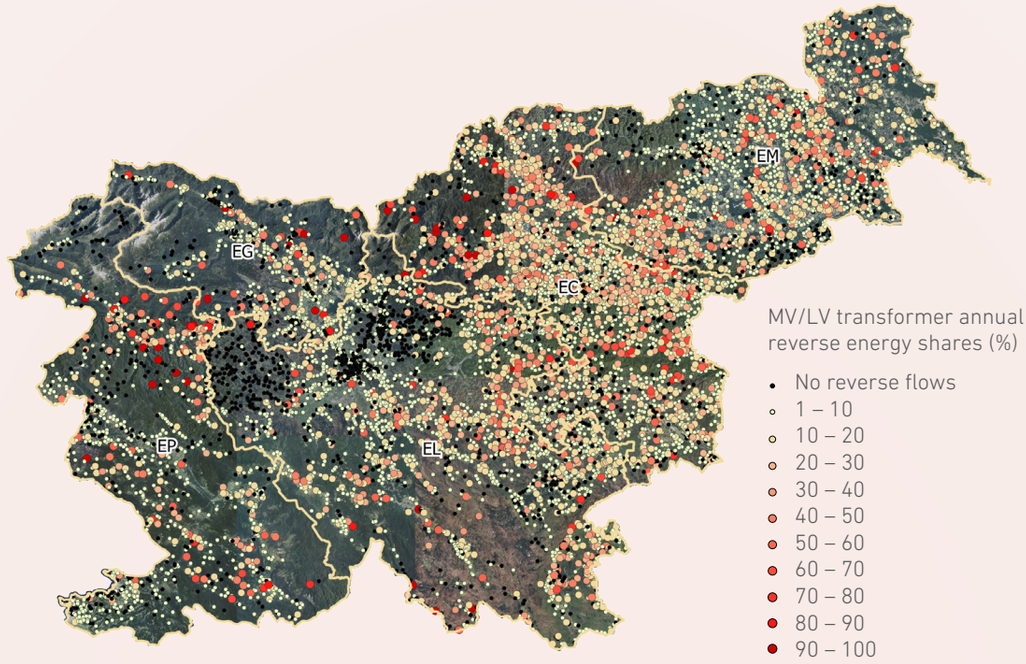


SOURCES: ENERGY AGENCY, EDCs

The indicator can also be used for the spatial visualisation of reverse energy flows. Figure 77 illustrates the annual proportions of reverse flows in the LV→MV direction at individual MV/LV transformer stations across the whole of Slovenia (within the scope of available data and the quality of measurements from summary meters for the year 2024[37]). Spatial visualisations enable the identification of potential bottlenecks in the grid and can also serve as a basis for data-driven grid planning and investment prioritisation.

37 At the time of writing this report, the data for 2025 was still being compiled.

FIGURE 77: GEOGRAPHICAL REPRESENTATION OF THE DISTRIBUTION OF BY MV/LV TRANSFORMER SUBSTATION (2024 MEASUREMENTS)



SOURCES: ENERGY AGENCY, EDCs

Although the network status analyses carried out to date indicate the presence of reverse flows in the network, these do not yet, from a systemic perspective, meet ACER's criteria for changing the approach to cost allocation between user groups. At the same time, the analyses clearly show that in certain local networks at the MV/LV level, the criterion has already been met. Given the limited scope of such situations, a system-wide measure is not yet appropriate; the local issues in question should be addressed through local measures, such as the introduction of dynamic local network tariffs, the use of explicit flexibility or appropriate smart grid measures. It will also be interesting to analyse the impact of battery storage systems, which could curb the trend of increasing reverse flows and, consequently, completely eliminate the need to change the cost allocation in M1.

The results of the analyses therefore confirm the appropriateness of continuing to use M1 without methodological changes in the coming years, which is in line with the Energy Agency's expectations – namely, it had planned to introduce M2 for the period after 2030, while partial cost cascading had already been introduced within the framework of M1 for members of energy communities (an adjusted tariff item for the transmission of energy from a community's generation unit to a community member, excluding the allocation of costs at the highest voltage level, and an adjusted tariff item based on the extent of grid usage).

However, it is also necessary to highlight a restriction which currently prevents the transition to M2. The fourth paragraph of Article 60 of ZSROVE-1 stipulates that, for electricity fed into the grid, a self-supplying end consumer does not pay grid charges or other public levies. This provision constitutes an impermissible interference with the Energy Agency's methodology and independent assessment or decision-making regarding network tariffs, and is contrary to the relevant European Directive and Regulation. Self-supplied consumers are, in fact, classified as active consumers who would be subject to symmetrical billing following the entry into force of M2.

The following figures show the trend in the total network charge for the transmission and distribution system by regulatory period for certain typical domestic and business customers, defined by standard consumer groups.

Fluctuations in network charges for household consumption were observed between 1 March and 31 May 2020, when household and small business consumers were not charged for billing capacity due to an exceptional measure adopted by the Energy Agency to mitigate the social and economic consequences of the COVID -19. Another noticeable drop in the total grid charge is evident in 2022, when the Government of the Republic of Slovenia adopted a similar measure. For both electricity operators, from 1 February to 30 April 2022, all tariff items for billing capacity and active energy consumed were reduced to zero for all consumer groups.

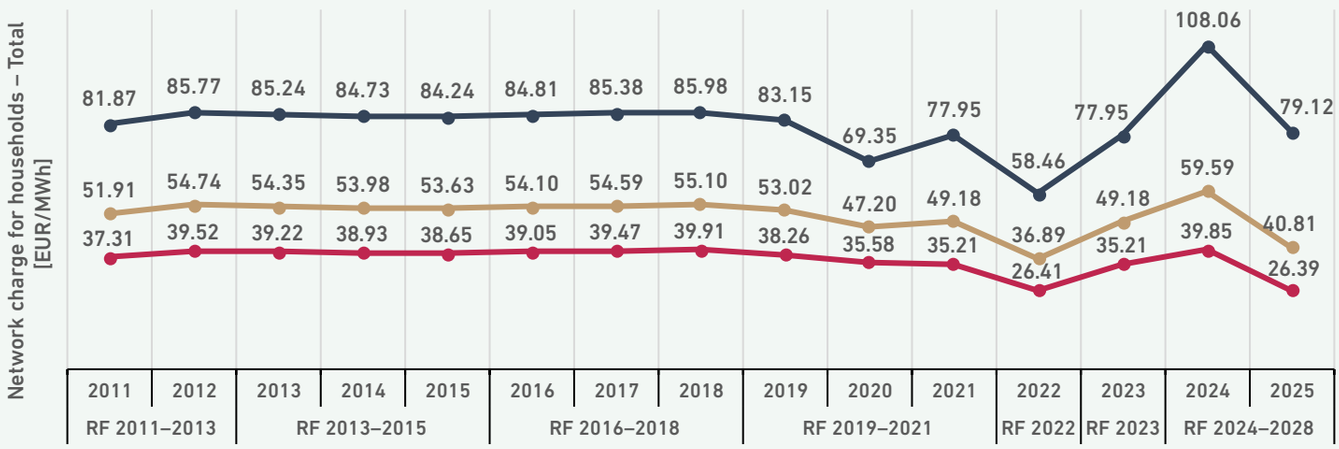
In 2025, as a result of an intervention measure in the form of the adopted Act on Urgent Measures to Mitigate the Consequences of High Network Charges for Household Consumers (ZNUOPOVO), the network charges for capacity for the transmission and distribution systems for household consumers were reduced during January and February. The tariffs for time block 1 for power were reduced to the level of the tariffs for time block 2, namely from 3.42250 EUR/kW to 0.91224 EUR/kW. This measure resulted in a shortfall in network charges amounting to 18.5 million euros.

In October 2025, a similar measure was adopted through the Act Amending the Act on the Methodology for Calculating Network Charges for Electricity Operators, which established a transitional period for setting capacity tariff rates. For the period from November 2025 to February 2026, a reduced value of 50% of the full value was set for capacity tariff items for time block 1 for all user groups.

Both measures resulted in a significant reduction in network charges, particularly for household consumers.

Compared with 2024, in 2025, as a result of intervention measures, phased measures and a shortfall in revenue, EUR 64 million less in distribution system network charges and EUR 10 million less in transmission system network charges were collected.

FIGURE 78: DEVELOPMENT OF THE TOTAL NETWORK CHARGE FOR THE TRANSMISSION AND DISTRIBUTION SYSTEMS FOR SELECTED TYPICAL HOUSEHOLD CONSUMERS BY REGULATORY PERIODS



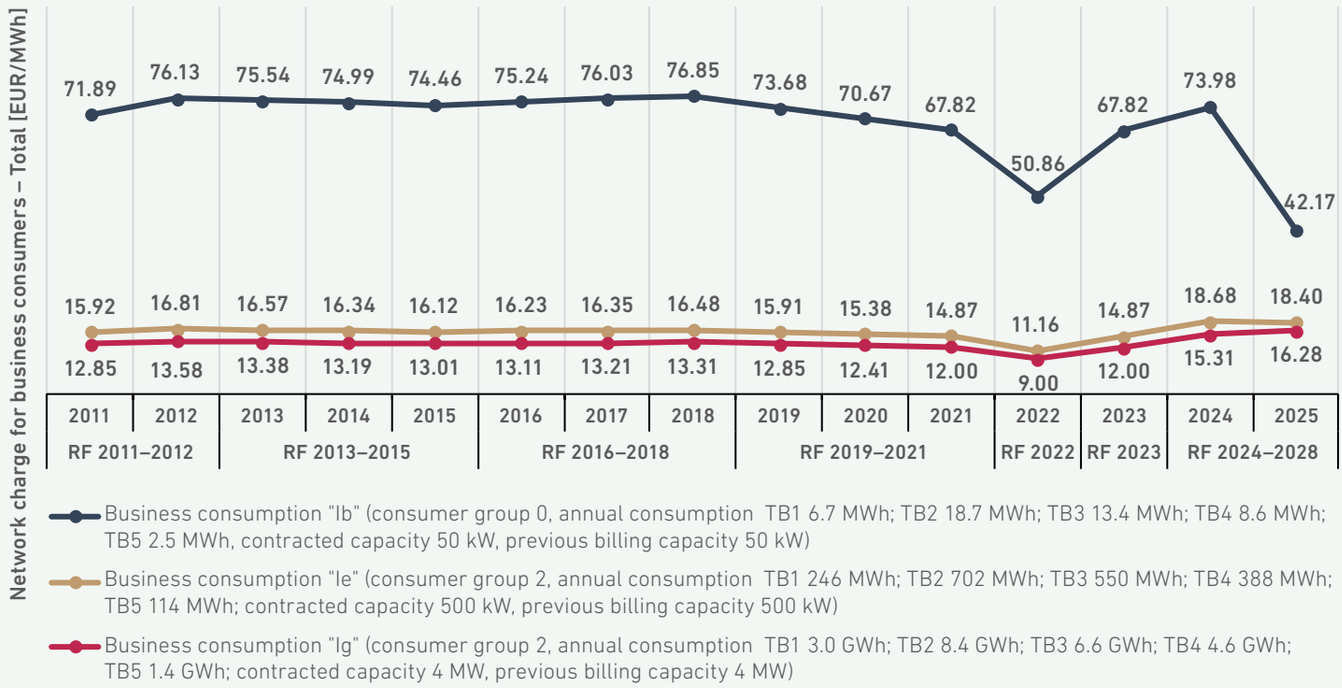
Household consumption "Da" (consumer group 0, TB1 60 kWh, TB2 170 kWh, TB3 199 kWh, TB4 134 kWh, TB5 36 kWh, contracted capacity TB1 do TB5 = 2 kW, previous billing capacity = 6 kW)

Household consumption "Dc" (consumer group 0, TB1 645 kWh, TB2 1501 kWh, TB3 1237 kWh, TB4 539 kWh, TB5 123 kWh, contracted capacity TB1 4.6 kW, TB2 do TB5 5.1 kW, previous billing capacity = 7 kW)

Household consumption "De" (consumer group 0, TB1 2684 kWh, TB2 5689 kWh, TB3 6395 kWh, TB4 4108 kWh, TB5 1123 kWh, contracted capacity TB1 8.2 kW, TB2 do TB5 8.8 kW, previous billing capacity = 10 kW)

SOURCE: ENERGY AGENCY

FIGURE 79: DEVELOPMENT OF THE TOTAL NETWORK CHARGE FOR THE TRANSMISSION AND DISTRIBUTION SYSTEMS FOR SELECTED TYPICAL BUSINESS CONSUMERS BY REGULATORY PERIODS



SOURCE: ENERGY AGENCY

Allocation and Use of Cross-Zonal Transmission Capacities

The allocation and use of cross-zonal transmission capacities (hereinafter: CZCs) in the EU is governed by Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (hereinafter: Regulation (EU) 2019/943). The regulation stipulates, among other things, the mandatory use, in all time periods, of market-based methods for allocating the CZCs available. In 2022, this area was additionally governed by Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (hereinafter: Regulation (EU) 2015/1222), which governs the day-ahead and intraday calculation and allocation of CZC, and Commission Regulation (EU) 2016/1719 of 26 September 2016 on establishing a guideline on forward capacity allocation (hereinafter: Regulation (EU) 2016/1719), which lays down the rules on calculating and allocating CZCs for time frames longer than day-ahead.

Regulation (EU) 2015/1222 stipulates that the day-ahead CZC allocation must take place within the framework of continuous market coupling in the form of auction trading. Intraday CZC allocation must likewise take place within the framework of continuous market coupling, but in the form of continuous trading. On the other hand, Regulation (EU) 2016/1719 decrees that, for periods longer than day-ahead, the allocation of CZCs may take the form of assigning physical or financial rights to use the CZCs through the use of explicit auctions. This assignment should be conducted through a common European auction platform and using unified rules for a common European market. Slovenia has been participating in the so-called pan-European day-ahead market coupling at the border with Italy since February 2014 and at the border with Austria since July 2016. In June 2018, the Slovenian-Croatian border was added to this market coupling. In June 2022, the Cirkovce-Héviz 400 kV transmission line began operating. With that, a direct transmission link between Slovenia and Hungary was established. Immediately after this link was established, the border in question was integrated into the European single day-ahead market coupling. In June 2022, there was also an essential change in the Core region, which includes Slovenia's borders with Austria, Croatia and Hungary, as from then on a power flow-based (FB) method will be used to allocate the available CZCs instead of the Available Transmission Capacity (ATC) method used previously. The ATC method continues to be used in the region of Northern Italy, which includes the Slovenian border with Italy.

In 2025, the allocation of day-ahead and intraday cross-border transmission capacity at all Slovenian borders continued to take place within the framework of the single European market coupling. For the day-ahead market, the FB methodology for calculating cross-border transmission capacity continued to be applied in the Core region. In the area of intraday trading, work continued under the Intraday Capacity Calculation (IDCC) projects to introduce the FB methodology within the intraday timeframe as well. The IDCC(a) and IDCC(b) processes commenced operational implementation for the first time in May 2024, whilst the Core FB IDCC(c) process began on 25 June 2025. The IDCC(c) process enables an updated, coordinated calculation of cross-border capacity for the intraday market based on the latest Common Grid Model (CGM) and represents a further step towards optimising available capacity whilst taking system operational security into account. In the area of long-term capacity allocation, the FB methodology has not yet been implemented and remains in the development phase.

In the allocation of capacity on the Slovenian side, BSP Energetska Borza also participated alongside the combined system operator; under Regulation (EU) 2015/1222, BSP Energetska Borza is designated as the nominated electricity market operator (NEMO) for the Slovenian trading area. In January and October 2025, the Agency received notifications from Nord Pool European Market Coupling Operator AS (Nord Pool) and the Croatian Electricity Exchange (CROPEX) that both companies intend to offer competing day-ahead and intraday market coupling services, including within the Slovenian trading area as IOTEE 'passporting', as permitted by the fifth paragraph of Article 4 of Regulation (EU) 2015/1222. The Energy Agency has determined that both companies meet the conditions set out in Regulation (EU) 2015/1222; however, prior to entering the market, ELES must, in cooperation with all stakeholders (NEMOs), establish arrangements that enable the equal participation of all NEMOs. ELES has not yet submitted a coordinated proposal for such an arrangement (known as Multi-Nemo Arrangements – MNA), which, amongst other things, sets out the conditions for the exchange of necessary data and financial guarantees, to the Energy Agency for approval by the end of 2025.

In the context of the forward allocation of CZCs, governed by Regulation (EU) 2016/1719, capacity was allocated on an annual and monthly basis at all Slovenian borders. This allocation took place in the form of explicit auctions where capacities in the form of physical usage rights were being allocated according to the use-it-or-sell-it principle. According to this principle, any capacities that their holders fail to nominate by a certain deadline to confirm they're being used are transferred to day-ahead allocation, whereby holders of CZC use rights are compensated by a payment equal to the product of the price difference between the two markets resulting from the day-ahead market coupling and the amount of unused capacity. The Joint Allocation Office (JAO), headquartered in Luxembourg, took the role of the common European auction platform at all Slovenian borders. All annual and monthly auctions at the Slovenian borders were conducted in accordance with the so-called harmonised auction rules, which also apply at all other borders in the common European electricity market.

Due to the introduction of CZCs allocation based on power flows, it is no longer possible to show allocated quantities and revenues by individual borders, as this method of calculating or allocating congestion revenue to individual external borders also utilises a virtual trading area, which takes into account the borders between trading areas that do not belong to the Core region. This external border represents exchanges from France, Germany and Austria via Switzerland/Italy as a result of market coupling based on power flows within the Core region. It is therefore only possible to show realised revenues by individual borders and within the virtual area. Table 16 shows revenues by border, with the virtual area designated as the Slack hub. Revenues are presented using both the gross and net approaches. The gross approach means that the total amount of congestion revenue is shown, whilst the net approach deducts the costs of compensation to transmission capacity holders for capacity curtailment and refunds for unnominated long-term transmission capacity.

TABLE 16: ACTUAL REVENUES IN 2025 BY BORDERS

Border	Gross approach [EUR]	Net approach [EUR]
Austria	41,930,381	22,786,829
Croatia	24,945,418	19,607,696
Italy	70,922,249	50,183,403
Hungary	18,448,807	9,949,924
Slack Zone	119,244,616	119,244,616
Total	**275,491,471**	**221,772,468**

SOURCE: ELES

Revenue from congestion in 2025 amounted to EUR 275,491,471 (gross) or EUR 221,772,468 (net), representing one of the highest levels in recent years. Table 16 shows that a significant share of revenue comes from the so-called virtual area Slack hub, which accounted for as much as 43.3% of total congestion revenue in 2025.

It is also evident that the trend of high congestion revenue continued in 2025, a result of persistently higher electricity prices on energy exchanges and the differences between them following the energy crisis of 2022.

The changed structure of electricity generation in Europe also had a significant impact on flows, with France achieving a markedly positive export balance in 2025, whilst prices in south-eastern European countries (Hungary, Croatia, Romania, Bulgaria) were higher during certain periods. This increased electricity flows through Slovenia, particularly via the interconnections with Italy, which was directly reflected in congestion revenue.

The high congestion revenue is also linked, amongst other things, to the high availability of the CZCs for trading at all Slovenian borders, both with countries that are part of the Core region and with Italy, which is classified as part of the Italy Nord region. Slovenia's borders meet the highest prescribed criterion regarding the requirement set out in Article 16 of Regulation (EU) 2019/943, which requires transmission system operators not to restrict the volume of cross-border transmission and to offer market participants at least 70% of the minimum transmission capacity, taking into account operational safety constraints. Data from ACER, which is responsible for supervising cross-zonal trade at EU level, in its annual reports[38] demonstrate compliance with this criterion.

Marker Operations and Outcomes for Consumers

The year 2025 on the wholesale electricity market was marked by the continued implementation of the 2024 reforms and a gradual transition to a new phase of market operations, characterised by a greater role for renewable energy sources and the need for greater system flexibility. A significant step in this direction was the introduction of 15-minute trading intervals, both on the day-ahead market and the intraday market, which allows for a more accurate reflection of short-term changes in generation and consumption, as well as more efficient integration of weather-dependent sources. At the same time, the stabilisation of wholesale prices following the energy crisis continued, albeit at levels that remain higher than pre-crisis levels, with prices continuing to be heavily dependent on gas prices as the marginal generation source. Phenomena associated with the high penetration of renewable energy sources, such as increased price volatility, more frequent negative prices and greater sensitivity of the system to weather conditions, have also come increasingly to the fore. At the same time, the global trend towards electrification and growth in electricity consumption

38 Transmission capacities for cross-zonal trade of electricity and congestion management in the EU, 2025 Monitoring Report, https://www.acer.europa.eu/monitoring/cross-zonal-electricity-trade-2025

has strengthened, driven by the development of new technologies, digitalisation and the expansion of renewable energy sources, which further emphasises the importance of flexible and well-connected electricity markets in the future. The following section provides a quantitative and qualitative assessment of the state of the electricity markets in Slovenia.

Functioning of the Wholesale Market and Market Integrity

In the following sections, we focus primarily on trading on continuous wholesale markets, which is also organised in Slovenia and allows for comparison with other reference markets. We thus systematically address trends and volatility in wholesale prices, market liquidity, concentration and market power, market transparency, the functioning of the intraday and balancing markets, the quality of price signals for investment, flexibility and energy storage, market monitoring under REMIT, and detected risks of market abuse.

Electricity prices

In 2025, electricity prices in the EU stabilised, but remained higher than in the period prior to the energy crisis. Price trends increasingly reflected structural changes in the energy system, particularly the growth of renewable sources and greater dependence on weather conditions. This was reflected in greater price volatility and highlighted the importance of further developing system flexibility and the integration of renewable sources.

Day-ahead Exchange Prices in Slovenia and on Foreign Markets

The Slovenian electricity market lies at the crossroads of four major European markets: the German, Austrian, Italian and South-Eastern European markets. The Slovenian market is integrated into the interregional day-ahead market coupling at the borders with Austria, Italy, Croatia and Hungary. As part of intraday market coupling, the Slovenian electricity exchange market is integrated into the single European intraday market, and from 2022 onwards this will extend to the borders with all neighbouring countries.

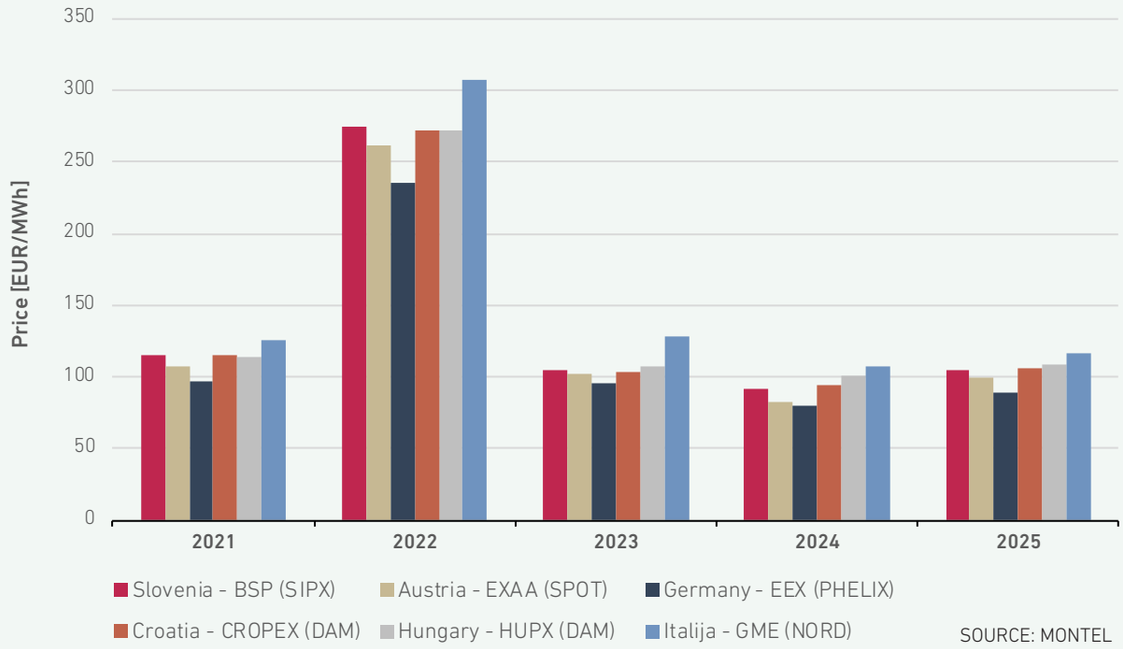
An increase in average base electricity prices on exchanges of approximately 12% compared with 2024

Figure 80 shows the trend in average base electricity prices on exchanges in Slovenia, neighbouring countries and Germany over the last five years. In 2025, prices on the Slovenian exchange were most comparable to those in Croatia.

In 2025, the average baseload electricity price on the Slovenian exchange increased by 14.6% compared with 2024, reaching EUR/MWh 104.64. As shown in Figure 80, electricity prices increased across all observed markets. As in 2024, the highest average price on the day-ahead market in 2025 was recorded on the Italian GME (NORD) market.

The lowest average baseload price in the comparison was once again recorded on the German exchange, where the price stood at 89.32 EUR/MWh. Compared with 2024, average prices there have risen by 12.3%. Due to the high liquidity of the German electricity market, prices on the German exchanges also have a significant impact on other markets within the European Union.

FIGURE 80: TRENDS IN THE AVERAGE BASE PRICE IN THE DAY-AHEAD MARKET IN SLOVENIA AND IN FOREIGN EXCHANGES IN THE 2021–2025 PERIOD



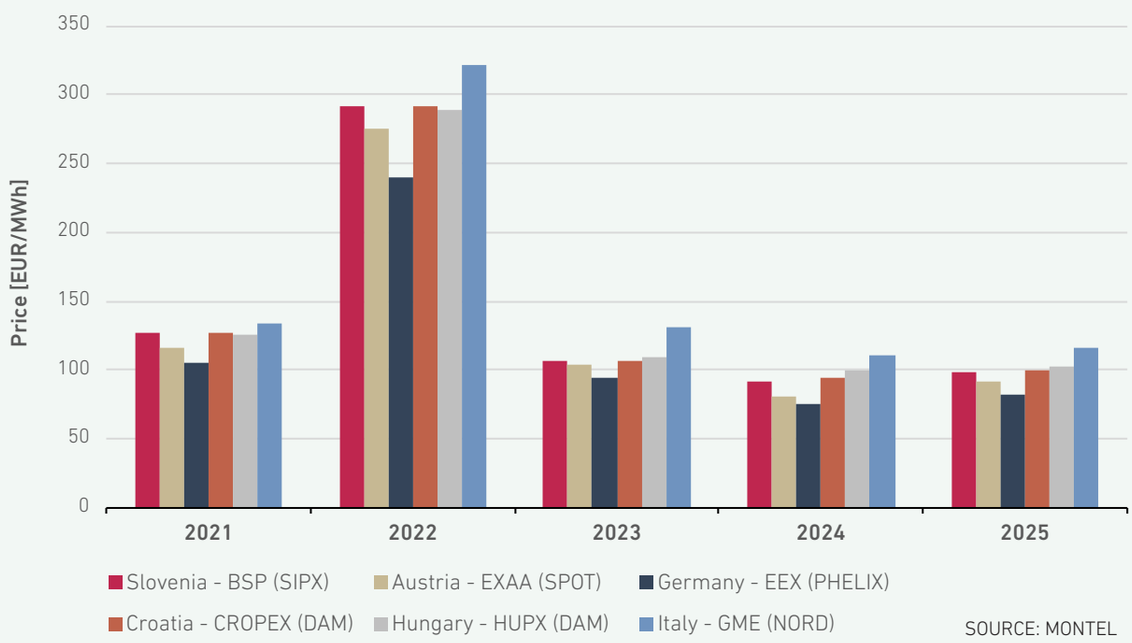
SOURCE: MONTEL

Figure 81 shows the trend in the average day-ahead peak energy price in individual markets. In 2025, the average peak energy price on the Slovenian exchange rose by 8.2% compared with 2024, standing at EUR/MWh 98.94.

The average price of off-peak energy in 2025 was higher than the average price of peak energy, indicating a significant impact from photovoltaic generation, which can cause prices to fall during daylight hours due to increased supply.

As has been the case for the past four years, the highest average peak-load energy price in 2025 was recorded on the Italian GME (NORD) market, amounting to EUR/MWh 116.18. The largest price increase in 2025 was recorded on the Austrian EXAA market, at 13.1%.

FIGURE 81: TRENDS IN THE AVERAGE PEAK PRICE IN THE DAY-AHEAD MARKET IN SLOVENIA AND IN FOREIGN EXCHANGES IN THE 2021–2025 PERIOD



SOURCE: MONTEL

Figure 82 illustrates the trend in the prices of baseload energy on day-ahead markets in 2025 and clearly highlights several key characteristics of how these markets operate. A relatively high degree of price alignment between countries is evident. Hungary and Slovenia exhibit similar price fluctuations, although Slovenia shows greater volatility, suggesting a stronger influence of local factors and possibly lower market liquidity. Austria and Croatia follow a similar trend to Slovenia, but with fewer extremes. Germany (EEX) stands out with the greatest fluctuations – ranging from pronounced price peaks to rock-bottom prices – which is consistent with a higher degree of renewable energy integration. Italy (GME NORD) stands out in this regard as a market with slightly higher and more stable prices, which is consistent with the fact that it often has higher marginal production costs, primarily due to the greater role of gas-fired power stations.

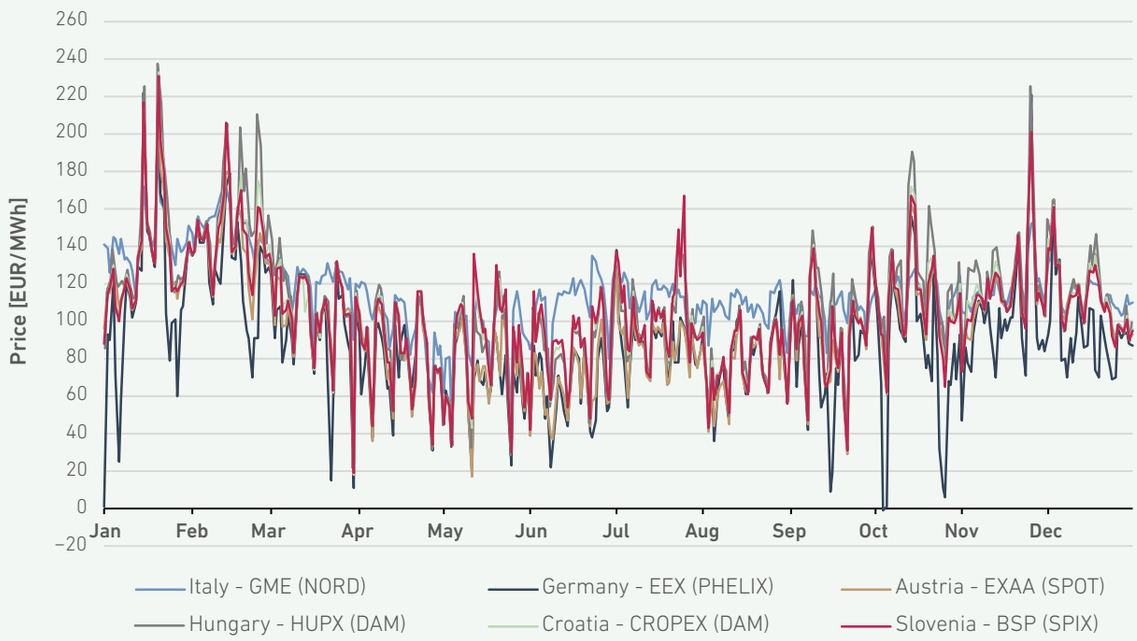
Another significant pattern is the marked volatility of prices throughout the year. There are numerous short-term price spikes, particularly during the winter months (January–March) and again towards the end of the year (November–December). These peaks coincide with periods of higher demand and/or lower generation from renewable sources, which increases reliance on more expensive sources, particularly gas, which often determines the marginal price in the market.

At the same time, the graph also shows periods of very low prices, in some places even close to zero (particularly in Germany), especially during the spring and autumn months. This is linked to high output from solar and wind power stations coupled with lower demand, which leads to energy surpluses in the system. Such phenomena have become increasingly common in recent years due to the growth of renewable energy sources and the system's limited flexibility. These trends underscore the need for improved system flexibility, cross-border interconnections and measures to mitigate volatility, particularly during periods of high renewable energy generation.

Baseload energy prices in 2025 were highest in the first quarter. In Slovenia, the average price in the first quarter was EUR/MWh 128.14, in Germany EUR/MWh 111.89, and in Hungary as high as EUR/MWh 135.23. The lowest average baseload electricity prices across all markets were recorded in the second quarter. The highest day-ahead prices on the day-ahead markets in 2025 were recorded in January; specifically, the daily price on the Slovenian exchange peaked on 20 January 2025, reaching EUR/MWh 231.09. The highest hourly price in 2025 was recorded on 20 January, when it stood at EUR/MWh 561.75 between 17:00 and 18:00 on that day. In 2024, the highest hourly price was recorded in August and stood at EUR/MWh 1,022.27.

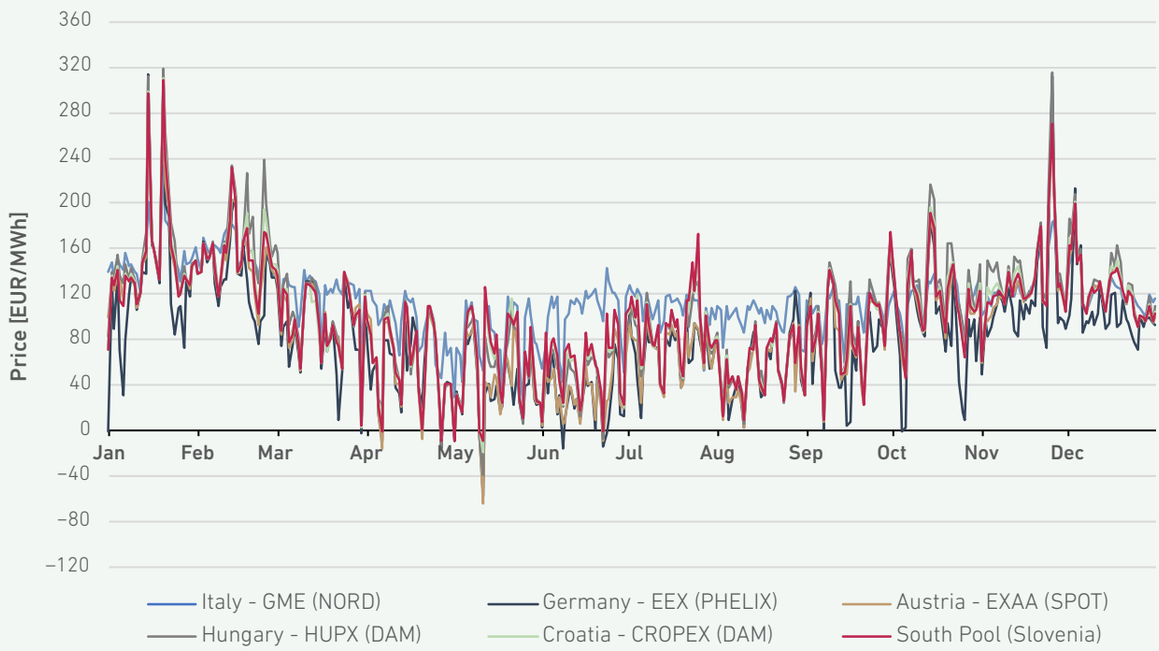
If we arbitrarily define price peaks as exceeding three times the average hourly prices for the year, price peaks were exceeded on 36 occasions in Slovenia, whilst in 2024 there were 108 such instances.

FIGURE 82: TRENDS IN THE BASE PRICE ON THE DAY-AHEAD MARKET IN SLOVENIA AND ON THE NEIGHBOURING EXCHANGES



SOURCE: MONTEL

FIGURE 83: TRENDS IN THE PEAK PRICE ON THE DAY-AHEAD MARKET IN SLOVENIA AND ON THE NEIGHBOURING EXCHANGES



SOURCE: MONTEL

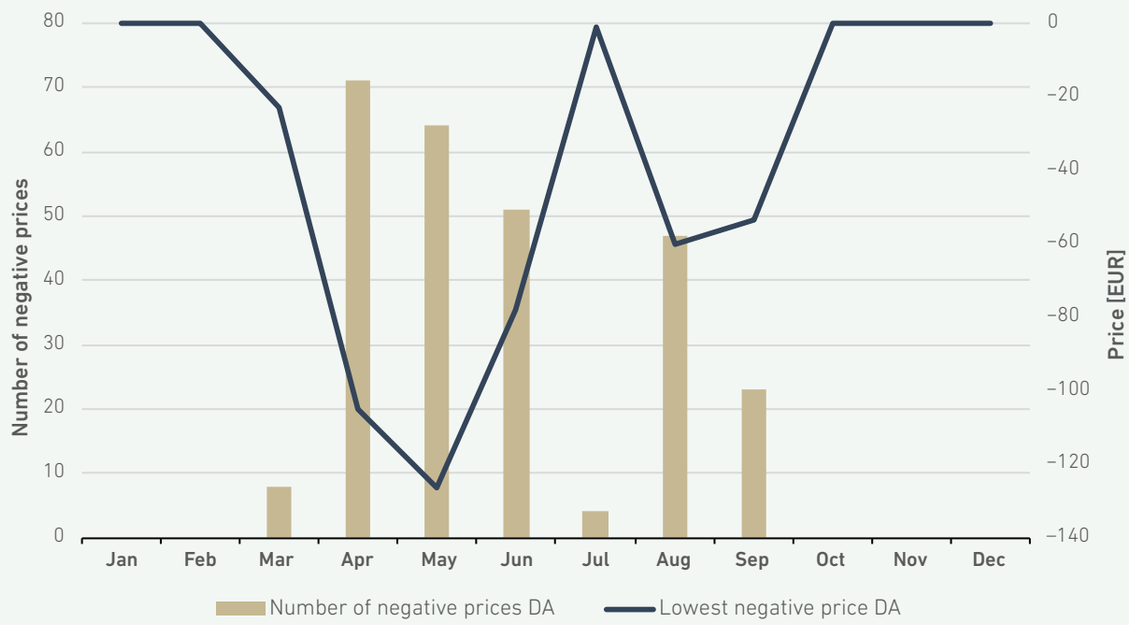
From October 2025, day-ahead trading with a 15-minute time resolution was introduced on the European electricity market, enabling a more accurate reflection of short-term changes in generation and consumption, as well as better integration of renewable sources. Despite this change, hourly prices are used in this analysis, as we wish to ensure the comparability of data across the whole of 2025 and with previous periods. The hourly data thus represent an aggregated (block) product, composed of four consecutive 15-minute intervals, which provides a consistent time series for analysing price movements in the day-ahead market.

In 2025, the number of negative hourly prices increased further – these occurred most frequently on the day-ahead market (BSP) between March and September. In 2025, 268 instances of negative hourly prices were recorded, representing a 22.4% increase compared with 2024, when there were 219 such instances[39]. The highest number of negative prices occurred in April 2025, when a negative price was recorded 71 times. The lowest price recorded was on 11 May 2025 for hour H15 and stood at −126.46 EUR/MWh. In 2024, the lowest hourly negative price was recorded for the same hour on 12 May 2024.

Increase in negative prices on the day-ahead market

39 A typographical error has been identified in the 2024 Energy Sector Status Report – the correct figure is 219, not 2,019.

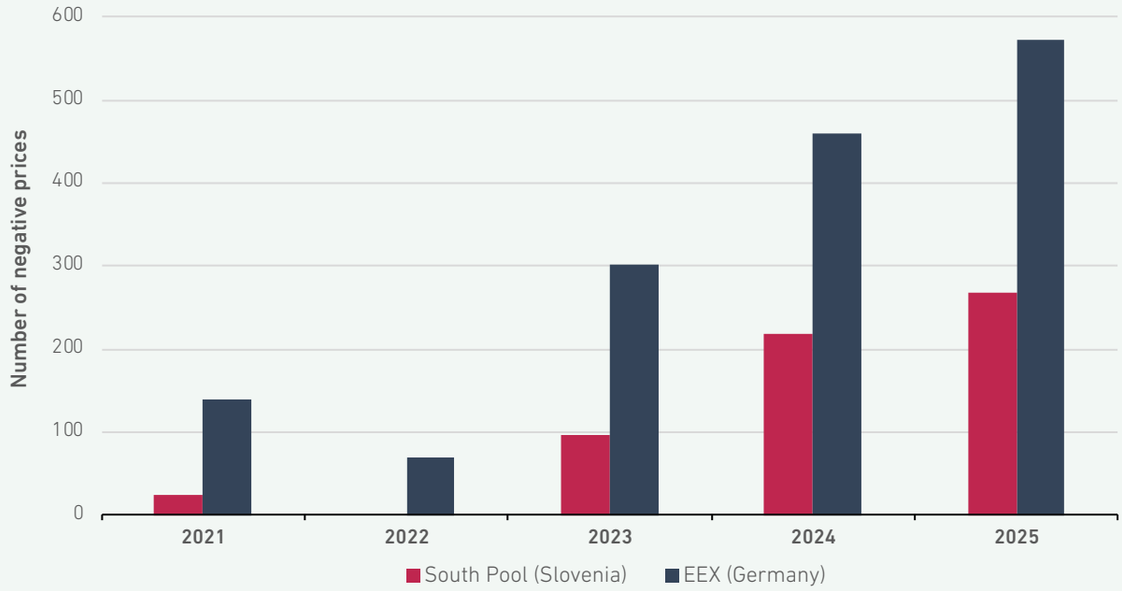
FIGURE 84: ANALYSIS OF NEGATIVE PRICES ON THE BSP MARKET FOR DAY-AHEAD (DA)



SOURCE: MONTEL

The increase in the number of hours with negative electricity prices on the day-ahead market has become a pronounced phenomenon in recent years, as confirmed by data for Slovenia (South Pool) and Germany (EEX). The number of hours with negative prices has increased year on year in both markets: in Germany from 139 hours in 2021 to 573 hours in 2025, and in Slovenia from 23 hours to 268 hours over the same period. This trend is primarily due to the growing share of renewable sources, particularly solar and wind energy, the generation of which is weather-dependent and often not synchronised with demand. During periods of high generation (e.g. sunny days with low consumption), energy surpluses may arise that the system cannot fully absorb, leading to negative prices. At the same time, this phenomenon highlights the limited flexibility of the electricity system, particularly the lack of capacity for energy storage, flexible generation and demand response. The rise in negative prices is therefore not only a consequence of the growth in renewable energy sources, but also a signal that the development of infrastructure and market mechanisms for flexibility is not keeping pace with changes in the generation mix.

FIGURE 85: NUMBER OF HOURS WITH NEGATIVE PRICES ON THE SLOVENIAN AND GERMAN DAY-AHEAD EXCHANGES (DA) IN THE 2021–2025 PERIOD



SOURCE: MONTEL

The following table shows the results of a comparative analysis of spot market prices on the day-ahead markets of BSP (Slovenia), GME (Italy), EXAA (Austria), CROPEX (Croatia) and HUPX (Hungary) in 2024 and 2025.

In 2025, the Austrian market offered lower prices in significantly more instances, indicating better liquidity and more favourable pricing on EXAA compared with BSP. The decline in the proportion of identical prices suggests a greater difference in trading patterns and, likely, in production conditions as well. In 2024, BSP often emerged as the cheaper market compared with Hungary and Croatia, but the situation changed in 2025. The Hungarian market proved to be cheaper in as many as 57% of cases, whereas last year it was cheaper in only 25% of cases. The Croatian market was found to be cheaper in 43% of cases this year, compared with 25% last year. The greatest differences remain when compared with the Italian market, where prices are significantly higher.

TABLE 17: COMPARSION OF ACHIEVED DAY-AHEAD PRICES (COMPARED TO SHARE OF HOURS) BETWEEN EXHANGES

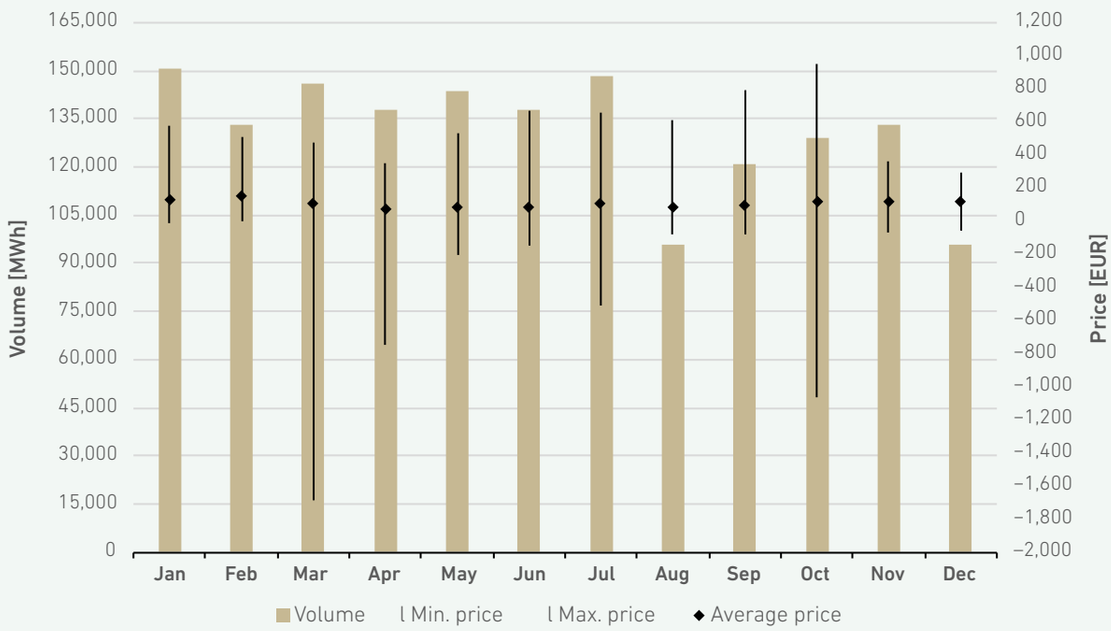
	Share of hours in 2024	Share of hours in 2025
Lower price on BSP compared to GME	76.11%	65.42%
Lower price on GME compared to BSP	13.34%	24.71%
Same price on BSP and GME	10.55%	9.86%
Lower price on BSP compared to EXAA	23.72%	28.29%
Lower price on EXAA compared to BSP	59.91%	60.38%
Same price on BSP and EXAA	16.37%	11.34%
Lower price on BSP compared to CROPEX	59.87%	45.47%
Lower price on CROPEX compared to BSP	24.61%	42.81%
Same price on BSP and CROPEX	15.51%	11.72%
Lower price on BSP compared to HUPX	61.22%	42.90%
Lower price on HUPX compared to BSP	25.05%	57.09%
Same price on BSP and HUPX	13.73%	0.01%

SOURCES: ENERGY AGENCY, MONTEL

Intraday Market Prices

Figure 86 shows the trends in trading volumes and ranges of average prices[40] for all products on the intraday market. In August and December, there was a fall in trading volumes, while the widest ranges in the average price of individual products occurred in March and October.

FIGURE 86: INTRADAY TRADING VOLUME AND PRICE RANGES

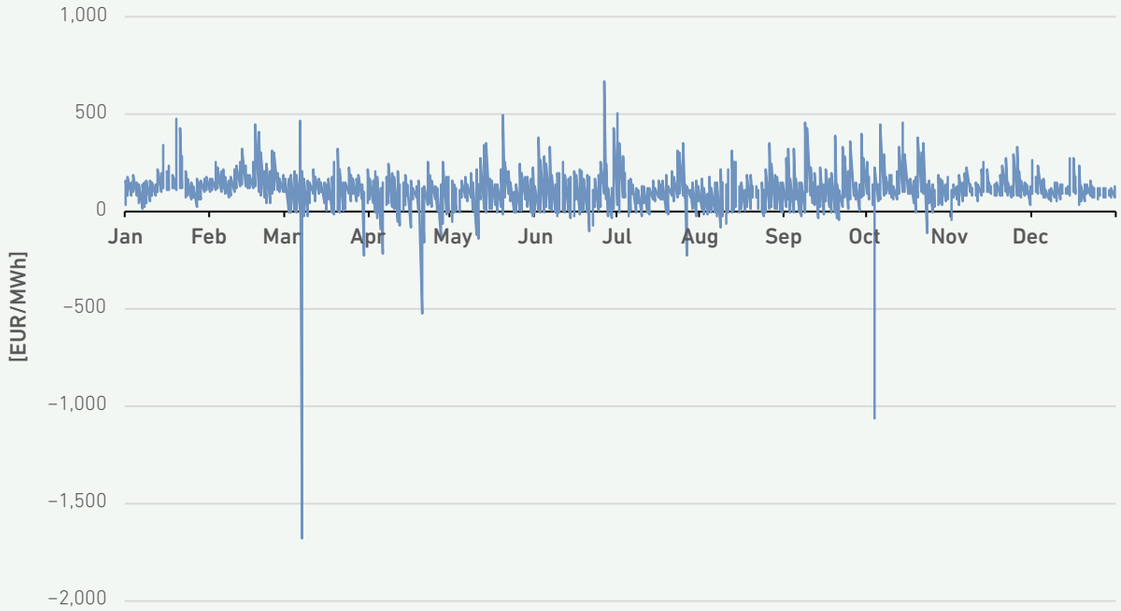


SOURCE: BSP

The average price of hourly products on the intraday market in 2025 was EUR/MWh 104, which is 10% higher than in 2024. The highest price for an hourly product on the intraday market occurred on 26 June 2025 for H21 and amounted to EUR/MWh 665.84, while the lowest price occurred on 7 March 2025 for H2 and amounted to −1,680.8 EUR/MWh.

40 The average price represents the weighted average of all trades concluded for a particular product, with the weight determined by the volume of each individual trade.

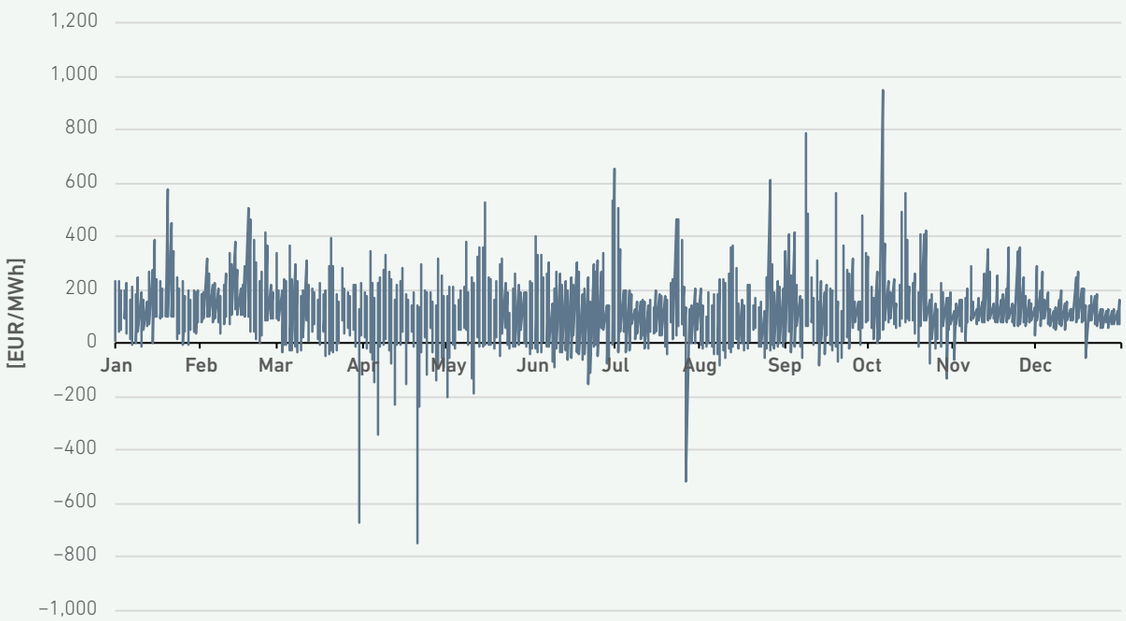
FIGURE 87: TRENDS IN HOURLY PRODUCT PRICES ON THE BSP ID MARKET



SOURCE: BSP

The average price of 15-minute products on the intraday market in 2025 was 104.60 EUR/MWh, which is almost 11% more than in 2024 and 2.7% less than in 2023. The highest price for a 15-minute product on the intraday market occurred on 6 October 2025 for the interval between 08:00 and 08:15 and amounted to EUR/MWh 951.43, while the lowest price occurred on 20 April 2025 for the interval between 13.45 and 14.00 and amounts to −752.17 EUR/MWh.

FIGURE 88: PRICE TRENDS FOR THE 15-MINUTE PRODUCT ON THE BSP ID MARKET

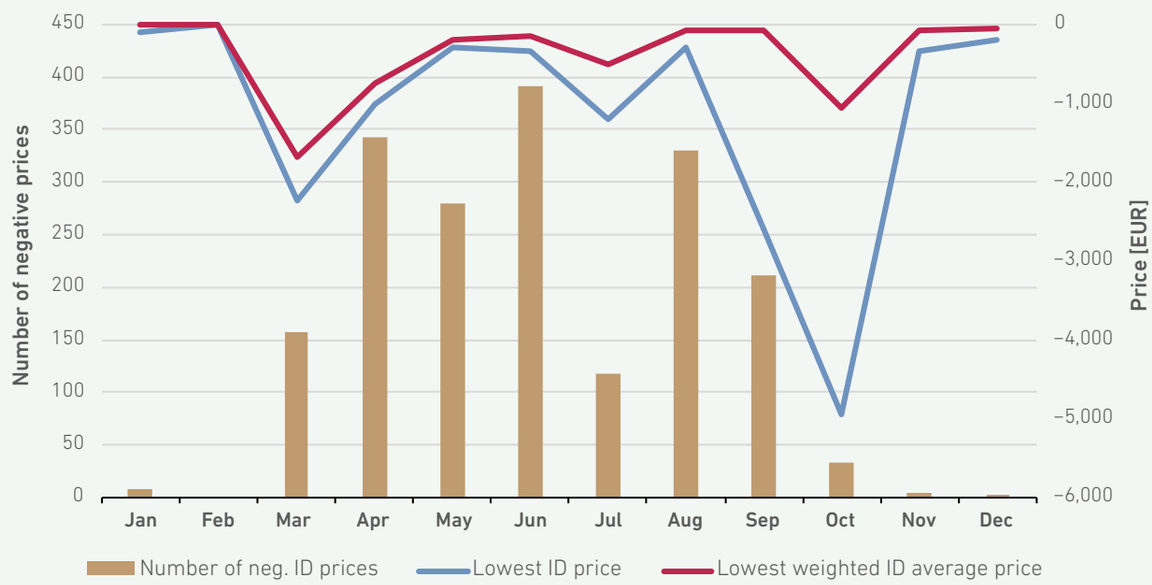


SOURCE: BSP

On the intraday market, too, there was an increase in 2025 in the number of volume-weighted average negative prices, which occurred in every month except February 2025. In 2025, the volume-weighted average negative price for block, hourly and 15-minute products was recorded 1,878 times, representing a 5% increase compared with 2024, when it occurred 1,781 times. In 2025, the majority of weighted average negative prices (83%) were recorded for 15-minute products. The highest number of weighted average negative prices occurred in June 2025, when the weighted average negative price occurred 392 times across all products. The lowest actual price recorded was on 4 October 2025 for the H17 hourly product and amounted to −4,950.89 EUR/MWh.

A 5% increase in the number of weighted average negative prices on the intraday market

FIGURE 89: THE VOLUME OF NEGATIVE PRICES IN THE INTRADAY MARKET



SOURCE: BSP

Energy and Balancing Capacity Prices in Balancing Market

The Energy Agency monitors all organised markets on which energy is traded for system balancing purposes, i.e. the system services market organised by the transmission system operator and the market operator's balancing market.

The analysis below focuses both on the prices of capacity contracts for the provision of balancing services and on the prices of balancing energy.

Prices for the procurement of balancing power, with the aim of ensuring the availability of units participating in the system services market, are discussed in the chapter 'Procurement of the capacity required to provide balancing services'; and below we analyse price trends in both markets involving balancing energy, namely the electricity operator's frequency system services market and the market operator's balancing market.

Procurement of the balancing capacity required to provide the balancing service

In accordance with Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing guidelines for electricity balancing (hereinafter 'Regulation (EU) 2017/2195'), separate market procedures apply to each service for the purposes of electricity balancing. In 2025, ELES continued to lease the FRR at regional level, while the leasing of the capacity required to provide the aFRR and mFRR balancing services and non-frequency services is still organised at national level. Procedures for establishing a pan-European platform for

cross-border aFRR power exchange, which is being developed under the auspices of ENTSO-E as part of the ALPACA (Allocation of Cross-zonal Capacity and Procurement of aFRR Cooperation Agreement) project, are still ongoing. Similarly, the COBRA (Common Optimisation of Balancing Reserves and CZC Allocation) project is being developed at EU level, which will in future enable the cross-border procurement of capacity for aFRR and mFRR together. The launch date of this EU platform at the end of 2025 was not yet known.

The selection of providers of FRR within the framework of FCR Cooperation took the form of auctions for four-hour reserve provision products, with auctions being held on a daily basis.

TABLE 18: FRR PRICES AND SHARE IN SLOVENIA LEASED FRR IN 2025

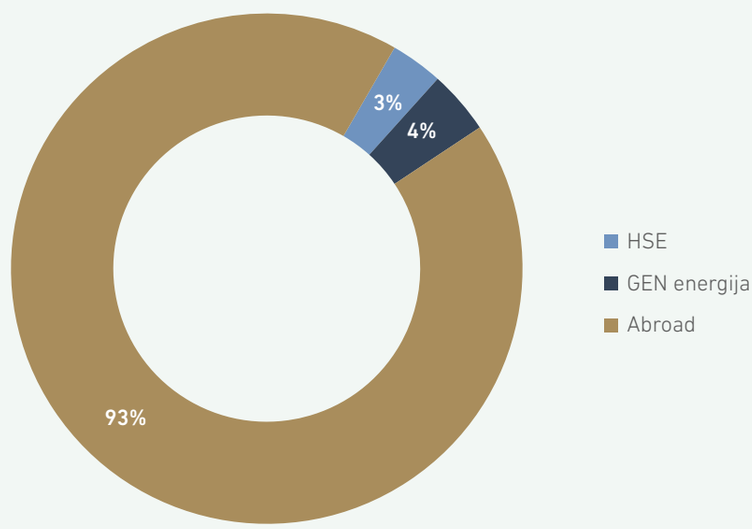
	Average marginal purchase price [EUR/MW/h]	Lease cost, excluding benefits from FCR cooperation [EUR]	Lease cost price [EUR]	Share of FRR activated at home (%)
Total	**15.24**	**1,873,573**	**909,241**	**7.30%**

SOURCES: ELES, HTTPS://WWW.REGELLEISTUNG.NET

The table above shows ELES's total costs for booking the frequency restoration reserve (FRR) and the shares provided by Slovenian suppliers. The average marginal price for purchasing the FRR in 2025 was 15.24 EUR/MW/h. The total procurement cost, excluding the benefits from the FCR Cooperation mechanism, amounted to EUR 1,873,573.00, while the final cost, after taking the mechanism into account, amounted to EUR 909,241.25. This means that, as a result of participation in the cooperation, the total cost was reduced by EUR 964,331.75.

Compared with 2024, the average marginal price of FCR procurement in 2025 fell (from 16.26 to 15.24 EUR/MW/h), and the final procurement cost also decreased. The share of capitalised FCR from Slovenian sources remained at a similar level (around 7%), which means that the majority of FCR requirements still stem from cross-border procurement within the framework of the FCR Cooperation. The availability of domestic suppliers was again higher in 2025 during periods outside the winter months, when hydrological conditions were more favourable. The cost-benefit sharing system within the FCR Cooperation framework continues to enable lower procurement costs compared with the exclusively national market. Several factors contribute to the limited share of domestic suppliers, including the uncompetitive nature of offers on the domestic market and the limited availability of suitable resources.

FIGURE 90: SHARES OF ACTIVATED FRR IN 2025



SOURCE: ELES

ELES conducted the aFRR service provider selection process for 2025 separately for capacity (aFRR) and balancing energy. All bidders holding a valid certificate of technical capability to provide the aFRR service were eligible to participate in the aFRR auctions. Selected aFRR bidders were required to offer, on a daily basis, a quantity of energy corresponding to the amount of balancing power allocated at the auction, while all bidders with a valid certificate of technical capability to provide the aFRR service were able to bid for balancing energy up to a value corresponding to the total recognised aRPF regulatory power. In accordance with the provisions of Regulation (EU) 2017/2195, ELES therefore ceased to conduct annual auctions for aFRR and mFRR in 2025 as well. ELES procured the total reserve capacity of ±60 MW in two parts: up to ±30 MW of balancing power was procured through monthly auctions, and the remaining ±30 MW through daily auctions.

The aFRR system service was provided in 2025 by several qualified bidders (NGEN, HSE, GEN-I and others), representing an increase in the number of active bidders compared with 2024.

Bids for balancing energy were submitted by providers up to two hours before delivery (H-2).

TABLE 19: AUCTIONS RESULTS FOR aFRR

Positive balancing direction (aFRR+)		
	Allocated volume [MW]	Average weighted price [EUR/MW/h]
Monthly auctions	30	8.69
Daily auctions	30	8.41
Negative balancing directions (aFRR–)		
	Allocated volume [MW]	Average weighted price [EUR/MW/h]
Monthly auctions	30	8.20
Daily auctions	30	8.08

SOURCE: ELES

In accordance with the dimensioning requirements for the provision of mFRR and the agreement on the joint provision and sharing of reserves within the SHB (RDMF), under which the partners have divided the provision of the required quantities of mFRR amongst themselves, in 2025 ELES maintained its planned positive-direction capacity booking at 190 MW and increased its planned negative-direction capacity booking to 66 MW. The key reason for the increase in negative reserve is the impact of changes in the electricity system, primarily due to the higher share of renewable energy sources.

ELES collected bids for mFRR services for 2025 separately for capacity (mFRR) and balancing energy, covering both the positive (mFRR+) and negative (mFRR–) directions. Only bidders with a valid certificate of technical capability to provide the mFRR service were eligible to participate. ELES secured part of the required reserve in the positive direction by contracting a year-long capacity product, while the remainder of the required volume in the positive direction and the entire volume in the negative direction were procured through daily auctions for each individual hour. The mFRR system service was provided by several suppliers in 2025 (GEN energija, GEN-I, Petrol, NGEN and KOLEKTOR sETup), indicating a relatively diversified supplier structure. In 2025, the mFRR+ service was provided largely by a single provider (GEN energija), which accounted for the majority of the annual procurement, while the remaining providers participated primarily in daily auctions. For the mFRR– service, the structure of suppliers was more dispersed, with two suppliers providing the largest share, while the others participated with smaller shares. Participants in the mFRR+ and mFRR– auctions provided reserve capacity predominantly through conventional generation units, while part of the capacity was also provided from other sources in accordance with the technical conditions for the provision of the service. The auction results are shown in the next table.

TABLE 20: AUCTIONS RESULTS FOR mFRR

Positive balancing direction (mFRR+)		
	Allocated volume [MW]	Average weighted price [EUR/MW/h]
Annual purchase of a product	120	5.40
Daily auctions	70	4.73
Negative balancing direction (mFRR–)		
	Allocated volume [MW]	Average weighted price [EUR/MW/h]
Daily auctions	66	3.85

SOURCE: ELES

The following table shows the total costs of individual system services financed from the transmission system network charge. These comprise the costs of non-frequency system services and the costs of procuring reserve capacity for frequency system services, while the costs of energy activation for frequency system services are financed from the balancing account, the costs of which are covered by the responsible balancing groups through imbalance charges.

The increase in costs compared with last year is primarily attributable to the procurement of negative manual frequency restoration reserves (mFRR) in the negative direction.

TABLE 21: COSTS OF ANCILLARY SERVICES IN 2025

Ancillary service	Annual costs without VAT [EUR]
FCR	909,241.25
aFRR+	4,483,730.98
aFRR–	4,267,606.86
mFRR+	8,575,929.29
mFRR–	2,226,966.63
Voltage and reactive power control	3,997,560.41
Provision of a black start	2,587,248.00
Total	**27,048,283.42**

SOURCE: ELES

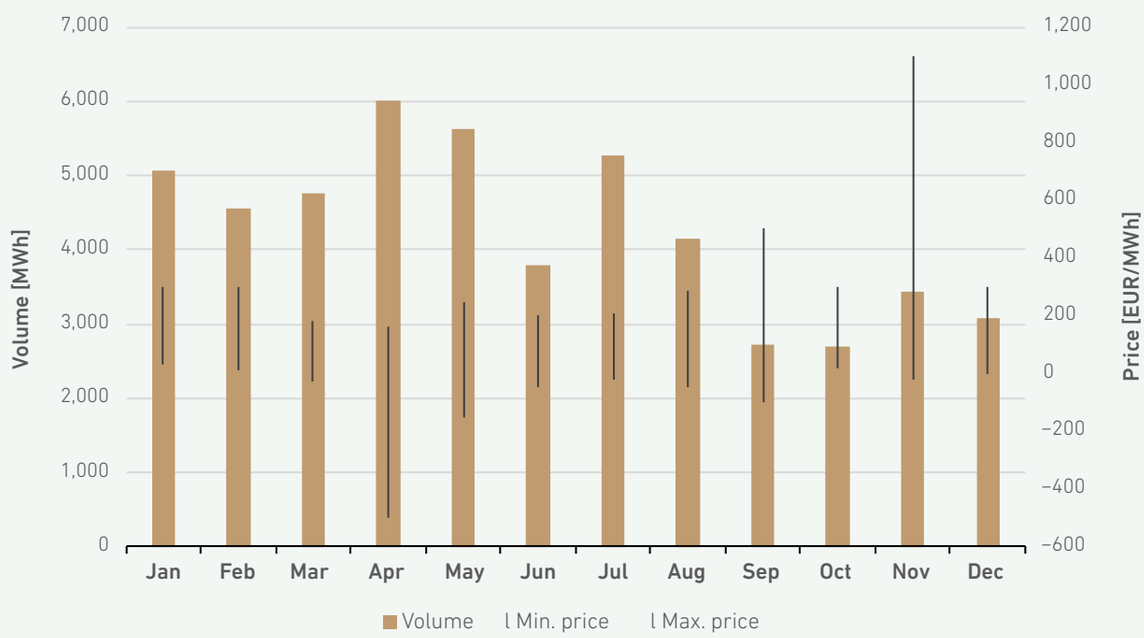
In 2025, ELES leased all the necessary reserve capacity, energy and other services within the framework of the prescribed system services, and did not record any deviations from the planned volumes. In individual cases where it was unable to secure the prescribed quantities for the aFRR and mFRR services at monthly and daily auctions, it initiated the alternative procedure provided for in the ZOEE. In 2025, this procedure was activated twice for the aFRR service and four times for the mFRR service. In these cases, the purchase price was determined by the Energy Agency through its decisions; the Energy Agency set prices for two unsuccessful auctions at 8.63 EUR/MW/h for aFRR – for the next two aFRR– auctions at 4.57 EUR/MW/h, and for one unsuccessful auction at 5.79 EUR/MW/h for mFRR+ and 0.48 EUR/MW/h for mFRR–.

The market operator's balancing market

The highest electricity price on the market operator's balancing market in 2025 was 1,099 EUR/MWh, and the lowest –500 EUR/MWh. The highest prices occur when balancing energy is purchased, while the lowest reflect the transmission system operator's sales of surplus energy. In addition to the transmission system operator, eight other members participated in the market operator's balancing market. The highest price was recorded on 13 November 2025. In 2025, the transmission system operator acted slightly more as a seller of electricity on the balancing market. Compared with 2024, the volume of trading on the balancing energy platform fell by 32.6%.

Trading volume on the balancing energy platform was 32.6% lower than in the previous year

FIGURE 91: TRADING VOLUME AND PRICE RANGES ON THE MARKET OPERATOR'S BALANCING MARKET

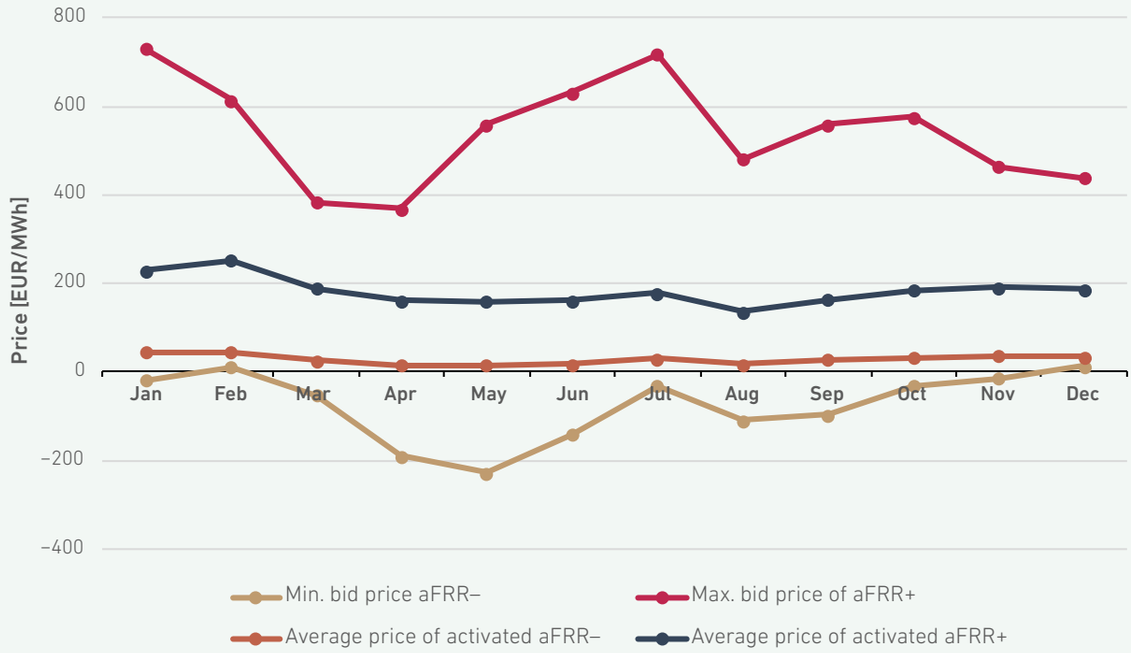


SOURCE: BORZEN

The electricity system operator's frequency system services market

In the frequency system services market, the prices of balancing energy for the frequency restoration reserve (FPR) are determined on the basis of bids submitted by qualified balancing service providers, specifically: separately for positive (FRR+) and negative (FRR–) balancing, and separately for automatic (aFRR) and manual frequency restoration reserves (mFRR). The transmission system operator uses a trading platform to collect bids and activate aFRR and mFRR energy. Energy bids are collected on this platform for each hour, and the system selects the most favourable bid based on the ranked list of bids and the balancing requirements; this forms the basis for the activation of balancing energy and an irrevocable transaction under the 'pay-as-bid' principle.

FIGURE 92: TREND IN BID PRICES AND ACTIVATED ENERGY aFRR



SOURCE: ELES

Figure 92 shows the trend in bid prices and the price of activated frequency restoration reserve energy (aFRR– and aFRR+). Due to activations based on the ranked list of bids, the realised prices are more favourable than the range of bid prices shown. The highest monthly average prices for positive balancing (aFRR+) were recorded in February, when the average price of activated energy stood at 253.08 EUR/MWh. The lowest – and thus least favourable – monthly average prices for activated negative balancing (aFRR–) were recorded in May, when the average price of activated energy stood at 14.96 EUR/MWh. The lowest hourly bid price for aFRR– was recorded on 11 May 2025 for hour H15; due to price caps, this coincided with the lowest day-ahead market price and stood at –126.46 EUR/MWh. The largest difference between the prices for positive and negative balancing was recorded in February, when it stood at 207.56 EUR/MWh.

On the market for system services for automatic reserve (aFRR), the measure under the Act on Measures to Manage Crisis Situations in the Field of Energy Supply (ZUOKPOE), which came into force on 22 September 2022, remained in force until the end of 2025. Initially, it capped bid prices at 1.3 times the realised day-ahead market price for positive balancing and at 0.7 times the realised day-ahead market price for negative balancing. In early 2023, due to lower day-ahead market prices, the methodology was amended, with the following new limit factors being set, which remained in force until 30 September 2025:

TABLE 22: THE aFRR CAPPING FACTOR, WHICH IS SET ACCORDING TO SIPXh AND IS VALID TO 30 SEPTEMBER 2025

SIPXh i EUR/MWh	Factor aFRR+	Factor aFRR–
Up to 0.00	0.8	1.2
From 0.01 to 200.00	1.8	0.2
From 200.01 to 350.00	1.5	0.5
From 350.01 to 450.00	1.4	0.6
From 450.01	1.3	0.7

SOURCE: ELES

In the last quarter, ELES published an amendment to the Methodology for capping the prices of balancing energy for the automatic frequency restoration reserve, relating to the 15-minute market time intervals of the single day-ahead market. The methodology came into force on 30 September 2025 and was first applied to the delivery day of 1 October 2025. The following factors came into effect:

TABLE 23: THE aFRR CAPPING FACTOR, WHICH IS SET ACCORDING TO SIPXh AND IS VALID FROM 1 OCTOBER 2025

SIPXh in EUR/MWh	Factor aFRR+	Factor aFRR–
Up to –450,01	0.7	1.3
From –450.00 to –350.01	0.6	1.4
From –350.00 to –200.01	0.5	1.5
From –200.00 to 0.00	0.2	1.8
From 0.01 to 200.00	1.8	0.2
From 200.01 to 350.00	1.5	0.5
From 350.01 to 450.00	1.4	0.6
From 450.01	1.3	0.7

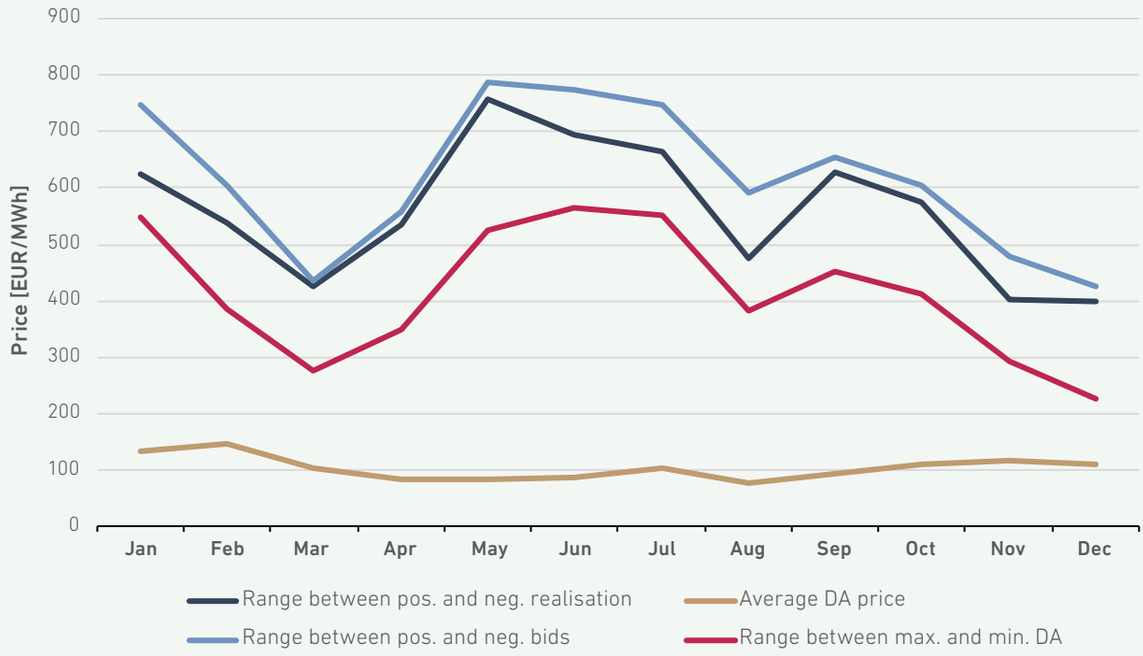
SOURCE: ELES

The maximum price for aFRR+ balancing energy and the minimum price for aFRR– balancing energy for delivery hour h are determined as the product of SIPXh and the corresponding aFRR+ or aFRR– factor. This value represents the maximum price for aFRR+ and the minimum price for aFRR– that PSI may quote when submitting energy bids for aFRR balancing energy for delivery hour h.

Actual aFRR energy prices more favourable than the maximum capped prices

Figure 93 shows that throughout 2025, despite the constraints set out in Table 22 and Table 23, here were differences in bids and actual realisation ranging from positive to negative energy. However, in the period from March to May, it is still observed that all bidders typically submit bids at close to the maximum or minimum permitted price, with trading consequently taking place at these prices; this does not result in significant differences in the range of realised/bid aFRR+/aFRR–.

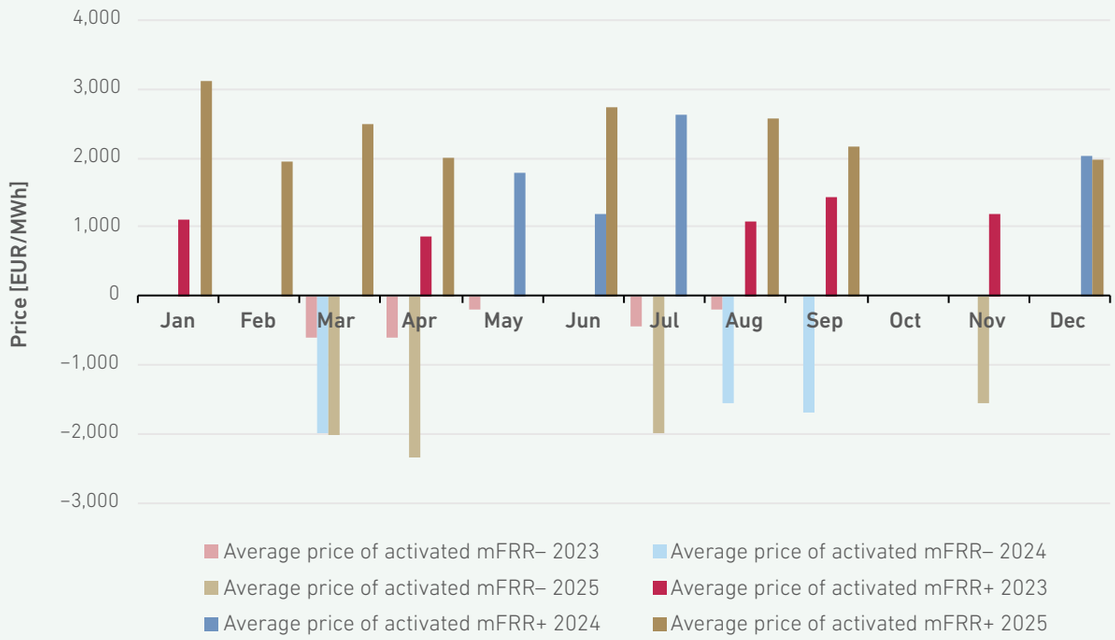
FIGURE 93: CORRELATION BETWEEN THE RANGE OF MINIMUM PRICES OF THE REALISED/OFFERED aFRR– AND THE MAXIMUM PRICES OF THE REALISED/OFFERED aFRR+, THE AVERAGE PRICE OF THE DAY-AHEAD TRADING AND THE RANGE OF THE MINIMUM AND MAXIMUM PRICE OF THE DAY-AHEAD TRADING



SOURCE: ELES

Figure 94 shows the average prices of mFRR+ and mFRR– activated energy for the months in which the energy was activated. The prices of mFRR+ and mFRR– activated energy continue to show an upward trend. Compared with 2024, when positive mFRR+ was activated in four months, it was activated in eight months in 2025. It was not activated in May, July, October and November, while the negative mFRR– was activated only in March, April, July and November.

FIGURE 94: PRICE TRENDS OF ACTIVATED mFRR ENERGY



SOURCE: ELES

Market Price of Electricity for which Producers are Eligible for Support

In 2025, under the RES and CHP support scheme, support was paid to electricity producers in Slovenia for 1,075 GWh of electricity generated; of this, 872.7 GWh was paid in operating support, and 202.3 GWh of electricity was taken off the grid by the Support Centre under the guaranteed purchase scheme. Producers included in the support scheme who received operating support sold the electricity they generated independently on the market or used it for their own consumption. When selling on the market in 2025, they achieved an average price of 45.63 EUR/MWh, which is 67.5% of the average price achieved in 2024. Electricity purchased from producers under the guaranteed purchase scheme operated by the Support Centre was sold at auction in 2025, conducted in accordance with the EKO Group's Transmission Rules of the Support Centre, at a price of 70.92 EUR/MWh, whilst the price achieved at the Support Centre's electricity auction for 2024 was 109.11 EUR/MWh. The weighted average of both prices on the market for electricity sold, for which support is also paid to producers, stood at 50.39 EUR/MWh in 2025 and was 51.9% lower than the average hourly price on the BSP, which stood at 104.69 EUR/MWh for 2025. The average selling price of electricity achieved on the market by producers receiving operating support, however, was 56.4% lower than the average hourly price on the BSP in 2025.

TABLE 24: COMPARISON OF THE AVERAGE SELLING PRICE OF ELECTRICITY FOR WHICH PRODUCERS ARE ELIGIBLE FOR SUPPORT WITH THE AVERAGE ANNUAL BASE PRICE OF ON THE BSP DURING THE 2018–2025 PERIOD

Year	Average selling price of producers with operational support [EUR/MWh][41]	Price achieved at auction by the Centre of Support [EUR/MWh]	Weighted average of both prices [EUR/MWh]	Average hourly price on the BSP [EUR/MWh]
2018	44.05	47.33	44.54	51.16
2019	55.41	58.88	55.86	48.74
2020	52.66	55.87	53.10	37.55
2021	44.84	43.86	44.71	115.03
2022	106.69	125.11	108.71	274.47
2023	169.54	317.00	190.87	104.33
2024	67.57	109.11	84.84	91.29
2025	45.63	70.92	50.39	104.69

SOURCES: ENERGY AGENCY, BORZEN, BSP

Allowance Trading

Allowance is a general term for a certificate or authorisation to emit one tonne of carbon dioxide equivalent in the atmosphere.

The adjustments to the free allocation of greenhouse gas emission allowances introduced by Directive (EU) 2018/410[42] and made effective by Commission Implementing Regulation (EU) 2019/1842[43] have improved the efficiency and incentives provided by the free allocation, but have increased the administrative burden and made the previous date of issue of the free allocation, 28 February, unrealistic. In order to better take into account the adjustments to the free allocation of allowances, it was appropriate to make adjustments to the compliance cycle. The deadline for competent authorities to allocate allowances free of charge should therefore be postponed from 28 February to 30 June and the deadline for operators to surrender allowances postponed from 30 April to 30 September (Directive (EU) 2023/959[44]).

The average price of emission allowances is 12% higher than the previous year

Figure 95 shows the price trend for emission allowances for forward contracts[45] maturing in December 2025 (EUA product on the EEX exchange) and reflects a relatively stable but gradually rising trend throughout the year. The average price over the period under review was approximately EUR 74 per tonne of CO_2, which is approximately 12% higher than the average price of emission allowances in 2024 for forward contracts maturing in December 2024. The lowest settlement price for emission allowances during the year was recorded at the close of trading on 9 April 2025 (EUR 60.94 per tonne of CO_2), while the highest settlement

41 The average price is published on the basis of Article 20 of ZSROVE (in connection with Article 118 of ZSROVE-1)..
42 Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814
43 Commission Implementing Regulation (EU) 2019/1842 of 31 October 2019 laying down rules for the application of Directive 2003/87/EC of the European Parliament and of the Council as regards further arrangements for the adjustments to free allocation of emission allowances due to activity level changes
44 Directive (EU) 2023/959 of the European Parliament and of the Council of 10 May 2023 amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union and Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading system
45 Forward contracts are long- and short-term. Long-term forward contracts mature in the period that is longer than one year (an example of such a contract is the forward supply contract for 2025), while short-term contracts mature in the period that is shorter than one year (for example, the forward supply contract for December 2025.)

price for emission allowances during the year was recorded at the close of trading on 15 December 2025 (EUR 85 per tonne of CO_2). A sharp downward price correction was observed at the start of the second quarter of 2025. This fall can be linked to moderate demand for emission allowances due to favourable weather conditions, lower fossil fuel production and macroeconomic factors that affected energy markets and financial flows.

Later in the year, prices gradually stabilised and fluctuated within a range of approximately 65 to 75 EUR/t, with fluctuations reflecting short-term changes in energy markets, particularly movements in gas prices and the volume of electricity generation from fossil fuels, which directly influence demand for emission allowances. In the second half of the year, a gradual upward trend in prices was evident, exceeding 80 EUR/t towards the end of the year and reaching a peak of around 85 EUR/t.

The rise in prices towards the end of the year can be attributed to a combination of factors: expectations of a tightening of the EU ETS (a reduction in the available quantity of allowances), higher demand due to seasonally higher electricity generation from fossil fuels, and the impact of energy prices. On the supply side, price movements were also influenced by EU measures under the REPowerEU plan, which increased the availability of emission allowances on the market through additional auctions.

FIGURE 95: PRICE TRENDS OF ALLOWANCES (EUA) IN THE EEX EXCHANGE FOR 2025

SOURCE: MONTEL

In addition to market mechanisms, regulatory measures to ensure compliance also make a significant contribution to the effective functioning of the EU ETS. In this context, for 2024, the penalty for each metric tonne of carbon dioxide equivalent for which an operator fails to submit the appropriate number of emission allowances amounted to EUR 130.34. The amount of the fine is adjusted annually in line with the European consumer price index and is ultimately set by the government by means of a decision in the second half of the year for the preceding calendar year. Payment of the fine does not relieve the operator of the obligation to surrender the missing allowances, which further strengthens participants' discipline and the stability of the system.

Transparency of the Wholesale Market

Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency (hereinafter REMIT) provides the fundamental legal framework for ensuring the integrity, transparency and effective supervision of trading on wholesale energy markets. During the 2025 reporting period, its implementation in the area of data reporting was further regulated by Implementing Regulation (EU) No 1348/2014[46]. The regulatory framework was further enhanced in 2024 by Regulation (EU) 2024/1106 of the European Parliament and of the Council of 11 April 2024 amending Regulations (EU) No 1227/2011 and (EU) 2019/942 with regard to improving the protection of the Union against market manipulation in the wholesale energy market, also known as REMIT II.[47] Together with national energy legislation, in particular the Energy Act (EZ-2), which replaced the previous regime under EZ-1 with effect from 8 May 2024, has replaced the previous regime under EZ-1, these acts form a comprehensive legal framework for monitoring, supervising and preventing market abuse on the wholesale electricity and gas markets. This framework is based on three key elements: prohibitions on insider trading and market manipulation; obligations to disclose inside information effectively and in a timely manner; and a comprehensive market monitoring system, including the reporting of data to the competent authorities.

Market monitoring under REMIT involves monitoring all wholesale energy products, including orders to trade, regardless of the trading venue. This also includes basic data on the availability of energy infrastructure. The type and method of data reporting for the 2025 reporting year were set out in Implementing Regulation (EU) No 1348/2014. All data is collected centrally by the Agency for the Cooperation of Energy Regulators (ACER). Under the terms of an agreement, ACER provides the Energy Agency with the data it requires to monitor the national energy market. It sends data on a daily basis concerning the Slovenian trading area, as well as data on trading within the EU relating to the activities of participants registered with the Energy Agency.

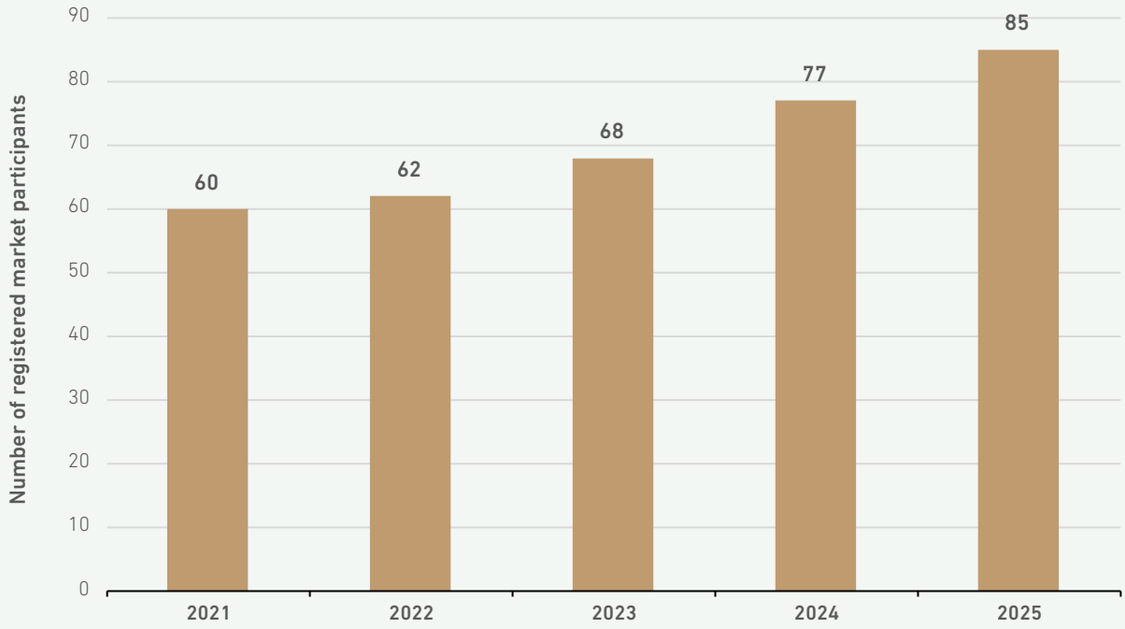
Under REMIT, market participants must register with the national regulatory authority in the Member State in which they are established or resident. If they are not established in an EU Member State and are not resident in any Member State, they must register in the Member State in which they operate. Following the transition from the National REMIT Register of Market Participants (NAREMP) to the Central European Registry for Energy Market Participants (CEREMP) at the end of 2024, in 2025 the Energy Agency carried out market participant registration activities directly at the level of the Central European Registry, which is managed by ACER. The transition to CEREMP contributes to more efficient management of registration data, greater comparability of data at EU level and closer integration of national supervision with the European market monitoring system.

The number of registered market participants increased to 85 in 2025. The growth in the number of registered participants indicates the further development and greater complexity of the wholesale energy market and, consequently, the importance of effective monitoring and supervision of market participants' conduct.

46 Commission Implementing Regulation (EU) No 1348/2014 of 17 December 2014 on data reporting implementing Article 8(2) and Article 8(6) of Regulation (EU) No 1227/2011 of the European Parliament and of the Council on wholesale energy market integrity and transparency (hereinafter Implementing Regulation (EU) 1348/2014) was still in force in 2025 and was therefore relevant to the reporting period covered by this report. Following the end of the reporting period, it was repealed with effect from 29 April 2026 by Commission Implementing Regulation (EU) 2026/256 of 30 January 2026 on the reporting of data in accordance with Article 7c(2) and Article 8(1a), (2) and (6) of Regulation (EU) No 1227/2011 of the European Parliament and of the Council on wholesale energy market integrity and transparency and repealing Commission Implementing Regulation (EU) No 1348/2014. This does not affect its relevance to the review of the status and implementation of REMIT in 2025.

47 Link to the Slovenian text of the REMIT II: https://eur-lex.europa.eu/legal-content/SL/TXT/PDF/?uri=OJ:L_202401106

FIGURE 96: REGISTRATION OF MARKET PARTICIPANTS IN SLOVENIA IN THE 2021–2025 PERIOD



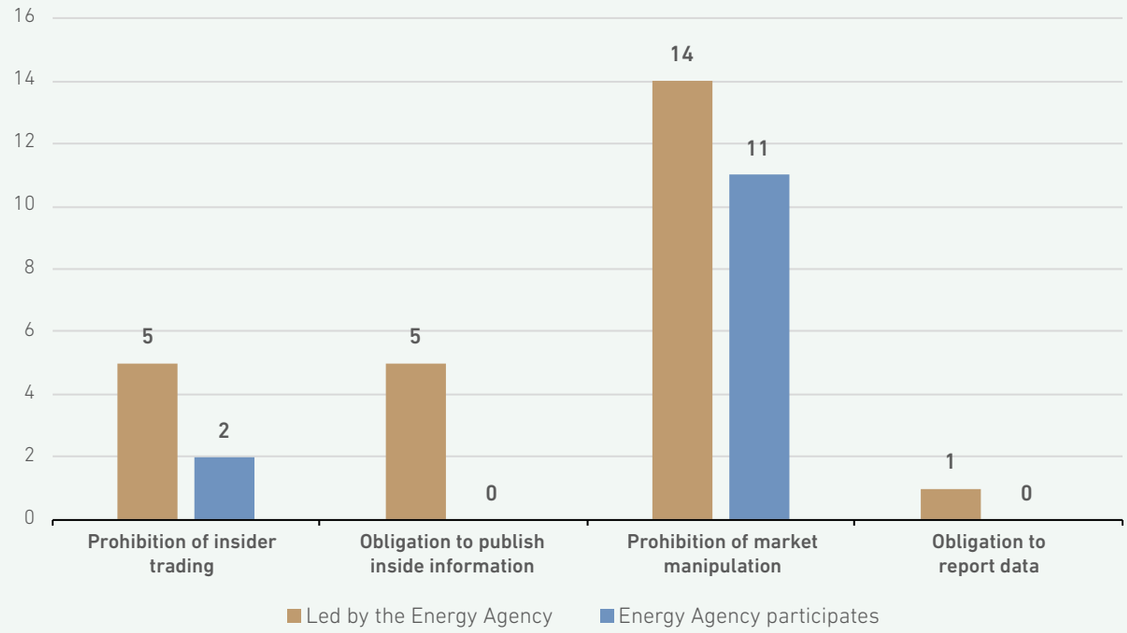
SOURCE: ENERGY AGENCY

When dealing with cases of REMIT infringements, the Energy Agency works closely with the national regulatory authorities of other Member States and with ACER, which ensures a coordinated approach to resolving cross-border cases. Through comprehensive, data-driven and proactive supervision, the Energy Agency contributes to greater transparency, fairness and stability in the wholesale energy market and to strengthening confidence in its functioning.

As part of its monitoring of wholesale energy markets under the REMIT Regulation, the Energy Agency handled 22 cases in 2025; in 11 of these, it cooperated with foreign national regulatory authorities or provided expert assistance in proceedings conducted by other competent authorities. In total, the Energy Agency was involved in 33 cases. The number of cases being handled by the Energy Agency or in which it is involved may vary during the year, particularly where the competence for further consideration of a case changes due to additional facts coming to light, or where another national regulatory authority takes over a case at a later stage.

In terms of the types of alleged infringements, the majority of cases related to the prohibition of market manipulation. A total of 25 allegations or suspected breaches of the prohibition of market manipulation were recorded, of which the Energy Agency led 14 and cooperated in 11. In addition, seven allegations or suspected breaches of the prohibition on trading on the basis of inside information were recorded, as well as five allegations or suspected breaches of the obligation to disclose inside information and one allegation or suspected breach of the obligation to report data. In individual cases, several different types of alleged breaches may be under investigation; therefore, the total number of alleged types of breaches may be higher than the number of cases under investigation.

FIGURE 97: NUMBER OF VIOLATIONS BASED ON THE TYPES OF VIOLATIONS ALLEGED AGAINST MARKET PARTICIPANTS IN PROCEEDINGS INVOLVING THE ENERGY AGENCY

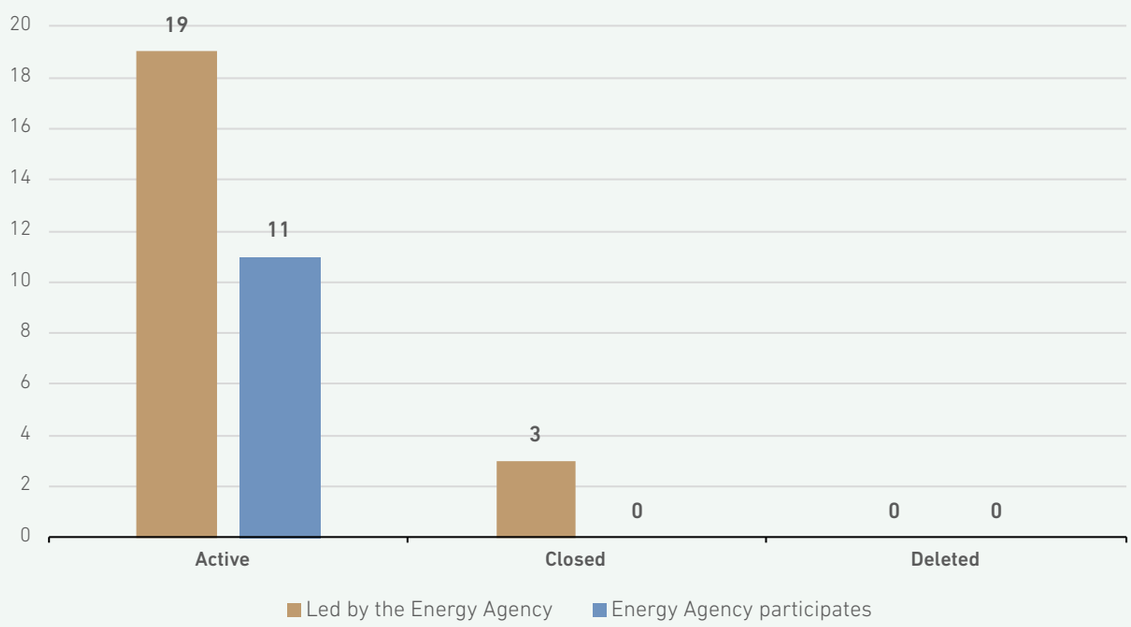


SOURCE: ENERGY AGENCY

An overview of the status of cases[48] shows that, in 2025, a total of 30 cases were recorded as active, while three cases were closed. No cases were deleted.

Of the active cases, 19 were handled by the Energy Agency, while 11 involved cooperation with foreign national regulatory authorities. All three closed cases were handled by the Energy Agency.

FIGURE 98: REMIT INVESTIGATION STATUS IN 2025



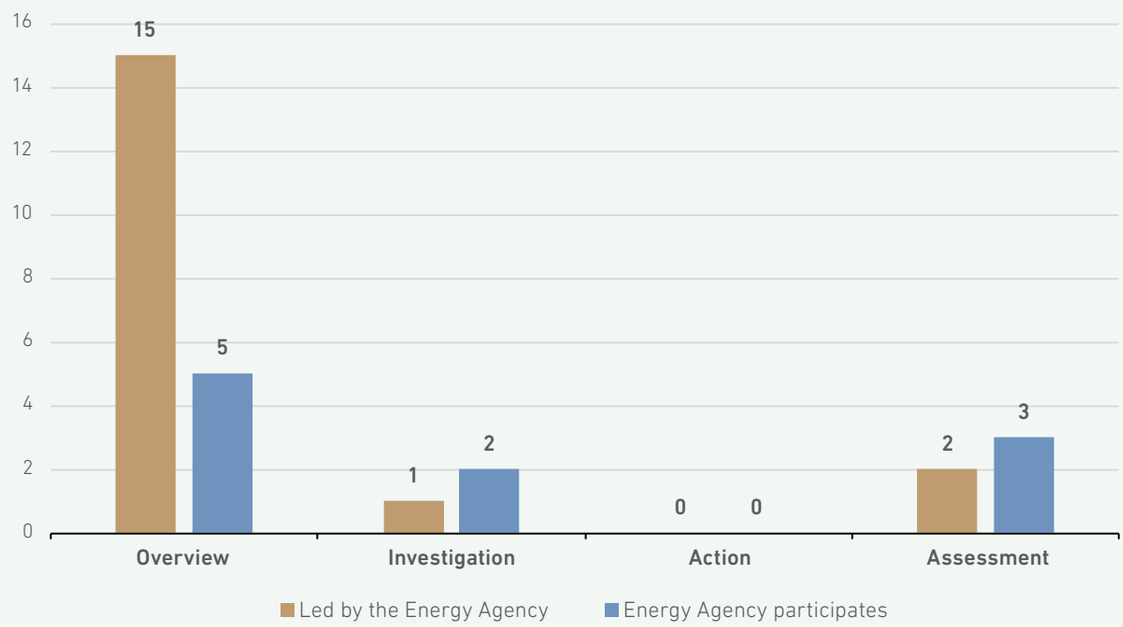
SOURCE: ENERGY AGENCY

48 When summarizing the status of cases, ACER terminology from the Case Management Tool (hereinafter CMT) is used, specifically: 'Active' (Open) means that the case is still pending; 'Closed' means that the case has been formally closed; 'Deleted' means that the case has been deleted or is no longer under consideration

Active REMIT cases were at various stages of processing in 2025. The majority of cases were at the review stage – 20 cases in total – of which 15 were handled by the Agency, while it cooperated with foreign national regulatory authorities on the remaining five. The review phase is the initial stage of proceedings, during which the basic facts and circumstances of the alleged infringement are established, clarifications and information are obtained, and an assessment is made as to whether there are sufficient grounds for further proceedings or for the case to be closed.

There were three cases at the investigation stage, of which the Energy Agency led one and cooperated in two. An investigation involves an in-depth examination of a case where the grounds for suspecting an infringement are already sufficiently substantiated. There were five cases at the evaluation or (final) assessment stage, of which the Energy Agency led two and collaborated on three. Assessment involves evaluating the findings gathered and deciding on further procedural steps, including the closure of the case by the national regulatory authority, the technical closure of the case in the CMT system, or the referral of the matter to the judicial phase or review where an appeal has been lodged against the decision of the national regulatory authority. No cases were recorded in the enforcement phase in 2025.

FIGURE 99: STAGES OF ACTIVE REMIT CASES IN 2025



SOURCE: ENERGY AGENCY

In 2025, a number of significant irregularities in the reporting of trading data were eliminated. This also improves the quality of the data that forms the basis for market monitoring and the detection of potential abuses.

In 2025, legal and procedural constraints relating to the enforcement of the REMIT II Regulation were also identified, particularly when dealing with cases involving foreign market participants. The Energy Agency brought this issue to the attention of the European Commission, which also recognised the challenges highlighted as part of its efforts to ensure more effective implementation of the REMIT II Regulation. As the revised Regulation requires an effective, proportionate and dissuasive system of sanctions and enforcement measures, it will also be necessary to ensure that the national substantive and procedural framework is adapted accordingly. The revised Article 18 of REMIT stipulates that sanctions must be effective, proportionate and dissuasive, and that Member States must notify the European Commission of their national measures by 8 May 2026. Appropriate national implementation is therefore an important prerequisite for the effective enforceability of the revised European

framework and for the effective protection of the wholesale energy market against market abuse.

In the area of compliance, the Energy Agency's activities have contributed to strengthening preventive supervision and promoting responsible behaviour among market participants in fulfilling their obligations under the REMIT Regulation. Through systematic monitoring of market behaviour and addressing issues relevant to ensuring compliance, the Energy Agency contributes to raising awareness amongst market participants, improving the quality of internal procedures and ensuring more consistent compliance with the rules that guarantee the transparency and integrity of the wholesale energy market. The impact of these activities is reflected in a reduction in the risk of irregularities, a strengthening of confidence in the functioning of the market, and the creation of a more stable and transparent regulatory environment.

Implementation of REMIT II subject to legal and procedural constraints

Market Effectiveness

Recording of Concluded Contracts and Operational Forecasts

The recording of concluded contracts and operational forecasts is carried out by the Borzen market operator. These form the basis for the preparation of market plans by members of the balancing scheme and for the preparation of the transmission system operator's operational schedule; following delivery, they are used to calculate the balancing deviation of the balancing group leaders.

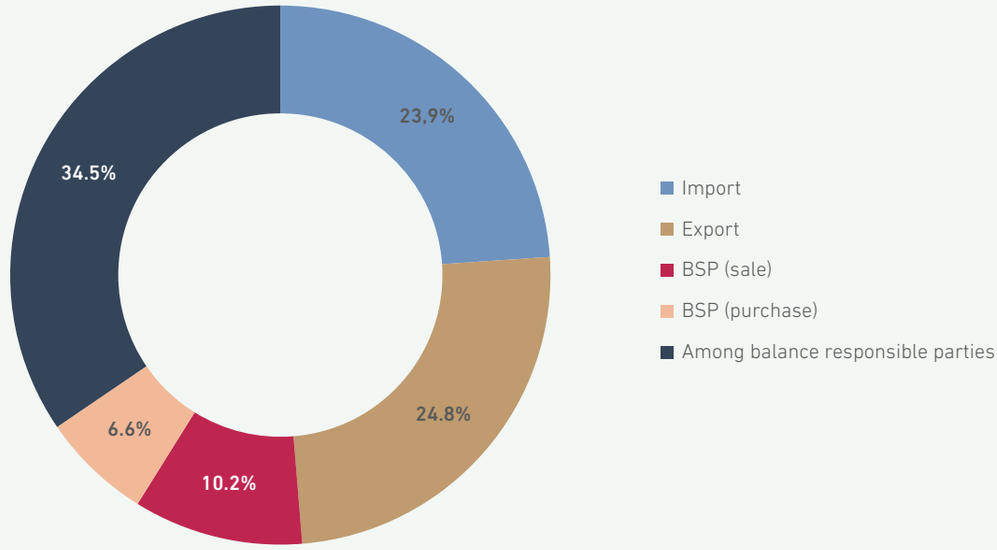
Borzen records all concluded contracts that affect the energy balance of a member of the Slovenian balancing scheme. It records all contracts concluded between members of the balancing scheme, contracts concluded on the energy exchange, and concluded import and export contracts. Contracts concluded on bilateral markets form part of the recorded import-export firm contracts and firm contracts concluded between members of the balancing scheme. Bilateral trading is characterised by being conducted between two contracting parties outside the organised exchange market.

In addition to firm contracts, Borzen also records operational forecasts, which represent the forecast electricity deliveries and off-takes of balance scheme members for delivery and off-take points for which they have concluded open contracts. In 2025, the market operator recorded 124,413 firm contracts and operational forecasts with a total volume of 80,016,286 MWh. Compared with the previous year, the total number of recorded concluded contracts and operational forecasts in 2025 was 8.9% higher, while the volume of trading increased by 4.4%.

The volume of electricity sold or purchased in 2025 under fixed-term contracts amounts to 53,551,400 MWh. This volume was 10.3% higher than in 2024, when the total volume of fixed-term contracts stood at 48,528,972 MWh. A comparison of the structure of concluded contracts between 2024 and 2025 reveals several significant shifts that can be linked to conditions on the wholesale electricity market. Contracts between balance groups continue to account for the largest share, having risen from 30.1% to 34.5%, which indicates increased internal portfolio optimisation in a context of greater price volatility. This volatility was more pronounced in 2025 due to the higher share of renewable sources and greater price sensitivity to weather conditions, which encouraged market participants to manage their portfolios more actively within the balancing schemes. On the other hand, the share of exports decreased compared with the previous year, whilst imports remained stable, which may reflect changed price signals in regional markets and less pronounced export opportunities. Changes are also evident on the organised BSP market, where the share of sales increased whilst the share of purchases decreased, indicating that participants are adapting to new market conditions and that exchange trading is playing a greater role in the management of energy surpluses.

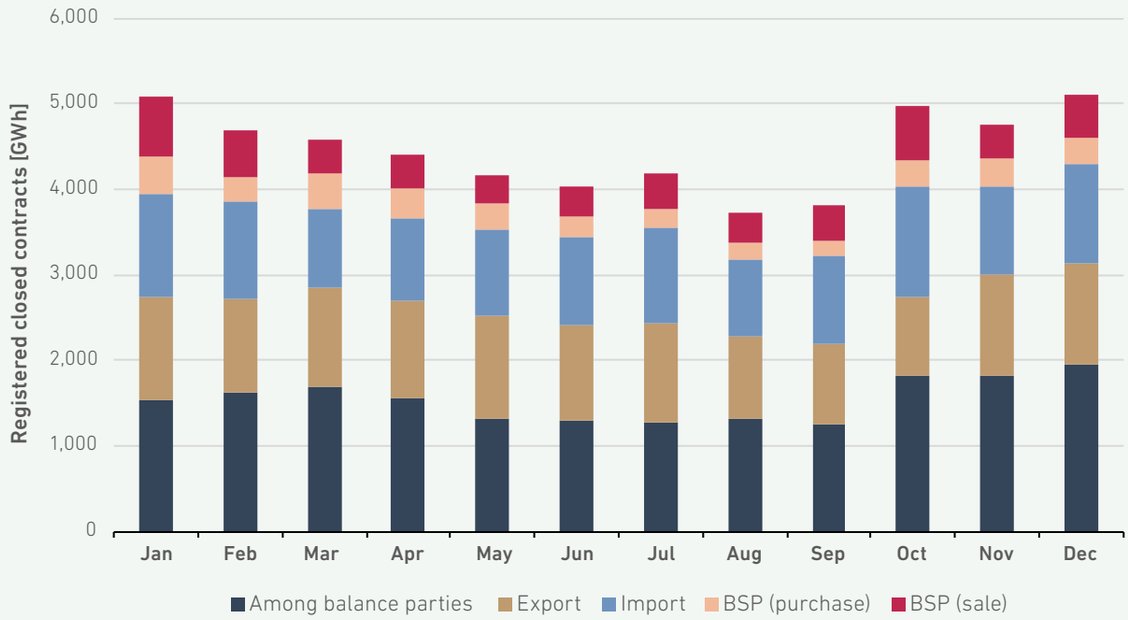
Figure 101, which shows the trend over the course of 2025, further confirms these trends. The volume of registered concluded contracts was highest during the winter months, when energy demand is greater, and lowest during the summer (particularly in August), which is consistent with seasonal patterns of electricity consumption. In the second half of the year, a gradual increase in volume is evident, coinciding with rising prices and greater market activity. The structure by segment remains relatively stable throughout the year, with contracts between balancing groups accounting for the largest share, while the BSP segment and cross-border flows reflect shorter-term adjustments to market conditions.

FIGURE 100: STRUCTURE OF THE VOLUME OF REGISTERED CLOSED CONTRACTS



SOURCE: BORZEN

FIGURE 101: AMOUNT OF ELECTRICITY SOLD OR PURCHASED THROUGH CLOSED CONTRACTS PER MONTH



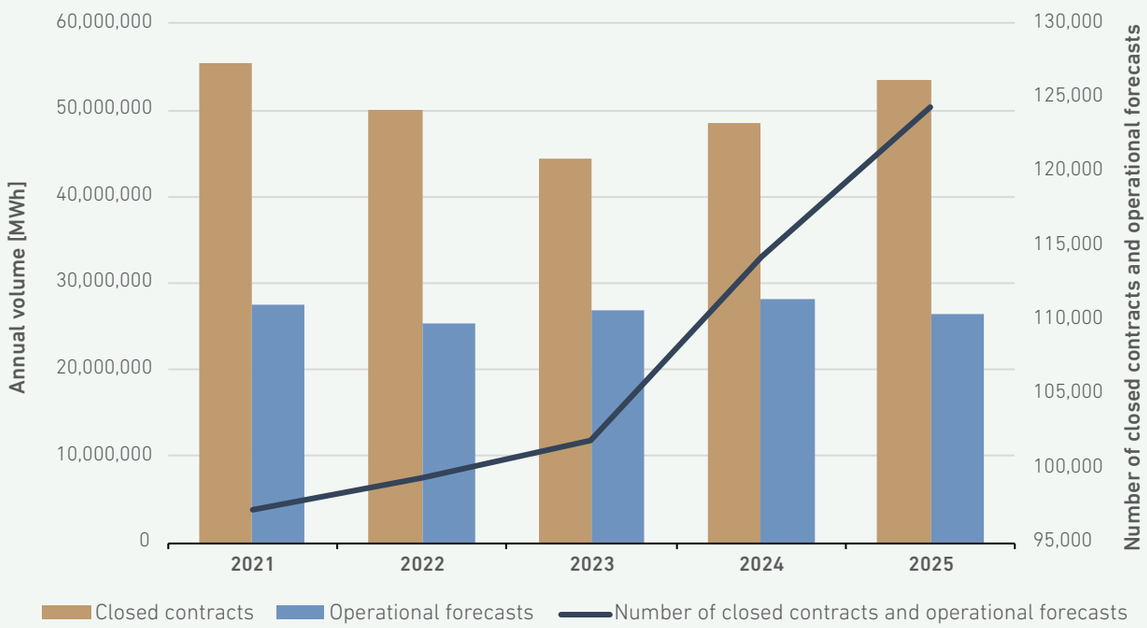
SOURCE: BORZEN

The trend in annual volumes of contracts concluded, operational forecasts and their numbers for the period 2021–2025 indicates a gradual increase in market activity. Following a decline in the volume of contracts concluded in 2023, activity picked up again in 2024 and 2025, reaching one of the highest levels in the observed period in 2025. Operational forecasts remain relatively stable throughout the entire period, with minor fluctuations, indicating a relatively constant baseline for consumption and production planning.

Particularly pronounced is the upward trend in the number of contracts concluded and operational forecasts, which rose sharply in 2025 and reached their highest level during the period under review. The number of contracts concluded increased by 12.26% in 2025 compared with the previous year, whilst the number of operational forecasts rose by 6.35% compared with 2024. This indicates greater fragmentation of trading and a higher number of individual transactions, which is linked to the increased complexity of the market, greater price volatility and market participants' adaptation to changed conditions, including a higher share of renewable energy sources and the development of short-term markets.

A 12.3% increase in the number of concluded contracts

FIGURE 102: ANNUAL VOLUME OF CLOSED CONTRACTS, OPERATIONAL FORECASTS AND NUMBER OF CLOSED CONTRACTS AND OPERATING FORECASTS IN THE 2021–2025 PERIOD



SOURCE: BORZEN

Overall, the trends indicate an increase in the volume of registered concluded contracts and greater dynamism in trading and the management of balance group portfolios, which is in line with broader changes in the wholesale electricity market.

Day-ahead Market

Day-ahead trading on the BSP takes the form of auction-based trading. During the trading phase, market participants enter buy and sell bids for standardised products into the trading application; prior to the introduction of the change in 2025, these were predominantly hourly products. Market price formation is based on the trading application's algorithm, which, once the collection of bids has closed, calculates the marginal price at which all trades are executed. Trading is integrated into

the Single Day-Ahead Coupling (SDAC) mechanism, within which available MPZs are also allocated simultaneously.

In 2025, 21 market participants took part in day-ahead trading, the same number as the previous year, with domestic participants predominating.

The total trading volume on the Slovenian day-ahead market in 2025 amounted to 12,650 GWh, which is 0.1% more than in 2024. Bids totalling 14,623 GWh were submitted, of which 9,218 GWh were buy bids and 5,404 GWh were sell bids[49]. The volume of bids submitted increased significantly compared with 2024, by 67.6%, primarily due to the higher volume of buy bids, which indicates increased market activity and greater market liquidity. The average daily trading volume stood at 34,657 MWh, while the highest daily trading volume was 57,143.4 MWh, recorded on 21 January 2025 for the delivery date of 22 January 2025. To summarise trading volume even more clearly, we can say that, on average, 1.44 GW of capacity was traded per hour.

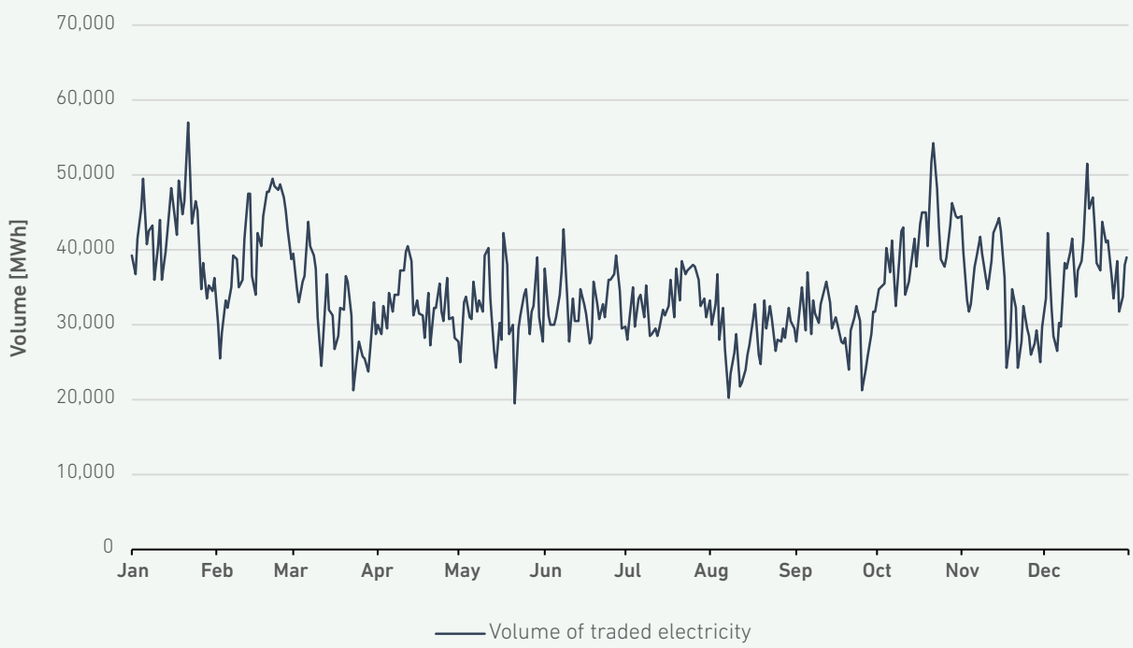
Trading volume on the day-ahead market remains at virtually the same level

The number of active market participants on the day-ahead market remains unchanged

The highest monthly trading volume in 2025 was recorded in January, amounting to 1,310,029 MWh. The lowest monthly trading volume was recorded in August, amounting to 878,142 MWh. There were no significant differences in trading volume between the first and second halves of the year; the volume was 1.9% higher in the first half. However, there was a greater difference in the final quarter, with trading volume increasing by 8.7% compared with 2024. The increase in trading volume in the final quarter of 2025 coincided with greater market activity and more pronounced price volatility.

During this period, a 15-minute trading interval was also introduced; while this primarily affects the accuracy of price formation and short-term market dynamics, it may indirectly contribute to greater activity amongst market participants due to increased opportunities to adjust their portfolios.

FIGURE 103: VOLUME OF ELECTRICITY TRADED IN 2025



SOURCE: BSP

49 The difference in the total of sell and buy offers compared with the overall figure is due to rounding.

Intraday Trading

Intraday trading on the Slovenian organised market takes place on the BSP. As part of intraday market coupling, the Slovenian electricity exchange market is integrated into the single European intraday market, specifically at the borders with Croatia, Austria, Italy and Hungary[50]. On the continuous intraday market, trading is carried out 24 hours per day using hourly, 15-minute and block products[51].

Intraday trading allows market participants and balance responsible parties to post additional bids or purchases after the close of day-ahead trading and thus adjust their trading plans accordingly and harmonise them with the operational forecasts. Trading in the intraday market concludes one hour before physical delivery and converts into trading in the balancing market, where market participants are left to trade with only the TSO. Prices in the intraday market always provide a clearer reflection of the real-time value of energy, which can be put to use by market participants. As providers of flexibility, they can adjust their generation and/or consumption within a short period of time.

On the intraday market, 14 domestic and seven foreign market participants were trading on the BSP at the end of 2025. In addition to continuous trading, market participants are also permitted to engage in intraday auction trading – IDA. These are implicit intraday auctions.

The day-ahead (DA) auction is followed by three further IDA auctions during the day.

In 2025, trading volumes decreased by 4% in the segment of intraday continuous trading compared with 2024, and increased by 97.2% in the segment of auction intraday trading.

A 97% increase in the volume of auction intraday trading on the Slovenian continuous market

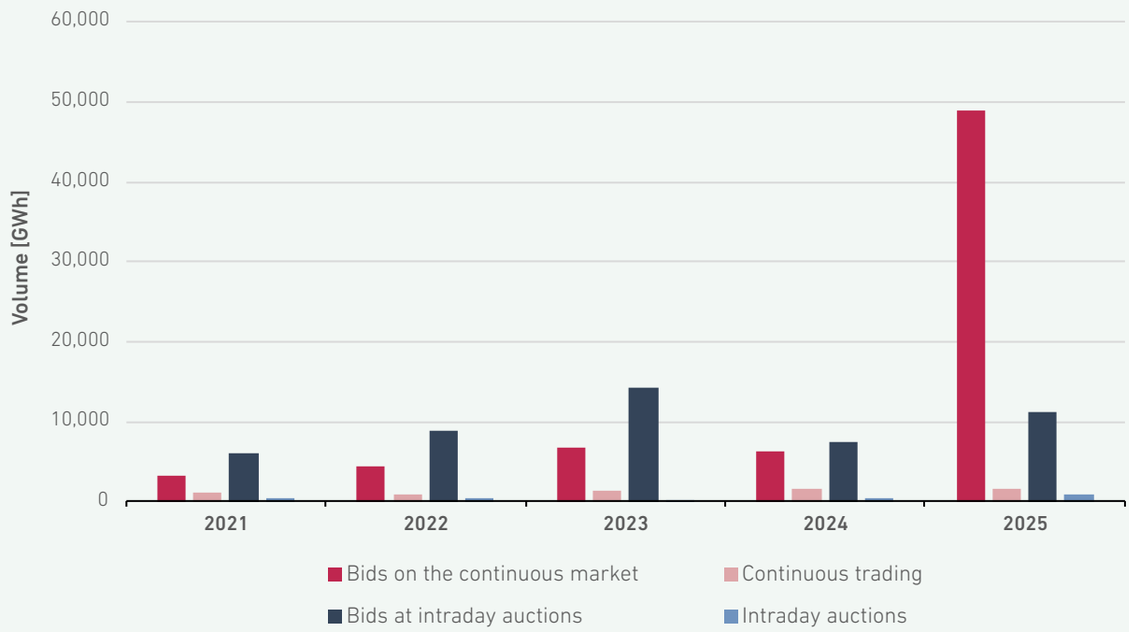
In 2025, the total volume of continuous intraday trading amounted to 1,573 GWh, which was slightly less than the year before, when the total volume of continuous intraday trading amounted to 1,634 GWh (see also the section on Prices on the Intraday Continuous Market). A total of 48,896 GWh of bids were submitted, of which 23,918 GWh were purchase bids and 24,977 GWh were sell bids[52]. The volume of bids in this exchange segment grew by 680%. This significant increase in bids was most likely driven by algorithmic trading. In 2025, the BSP also increased the number of bids that market participants can submit per day.

Of the total intraday trading volume, the trading volume on the balancing market amounted to 52 GWh. An explanation of why certain volumes in intraday trading are counted as volumes on the balancing market is provided in the following section.

In 2025, the volume of intraday auction trading amounted to 848 GWh, which is 97.2% more than the previous year, when it stood at 430 GWh. A total of 11,151 GWh of bids were submitted, of which 6,051 GWh were buy bids and 5,100 GWh were sell bids. The volume of bids submitted in intraday auction trading.

50 As of 7 June 2022, the border with Hungary was also added for trading on the intraday market.
51 A more detailed definition of products included in intraday continuous trading is available on the BSP Southpool official website: https://www.bsp-southpool.com/podatki-in-informacije/pravila-borze-in-cenik.html
52 The difference in the total of sell and buy offers compared with the overall figure is due to rounding.

FIGURE 104: INTRADAY TRADING VOLUME AND BIDS ON THE INTRADAY POWER EXCHANGE FOR THE 2021–2025 PERIOD



SOURCE: BSP

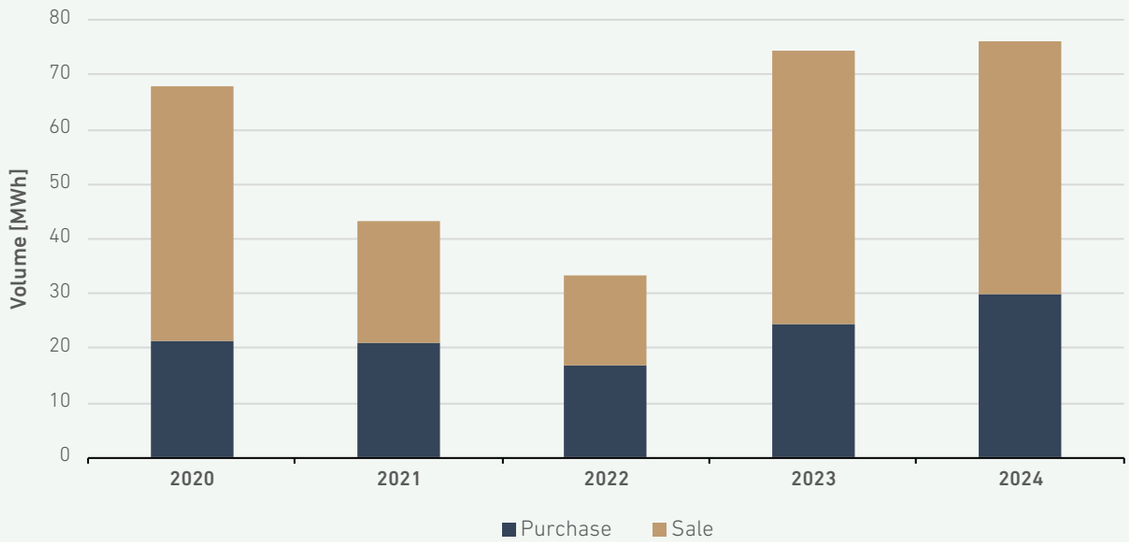
Trading on the Market Operator's Balancing market

The balancing market in Slovenia is operated by Borzen. On the balancing market, the transmission system operator may buy or sell balancing energy from suppliers to balance deviations in the electricity system. In doing so, it releases quantities of frequency restoration reserves. The rules governing the operation of the balancing market stipulate that bids submitted by balancing market participants as part of intraday trading may be accepted by the transmission system operator as bids submitted on the balancing market, and that all transactions concluded using the operator's bids to balance deviations in the electricity system are considered to be transactions on the balancing market. Transactions on the balancing market can be divided into those carried out during the intraday trading phase outside the final hour prior to delivery, and those carried out during the trading phase in the final hour prior to delivery. The proportion of the latter is very high, which means that the transmission system operator buys or sells electricity on the market operator's balancing market predominantly during the final hour before delivery. To facilitate trading, the Slovenian balancing market is linked to the intraday market. Both markets are operated by BSP on behalf of the market operator. The same rules apply to both markets, with the principle that trading on the intraday market ceases one hour before the delivery time and transitions to trading on the balancing market. In 2025, 1,725 transactions totalling 51 GWh were concluded on the market operator's balancing market. Of this, 25 GWh represented the purchase of balancing energy, whilst 26 GWh represented the sale of balancing energy by the transmission system operator.

Following significant growth in volumes and the number of transactions concluded in 2023 and 2024, a decline was observed in 2025. The volume of transactions concluded fell by 32.9% in 2025, while the number of transactions fell by 24.7%. Trends in volumes and the number of transactions are directly determined by the needs of the transmission system operator, as the platform acts as an additional mechanism for optimising and reducing aFRR and mFRR costs.

The majority of transactions were concluded for hourly products, with a total volume of 45.2 GWh of electricity. With 1,201 transactions concluded, hourly products were also the most traded product on the balancing market.

FIGURE 105: TRADING VOLUME OF ALL PRODUCTS ON MARKET OPERATOR BALANCING MARKET IN THE 2021–2025 PERIOD



SOURCES: BORZEN, BSP

In 2025, the market operator's balancing market accounted for 6.2%[53] of total system balancing, which are 3.6 percentage points lower than in 2024, when the balancing market's share of total system balancing amounted to 9.8%. In addition to the transmission system operator, nine of the total of 34 members participating in the market operator's platform took part in trading, which is the same number as in 2024. The total number of members increased by one, from 33 to 34.

Trading with Balancing Energy on the ELES Ancillary Services Market

The ELES ancillary services market is run by the TSO. Since the beginning of 2020, ELES has used the Slovenian platform for balancing services, which is controlled and managed by the transmission system operator, to activate aFRR and mFRR balancing energy. The platform is monitored and managed by the TSO and it also enables the collection and activation of aFRR and mFRR offers. The activation of the aFRR energy offers is carried out automatically via the management system, while with mFRR offers, the activation is done on demand via the mFRR auction and activation application. Providers of balancing services must meet the market criteria and many technical and communication requirements in line with the Rules and conditions for providers of balancing services on the ELES balancing market. The offers for balancing energy may only be submitted by qualified providers of balancing services. The provider of balancing services submits separate offers for balancing power and balancing energy, which must also be separated by balancing direction. The provider that was successful in the auction for balancing power must submit mandatory offers for balancing energy with an hourly resolution in line with the quantity and period of collected offers for balancing power. The remaining qualified providers can submit offers for balancing energy on a voluntary basis. According to the order of activation of the balancing energy offers, the most favourable offers on the list, classified according to price, are activated first. Based on the selected offers, the aFRR and mFRR balancing energy is accounted for according to the pay-as-bid principle.

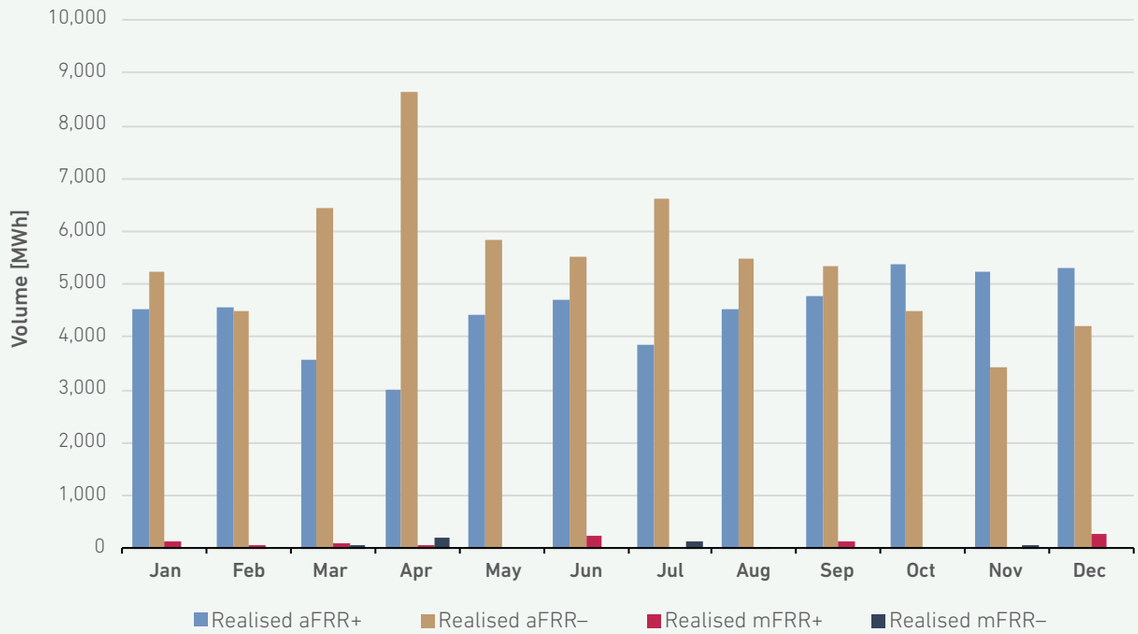
Cross-border mechanisms for optimising the activation of regulating energy also play an important role in the operation of the balancing market, particularly the IGCC platform, which enables the netting of opposing deviations between transmission system operators, thereby reducing the need to activate aFRR. The balancing of the electricity system is also based on a joint agreement within the Slovenia–Croatia–Bosnia and Herzegovina regulatory block. Under this agreement, the operators assist one another in covering primary, secondary and tertiary reserves, which significantly reduces ELES's procurement costs. In addition, the FSkar mechanism is also used in the system balancing process. FSkar is a correction or settlement mechanism linked to the balancing of deviations, whilst the transmission system operator's activations within the block represent regulatory energy activations carried out by transmission system operators to ensure the balance of the electricity system.

53 Percentage of the sum of FCR, aFRR, mFRR, replacement reserve (RR), IGCC and FSkar

In 2025, bids for aFRR balancing energy were submitted by just four qualified bidders, whilst bids for mFRR balancing energy were submitted by six qualified balancing service providers. Consequently, market concentration in the system services market is very high, and although competition increased in 2025 in the aFRR sector, it remains low across the system services market as a whole. On the aFRR balancing energy trading platform in 2025, the volume of bids submitted for positive balancing amounted to 544.8 GWh, and for negative balancing to 537.1 GWh. A total of 53.8 GWh was activated for positive balancing and 65.7 GWh for negative balancing. For mFRR+ balancing energy, bids totalling 1,731.7 GWh were submitted, whilst for mFRR– balancing energy, bids totalling 592.8 GWh were submitted. Of these volumes, 1,096.0 MWh were activated for the positive direction and 499.0 MWh for the negative direction.

The volumes of bids submitted in certain months exceed the required minimum volume of bids for system services, which means that bidders have made use of the option to submit competitive voluntary bids. The total volume of bids by month indicates that voluntary bids for aFRR balancing energy were submitted in almost all months[54] and account for around 3.4% of the total bid volume in those months, which is higher than in 2024, when this percentage stood at just 0.2%. For mFRR balancing energy, voluntary bids were Voluntary bids for mFRR balancing energy were submitted in every month of the year; for positive balancing, these accounted for approximately 3.9% of the total quantities offered, while for negative balancing they accounted for around 3.0% of the total volumes offered. The percentage of available offered volumes has not changed significantly since the previous year.

FIGURE 106: ACTUAL VOLUMES OF aFRR AND mFRR

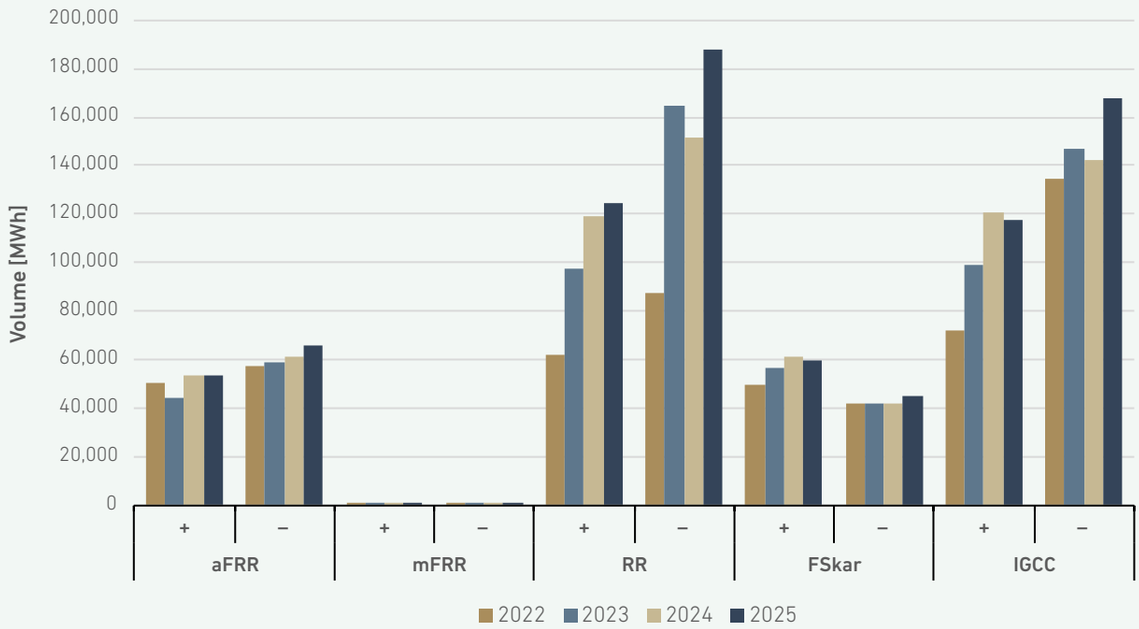


SOURCE: ELES

In the implementation of the aFRR the engaged amounts of 53.8 GWh of positive energy and 65.7 GWh of negative energy mean that ELES engaged slightly more positive and negative energy in 2025 than in 2024, when it committed 53.6 GWh of positive and 61.4 GWh of negative energy. As with the netting of deviations, the aFRR service has also seen a slightly greater need for regulation in the negative direction than in the positive direction for the fourth year running. Thus, in 2025, ELES exported 168 GWh to eliminate positive imbalances as part of its participation in the IGCC, thereby reducing the need to commit negative aFRR energy, while importing 117 GWh to eliminate negative imbalances, thereby also reducing the need to procure positive aFRR energy by that amount. Slovenia has been participating in the IGCC imbalance netting project since 2019, with the volumes of energy exchanged as part of this process increasing year to year.

54 From the aggregated data available, it is not possible to confirm with certainty the existence of these offers in other months, as not all providers are able to fully meet the minimum contractual requirements for the provision of services, which consequently reduces the monthly total of volumes offered. In 2025, the only month in which this was the case was January.

FIGURE 107: ACTIVATED POSITIVE AND NEGATIVE ENERGY BY SERVICES IN THE 2022–2025 PERIOD



SOURCE: ELES

In the provisioning of implementing the mFRR, 1,096.2 MWh of positive energy was activated in 2025, which is more than the previous year, when ELES activated 497 MWh of positive energy. On the other hand, ELES activated 499.0 MWh of mFRR– energy from domestic suppliers in 2025, which is also more than in the previous year, when ELES activated 128[55] MWh of negative energy. The majority of mFRR+ and mFRR– energy was activated with Slovenian suppliers. In the mFRR+ segment, the foreign transmission system operator HOPS was activated in August to the extent of 175 MWh, while in the mFRR– segment, the foreign transmission system operator NOS BIH was activated in November to the extent of 18.75 MWh.

In total, there were 98 mFRR activations in 2025 – 54 positive and 44 negative – which is more than in 2024, when there were a total of 41 activations of the manual frequency restoration reserve.

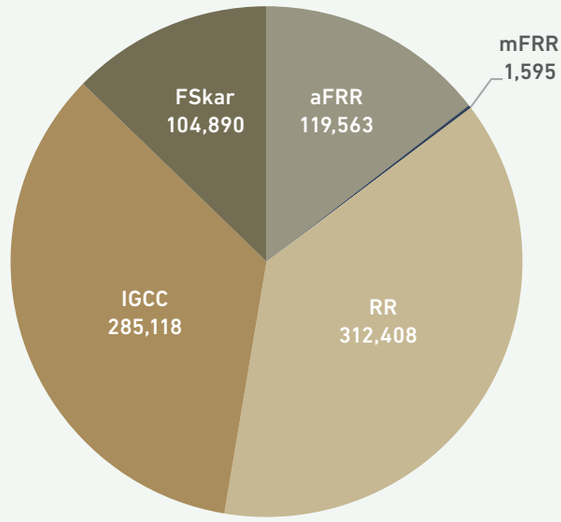
In 2025, ELES also procured part of the energy required to balance deviations on the market operator's balancing market, while it had to provide part of the energy to balance unintended deviations in the electricity system (FSkar). As part of unplanned energy exchanges (FSkar settlement), 59.9 GWh of positive and 45.0 GWh of negative energy were exchanged in 2025.

To meet the requirements for the replacement reserve (RR)–which, in this report, covers the market operator's balancing market, the intraday market and transactions concluded under the provisions of the applicable pentalateral procedure for ensuring operational reliability at the northern Italian border, ELES engaged 124.3 GWh of positive energy and 188.1 GWh of negative energy.

Figure 108 shows the distribution of the absolute volumes committed (the sum of absolute negative and positive balancing energy) by service type. In 2025, trading for balancing purposes on the intraday market remains high, accounting for as much as 37.9% of the absolute value of the committed balancing energy quantities. It is also evident, in particular, that balancing deviations with neighbouring transmission system operators is of great importance to the Slovenian electricity system, accounting for 34.6% of the absolute value of the committed balancing energy volumes. Despite a slight increase in tertiary activations, the most expensive type of tertiary activation still accounts for the smallest percentage, as expected, namely 0.1% of the absolute value of the committed volumes of balancing energy.

55 Pentalateral handling of the Control Program of the Italian Northern Interconnection

FIGURE 108: ABSOLUTE VALUES OF ACTIVATED BALANCING ENERGY IN MWh[56]



SOURCE: ELES

ELES's direct trading on the intraday continuous market for balancing purposes currently represents a key element in ensuring the stability and reliability of the Slovenian electricity system. From July 2026, ELES is scheduled to be integrated into the European platforms for the exchange of balancing energy: PICASSO for the automatic frequency restoration process (aFRR) and MARI for the manual frequency restoration process (mFRR). Regulation (EU) 2017/2195 stipulates that transmission system operators must primarily use organised balancing markets and standardised balancing products to ensure balancing, while the intraday market must remain dedicated to balancing the balance groups and market participants. A further change to the design of the intraday continuous market, introduced on 1 January 2026, has reduced the trading close time to 30 minutes prior to delivery; and as Regulation (EU) 2017/2195 stipulates that the trading cut-off time for balancing energy must not precede the cross-zonal trading cut-off time, ELES's activities on the intraday spot market for balancing purposes will have to cease.

As ELES has accounted for a significant share of activity on the Slovenian intraday continuous market in the past, the termination of its direct participation may have a significant impact on the dynamics of this market segment. A reduction in liquidity and trading volume can be expected, particularly in time intervals close to delivery. However, following effective integration, this liquidity could shift to the European platforms MARI and PICASSO, where activations will take place via standardised balancing products and common European activation mechanisms. In the long term, this may contribute to the more effective integration of the Slovenian market into the European market, whilst the transitional period is likely to involve adjustments to trading strategies and intraday liquidity in the domestic market.

56 The mFRR item covers annual domestic activations and annual activations abroad (HOPS, NOS BIH) for the purposes of ELES

Concentration in the Power Exchange

The number of traders in the power exchange remained unchanged in 2025 compared with 2024, standing at 21, which indicates a stable structure of market participants. Following a period of decline in the number of traders in recent years, the market has clearly consolidated.

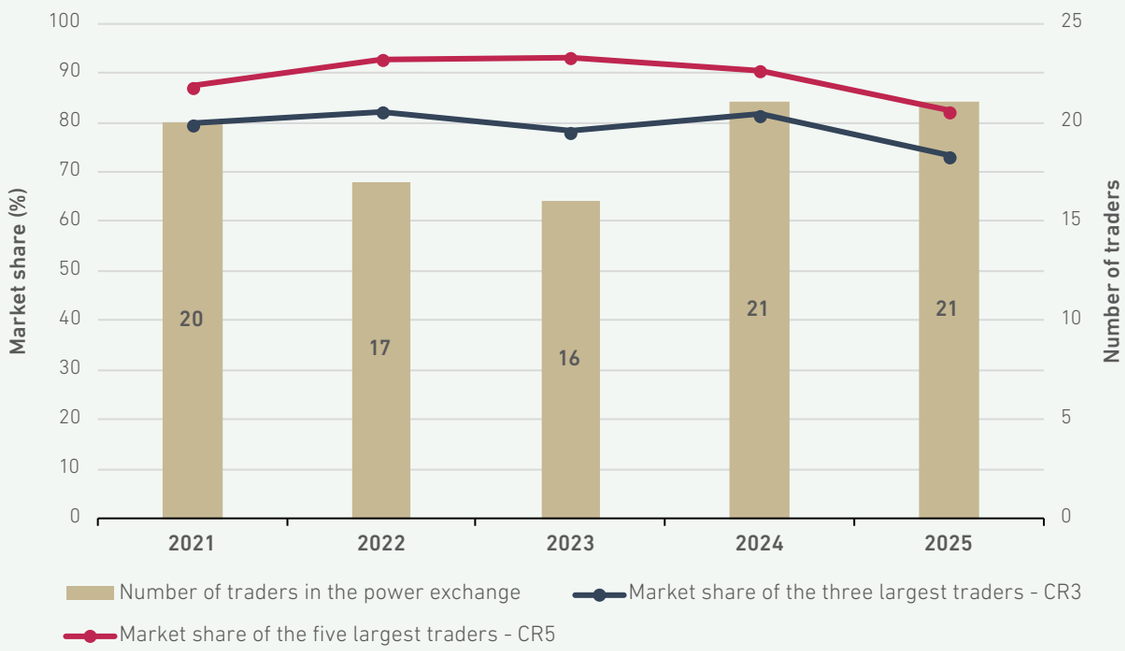
The number of traders in the power exchange remained unchanged in 2025 compared with 2024, standing at 21, which indicates a stable structure of market participants. Following a period of decline in the number of traders in recent years, the market has clearly consolidated.

The total market share of the three largest traders (CR3), as an indicator of the degree of concentration, stood at 73.2% in 2025, a decrease of 8.3% compared with 2024. The combined market share of the five largest retailers (CR5) stood at 82.4%, down from 90.5% in 2024.

Despite the decline in concentration, the indicators still point to a relatively highly concentrated market, where the largest players have a significant influence on trading. The decline in the CR3 and CR5 indicators suggests a slightly greater dispersion of market shares, which may reflect greater activity on the part of smaller participants or changes in trading strategies within the market.

The HHI concentration index increased slightly in 2025 compared with 2024 (from 2,814 to 2,861), which, despite the aforementioned reduction in the market shares of the largest traders, still confirms a high degree of concentration in the wholesale market.

FIGURE 109: MARKET SHARE AND NUMBER OF TRADERS IN THE SLOVENIAN POWER EXCHANGE ACCORDING TO TRADED VOLUME



SOURCE: BSP

The development of the market structure is also influenced by broader processes of regional integration, in particular the integration of BSP into the ADEX Group, which links several markets in Central and South-Eastern Europe. The ADEX Group was established gradually – first through the merger of BSP and SEEPEX in 2024, followed by the Hungarian stock exchange HUPX joining the group at the end of 2024, thereby creating a unified regional stock exchange platform. In 2025, the group's activities continued primarily in the areas of harmonising trading rules, the development of joint products and the strengthening of liquidity in the interconnected markets, whilst the start of 2026 was also marked by the implementation of new trading solutions (e.g. the introduction of the MATS system for the day-ahead market) and the harmonisation of pricing structures across the entire group.

Such integration generally contributes to greater liquidity, increased competitiveness and the gradual diversification of trading across multiple participants, as it facilitates easier access to a broader regional market.

Wholesale Market Liquidity

The Energy Agency monitors the liquidity of the Slovenian wholesale electricity market using an established index known as the 'churn ratio'. The index indicates the number of times a unit of electricity was traded before it was supplied to the final consumer[57]. Figure 110 shows the trend in the index over the five-year period under review.

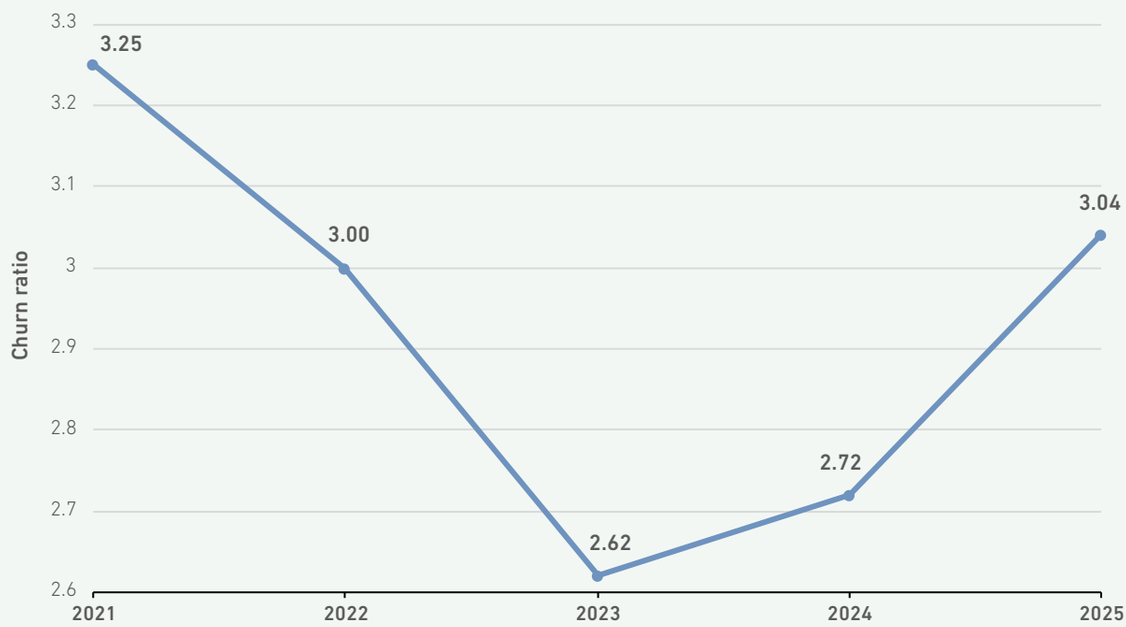
Liquidity in the wholesale market has once again reached a satisfactory level

The value of the Churn ratio in Slovenia was 3.04 in 2025, representing a noticeable increase compared with 2024 (2.72) and once again exceeding the internationally recognised threshold of 3, which indicates satisfactory market liquidity[58]. Following a period of lower liquidity between 2022 and 2024, the liquidity of the Slovenian wholesale market thus improved in 2025.

Although the wholesale market in Slovenia is smaller in scale compared with larger European markets, it involves a relatively large number of active participants, both domestic and foreign, which indicates the market's openness. Market conditions and price signals on European markets are also largely reflected in the Slovenian market.

The increase in the index value in 2025 indicates greater market efficiency, as electricity is traded more frequently prior to final delivery, which enables more active price formation and a better match between supply and demand.

FIGURE 110: TRENDS OF THE CHURN RATIO PER YEAR IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, BORZEN

57 The calculation is based on a methodology that takes into account the quotient between the sum of the recorded volume from closed contracts minus the exported volume, and the consumption in Slovenia. The volume from closed contracts includes the volume traded on BSP as well as that traded on the bilateral market.

58 ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity Market in 2015, September 2016,page 34

Imbalance Settlement

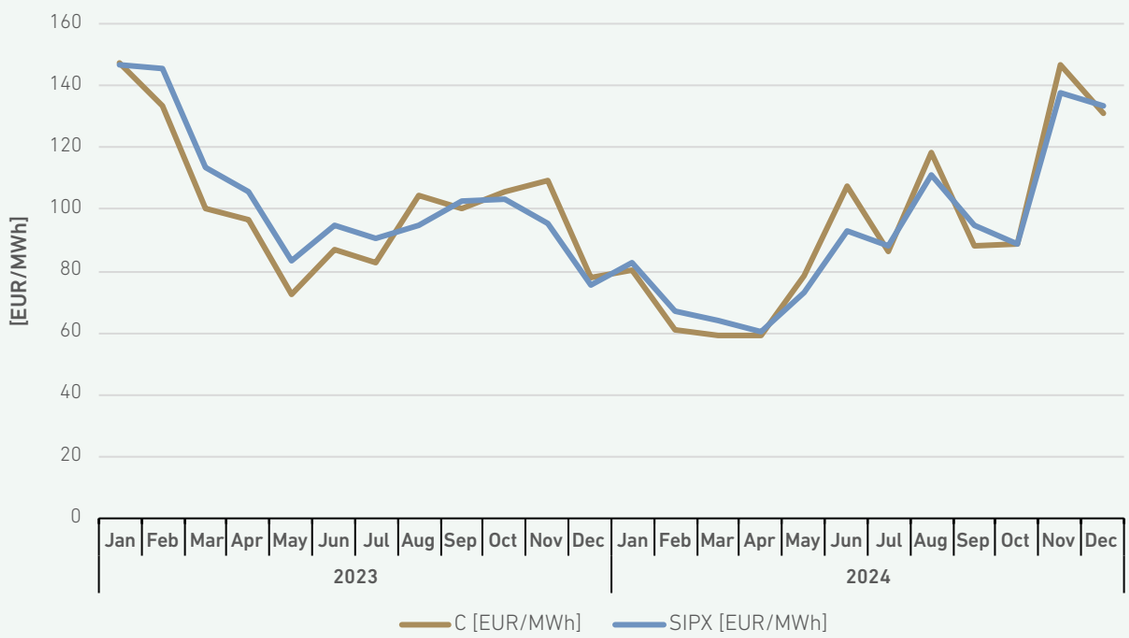
In Slovenia, the transmission system operator ELES is responsible for balancing deviations in the electricity system from forecast values, while Borzen acts as the electricity market operator and is responsible for imbalance settlement and the financial settlement of imbalances in the wholesale electricity market. Borzen conducts imbalance settlement on a monthly basis, determining the differences between forecast and actual electricity consumption or generation. The financial valuation of imbalances of balance groups, in accordance with the prescribed methodology, takes into account balancing costs, which are determined as the imbalance price for each time interval. For smaller system imbalances, the system uses automatic Frequency Restoration Reserve (aFRR), while in the event of larger imbalances, it activates manual Frequency Restoration Reserve (mFRR) or resorts to purchasing or selling energy on the balancing market. The costs associated with balancing imbalances are borne by balance groups through imbalance settlement, with the settlement interval remaining at 15 minutes.

Year 2025 represents the third year of applying the imbalance pricing model based on a single price for each settlement interval, regardless of the direction of the imbalance, as stipulated by the Rules on the Operation of the Electricity Market. In 2025, the data used for imbalance settlement were, on average, delayed by less than three days compared with the prescribed submission deadline. The delays, which were primarily attributable to the inclusion of household and self-consumption customers in the metered load profile system in 2024, gradually decreased over the course of the year, from more than ten days at the beginning of the year to approximately one day in the second half of the year.

The average imbalance price in 2025 was EUR 99.37/MWh, representing a 7.9% increase compared with 2024, when it stood at EUR 92.11/MWh. The annual average SIPX index was EUR 104.6/MWh in 2025, 14.6% higher than in the previous year.

In the first quarter of 2025, imbalance prices were higher than in the same period of 2024, as the trend of elevated prices observed towards the end of 2024 continued into the beginning of 2025. In the second and third quarters, prices stabilised and were, on average, approximately 2.5% higher than in the corresponding periods of 2024, while in the final quarter they were 2.8% lower than in the same period of the previous year. The average monthly imbalance prices C and SIPX index values for 2024 and 2025 are presented in the graph below.

FIGURE 111: AVERAGE DAILY PRICES OF C AND SIPX



SOURCE: BORZEN

The single-price model for imbalance settlement, which has been in use since 1 January 2023, remained unchanged in 2025. The highest imbalance price in 2025 was recorded on 18 January during the evening peak (at 20:30), reaching EUR 3,409.32/MWh, while the lowest price (EUR –2,095.98/MWh) was recorded during the day on 27 July (at 15:30, when solar irradiance and renewable energy generation were at their highest). The lowest average monthly price was recorded in April, at EUR 56.16/MWh, while the highest was recorded in February, at EUR 146.36/MWh.

Continued growth in the volume of imbalances amid stabilisation of overall costs

Under certain conditions, separate prices for positive and negative imbalances may still be calculated. In the vast majority of cases, however, the two prices are identical, as imbalance settlement is based on a single price.

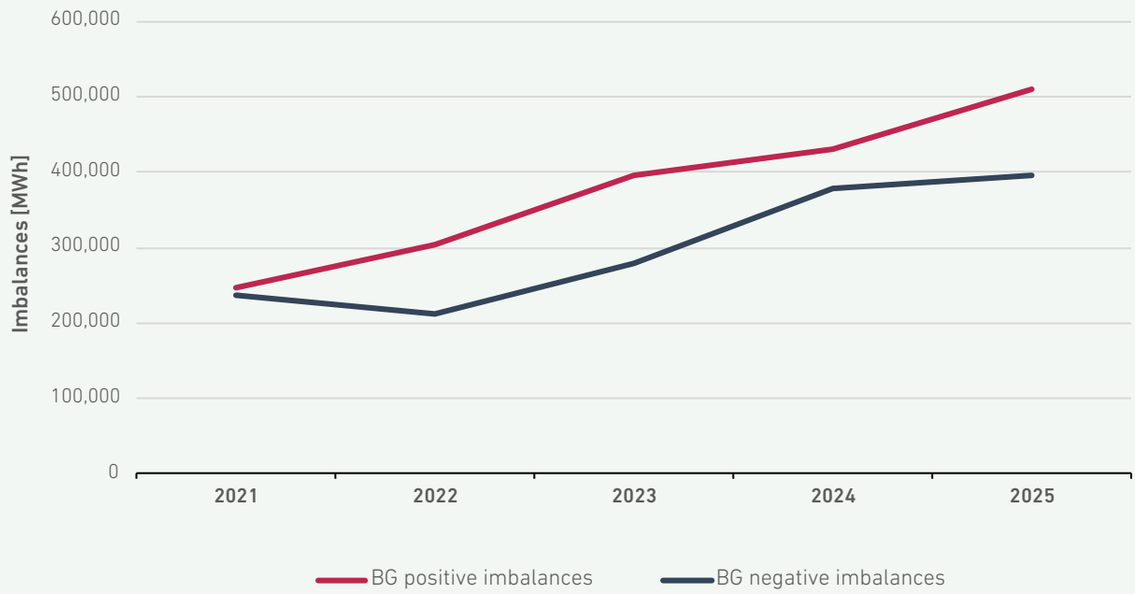
TABLE 25: AVERAGE, HIGHEST AND LOWEST VALUES OF PRICE DEVIATIONS FOR C AND SIPX IN SETTLEMENT INTERVALS

	2024 [EUR/MWh]		2025 [EUR/MWh]	
	C	SIPX	C	SIPX
Average prices of the settlement interval	**92.11**	**91.29**	**99.37**	**104.6**
Highest value	2,625.81	1,022.27	3,409.32	561.75
Lowest value	–1,635.51	–105.88	–2,095.98	–126.46

SOURCE: BORZEN

The total negative imbalances of balance groups amounted to 395,907 MWh in 2025, while total positive imbalances amounted to 508,468 MWh, representing a further increase compared with 2024. The increase in imbalances is primarily attributable to the growing share of distributed renewable energy sources, particularly solar power plants, whose output is weather-dependent and more difficult to forecast. Changes in consumption patterns, the increased use of heat pumps, and the growth of e-mobility also contributed to greater system volatility.

FIGURE 112: DEVIATIONS OF BALANCE GROUPS IN THE 2021–2025 PERIOD

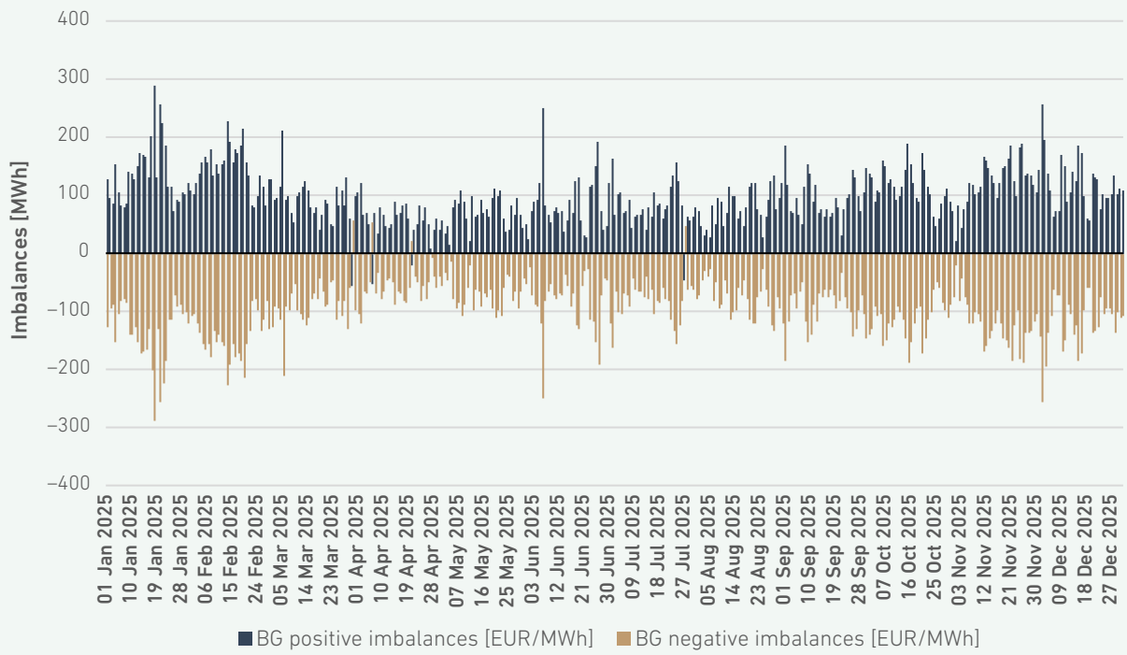


SOURCE: BORZEN

Figure 112 shows that in recent years, both the volume of positive and negative imbalances of balance groups has been increasing. In 2025, positive imbalances exceeded 500 GWh for the first time, while negative imbalances reached almost 400 GWh, representing the highest values in the period under review.

The following figure presents the total daily amounts of positive and negative imbalances of all balance groups in Slovenia in 2025.

FIGURE 113: DAILY IMBALANCES IN THE SLOVENIAN NETWORK IN 2025

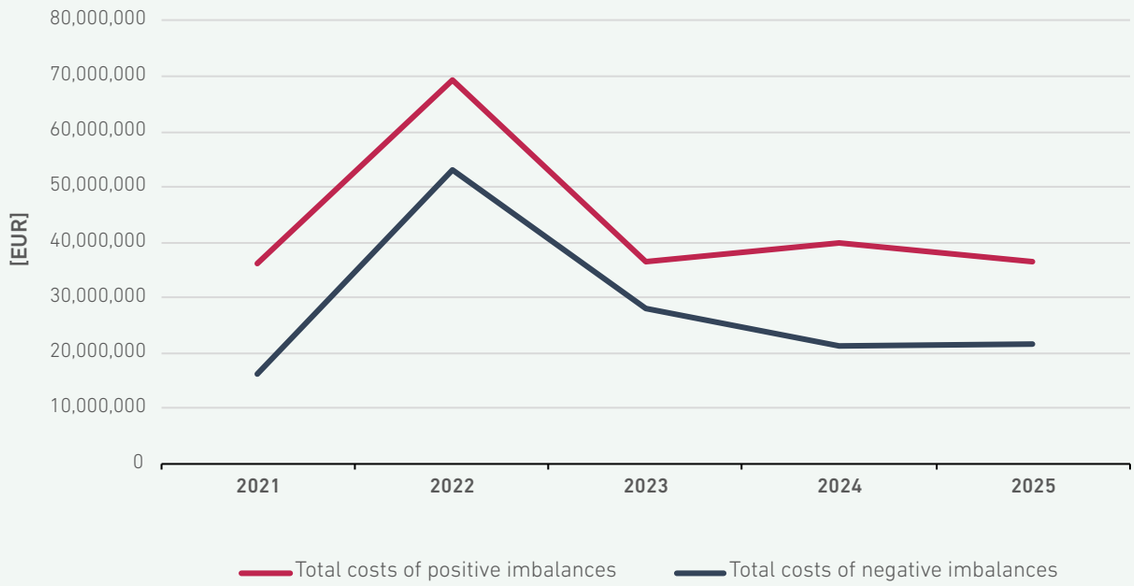


SOURCE: BORZEN

Daily imbalances in 2025 show pronounced variability in the system throughout the year, particularly during periods of increased renewable energy generation and more pronounced temperature deviations.

Balancing energy for managing imbalances in the Slovenian electricity system is provided by the transmission system operator ELES. In 2025, 396 GWh of balancing energy was used to offset negative imbalances, while 508 GWh was used to offset positive imbalances.

FIGURE 114: TREND IN THE TOTAL POSITIVE AND NEGATIVE IMBALANCES IN THE 2021–2025 PERIOD



SOURCE: BORZEN

Despite the continued growth in imbalance volumes, total imbalance costs, following a sharp increase during the energy crisis in 2022, gradually declined or stabilised over the 2023–2025 period. In 2025, the total costs of positive imbalances amounted to approximately EUR 36 million, while the costs of negative imbalances were approximately EUR 21 million. The trend indicates a gradual easing of conditions in the electricity and balancing services markets following the extreme price conditions observed in 2022, although costs remain higher than in the period preceding the energy crisis.

Retail market

Suppliers and end-consumers in the Slovenian retail market sign open contracts, in which the quantities of supplied electricity and the timing of delivery are not determined in advance.

The retail market in Slovenia has undergone significant changes in recent years. Due to a decline in the number of suppliers[59] and ownership changes involving major electricity suppliers, market concentration has increased, while competition has statistically begun to decline. On the other hand, advances in digitalisation have made information more readily accessible, consumers have become more aware as a result of the energy crisis, and numerous new services have emerged on the market.

One new supplier entered the market

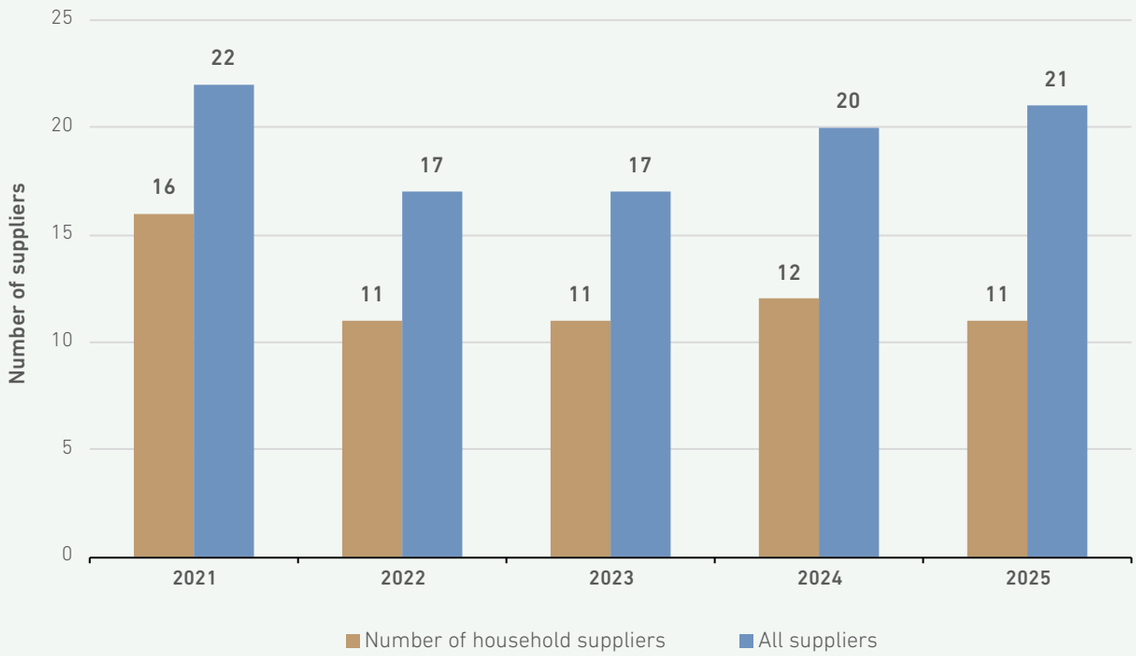
Retail prices changed little in 2024 due to government-imposed price caps, while during most of 2025 they were predominantly determined by market conditions. Until March, the government had set, by regulation, a maximum permitted retail price for electricity supply covering total monthly consumption for household customers, as well as consumption in the common areas of multi-apartment residential buildings and the common areas of mixed residential-commercial buildings.

In 2025, one new supplier, ENNA Next, entered the electricity supply market for business consumers, while Alpacem Cement ceased supplying household consumers but remained a supplier in the non-household segment.

At the end of the year, 21 electricity suppliers were active on the retail market, 11 of which supplied electricity to household consumers.

59 Mainly in 2022

FIGURE 115: TRENDS IN THE NUMBER OF SUPPLIERS IN THE SLOVENIAN RETAIL MARKET IN THE 2021–2025[60] PERIOD



SOURCE: ENERGY AGENCY

Suppliers' business models continue to vary. Some supply electricity only to domestic customers, others only to business consumers, while more than half supply both.

Prices

At the start of 2025, the measures adopted by the Government of the Republic of Slovenia in 2024 to regulate electricity prices were still in force, with the aim of mitigating the impact of rising energy costs on households and certain vulnerable groups. The Regulation on the Setting of Electricity Prices set the maximum permitted retail price of electricity for domestic customers and for consumption in the communal areas of multi-occupancy residential buildings and in the communal areas of mixed-use residential and commercial buildings. Table 26 shows the capped prices that were in force until 28 February 2025:

TABLE 26: ELECTRICITY PRICE REGULATION MEASURES

Government Decree	Regulation Period	Scope of Regulation	Higher Tariff (HT) [EUR/kWh]	Lower Tariff (LT) [EUR/kWh]	Flat tariff (ET) [EUR/kWh]	RES + CHP Contribution
Official Gazette, RS, No. 96/24	1 November 2024–28 February 2025	100% of consumption	0.084	0.070	0.077	Exempt

SOURCE: DECREE ON SETTING ELECTRICITY PRICES (OFFICIAL GAZETTE RS, NO. 96/24)

The measure, which was adopted in 2024, was aimed at limiting the increase in the final supply charge, primarily due to higher network charges at the start of the peak season, and was therefore in force from 1 November 2024 to 28 February 2025.

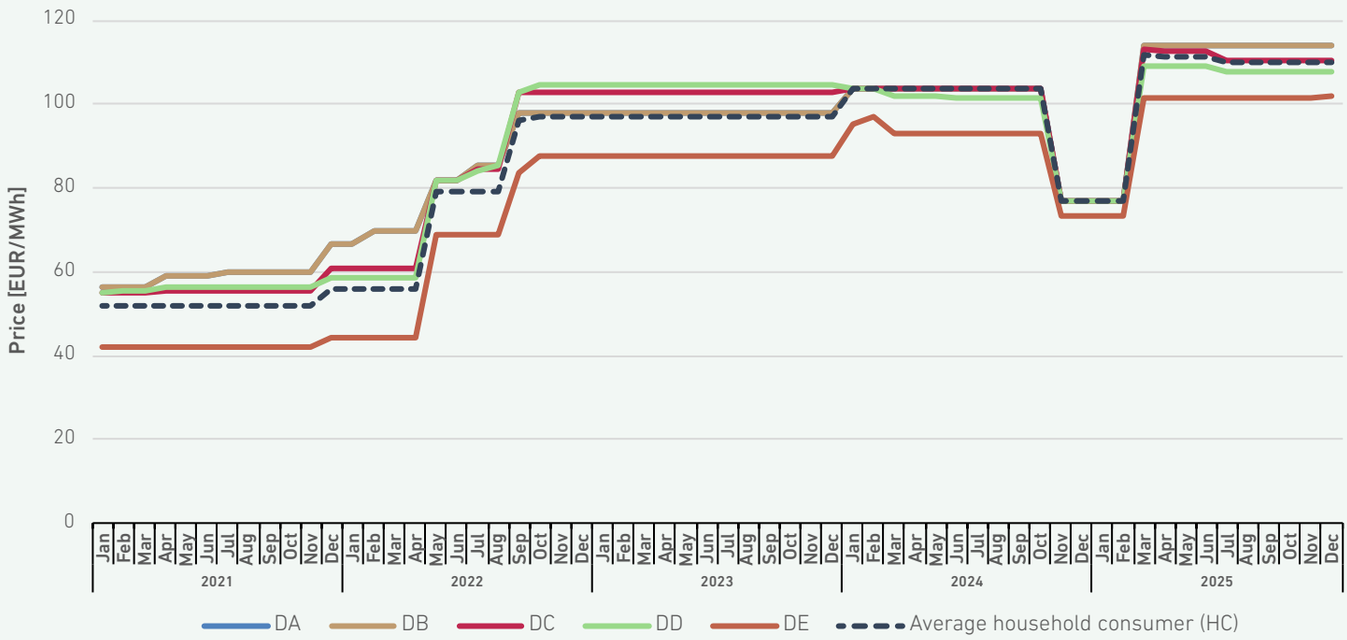
60 Supplier statistics include the number of suppliers that supplied electricity on the last calendar day of each year.

Retail Price Index for Typical Household Consumers

The Energy Agency sets retail price indices (RPI) on the basis of its regular monitoring of the retail electricity market for domestic customers. The RPI is based on the most favourable offer on the market, which is available to all household consumers and allows them to switch suppliers without contractual restrictions or costs. As such, it serves as a benchmark for the price potential of the retail market and, through the use of a standard reference consumer, enables a comparable monitoring of price trends in the retail market across different years.

In the retail market, the majority of household consumers – with the exception of those bound by contracts containing penalty clauses – have the option of obtaining electricity at a price reflected by the RPI by switching supplier or selecting a different product from their existing supplier. The index thus reflects the price level that is realistically achievable on the market provided the consumer takes active steps to do so.

FIGURE 116: RPI IN THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

Figure 116 shows the trend in the MPI for the standard consumption groups DA, DB, DC, DD and DE[61] as well as for the average household consumer in Slovenia[62] over the 2021–2025 period. The graph shows that a 100% cap on electricity prices, introduced under the Regulation on the Determination of the Electricity Price[63] was still in effect during the first two months of 2025. As a result, the RPI during this period did not reflect actual retail market conditions, but rather the effect of the regulatory measure.

After the measure expired at the end of February 2025, supply prices once again became market-based, which is reflected in the graph by a pronounced increase in the MPI in March 2025. Over the remainder of the year, the MPI for most consumption groups stabilised at approximately EUR 101–114/MWh. For the DC and DD groups and the average household consumer, a slight decline in the RPI was also observed in the middle of the year.

Increased Influence of Market Conditions on Retail Price Formation

61 Consumption groups based on the Eurostat methodology used until 2007 (DC: annual consumption of 3,500 kWh, of which 1,300 kWh is off-peak (MT)) – https://ec.europa.eu/eurostat/databrowser/view/NRG_PC_204_H__custom_6471365/default/table?lang=en

62 Consumption profile of the average household customer in Slovenia: contracted capacity of 8 kW and annual consumption of 1,996 kWh during the high-tariff period (HT) and 2,100 kWh during the low-tariff period (LT)

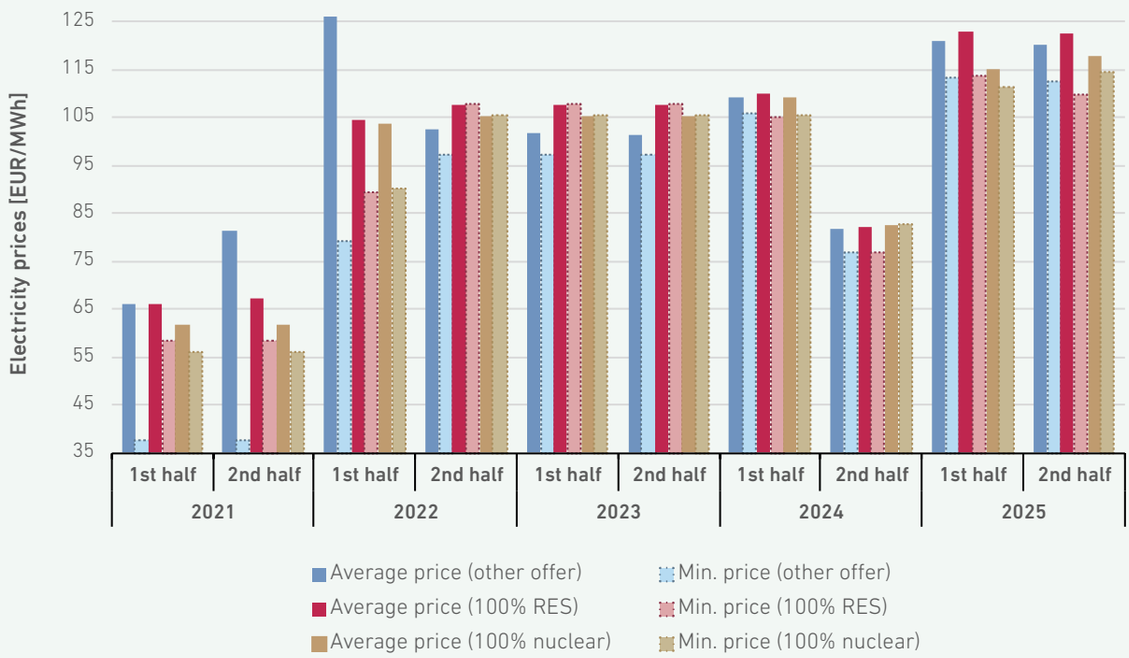
63 Official Gazette of the Republic of Slovenia, No. 96/24

Analysis of Green or Low-carbon Energy Offers

Electricity offers differ, amongst other things, in terms of the structure of their primary generation sources. In the retail market, suppliers continued to offer consumers electricity supply services in 2025 comprising electricity from renewable energy sources (100% RES), offers including energy from nuclear sources (100% nuclear energy) and combined offers incorporating various generation sources.

Figure 117 shows the trend in average energy prices[64] based on offers from 100% RES, 100% nuclear energy and other energy sources, as well as the trend in the lowest energy price based on offers based on 100% RES, 100% nuclear energy and other energy sources, for suppliers' offers on the market in the period 2023–2025 for an average household consumer[65]. The prices for the first and second half-years were calculated for offers valid on 1 July 2025 and 31 December 2025.

FIGURE 117: PRICE TRENDS OF OFFERS FROM 100% RES, 100% NUCLEAR ENERGY, AND OTHER AND OTHER ENERGY SOURCES FOR A TYPICAL HOUSEHOLD CONSUMER IN THE 2023–2025 PERIOD



SOURCE: ENERGY AGENCY

The average offer prices in 2025 ranged from EUR 115/MWh to EUR 122/MWh. The lowest prices across all offers were somewhat closer together, at approximately EUR 112.5/MWh.

Compared with previous years, in 2025 the average price of offers consisting of 100% nuclear energy was lower than the average prices of offers consisting of 100% renewable energy sources (by 5% in the first half of the year and 2% in the second half) and other energy sources (by 6% in the first half of the year and 4% in the second half).

Following the expiry of the aforementioned government price cap regulation[66], the lowest prices of offers consisting of 100% renewable energy sources and other energy sources increased by 19% in 2025 compared with 2024. The prices of offers consisting of 100% nuclear energy increased by 17%.

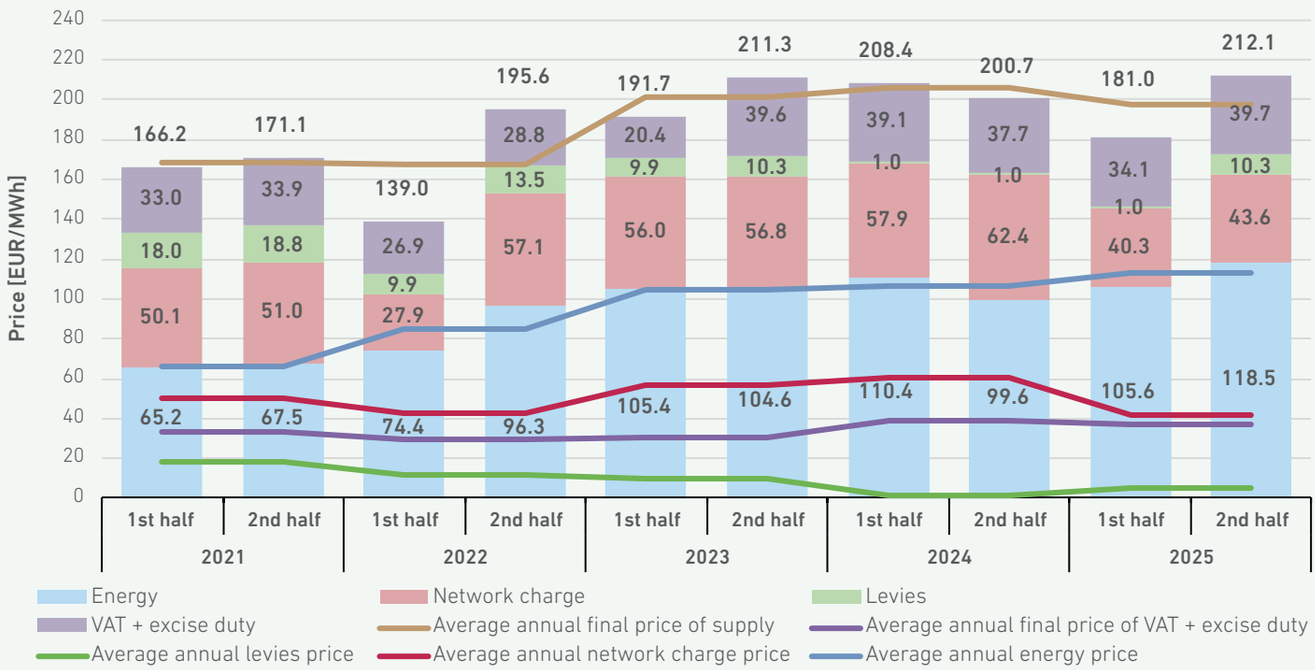
64 The price of energy also includes flat-rate operating costs and other surcharges, which are slightly more common in green energy tariffs.
65 Consumption profile of the average household customer in Slovenia: contracted capacity of 8 kW and annual consumption of 1,996 kWh during the high-tariff period (HT) and 2,100 kWh during the low-tariff period (LT).
66 Official Gazette of the Republic of Slovenia, No. 96/24

Final Electricity Price for Household Consumers

An analysis of the structure of the final prices of electricity supplied to household consumers from the standard consumer group DC[67] is presented below. The final electricity supply price for consumers include:

- electricity price, which was capped during the first two months in 2025;
- network charges:
  - network charge for transmission and
  - network charge for distribution;
- levies:
  - levy for supporting electricity production with high-efficiency cogeneration and renewable electricity (RES);
  - the energy efficiency levy, and
  - levy for the operation of the market operator;
- excise duties and
- value-added tax (VAT).

FIGURE 118: TRENDS OF THE FINAL ELECTRICITY SUPPLY PRICE IN SLOVENIA FOR A TYPICAL HOUSEHOLD CONSUMER IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, SURS[68]

The average annual final price decreased by 4.3% in 2025, primarily due to a 30.2% decrease in the network charge compared with 2024. Following the introduction of the new methodology for calculating network charges on 1 October 2024, a regulation came into force from 1 January 2025 until 28 February 2025, a regulation was in force providing for a temporary partial reduction in the cost of network use during the peak season for household consumers, which reduced the value of the electricity operators' tariff item for billing capacity in time block 1 to the value of the tariff for time block 2[69]. A transitional period for the setting of tariff

A 4.3% decrease in the average annual final supply price for a typical household consumer

67 Standard DC consumer group includes household consumers with an annual consumption of between 2,500 and 5,000 kWh.
68 SURS – Explanation of the methodology: https://www.stat.si/StatWeb/File/DocSysFile/8130
69 Act on Urgent Measures to Mitigate the Consequences of High Network Charges for Household Consumers (ZNUOPOVO) (Official Gazette of the Republic of Slovenia, No. 9/25)

items for capacity also applied in November and December, during which the tariff for capacity in time block 1 was charged at only 50% of the value[70]. In addition, we note a further 4.1% decrease in VAT and excise duty combined, resulting from a lower VAT taxable base due to the reduction in final electricity prices. The reduced excise duty on electricity, which remains in force[71] also contributed to the lower level of this item.

To help ease the burden of high electricity bills during the 2024/2025 winter season, the government capped household electricity prices[72] from November 2024 to February 2025, with prices regulated across the entire consumption. As the cap lasted only until the end of February, the average annual energy price in 2025 rose by 6%.

An exemption from the payment of RES and CHP levies for domestic consumers was in force until 30 June 2025, after which a transitional provision granting a 50% exemption from the payment of RES and CHP levies for household consumers[73] came into force on 1 November 2025.

However, as the exemption from the levy was in force for the whole of 2024, the average value of the levy in 2025 was 511.1% higher than in 2024.

In 2025, the share of the electricity price component amounted to 57.1%, the share of the network charge to just 21.3%, the share of energy sector levies to 2.8%, and the share of excise duty and value-added tax to 18.8% of the average annual final price. As a result of these measures, the structure of the final price in 2025 did not reflect the long-term cost signals of the electricity system.

Final Electricity Prices for Business Consumers

The final price of electricity supply for an average business consumer according to SURS[74], which includes the average of electricity prices, network charges, surcharges, contributions, excise duties and taxes[75] for the first and second halves of the year, stood at 181.00 EUR/MWh in 2025, representing a 12.6% decrease compared with 2024. The decrease in final prices is primarily due to lower grid charges, as shown in Figure 79 which illustrates the trend in network charges for certain typical business consumers. As futures contracts account for the majority of the final price, despite the rise in wholesale market prices in 2025, as shown in Figure 80, the decrease in the final supply price for the average business consumer was driven by the fall in prices of annual futures contracts on the EEX exchange for electricity supply in 2025, which were 27.3% lower than the contracts for supply in 2024.

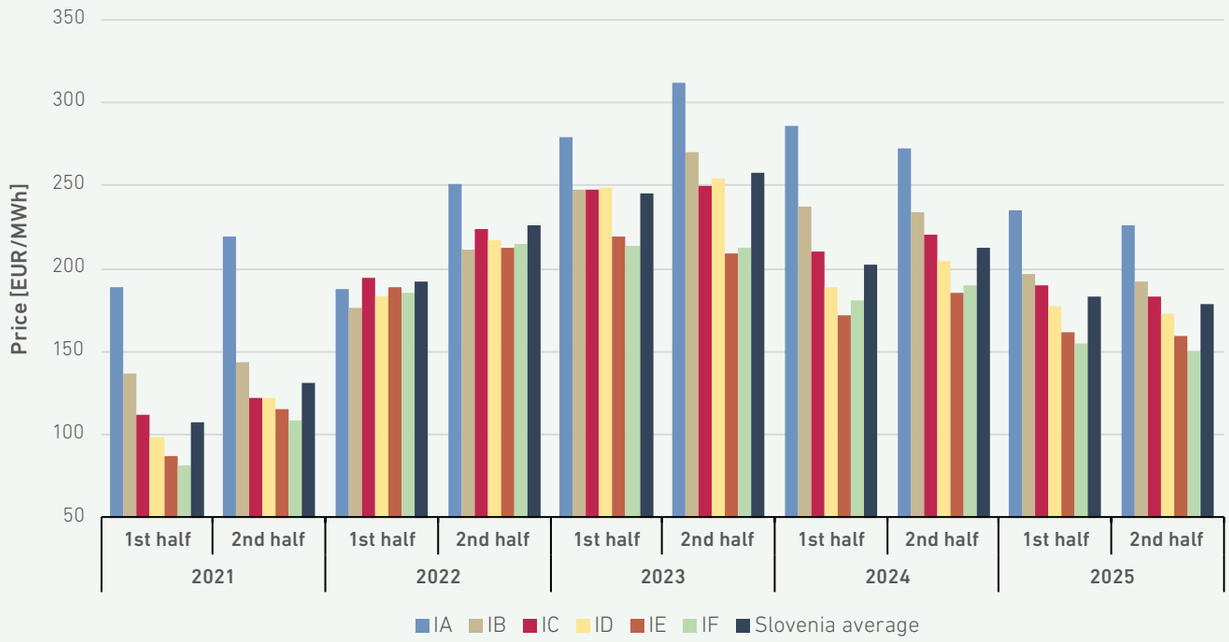
A 12.6% decrease in the final prices of electricity supply for the average business consumer

Final supply prices fell across all consumer groups, with the largest reduction seen in consumer group IB, for which the average annual final supply price in 2025 was 17.6% lower than in 2024, as both the price of electricity and the network charge fell. The smallest reduction was for consumer group IE, where only the price of electricity fell, whilst the network charge rose slightly despite government measures (the network charge for business consumers connected to the high-voltage network has a greater weighting in the energy tariff components, whereas the measures were targeted at the capacity tariff component[70]). The average annual final supply price for the IE consumer group in 2025 was thus 10.1% lower than in 2024.

The trend in the final electricity supply price in Slovenia for typical business consumers by half-year in the years 2021 to 2025, and a comparison with the average final supply price for business consumption in Slovenia, is shown in Figure 119.

70 Act Amending the Act on the Methodology for Calculating Network Charges for Electricity Operators (Official Gazette of the Republic of Slovenia, No. 76/25)
71 Decree on the Determination of Excise Duty for Energy Products and Electricity
72 Decree on the Determination of Electricity Prices (Official Gazette of the Republic of Slovenia, No. 96/24)
73 Act on Contributions to Support the Production of Electricity from Renewable Energy Sources and in High-Efficiency Cogeneration
74 SURS – Explanation of the methodology: https://www.stat.si/StatWeb/File/DocSysFile/8130
75 VAT is taken into account to ensure comparability with Eurostat's methodology.

FIGURE 119: TRENDS OF THE FINAL ELECTRICITY SUPPLY PRICE IN SLOVENIA FOR TYPICAL BUSINESS CONSUMERS IN THE 2021–2025 PERIOD



SOURCE: SURS

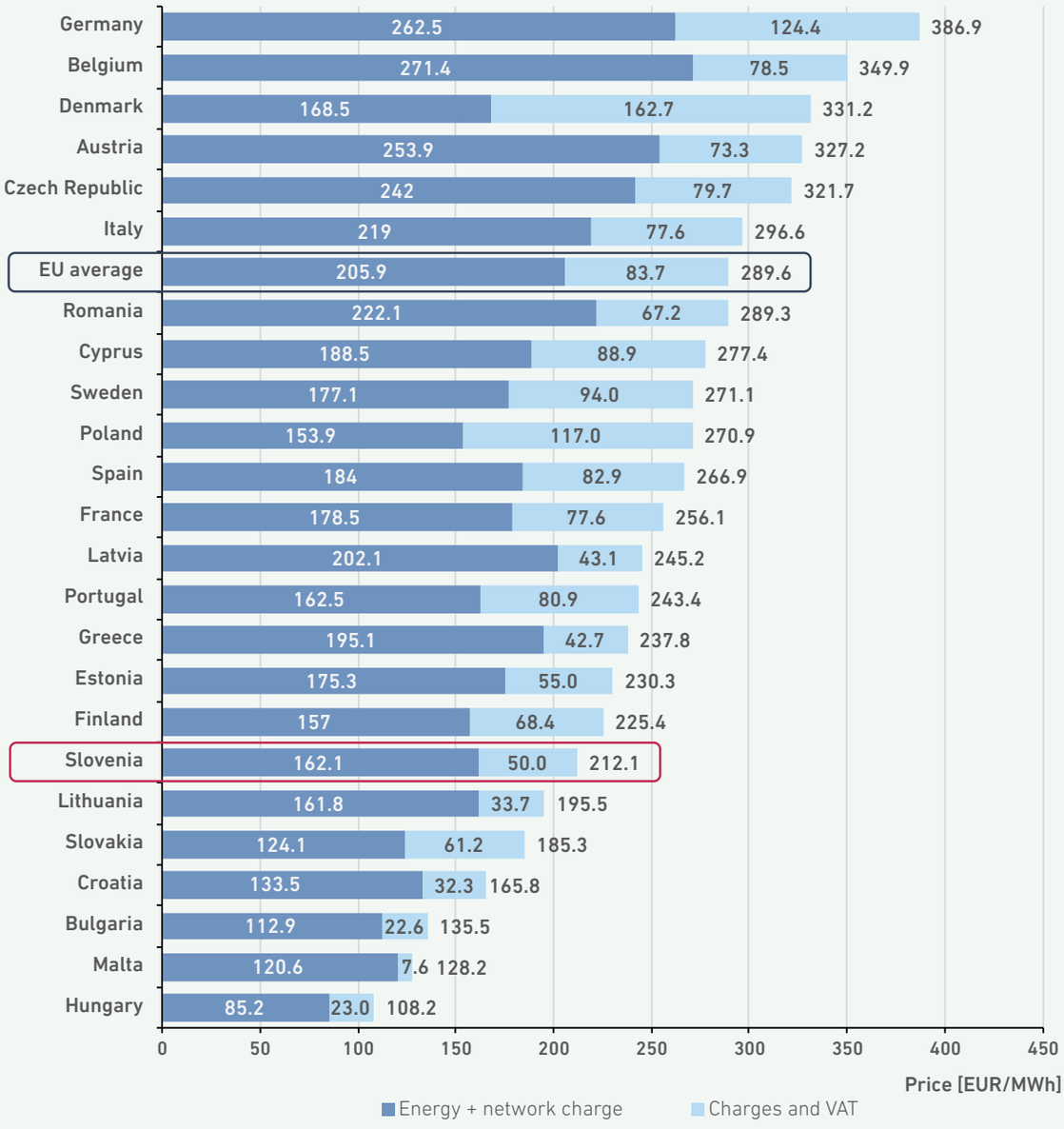
Comparison of the Final Electricity Prices in the EU Member States

Figures 120 and 121 show a comparison of the final electricity supply prices in EU Member States in the second half of 2025 for typical household and business consumers selected in accordance with the Eurostat methodology. Taxes and charges include levies, excise duty and VAT, while the price without charges and taxes includes the price of energy and the network charge.

In the internal electricity market, the retail electricity pricing is market-based in most EU countries, while in some EU countries, the regulated retail electricity prices, which were in force at the start of the year, are also present. The retail price depends on the structure of generation sources, access to neighbouring markets and market activities.

Differences in the final supply price are also reflected in the network charges, contributions to various support schemes for renewable energy generation and taxation.

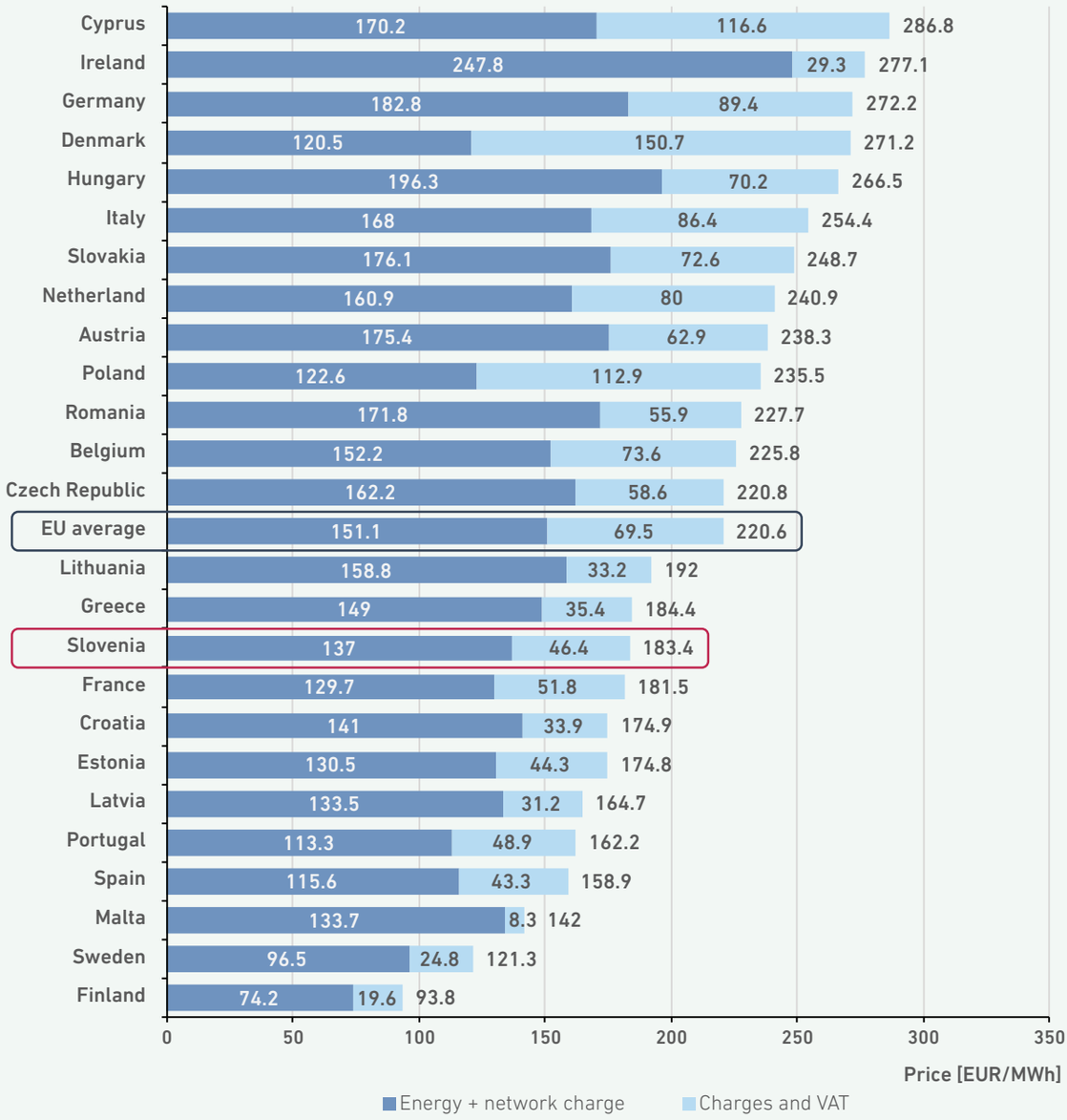
FIGURE 120: COMPARISON OF THE FINAL ELECTRICITY SUPPLY PRICES FOR A TYPICAL HOUSEHOLD CONSUMER WITH AN ANNUAL CONSUMPTION OF BETWEEN 2,500 kWh AND 5,000 kWh (DC) IN THE EU MEMBER STATES AND SLOVENIA IN THE SECOND HALF OF 2025 IN EUR/MWh



SOURCE: EUROSTAT

For a typical household consumer in Slovenia, the final supply price was, in nominal terms, significantly below the EU average; it was also lower than in Austria and Italy, and higher than in Croatia and Hungary, a situation that remained unchanged from the previous year.

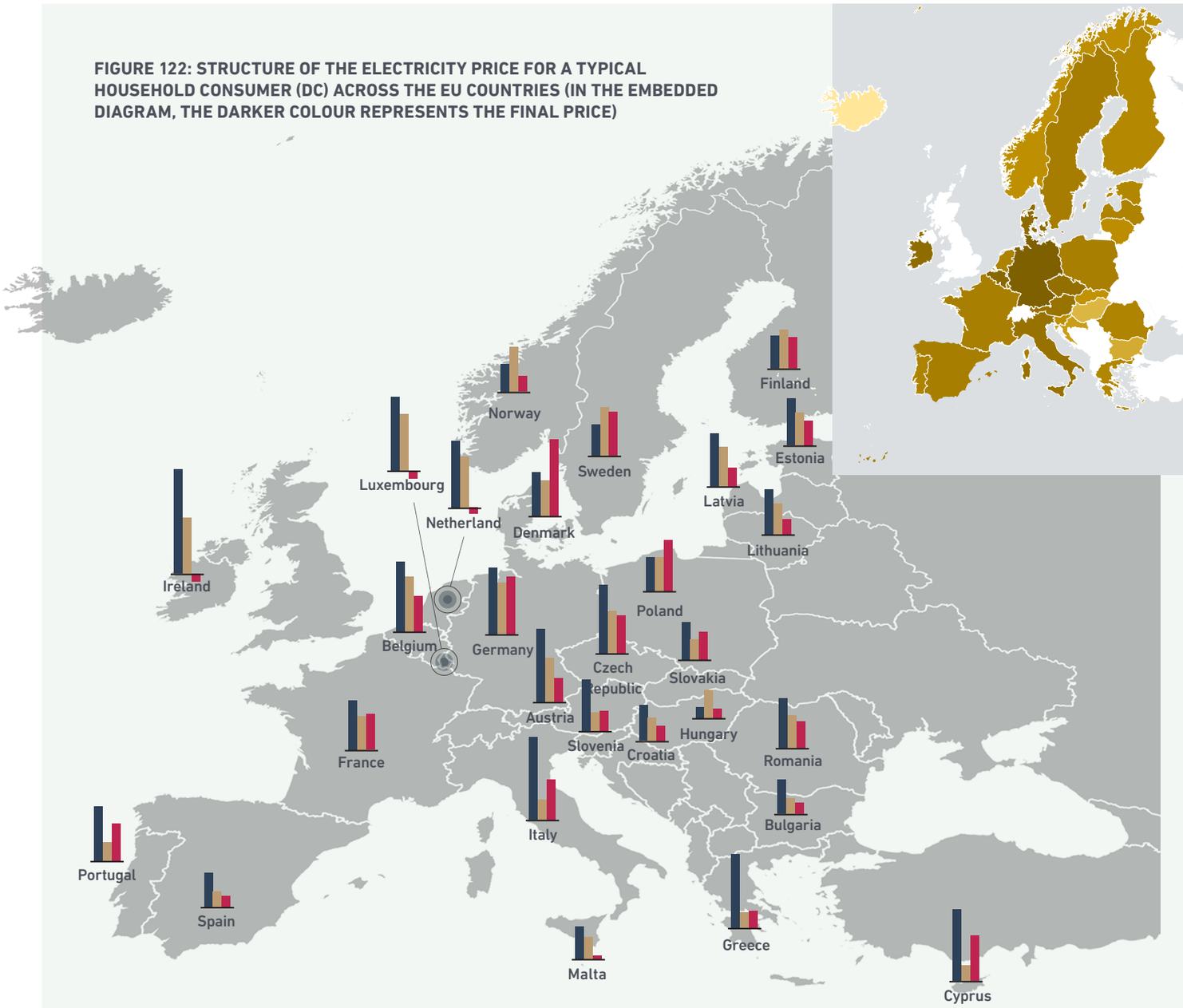
FIGURE 121: COMPARISON OF THE FINAL ELECTRICITY SUPPLY PRICES FOR A TYPICAL BUSINESS CONSUMER WITH AN ANNUAL CONSUMPTION OF BETWEEN 500 MWh AND 2,000 MWh (IC) IN THE EU MEMBER STATES AND SLOVENIA IN THE SECOND HALF OF 2025 IN EUR/MWh



SOURCE: EUROSTAT

The final price of electricity supply for a typical business consumer in Slovenia was, in nominal terms, lower than the EU average and also lower than in Austria, Italy and Hungary, while, unlike in the previous year, it was higher than in Croatia.

FIGURE 122: STRUCTURE OF THE ELECTRICITY PRICE FOR A TYPICAL HOUSEHOLD CONSUMER (DC) ACROSS THE EU COUNTRIES (IN THE EMBEDDED DIAGRAM, THE DARKER COLOUR REPRESENTS THE FINAL PRICE)



COMPONENTS OF THE FINAL ELECTRICITY PRICE

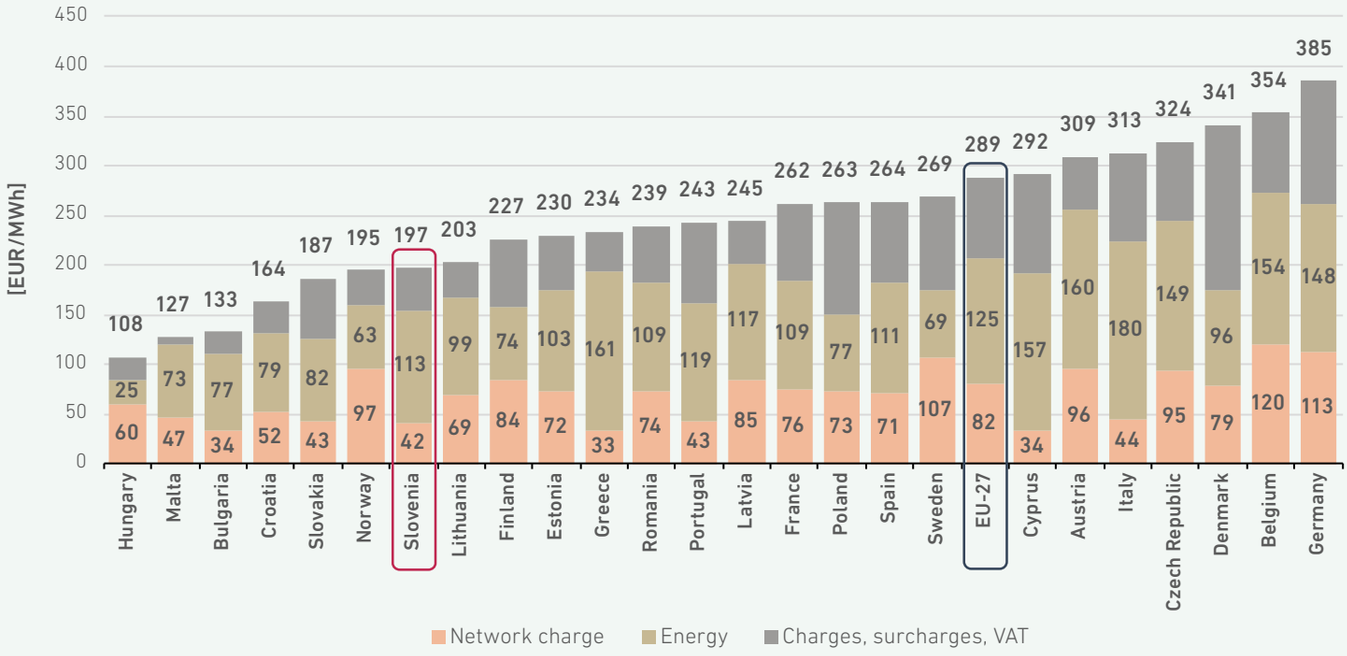
■ Energy ■ Network charge ■ Charges, surcharges, VAT

SOURCE: EUROSTAT

While in the year following the energy crisis the immediate focus was solely on reducing the price of electricity itself, there are now varying trends across EU countries regarding changes to network charges and, above all, levies and surcharges that form part of the total electricity bill for a typical household consumer. Eurostat data show that, although electricity prices across the EU have stabilised over the last two years (though they remain high), consumers have not felt the full benefit of these reductions, as countries have phased out the subsidies and measures adopted during the crisis.

There has been a noticeable rise in taxes and excise duties. At EU level, the price of electricity has fallen by 9%, but taxes have risen by 15%. Slovenia remains a case where the rise in electricity prices was almost equal to the rise in levies (electricity 6%, levies 7.6%), but due to a reduction in network charges, a 4.3% fall in the final price of electricity supply was recorded. The share of the network charge for a typical household consumer in Slovenia was among the lowest in the EU, accounting for only 21% of the total price (the EU average was 28%).

FIGURE 123: COMPARISON OF SHARES IN THE FINAL PRICE OF THE ELECTRICITY SUPPLY FOR A TYPICAL HOUSEHOLD CONSUMER IN EU MEMBER STATES

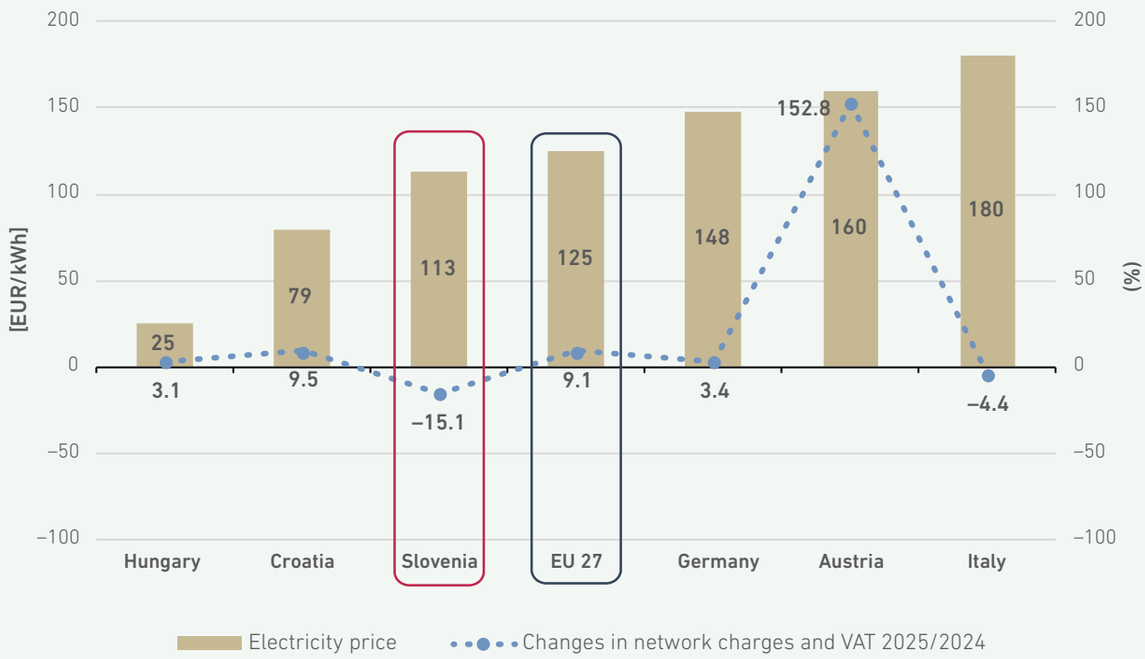


SOURCE: EUROSTAT

In Slovenia, extensive measures have been introduced in the area of network charges and levies to mitigate electricity prices, alongside a reform of the network charging system. Their impact on reducing end-user prices is among the greatest both in comparison with neighbouring countries and within the wider European context, as the following figure shows: the year-on-year change in network charges and taxation of electricity supply prices exceeds 15% compared with the previous year. Nevertheless, end-user electricity prices for a typical household consumer in Slovenia are still not among the lowest in the EU.

A comparison of nominal electricity prices on the wholesale market in 2025 and electricity prices for household consumers, as reported by Eurostat for individual countries, shows that the prices paid by a typical household consumer are lower than market prices. This suggests that there are still measures in place which directly influence the price of electricity supply and reduce it.

FIGURE 124: INTER-ANNUAL CHANGES IN THE FINAL PRICE AND ELECTRICITY PRICES FOR A TYPICAL HOUSEHOLD CONSUMER IN EU COUNTRIES



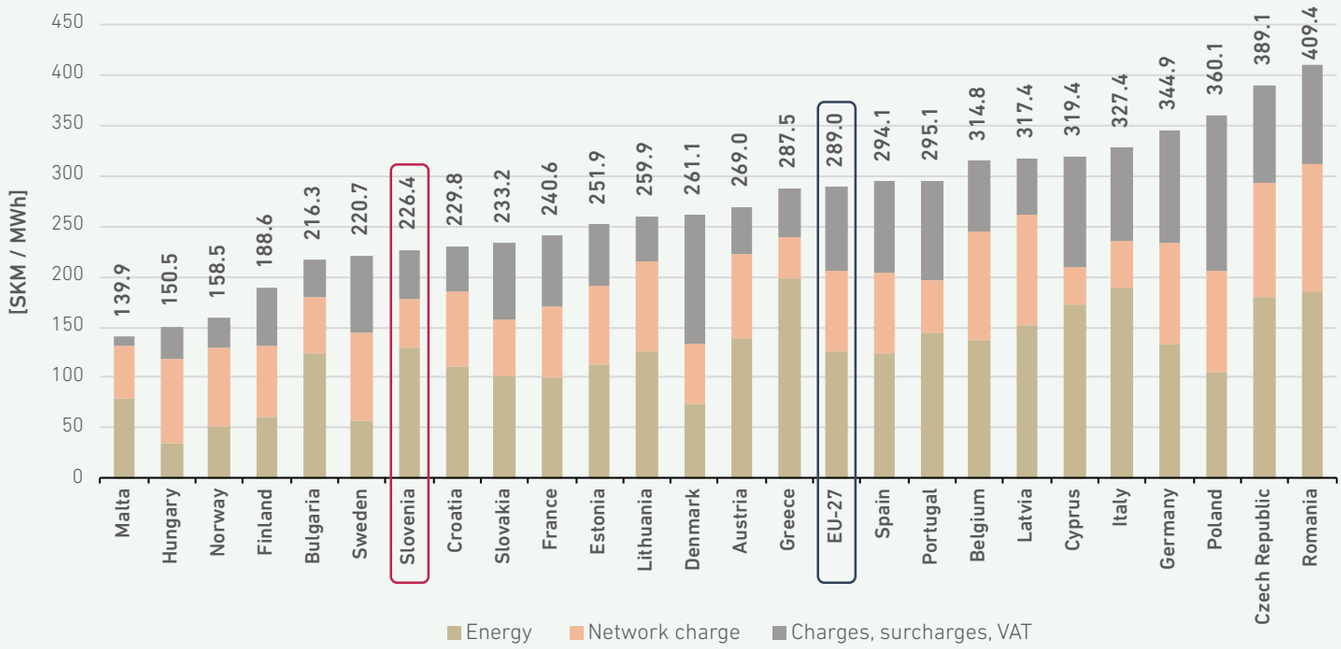
SOURCE: EUROSTAT

The mitigation of electricity supply prices, as measured by the purchasing power standard (PPS)[76], has revealed further variations in the impact of measures across countries.

For a typical household consumer, the average total price in the EU rose by 1.4%, while in Slovenia it fell by 5.4%. In terms of the structure of the total price, the purchasing power analysis shows that the price of electricity supply in Slovenia was 4.7% higher than in 2024, whereas in the EU it was 7.4% lower. The 31.1% reduction in network charges in Slovenia had a significant impact on the total price of electricity supply, compared to a 4.3% increase in network charges recorded in the EU. However, a lower increase in levies (by 6.1%) was recorded in Slovenia, while in the EU they increased by 14.8%. The next figure shows that the price of electricity supply in Slovenia is even more favourable compared with other EU countries, as, compared with the previous year, Slovenia ranked in the bottom third of countries in terms of the price of electricity supply based on purchasing power parity. Compared with the previous year's data, we can also see a different ranking of countries.

76 The Purchasing Power Standard (PPS) is an artificial currency. It equals one euro at the average level of the EU Member States. In theory, one PPS can buy the same amount of goods and services in any Member State. Cross-border price level differences mean that different amounts of units in the national currency are necessary for the same goods and services. The PPS is calculated by dividing any economic aggregate of a country in its national currency into its purchasing power parities. Purchasing power parities are exchange rates that equalise the purchasing power of different currencies by eliminating the price level differences between countries.

FIGURE 125: TOTAL ELECTRICITY SUPPLY PRICE FOR A TYPICAL HOUSEHOLD CONSUMER IN THE EU MEMBER STATES ACCORDING TO THEIR PURCHASING POWER STANDARD



SOURCE: EUROSTAT

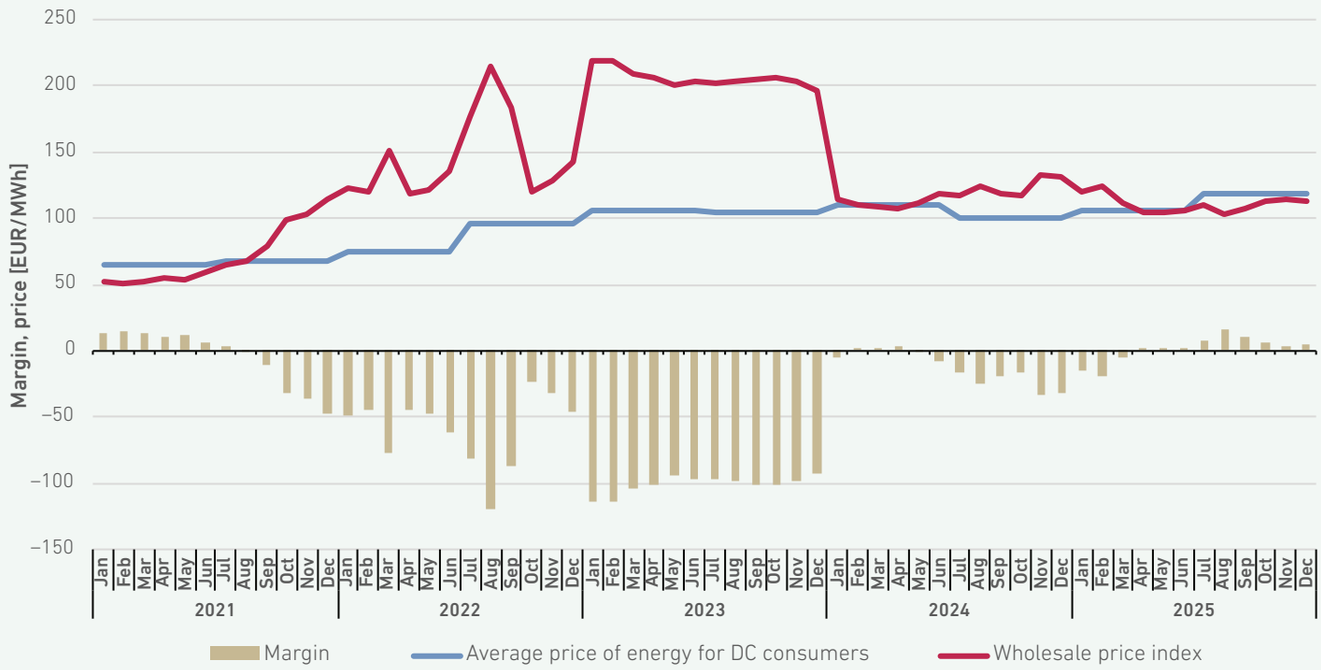
Margin and Responsiveness of Retail Prices

An analysis of the correlation between wholesale electricity prices and the energy component of retail prices for household consumers reveals the extent to which the retail market responds to changes in conditions on the wholesale markets. A comparison of trends in the average retail energy price for a typical household consumer[77] and the wholesale price index enables an assessment of suppliers' theoretical gross margin and provides insight into the dynamics of retail price adjustments in response to market conditions.

In this context, the margin (markup) represents the difference between the energy price for a typical household consumer and the estimated purchase price of energy on the wholesale market. In calculating the wholesale component[78] a wholesale price purchase index is used, based on a combination of annual forward contracts (where we use the average price over the 18 months prior to the delivery point) and purchases on the day-ahead market. To calculate the share of forward purchases (the same share is then applied to all years under review), we used the 10th percentile of the hourly consumption profile instead of the minimum value of 83 hours' consumption in 2025, thereby bringing the methodology closer to a simplified reference strategy for electricity procurement. The margin is a theoretical indicator and does not represent the suppliers' profit, as they also use it to cover the costs of balancing differences, portfolio management, sales and other business activities.

77 DC consumer group with annual consumption of between 2,500 kWh and 5,000 kWh.
78 The methodology is explained in more detail in Annex 6 of the ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2014.

FIGURE 126: MARGIN AND RESPONSIVENESS OF THE ENERGY COMPONENT OF RETAIL PRICES



SOURCES: ENERGY AGENCY, SURS

In 2025, margins on the retail electricity market returned to positive levels following the end of regulation. The average annual margin thus stood at 0.95 EUR/MWh, representing a significant improvement compared with 2024, when it stood at –12.54 EUR/MWh[79].

The end of the period of particularly negative margins in the retail electricity market

The return of margins to positive levels was primarily driven by a decrease in the purchase component of the wholesale electricity price and the gradual adjustment of retail offers to the new market conditions. As forward contracts form a significant part of suppliers' procurement strategy, the increase in margins in 2025, despite the rise in day-ahead market prices, was significantly driven by the fall in prices of annual futures contracts on the EEX exchange for electricity supply in 2025 compared with the price of annual futures contracts for supply in 2024.

The cap on retail prices, combined with unfavourable conditions on the wholesale markets, was a key factor in the persistence of negative margins between September 2021 and March 2025. Consequently, the market did not function to its full potential and, due to administrative restrictions, retail prices were unable to adjust to developments on the wholesale market, meaning that the margin depended solely on movements in wholesale prices. Following the expiry of the Decree on the Determination of Electricity Prices[80] there has been a 7% increase in retail prices, while the wholesale price procurement index has fallen by 5.5% compared with 2024.

In the early months of 2024 and 2025, we see the average energy price for the DC consumer group almost aligning with the wholesale price procurement index. The key difference between 2024 and 2025 is that, in 2024, this convergence was primarily due to a fall in wholesale prices, whereas in 2025, the renewed transmission of market signals into retail offers following the end of regulation also played a significant role.

79 The value for 2024 is calculated on the basis of a revised methodology
80 Official Gazette of the RS, No. 96/24

The correlation between the average retail price of energy and the wholesale price index remained negative in 2025. However, a negative correlation does not necessarily imply poorer market responsiveness; rather, it may reflect greater stabilisation of retail prices and the impact of suppliers' hedging mechanisms.

Retail prices better reflect wholesale market signals

Dynamic and Fixed Prices

Contracts with dynamic pricing have been available in the business consumer segment of the Slovenian retail market for several years, whereas in the household and small business consumer segment, the legal basis for offering such contracts was established following the transposition of Directive (EU) 2019/944[81] into the Electricity Supply Act (ZOEE) in 2022. The ZOEE regulates this area in Article 17, which sets out the rights relating to contracts with dynamic electricity prices. Suppliers who have electricity supply contracts with more than 100,000 final consumers are also obliged to offer contracts with dynamic pricing. At the same time, any final consumer with an advanced meter installed has the right to request the conclusion of such a contract. The actual introduction and harmonisation of dynamic pricing offers for household and small business consumers only began in the first half of 2024, when suppliers adjusted their price lists, contractual terms and business policies in response to a call for action in accordance with Article 17 of the ZOEE.

In 2025, five suppliers served more than 100,000 consumers: E 3, ECE, Elektro energija, Energija plus and GEN-I.

Figure 127 shows the number of contracts concluded on the basis of dynamic pricing in the period 2022–2025 for household consumers, small business consumers and business consumers.

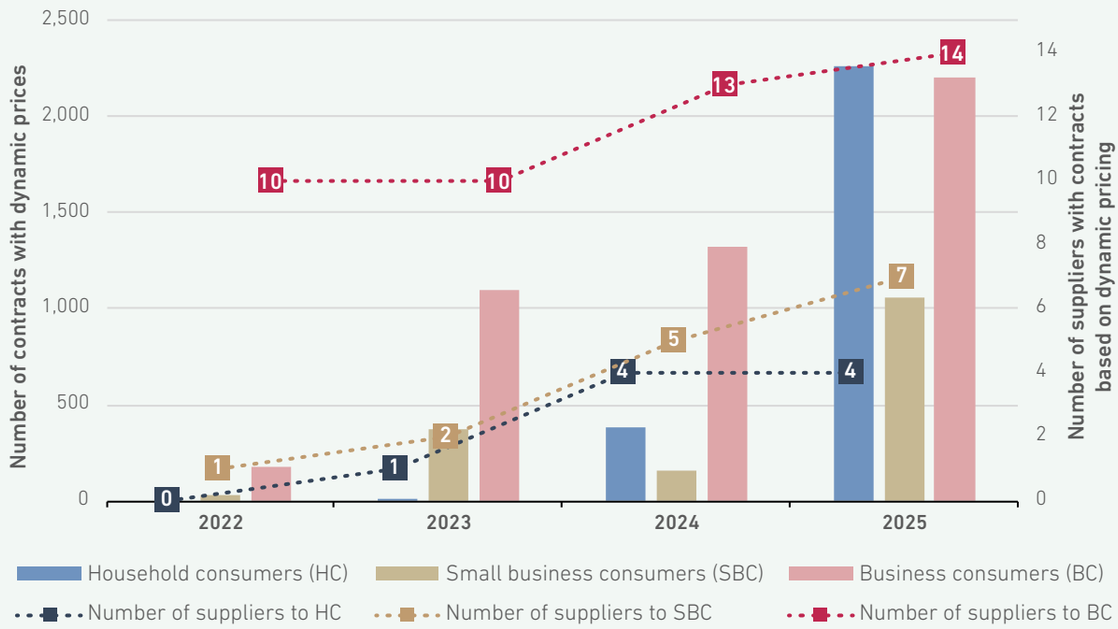
The energy crisis, linked to a sharp rise in wholesale electricity prices and increased price volatility, significantly curtailed both the supply of and demand for such products in 2022. Consequently, the number of contracts concluded was very low, whilst in the household consumer segment there were no such contracts during this period.

In the following years, there was a marked increase in the number of contracts concluded with domestic and business consumers, while the number of contracts with small business consumers fell slightly in 2024. In 2025, the number of contracts concluded rose sharply once again across all three groups of consumers, further confirming the continued establishment of such products on the market. At the same time, the number of suppliers offering or concluding such contracts gradually increased across all three customer groups, indicating the further development and expansion of this offering in the market.

In 2025, four suppliers had contracts based on dynamic pricing with 2,259 household consumers, seven suppliers with 1,063 small business consumers, and 14 suppliers with 2,204 business consumers. Despite these positive trends, however, the number of consumers supplied under dynamic pricing schemes remains small and still represents an insignificant segment of the retail market.

81 Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (hereinafter Directive (EU) 2019/944)

FIGURE 127: NUMBER OF CONTRACTS CONCLUDED BASED ON DYNAMIC PRICING AND THE NUMBER OF SUPPLIERS WITH WHOM CUSTOMERS CONCLUDED THESE CONTRACTS IN THE 2022–2025 PERIOD

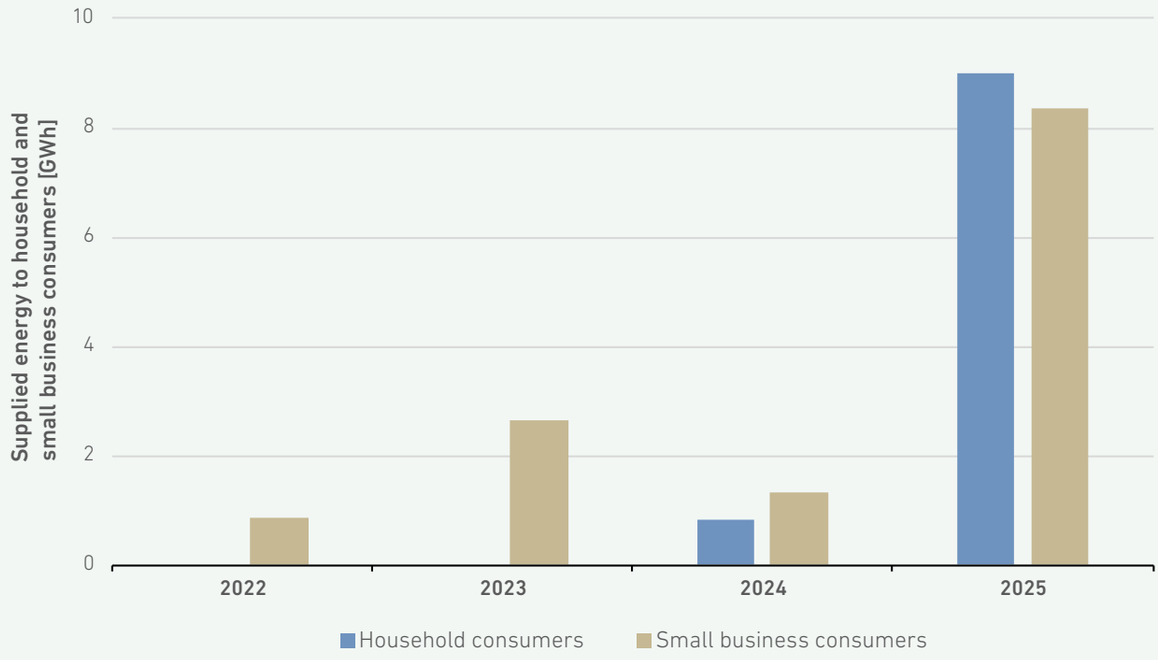


SOURCES: ENERGY AGENCY, SUPPLIERS

The total volume of electricity supplied to consumers with contracts based on dynamic pricing amounted to 9.00 GWh for household consumption in 2025 (an average of 3.98 MWh per household consumer), 8.36 GWh for small business consumption (an average of 7.87 MWh per small business consumer) and 4,108.1 GWh (an average of 1,863.92 MWh per business consumer).

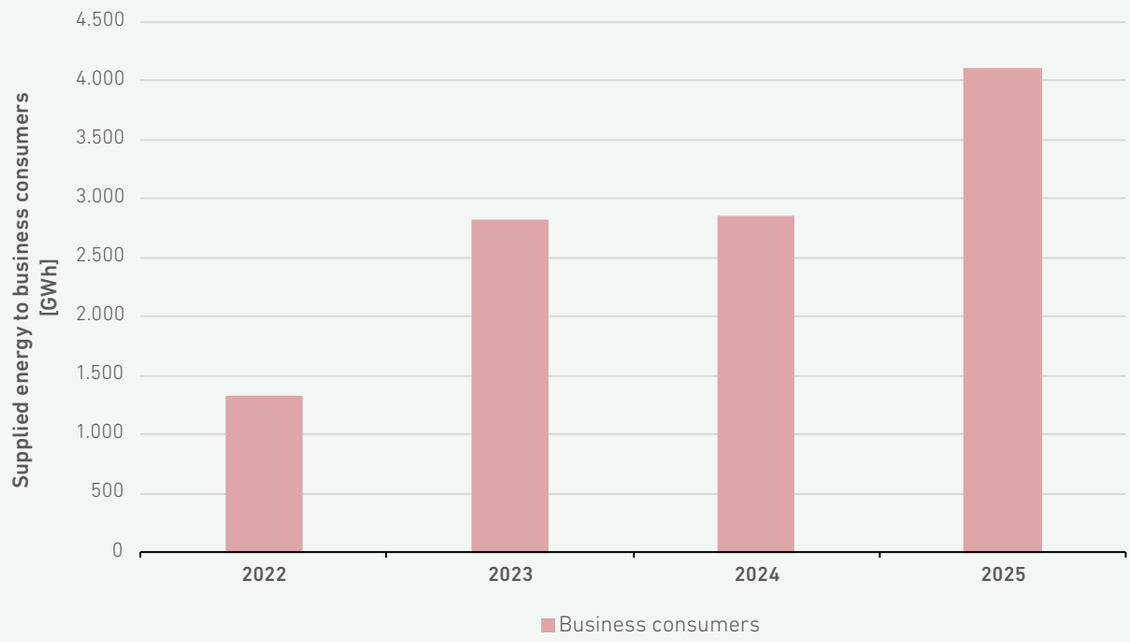
The volume of energy supplied under dynamic contracts varied across individual consumer groups between 2022 and 2025. While a gradual increase in supply under dynamic contracts can be observed among household and business consumers, small business consumers, following initial strong growth in 2024, recorded a decline, which was followed by significant growth again in 2025.

FIGURE 128: ENERGY SUPPLIED TO HOUSEHOLD AND SMALL BUSINESS CONSUMERS IN GWh DURING THE 2022–2025 PERIOD



SOURCES: ENERGY AGENCY, SUPPLIERS

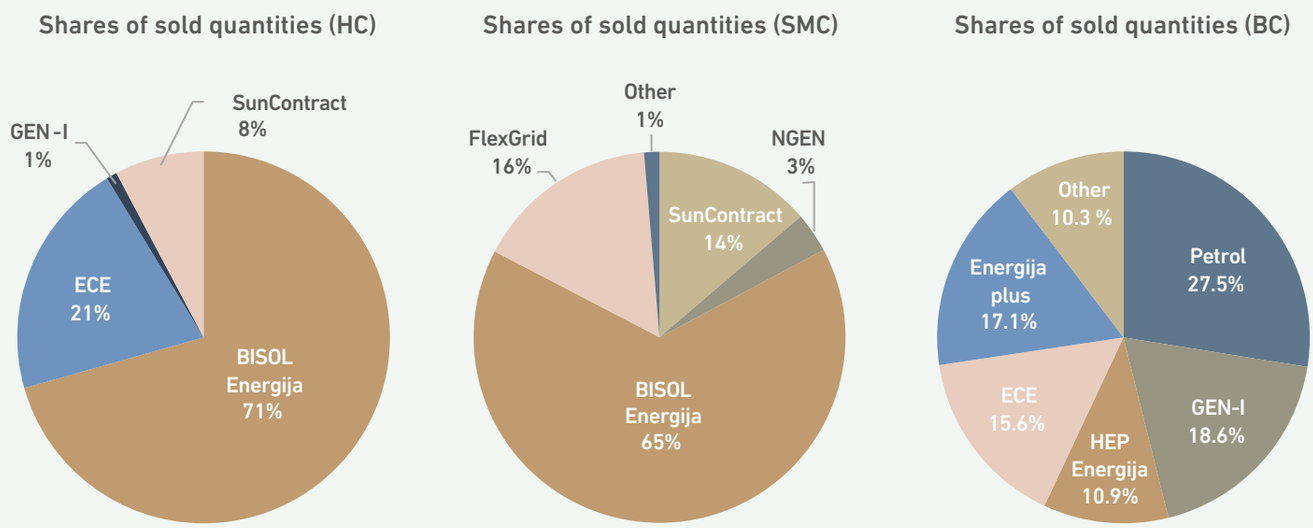
FIGURE 129: SUPPLIED ENERGY TO BUSINESS CONSUMERS IN GWh DURING THE 2022–2025 PERIOD



SOURCES: ENERGY AGENCY, SUPPLIERS

The allocation of the volume of electricity supplied under dynamic-pricing contracts, by supplier, for various groups of consumers is shown in Figure 130. The allocation of the volume of electricity supplied under dynamic-pricing contracts, by supplier, for various groups of consumers is shown in Figure 130. The data show that BISOL Energija is the leading supplier to household consumers, accounting for 71% of the electricity supplied. Similarly, among small business consumers, the largest share of electricity supplied belongs to BISOL Energija (65%). Among business consumers, the largest share of electricity supplied belongs to Petrol, at 27.5%.

FIGURE 130: SHARES OF ELECTRICITY SOLD UNDER DYNAMIC PRICING CONTRACTS BY SUPPLIER IN 2025[82]



SOURCES: ENERGY AGENCY, SUPPLIERS

Most of the available offers, which were based on dynamic pricing, were linked to the SIPX electricity index (EUR/MWh) on the Slovenian electricity exchange (BSP Southpool). The descriptions of how the dynamic prices for the available offers were calculated, as provided by the suppliers, do not generally include price caps, with the exception of one supplier offering a package with a cap set at the monthly average, one with a maximum price cap of 220 EUR/MWh, and two further suppliers who have price caps for business consumers. For one supplier, the cap is defined within the PPA (Power Purchase Agreement); for another, the cap is defined on the basis of a calculation. The lack of mechanisms to cap maximum electricity prices poses a significant risk to consumers, as it exposes them to price volatility in the wholesale market, which may in turn deter consumers from opting for such offers.

Suppliers have generally applied mark-ups to dynamic prices; these are either independent of developments on the wholesale market – i.e. fixed and stated in EUR/MWh – or are expressed as a relative mark-up added to the index value. According to suppliers' data, the relative mark-up values range from 6 to 10% of the price of a 15-minute interval on the Southpool energy exchange, while the fixed mark-up values added to the individual SIPX index range from 6.5 to 14 EUR/MWh. The mark-ups included the supplier's operational costs for forecasting and managing energy, costs arising from deviations between actual and forecast customer consumption, costs of managing the metering point, monitoring consumption and managing energy in line with the customer's needs. Only one supplier specifies a consumption-based mark-up. As with other electricity supply offers, the offers based on dynamic prices also included various support and flat-rate charges as part of the offer.

82 The difference between the total sum and the individual totals is due to rounding to one decimal place.

Fixed Prices for a Specific Period

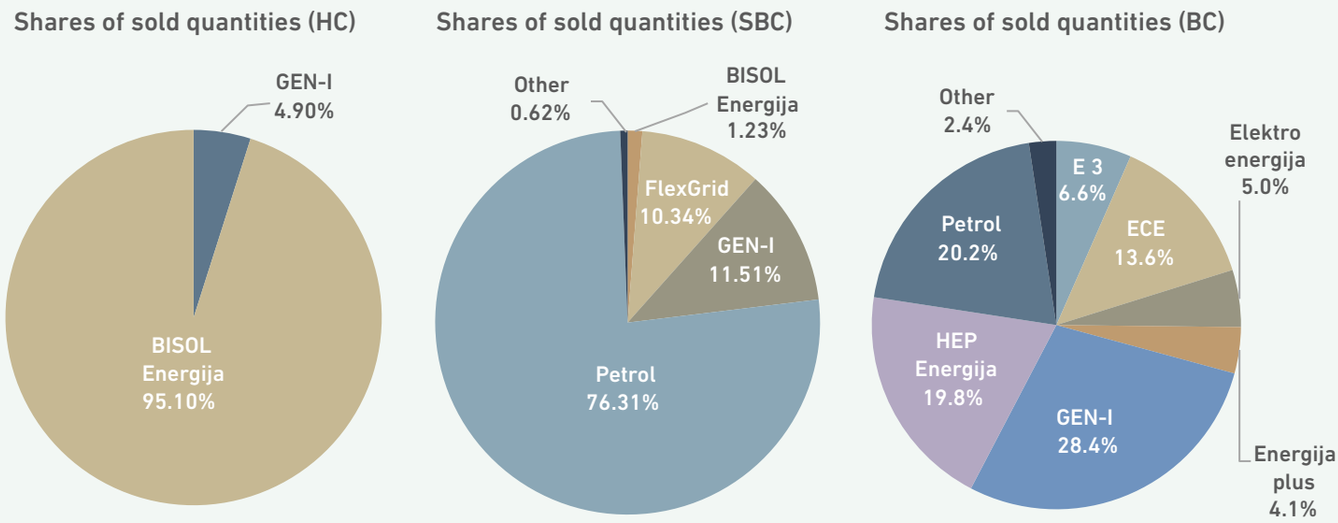
The Act Amending the Electricity Supply Act (ZOEE-A), which came into force in 2025, Article 17 of the ZOEE was amended to require electricity suppliers serving more than 100,000 final consumers to offer these consumers, in addition to other types of contracts, electricity supply contracts with a fixed price for a specific period.

Of the suppliers surveyed, 14 state that they have concluded fixed-price contracts for a specified period pursuant to Article 17 of the ZOEE. Currently, only two suppliers have such contracts in place with all types of customers, whilst the others have them only for small business or business customers.

In 2025, two suppliers had fixed-price contracts with 628 household consumers, six suppliers with 8,694 small business consumers, and 12 suppliers with 12,471 business consumers.

The allocation of the volume of electricity supplied under fixed-price contracts for a fixed term, by supplier, for the various customer groups is shown in Figure 131.

FIGURE 131: SHARES OF ELECTRICITY SOLD UNDER FIXED-PRICE CONTRACTS FOR A SPECIFIED TERM, BY SUPPLIER, IN 2025[83]



SOURCES: ENERGY AGENCY, SUPPLIERS

BISOL Energija and GEN-I are the only suppliers to have concluded fixed-price contracts for a fixed term with household consumers, with Bisol Energija accounting for the majority (95%) of these consumers and GEN-I for the remainder. Among small business consumers, the largest share of energy supplied belongs to the supplier Petrol (76.31%). Among business consumers, however, the shares of energy supplied are more evenly distributed amongst suppliers.

Most suppliers report that the average duration of fixed-price electricity supply contracts was 12 months, and that the fixed-price contracts concluded did not contain a flexibility clause, with the exception of one supplier, which states that the contracts contain a flexibility clause linked to a higher or lower tariff.

Price Volatility

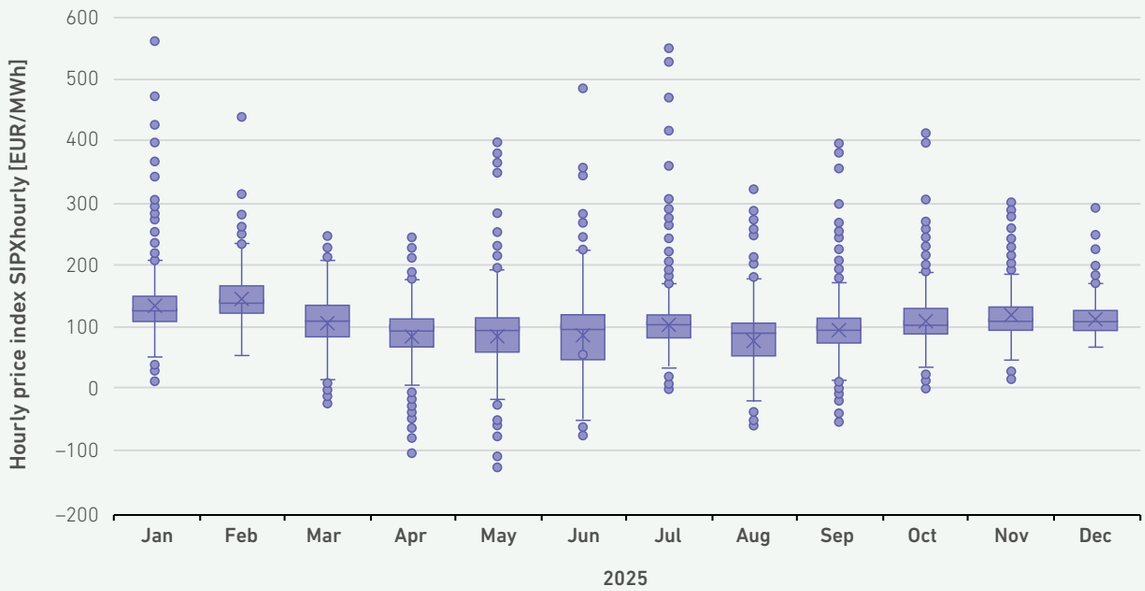
In accordance with Article 53 of the EZ-2, the Energy Agency must also monitor the level of volatility, i.e. price fluctuations in the electricity market, particularly in the context of its impact on end-users' bills. Volatility in wholesale electricity prices represents one of the main sources of risk when concluding contracts with dynamic price formation. As the range of such products in Slovenia in 2025 was somewhat limited and linked to prices on continuous wholesale markets, we present below an analysis of price volatility on the day-ahead market at the Slovenian energy exchange BSP SouthPool for the period 2021–2025.

Figure 132 shows the monthly distributions of hourly electricity indices on the day-ahead market

83 The difference between the total sum and the individual totals is due to rounding to one decimal place.

(SIPXhourly) in 2025, which indicates that the median wholesale electricity prices for each month range between approximately 90 and 140 EUR/MWh. As expected, in line with electricity demand, these are slightly higher in colder months and lower in warmer months. There is significant price dispersion, particularly in months when generation from renewable sources is higher, as well as in January due to weather-dependent variability in demand and potential supply-side constraints. The occurrence of negative prices, however, is characteristic of the period from March to September and is also a consequence of the stochastic nature of generation from renewable sources. The distribution is predominantly right-skewed, meaning that high peaks are more pronounced and more frequent than negative deviations.

FIGURE 132: DISTRIBUTION OF DAY-AHEAD WHOLESALE HOURLY PRICES ON THE SLOVENIAN ENERGY EXCHANGE BSP SOUTHPOOL

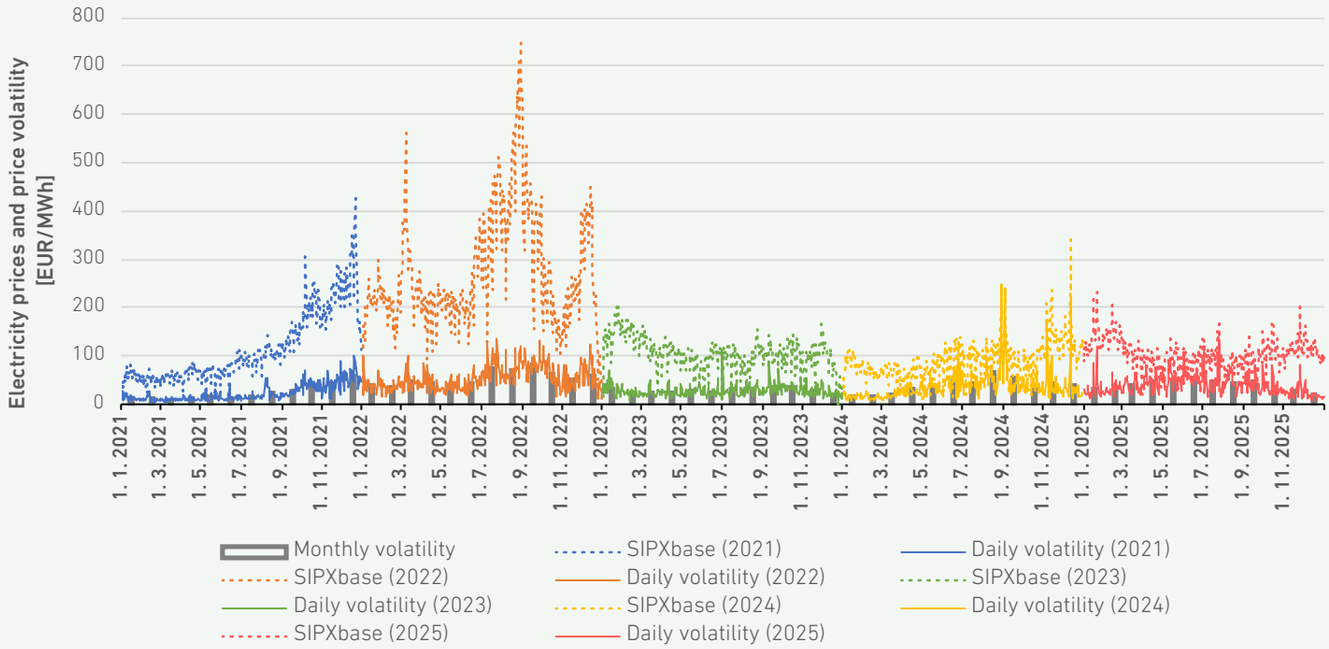


SOURCES: ENERGY AGENCY, BSP

To quantitatively assess the price dispersion presented, an analysis of price volatility is carried out below, based on the calculation of standard deviations of the SIPXhourly hourly electricity indices relative to the SIPXbase reference index[84]. SIPXbase is the electricity index on the Slovenian electricity exchange and represents the average daily price of concluded trades. Figure 133 illustrates the trend in average daily electricity prices (SIPXbase) and daily and monthly values of price volatility for the period 2021–2025. In 2025, the structure of price volatility in the day-ahead market changes slightly compared with 2024. There are fewer pronounced extreme price deviations, but the average level of volatility remains comparable or, in certain periods, is even higher than in 2024. Volatility is present throughout the year, with occasional more pronounced spikes, though these do not reach the highest levels seen in the previous year. In the context of the introduction of a 15-minute market interval at the end of 2025 and the increased granularity of market products, volatility may indeed be reflected in the short term by greater dispersion of price signals; however, aggregated hourly indicators do not show a marked increase in systemic instability.

84 The methodology for the evaluation of price volatility is presented in the State of the Energy Sector in Slovenia 2023 (Energy Agency, 2024), in the case study Analysis of the Level of Volatility of Electricity Prices in the Day-Ahead Market Over the 2021-2024 Period, pp. 102-104. Despite the introduction of a 15-minute market interval in the single European day-ahead market effective on the trading day of September 30, the calculation for 2025 was performed based on hourly values in accordance with the retained SIPXhourly hourly price index and the possibility of trading hourly products on the Slovenian energy exchange BSP.

FIGURE 133: PRICE TRENDS AND PRICE VOLATILITY ON THE SLOVENIAN ENERGY EXCHANGE

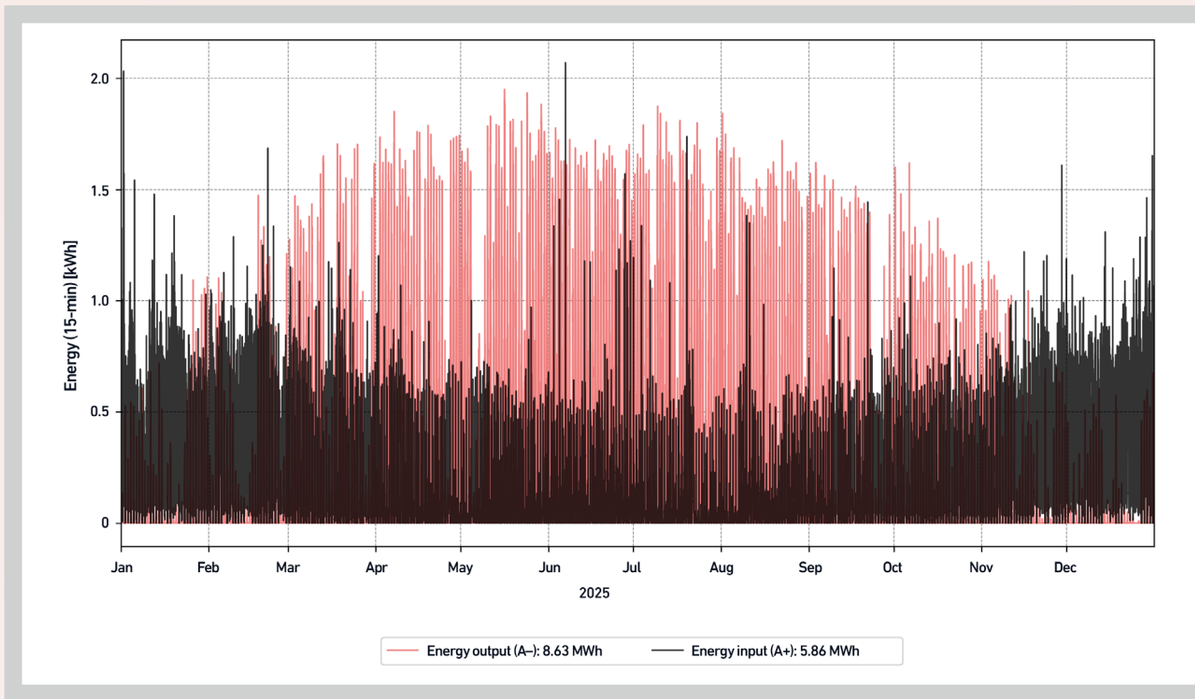


SOURCES: ENERGY AGENCY, BSP

CASE STUDY
The effectiveness of price signals in stimulating the potential for implicit flexibility amongst self-supplying household consumers

The change in the methodology for calculating network charges and the transition of self-supplying household consumers from the annual netting model (in accordance with the Electricity Act 1) to market-based self-supply models (in accordance with the ZSROVE or ZSROVE-1) increase the importance of implicit flexibility on the part of consumers, as the temporal adjustment of consumption can have a positive impact on reducing their supply costs. At the same time, appropriately designed price signals can encourage a reduction in consumption during periods of increased grid load or reduced feed-in during periods of increased renewable energy production, thereby having a positive impact on operating conditions in the distribution network. In this case study, based on a real self-supplied household consumer (Figure 134), the question is addressed as to whether existing signals actually create a sufficient economic incentive for the consumer's implicit flexibility through the use of battery energy storage systems (BESS). In the context of this analysis, implicit flexibility refers to the temporal adjustment of electricity consumption and generation via BESS, with the aim of reducing total supply costs, taking into account electricity supply prices and grid signals, without direct activation by the supplier, aggregator or system operator.

FIGURE 134: CONSUMPTION AND GENERATION PROFILE OF THE SELECTED HOUSEHOLD CONSUMER

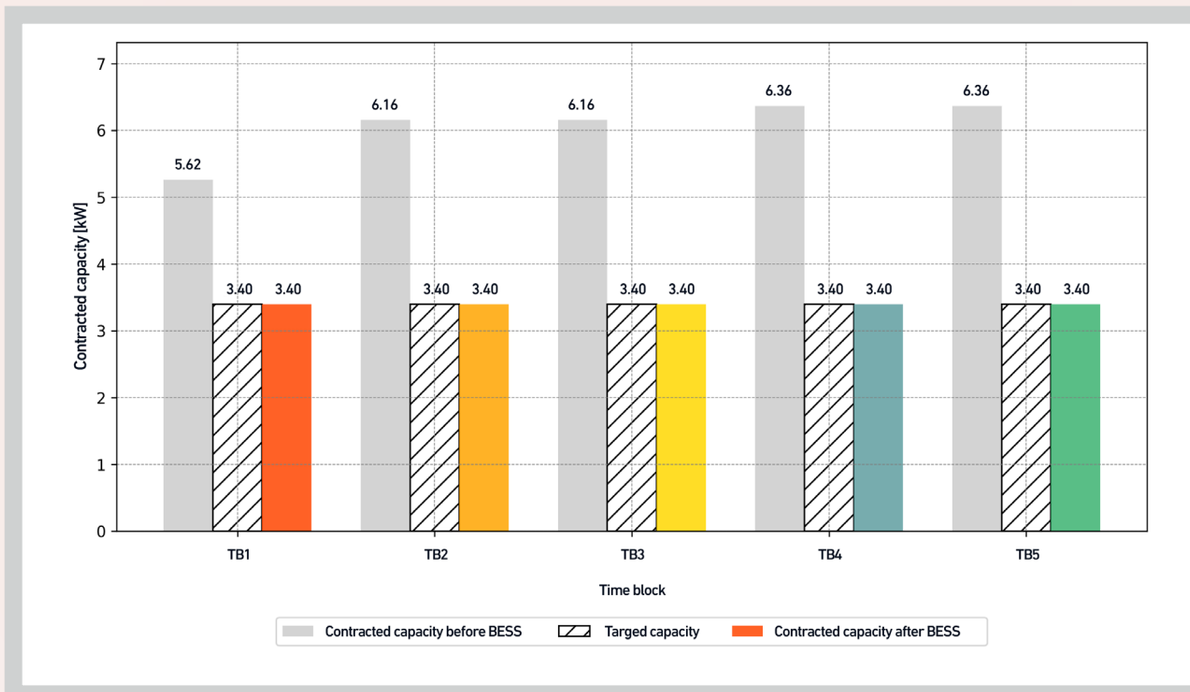


SOURCE: ENERGY AGENCY

In the continuation of the study, the costs of electricity supply for a selected self-supplied household consumer in 2025 are assessed, taking into account the network charges for energy and capacity, the costs of drawing energy from the network and the revenue from the sale of energy fed into the network, both with and without taking into account the selected BHEE (5 kW power and 10 kWh capacity). Contributions, excise duties and other levies are not taken into account in the calculation of supply costs.

If a self-supplied household consumer is included in the annual energy netting model and the annual quantity of energy fed into the network exceeds the annual quantity of energy drawn from the network, their annual supply costs depend exclusively on the network charges for capacity. At the same time, the consumer is not entitled to payment for the energy they feed into the grid. In such cases, the supply price signal plays no role in shaping the consumer's behaviour, and BHEE can be used primarily to limit consumption peaks and ensure the desired agreed power level is maintained. For a selected customer with a connection capacity of 14 kW, following the connection of BHEE, the baseline values of the agreed capacities (5.26 kW in the first time block up to 6.36 kW in the fifth time block) can be reduced to the minimum contracted capacity[85], which amounts to 3.40 kW (Figure 135). In this way, a 40.3% decrease in supply costs is achieved; however, on an annual basis and for the selected case, this amounts to savings of only EUR 61 over the whole year (Figure 136). The results show that the economic impact of using a BHEE in the case of annual energy net metering is insufficient to cover the investment costs in the BHEE. However, in this mode of operation, the BHEE is significantly underutilised, as it utilises only ten equivalent cycles to achieve the agreed target capacities, thereby enabling the additional use of available flexibility for other purposes, e.g. for the provision of system services in return for payment.

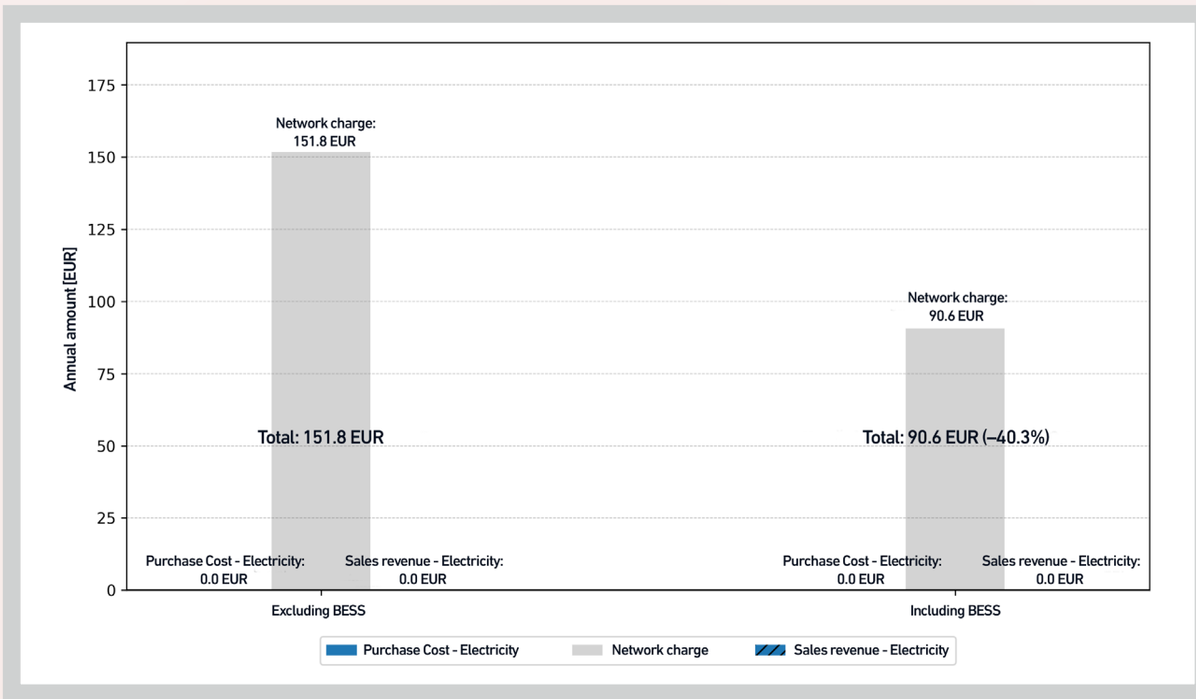
FIGURE 135: COMPARISON OF CONTRACTED CAPACITIES INCLUDING AND EXCLUDING BESS



SOURCE: ENERGY AGENCY

85 The Act on the Methodology for Calculating Network Charges for Electricity Operators (Official Gazette of the Republic of Slovenia, Nos. 146/22, 161/22, 50/23, 71/23, 117/23, 5/24, 30/24, 49/24, 107/24, 27/25, 76/25 and 753/26) stipulates that, for three-phase connections with a connected capacity equal to or less than 43 kW, this shall be 20% of the connected capacity specified in the connection consent, but not less than 2.8 kW.

FIGURE 136: COMPARISON OF ANNUAL ELECTRICITY SUPPLY COST WITH NET-METERING, INCLUDING AND EXCLUDING BESS



SOURCE: ENERGY AGENCY

In market-based self-supply models, price signals for electricity supply can become a significantly more important cost driver; consequently, the consumer's implicit flexibility can have a more significant impact on the final annual cost of electricity supply. To assess this potential, three supply models from a selected supplier are used below, designed to calculate the purchase and sale of electricity in the context of self-supply by household consumers:

- a single-tariff model, with a fixed price for electricity consumption and supply,
- an active model, with multi-tariff prices for consumption and supply depending on the time of day and season, which encourages consumption from the network during periods of solar generation and supply to the network during evening peak periods, and
- the dynamic model, in which the price of electricity is determined on the basis of the hourly index on the Slovenian Energy Exchange (SIPX-hourly), taking into account price mark-ups.

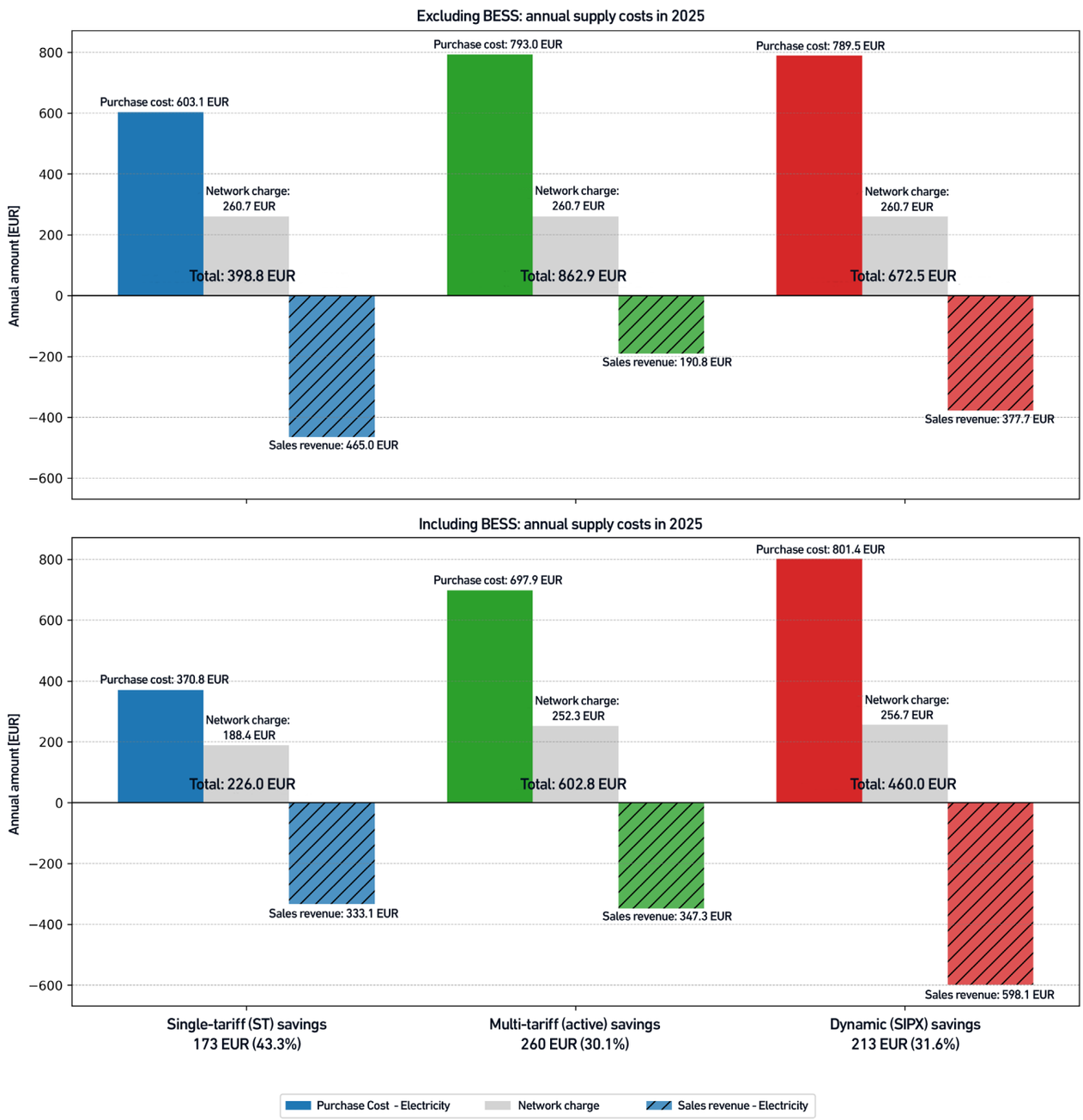
A comparison of the tariff items included in the single-tariff and active models is shown in Figure 137, and the chapter entitled 'Wholesale Market Operation and Market Integrity' is dedicated to the presentation of wholesale prices.

FIGURE 137: TARIFF ITEMS FOR THE INTAKE AND DELIVERY OF ELECTRICITY UNDER THE SINGLE-RATE AND ACTIVE SUPPLY MODELS

SOURCE: GEN-I

Figure 138 shows the annual supply costs for a selected household consumer under various market models of self-supply, both with and without taking BHEE into account. The results illustrate the economic effects within the assumptions of this case study and are highly dependent on the selected consumer profile, the supply models used and conditions on the wholesale electricity markets. The BHEE operating strategies selected in the simulation also have a significant impact on the results, as these are based on predefined operating rules and a trade-off between various objectives, primarily between reducing contracted capacity and engaging in price arbitrage. Consequently, different control strategies, based primarily on optimisation algorithms, could also yield better results.

FIGURE 138: COMPARISON OF ANNUAL ELECTRICITY SUPPLY COSTS UNDER DIFFERENT SUPPLY MODELS, EXCLUDING AND INCLUDING BESS



SOURCE: ENERGY AGENCY

Based on the results prior to the inclusion of BHEE (upper part of Figure 138) it is shown that the selected self-supplied household consumer has the lowest annual supply costs under the single-tariff model, while the active and dynamic models are significantly less favourable for the consumer. Although the active model, unlike the single-tariff model, incorporates time-dependent supply price signals which, at a generalised level, are also aligned with the dynamics of the network load, it turns out that the costs of electricity procurement are high, while revenues from the sale of electricity to the grid are low, making the total annual supply cost the highest among the supply models considered. The dynamic model, linked to hourly values of the SIPXhourly wholesale index, exposes the user to the volatility of the wholesale electricity markets; however, by accepting increased risk, it can also generate higher revenues from electricity sales compared with the active model.

The use of BHEE in market-based self-supply models in the case under consideration reduces annual supply costs by EUR 170–260, or by 30–44% (lower part of Figure 138). The savings are achieved primarily through the self-consumption of the energy produced, which, prior to BHEE, was supplied to the network, by reducing network costs through the limitation of consumption peaks; and by implementing price arbitrage, i.e. adjusting the timing of electricity intake and feed-in in response to time-dependent price signals, whereby the effect is highly dependent on the chosen supply model and the battery system's operating strategy.

Despite the use of BHEE, the single-tariff model once again proves to be the most economically favourable. Implicit user flexibility in such a model is based primarily on adapting to network signals by curtailing peak demand, while the user has no additional economic incentive to time their consumption in response to conditions in the electricity system. On the other hand, the active model incorporates time-dependent price signals which, provided they are sufficiently economically attractive (the values of individual tariffs) would enable users not only to optimise their own supply costs, but also to generate additional positive effects on the operation of the distribution network by shifting consumption and generation to more appropriate time intervals. However, the results of the case study indicate that the current ratios between the prices of electricity off-take and feed-in to the consumer do not yet create sufficient economic incentives to achieve such implicit flexibility.

Based on the estimated value of the BHEE with similar characteristics (approximately EUR 3,500, taking subsidies into account), the estimated savings – without additional utilisation of the battery's spare capacity, adjusted subsidies or further reductions in the price of battery systems – may provide an insufficient incentive for consumers to invest in BHEE. On the other hand, future conditions in retail markets, particularly in the period following the cessation of compensation payments to suppliers who supply electricity to self-supplying consumers with annual netting[86], may result in new costs for consumers, which could significantly affect the economic viability of the demonstrated use of BHEE and the transition to market-based self-supply models.

86 Decree on compensation to electricity suppliers for the supply to self-supplying households with annual netting (Official Gazette of the Republic of Slovenia, No. 37/26)

Market Transparency

Financial Transparency of Suppliers, Transparency of Invoices and Obligation to Publish Offers

Under the Companies Act (ZGD-1), the annual reports of electricity suppliers organised as companies must be published, thereby ensuring appropriate financial transparency in the conduct of electricity supply activities. Consolidated annual reports must present a true and fair view of the financial position and operating results of a group of companies, provided that the conditions for their preparation and audit are met; they must be audited by independent auditors and submitted to AJPES for the purposes of public disclosure. This ensured the basic financial transparency of suppliers in 2025 as well, with this transparency stemming primarily from the general rules of corporate and accounting law.

In 2025, the legal framework ensured transparency at several levels: at the level of suppliers' financial reporting; at the level of invoice transparency; at the level of pre-contractual and contractual information; and at the level of the public publication of tenders. Suppliers' bills thus showed separate items for the cost of electricity, the network charge, levies, excise duty and value added tax. In addition, the bill contained information on the breakdown of primary energy sources used for electricity generation, carbon dioxide emissions and radioactive waste generated. The transparency of bills was regulated in greater detail by the Act on the Method of Presenting Information on Electricity Bills and in an additional explanatory note, which specifies how information is to be presented on grid access bills, electricity supply bills and combined bills.

In 2025, the aforementioned Act was further amended to adjust the notification of final consumers about the contracted capacity for the coming calendar year. Following the amendment to the Act, information on the agreed billing capacity is shown on bills or in supplementary notes for October, November and December, which is important in terms of the comprehensibility of the new tariff system for calculating network charges. The 'Moj elektro' online portal plays a key role in this regard, providing network users with a detailed overview of the billed power and energy quantities associated with network usage, as well as a wealth of other data relating to their network connection. The portal thus provides important digital support for the transparency of billing data, as it enables end customers to carry out additional checks on the metering and billing data that form the basis for the issued bill.

The reform of the tariff system for calculating network charges that has now come into force introduces a slightly higher level of complexity into the tariffs for network use. At the same time, the requirements of the 'Clean Energy for All Europeans' package, which have been implemented in the ZOEE, oblige certain suppliers in the retail market to provide end consumers with supply products based on dynamic energy prices linked to wholesale prices, e.g. day-ahead market prices. The ZOEE-A has further strengthened the obligation to provide transparent information to consumers in 2025, as suppliers must specify the prices of all invoice components in the summary of the main contractual terms for household and small business consumers, explain whether the price is fixed, variable or dynamic, and, where appropriate, also include information on one-off payments, special offers, additional services and discounts.

This results in a significant increase in the complexity of bills, particularly in the case of combined bills for network charges and energy supply, as dynamic tariff items change on an hourly basis throughout the day. Further complexity in the information on the bill may result from the billing of other, innovative energy services, such as aggregation, flexibility services, active demand response, self-supply and, in the future, energy sharing. These developments present a new challenge for suppliers, particularly in terms of how to structure combined bills for energy supply and network usage to ensure that bills are transparent and easy to understand. It is important that, even with more complex products, customers are provided with a clear breakdown of energy costs, network usage charges, levies, taxes and any additional services. The greater complexity of dynamic and innovative products therefore increases the importance of digitally supported displays of billing data and additional explanations accompanying the bill, regardless of whether the customer receives a single bill or separate bills for energy supply and network usage.

In any case, the state of the art – namely digitalisation – enables new, more modern approaches to providing information to consumers: it is therefore possible and recommended to provide detailed information on the billing of services via appropriate electronic data services through the national data hub's web portal or via suppliers' web applications. In this way, the information can be appropriately structured and the necessary tabular and graphical

representations provided, enabling end-users to carry out a detailed analysis of the billed quantities and to understand the billing items more easily.

In 2025, suppliers were again required to provide household and small business consumers with transparent information on their electricity supply offers by publishing it on their websites, the associated price lists and the general terms and conditions for the supply service they offer to customers. The ZOEE-A has explicitly reinforced this obligation by requiring suppliers to publish on their websites price lists, tariffs and general contractual terms and conditions relating to the supply of electricity to household and small business customers, on the basis of which they offer contracts or issue invoices. Furthermore, when offering products based on dynamic pricing, they are obliged to inform customers appropriately about the opportunities, costs and risks that may arise from this type of energy supply. Larger suppliers that meet the statutory threshold for the number of end-users (100,000 end-users) must also offer end-users the option of concluding contracts with fixed prices and contracts with dynamic electricity prices.

The publicly available information referred to above serves as input data for the electricity and gas supply cost comparison services provided by the Energy Agency in accordance with the law. In 2025, the Act on the Method of Electronic Data Transmission for the Provision of a Price Comparison Tool for Electricity and Gas for Household and Small Business Consumers was also adopted in this area; this Act specifies the method of transmitting the data required to provide the Energy Agency's comparison services. Consequently, the obligation to publish offers publicly was also linked to the obligation to transmit data in a structured and timely manner for the purposes of the comparison tool, which further contributes to transparency, the comparability of offers and the protection of end-users.

The year 2025 therefore marked a further strengthening of the legal framework for transparency in the retail electricity market. The financial transparency of suppliers continued to be based on the provisions of the Companies Act (ZGD-1) and the public disclosure of annual reports, whilst the transparency of bills, contractual terms, publicly published offers and data for comparison services received additional regulatory and digital support.

Guarantees of Origin for Electricity

A guarantee of origin is a document issued by the Energy Agency at the request of a producer of electricity. This document enables traceability and serves as the proof of provenance of certain electricity. Guarantees of origin are particularly important for consumers since they prove the origin of the supplied electricity. They are also important from the suppliers' point of view, because they use them to demonstrate the origin of electricity supplied to the consumers, and they are mandatory for electricity from RES. However, guarantees of origin can also be issued to producers for other, conventional sources. Each guarantee is equipped with an ID number enabling the traceability of the producer and the origin of the electricity. Additionally, it includes data on the origin of electricity and the quantities of produced electricity for which the guarantee is being issued, the data on the producers, the production facility and information about the support for the produced electricity and the production period. The guarantees of origin and transactions and their cancellation are issued electronically in the register of guarantees of origin. With its cancellation, the guarantee of origin is used and serves suppliers and consumers as proof of the source of electricity supplied.

For electricity generated in 2025, guarantees of origin were issued for 9,834 GWh, of which 4,155 GWh were for electricity generated from renewable energy sources and 5,541 GWh for electricity generated from nuclear energy. The remaining guarantees were issued for electricity generated from fossil fuels.

To prove the origin of electricity on the domestic market, 5,604 GWh of guarantees of origin were cancelled, of which 2,555 GWh were for RES. 5,138 GWh of certificates were transferred to other EU Member States (of which 3,738 GWh were for electricity generated from RES), whilst 3,894 GWh of certificates (of which 2,488 GWh were for electricity generated from RES) were transferred to Slovenia from other EU Member States.

Ensuring Transparency in the Retail Market

Transparency in the retail market, in which numerous participants operate and which, under normal circumstances, offers a very wide and diverse range of services, is ensured primarily through the public disclosure of all necessary information. Suppliers and aggregators publish information on their websites about their offers and products, as well as the terms and conditions of engagement.

Following the implementation of the EU's 'Clean Energy for All Europeans' package and, subsequently, the amendment to the market design, the conditions have been established for the accelerated development of the retail market and for a significant increase in choice for consumers; however, in the first quarter of 2025, these developments were still hampered by the regulation of retail prices, in the form of intervention measures by the Government of the Republic of Slovenia to mitigate the effects of the energy crisis.

It was expected that, following the end of retail price regulation, the diversity of supply might also be increased by the entry of new market participants. However, even in 2025, we have not seen a burst of innovative business models in the retail market that incorporate demand-side flexibility; instead, the range of supply products based on dynamic pricing has become firmly established. Despite the growth in the number of contracts concluded for electricity supply products with dynamic pricing for the smallest consumers, interest in such products remained very limited in 2025. Furthermore, most suppliers had not yet offered products based on dynamic pricing in the previous period, which limited their visibility and understanding amongst consumers, whilst those who did have them in their range generally did not market them more aggressively. Another significant barrier to the wider adoption of dynamic products is the risk they pose to customers, particularly those who do not adapt to price signals in the market. Even by 2025, the still-small share of electric mobility had not stimulated the development of new business models for supply based on a shared supply model.

Despite the slow development, the scope of information that is relevant from the point of view of transparency and needs to be processed remains extensive, and the information is highly scattered. Transparency under the current legislation is ensured by the Energy Agency and the market operator Borzen.

The Energy Agency monitors the retail market on the basis of public and other data obtained from reporting entities. Based on the findings of this monitoring, reports of infringements or restrictive practices, and other information, the Energy Agency carries out supervisory activities and implements various measures to ensure transparency. Among other things, the Energy Agency also ensures transparency by publicly publishing information and services via a single point of contact, which includes comparative and validation e-services, including a list of suppliers and electricity operators with each company's identification details, key indicators for the energy markets (the eMonitor portal[87]), reports on the state of the retail and wholesale markets and other useful data, as well as relevant and up-to-date information, thereby contributing to the transparency of the retail market and services (a structured list of legislation, bill details, etc.).

In accordance with the first paragraph of Article 20 of the ZOEE, free access to the comparison tool for comparing suppliers' offers is restricted to household consumers and micro-enterprises with an expected annual consumption of less than 100,000 kWh. From the perspective of additional protection, the Act addresses household and small business consumption; however, according to available analyses, the latter very rarely reaches a consumption level of 100,000 kWh, so in practice the comparison tool, by covering the household and small business consumption segments, meets the legal requirements[88].

The set of comparative e-services enables the calculation and comparison of supply service costs for energy consumed, based on specific consumption characteristics. Comparative calculations can be carried out for supply service offers to domestic and small business consumers. Suppliers submit data on their offers to the Energy Agency on a monthly basis, standardised in accordance with the Act regulating the method of electronic data transmission to provide a tool for comparing electricity and gas prices for household and small business consumers[89].

Since the end of 2023, the Energy Agency has been providing a new online application, the Network Charges Comparator, which, based on a 15-minute load profile, enables the analysis of peak loads and the simulation of various scenarios for adjusting the contracted capacity (with and without demand response).

87 Decree on compensation to electricity suppliers for the supply to self-supplied household consumers with annual net metering (Official Gazette of the Republic of Slovenia, No. 37/26).

88 From these findings, it could be concluded that free access to the comparison tool should also be provided to certain end-users who do not meet the definition of a small business consumer, but who are, at the same time, micro-enterprises. Taking into account the fact that an electricity supplier draws up a supply offer for a consumption profile that cannot be satisfactorily accounted for by representative synthetic profiles, specifically for each such end user, it cannot be expected that suppliers would, in accordance with the eighth paragraph of Article 15 of the ZOEE, be able to draw up standard supply products and associated price lists for such end users and publish them, as is the case for household and small business consumers. Consequently, the condition for the inclusion of such offers in comparison services is not met.

89 In 2025, suppliers provided data on the basis of the updated Act on the Method of Electronic Data Transmission for the Provision of a Tool for Comparing Electricity and Gas Prices for Household and Small Business Consumers (Official Gazette of the Republic of Slovenia, No. 41/25).

Comparison of Energy Supply Offers – Electricity Supply Costs Comparator

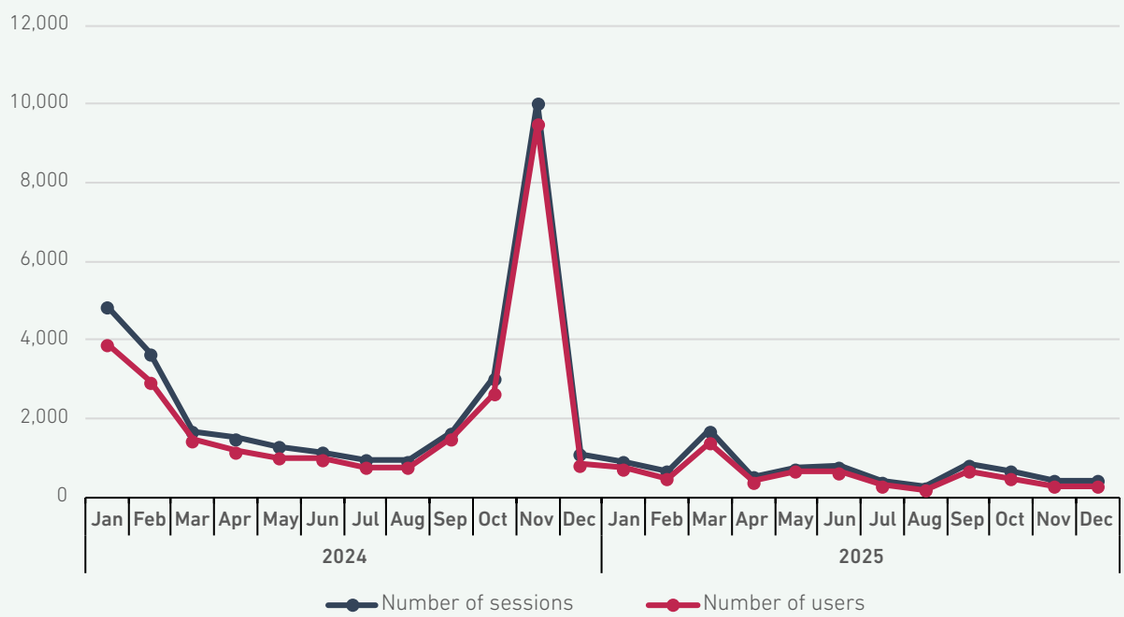
Providing an independent comparison of all offers on the market in one place certainly contributes significantly to greater transparency of offers on the retail market. In 2025, the Energy Agency provided comparison services using a new solution, which was launched in mid-October of the previous year and is based on the retail market monitoring system.

The number of comparative calculations of electricity supply costs remains at a negligible level

In 2025, the Energy Agency provided a comparison of the entire range of offers on the retail market, with a few exceptions – only individual offers from suppliers were excluded where their design or characteristics (supply products) did not ensure a minimum level of comparability, would have distorted the comparison, or were of such a specific nature that they could not be included in the comparison due to systemic limitations. The range of such offers on the market remains very limited; therefore, their absence from the comparative calculation did not have a significant impact on the integrity of the comparative calculation.

An analysis of the number of comparisons carried out and bills checked confirms users' negligible interest in carrying out comparative calculations in 2025, following a merely short-term increase in interest after 12 October 2024, when the Energy Agency launched the new solution. At that time, the renewed solution received a fair amount of media attention. The reason for this is the existence of retail price regulation and the relatively low average potential for switching suppliers following the liberalisation of retail prices in February. Ever since the introduction of price caps in the autumn of 2022 for all customers with a connected load of 43 kW or less, interest in comparison services has, as expected, declined sharply to negligible levels by 2025.

FIGURE 139: ANALYSIS OF THE USE OF COST COMPARATOR OVER THE PAST TWO YEARS



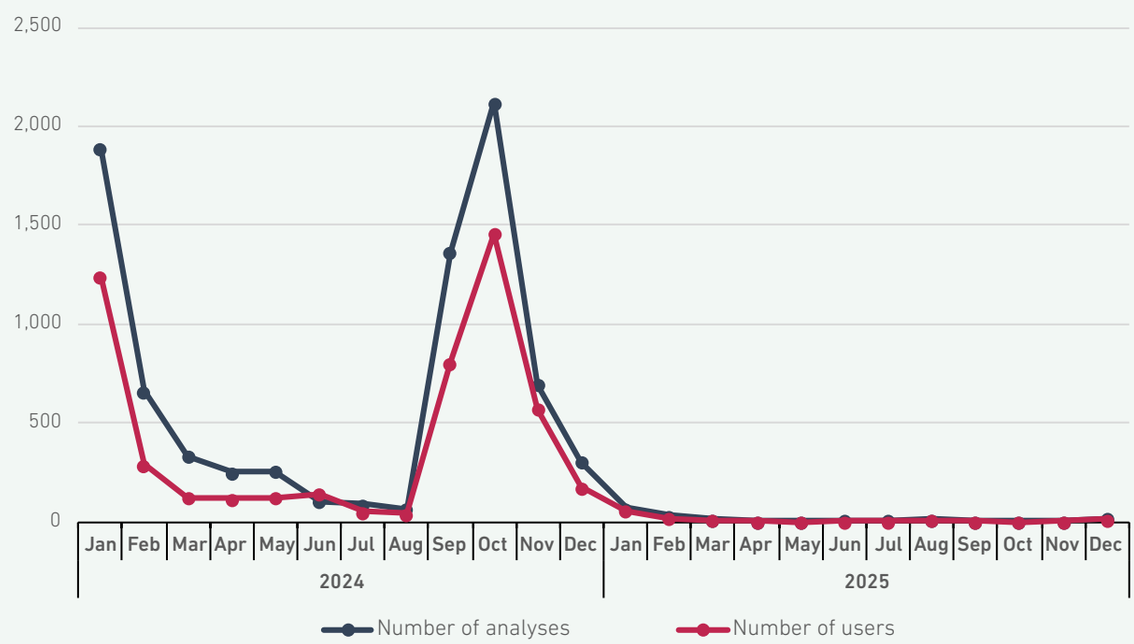
SOURCE: ENERGY AGENCY

Comparison of Network Charge Costs – Network Charge Comparator

The Energy Agency supported the revision of the network charge calculation methodology by providing a comparison service, which enables all final consumers to calculate their projected annual network usage costs based on the new methodology. Comparing network charges before and after the revision of the calculation methodology enabled end users to analyse the effects of the changes and prepare for a more efficient use of the network. The comparison was functionally withdrawn in 2025 following the initial phase of implementing the tariff reform, as it no longer had any practical value. However, the online network charge comparison tool[90] also enables calculations based on adjustments to the agreed billing capacity, specifically for cases where consumption is adjusted accordingly, and for cases where the final consumer does not ensure such adjustments to their consumption and is therefore charged for excess capacity. In addition, the user is provided with an analysis of the peak loads that their consumption imposes on the grid. A prerequisite for carrying out this comparison is the use of a 15-minute load profile, which the user exports from the Moj elektro portal for their point of delivery, and sufficient availability of 15-minute metering data within the scope of this load profile.

A marked increase in the use of the application is characteristic of the phase leading up to its launch and following the preparation and implementation of the tariff reform from September to October 2024, prior to the start of the first peak season, partly due to misleading information about significant price rises. In 2025, usage of this solution remains at negligible levels, even in the period prior to the introduction of the higher tariff. This confirms that the Energy Agency's forecasts regarding the effects of the reform were accurate and that, after the first year of the new network charge being applied, household consumers were able to see for themselves that, on an annual basis, they were actually paying slightly less in network charges.

FIGURE 140: COST COMPARISON TOOL USAGE TRENDS OVER THE PAST TWO YEARS



SOURCE: ENERGY AGENCY

90 https://www.agen-rs.si/web/primerjalnik-stroskov-omreznine

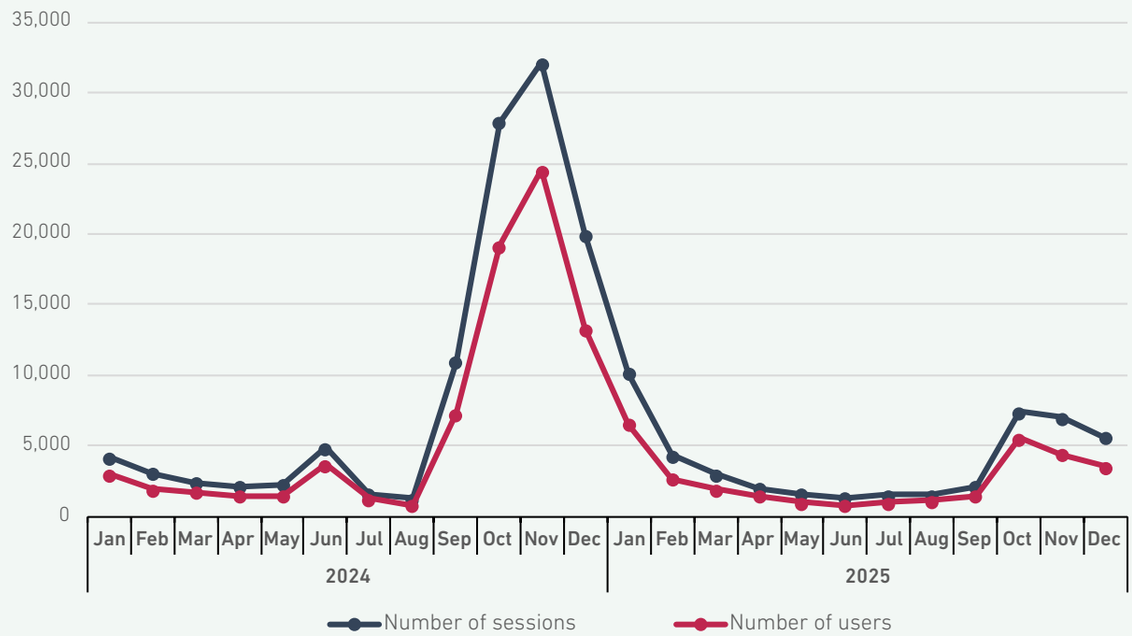
The URO.si Web Portal

In 2025, the URO.si portal moved from a period of intense public attention to a phase of more subdued, predominantly operational use. Visitor data show that interest peaked in autumn 2024, when the start of the higher network charge season coincided with intense public interest in the new method of calculating network charges. After the first quarter of 2025, interest gradually subsided, which can be attributed to several factors: the end of the 2024/2025 peak network charge season, a reduction in media coverage of network charge billing, and the fact that, after more than a year of using the new system, consumers had gained a better understanding of the key concepts, procedures and, above all, the financial implications.

The increased interest in information on the URO.si portal is linked to the seasonal nature of the tariffs and the publication of new tariff rates

Ahead of the next peak season and at the time of the publication of the tariff rates for the following year, there is a noticeable increase in public interest, albeit on a significantly smaller scale than when the reform was first introduced.

FIGURE 141: TRENDS IN THE USE OF THE URO.SI WEB PORTAL OVER THE PAST TWO YEARS



SOURCE: ENERGY AGENCY

A decline in visitor numbers does not mean the portal has lost its importance. On the contrary, it indicates a shift from mass searches for basic information towards more targeted queries. As general media attention has waned, the topics that remain in the spotlight are those of greatest practical relevance to consumers: contracted or billing capacity, time blocks, explanations of network charges and the use of the cost comparison tool. This content shows that users do not merely use the portal for passive information-gathering, but as a tool to help them understand their own bills, assess the implications of their decisions and prepare for changes to their agreed power.

The AI chatbot URO plays a key role in this, acting as an ever-available first point of contact for information.

Other Measures to Ensure Transparency

The Borzen web portal Trajnostna energija (Sustainable Energy) serves as a central information hub, providing a single point of access to information on energy efficiency and renewable energy sources in Slovenia. In a simple and transparent manner, high-quality and expert information is gathered in one place, which helps users to use energy more efficiently, whilst also serving an educational purpose aimed at raising awareness of the benefits of renewable energy sources and their use. Although the published information is not directly linked to the retail market, it helps, amongst other things, to raise customers' awareness of the importance of more environmentally friendly energy supply products, opportunities for saving energy and thereby reducing energy supply costs, and provides an overview of the possibilities and benefits of self-supply from renewable energy sources, which influences the choice of electricity supply products and assists in decisions regarding investment in renewable energy sources, energy storage systems, more energy-efficient appliances or smart devices.

Market Efficiency

Monitoring the efficiency and level of competition in the retail market is based on the regular and systematic collection of data from market participants and public data aggregators. Based on data on the volumes of electricity billed by suppliers to final consumers, the market shares of individual suppliers by market segment are presented in the continued text, changes compared with 2024, and more detailed indicators relating to supplier switching analytics.

Market Shares and Concentration in Retail Markets

We assess the concentration or competitiveness of the relevant markets using standard indicators based on market shares.

- The Herfindahl-Hirschman Index (HHI). If it is higher than 2,000, the retail market is highly concentrated, while an HHI below 2,000 indicates a market with a low level of concentration.
- The Concentration Ratio (CR). For the purposes of this report, we present the CR3, which shows the combined market share of the three largest suppliers in the market.

Electricity Supply to all consumers

Table 27 shows the market shares of suppliers based on electricity supplied, taking into account supply across the entire retail market, which also includes large end-users connected to the transmission system and CDS.

Compared with 2024, when the HHI stood at 1,368, it increased by 7.9% in 2025 to 1,476.

TABLE 27: MARKET SHARES AND HHI OF SUPPLIERS TO ALL FINAL CONSUMERS[91]

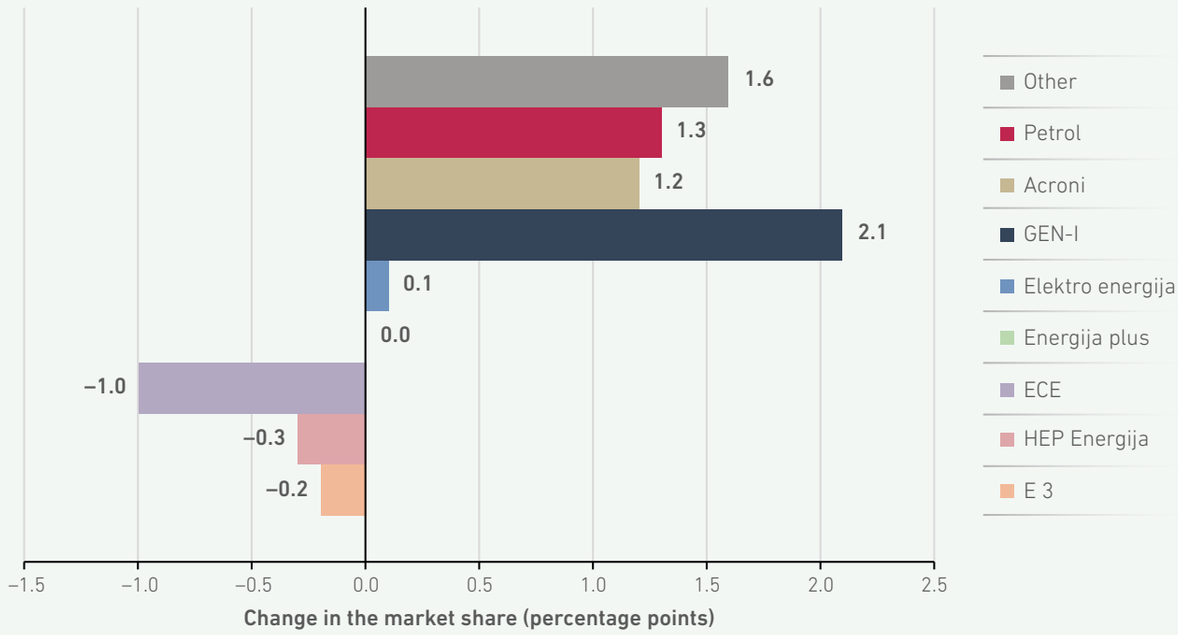
Supplier	Supplied energy [GWh]	Market share
GEN-I	2,713.1	23.8%
Petrol	2,066.0	18.1%
ECE	1,692.0	14.8%
Energija plus	1,505.6	13.2%
E 3	828.3	7.3%
HEP Energija	803.3	7.0%
Other	775.2	6.8%
Elektro energija	574.4	5.0%
Acroni	458.2	4.0%
TOTAL	**11,415.9**	**100.0%**
HHI of suppliers to all final consumers	**1,476**	

SOURCE: EPOS PORTAL

Structural changes affecting market concentration are, in absolute terms, in the range of up to 1.3 percentage points, except for HSE and GEN-I. In 2025, compared with the previous year, GEN-I's market share increased by as much as 2.1 percentage points. The market share also increased by 1.6 percentage points in the 'Others' segment, which includes all suppliers whose market share, based on the volume of energy supplied, is less than 2%. The increase in the market share of the 'Others' segment is largely due to the inclusion of the supplier HSE in this category. In 2025, this category comprised as many as 13 suppliers, which is two more than the previous year (ENNA Next and HSE). On the other hand, it was HSE's market share that saw the largest decrease, by 4.2 percentage points. In terms of the magnitude of the changes, the market shares of the other suppliers in 2025 did not differ significantly from previous years, meaning that the market positions of the suppliers did not change substantially, as shown in Figure 142.

91 Energy supplied and market shares are rounded to one decimal place. The difference between the total and the sums is due to rounding to one decimal place.

FIGURE 142: CHANGES IN THE MARKET SHARES OF SUPPLIERS TO ALL FINAL CONSUMERS IN 2025 COMPARED TO 2024[92]



SOURCE: EPOS PORTAL

Electricity Supply to Business Consumers

The table below shows the market shares of electricity suppliers in the retail market for business consumers in 2025. The level of concentration in the retail market for business consumers has increased slightly.

The HHI value was 1,458, representing an increase of 9.6% compared with 2024, when it was 1,330.

TABLE 28: MARKET SHARES AND HHI OF SUPPLIERS TO BUSINESS CONSUMERS[93]

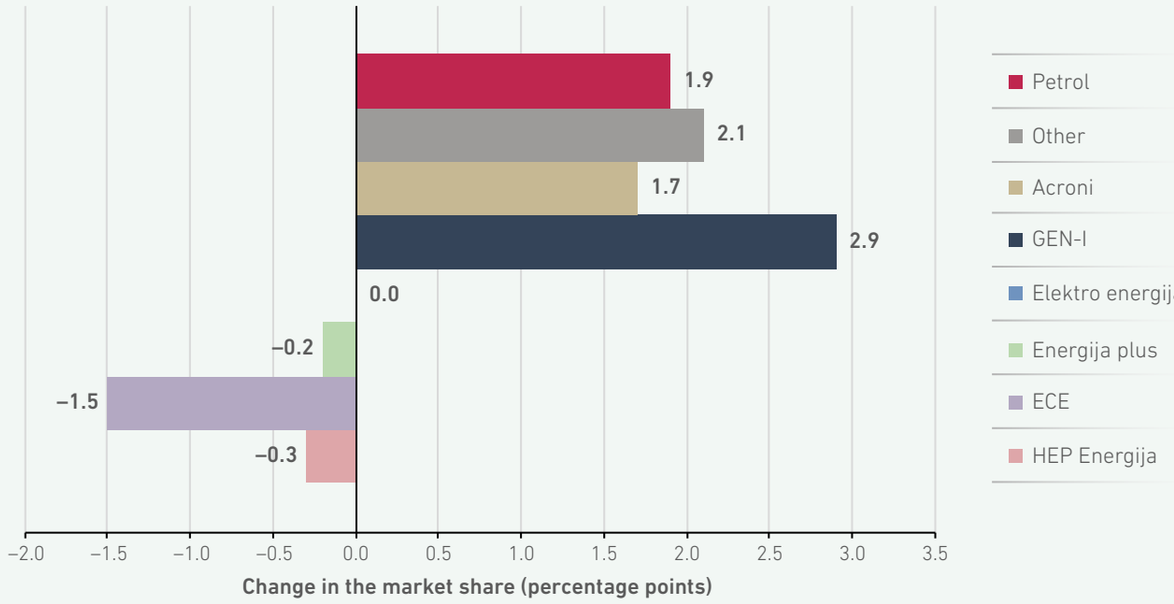
SOURCE: EPOS PORTAL

92 The changes in the market shares of suppliers in 2025 compared to 2024 are rounded to one decimal place. A direct comparison with last year's figures may result in a difference of +/- 0.1% due to rounding.

93 Energy supplied and market shares are rounded to one decimal place. The difference between the total and the sums is due to rounding to one decimal place.

As can be seen in Figure 143, the suppliers GEN-I (2.9 percentage points) and Petrol (1.9 percentage points) gained the largest market shares in this market segment relative to 2024. The largest decrease in market share can be observed for HSE (5.9 percentage points), which is consequently included in the Other segment.

FIGURE 143: CHANGES IN MARKET SHARES OF SUPPLIERS TO BUSINESS CONSUMERS IN 2025 COMPARED TO 2024[<?>]

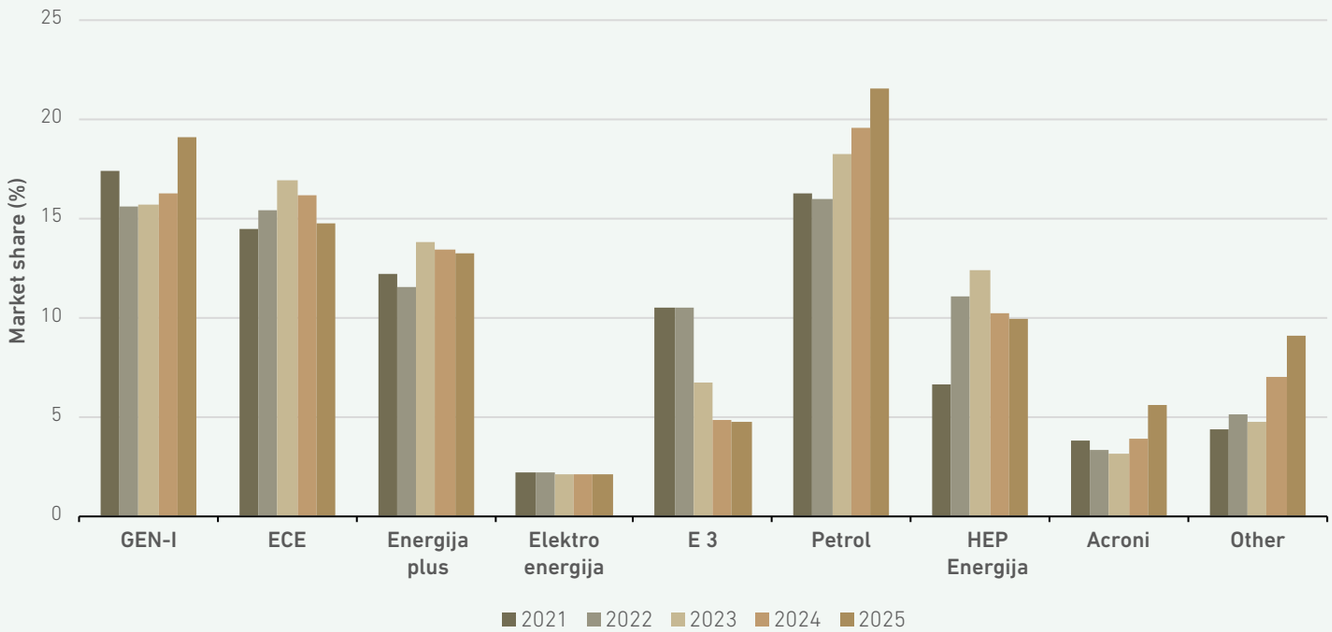


SOURCE: EPOS PORTAL

Figure 144 shows the five-year trend in the market share of suppliers to business consumers. Following three consecutive years of market share growth between 2021 and 2025, ECE has seen its market share decline for the second year running, while E 3 has remained at almost the same level as the previous year. Petrol and GEN-I have continued the trend of increasing market share seen over the last three years. The increase in market share in the Other segment was, in this case too, largely due to the inclusion of the supplier HSE in this category.

94 The changes in the market shares of suppliers in 2025 compared to 2024 are rounded to one decimal place. A direct comparison with last year's figures may result in a difference of +/- 0.1% due to rounding.

FIGURE 144: COMPARISON OF THE MARKET SHARES OF SUPPLIERS TO BUSINESS CONSUMERS IN THE 2021–2025 PERIOD



SOURCE: EPOS PORTAL

Electricity Supply to Household Consumers

In the retail market for household consumers in 2025, the market concentration ratio indicates that this is a highly concentrated market. The HHI stands at 2,070 and, for the third year running, is above the threshold for a highly concentrated market. Compared with 2024, the HHI did, however, fall slightly in 2025.

TABLE 29: MARKET SHARES AND HHI OF SUPPLIERS TO HOUSEHOLD CONSUMERS[95]

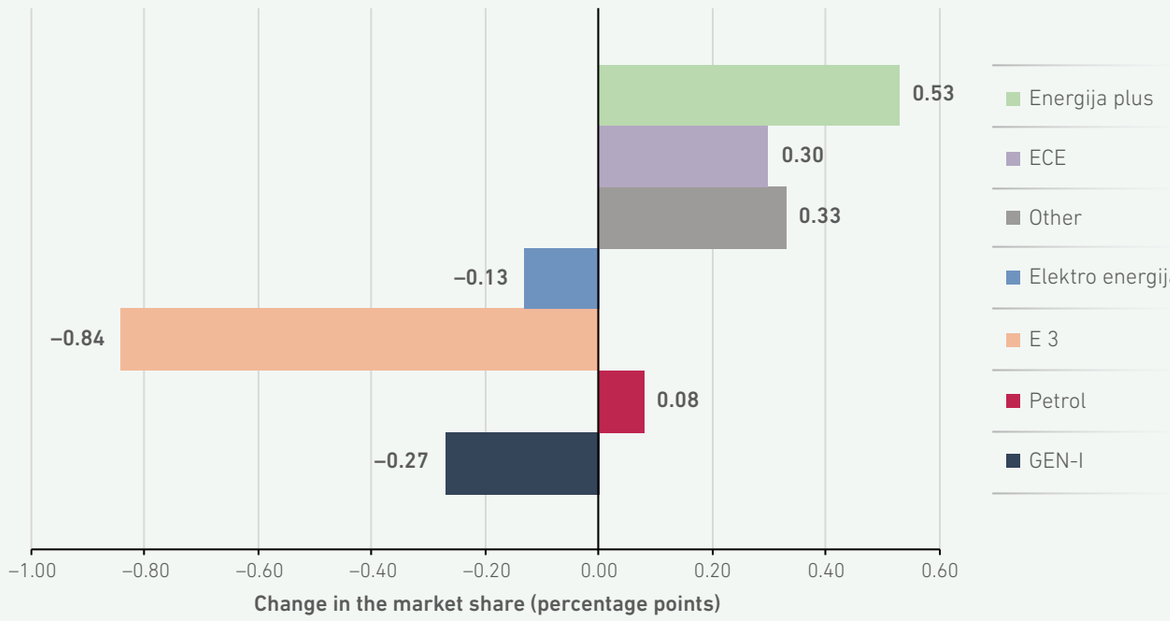
Supplier	Supplied energy [GWh]	Market share
GEN-I	1,159.3	35.2%
ECE	498.4	15.1%
E 3	443.2	13.5%
Energija plus	430.0	13.1%
Elektro energija	406.6	12.4%
Petrol	321.5	9.8%
Other	32.9	1.0%
TOTAL	**3,292.0**	**100.0%**
HHI of suppliers to all household consumers	**2,070**	

SOURCE: EPOS PORTAL

95 The changes in the market shares of suppliers are rounded to one decimal place. The difference between the total and the sums is due to rounding to one decimal place.

As Figure 145 shows, the structural changes affecting market concentration are negligible, as they do not exceed 0.85 percentage points in absolute terms. The largest increase in market share in the domestic supply segment in 2025 compared with 2024 was, as in the previous year, recorded by Energija plus, ECE and a group of smaller suppliers grouped under the Other category. The market share of the three largest suppliers stood at 63.8% and decreased by 1.25 percentage points compared with 2024. This decrease is linked to a fall in the market share of supplier E 3, which saw its market share drop by 0.84 percentage points.

FIGURE 145: CHANGES IN MARKETS SHARES OF SUPPLIERS TO HOUSEHOLD CONSUMERS[<?>]



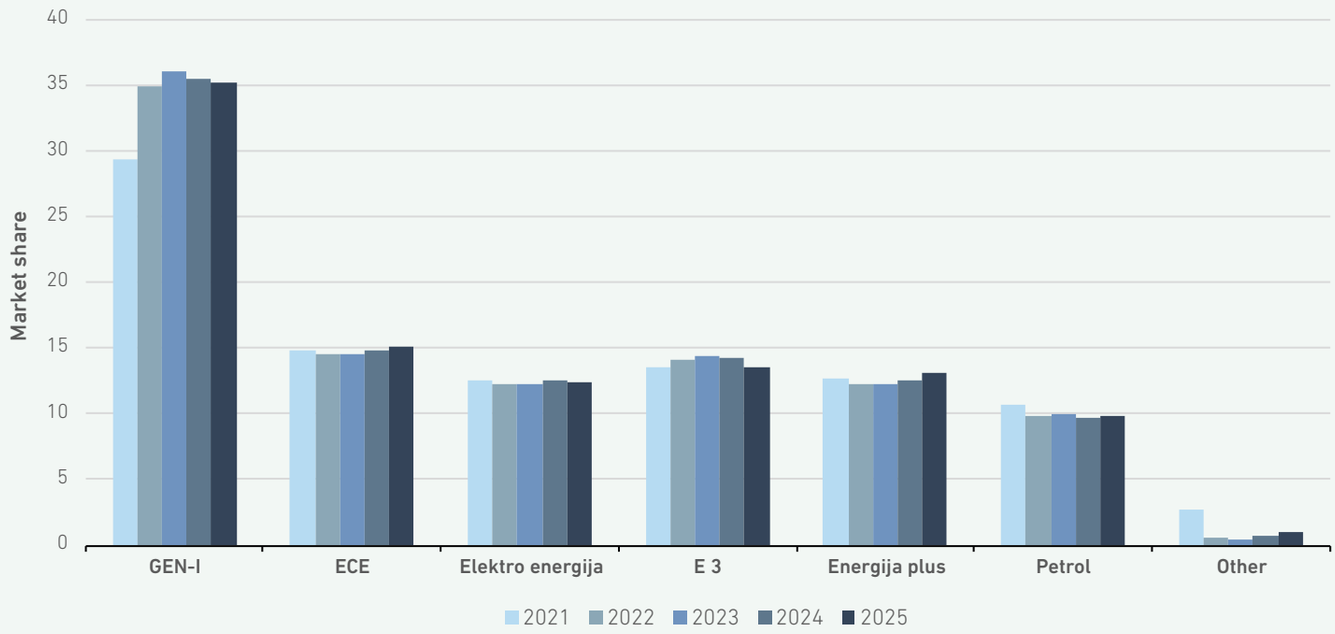
SOURCE: EPOS PORTAL

Figure 146 shows the market shares of suppliers to household consumers. The market shares shown are for the period 2021–2025. In terms of the extent of change, the market shares of suppliers have not differed significantly from those in 2024, meaning that market shares have not changed significantly over the past year. GEN-I remains the clear dominant player in the market.

Market concentration in the retail electricity market for household consumers remains high

96 The changes in the market shares of suppliers in 2025 compared to 2024 are rounded to one decimal place. A direct comparison with last year's figures may result in a difference of +/- 0.1% due to rounding.

FIGURE 146: COMPARISON OF THE MARKET SHARES OF SUPPLIERS TO HOUSEHOLD CONSUMERS IN THE 2021–2025 PERIOD



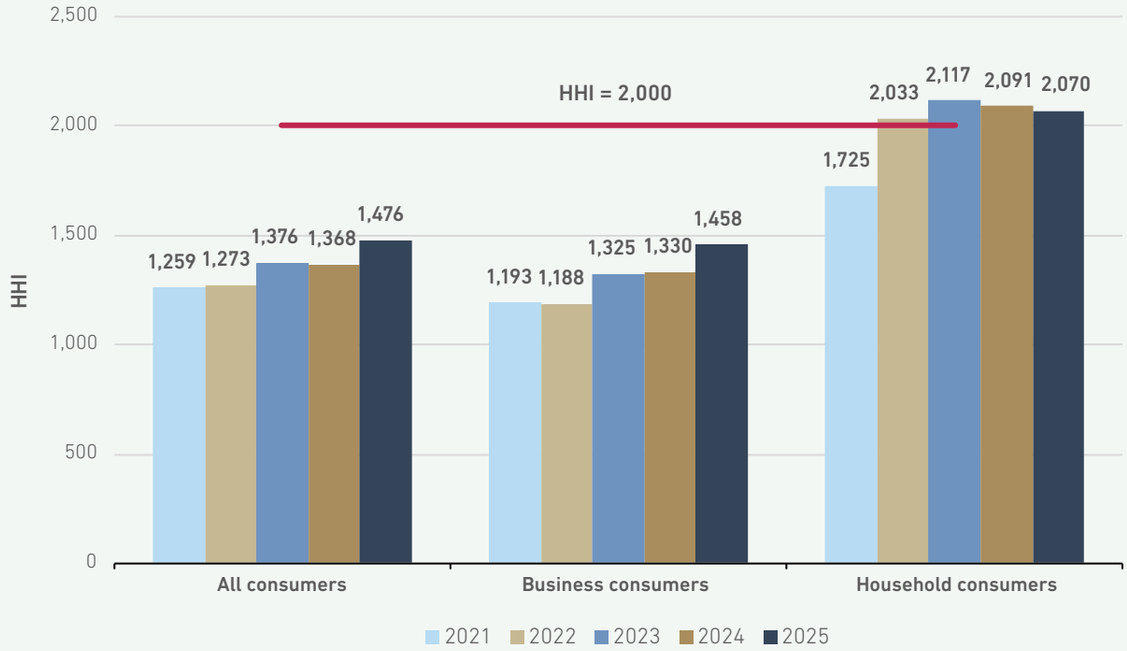
SOURCE: EPOS PORTAL

Comparison of Market Shares in the Relevant Markets

When assessing market power on the basis of market shares, we must exercise caution and take into account the limitations of such indicators. A high market share does not in itself imply the existence of competition problems and is not prohibited. When assessing it, particular attention must be paid to the position of direct competitors. The European Commission therefore identifies concentrations that must be subject to a more detailed assessment – this applies to concentrations above 40%, while concentrations above 60% are permitted only in exceptional cases. The US and UK competition authorities, however, base their assessment on the HHI, and for them the differences in the HHI before and after the merger are significant – in the case of a moderately concentrated market (HHI between 1,000 and 1,800), a difference of 100 points may lead to a more detailed assessment, whilst in a highly concentrated market even a difference of 50 points may be decisive.

As can be seen from Figure 147, the HHI increased in 2025 in the business supply and all-consumer supply segments. In the business consumer supply segment, the HHI rose by 8.9%, and in the supply segment for all consumers by 7.5%, while in the household consumer supply segment it fell by 1% compared with the previous year.

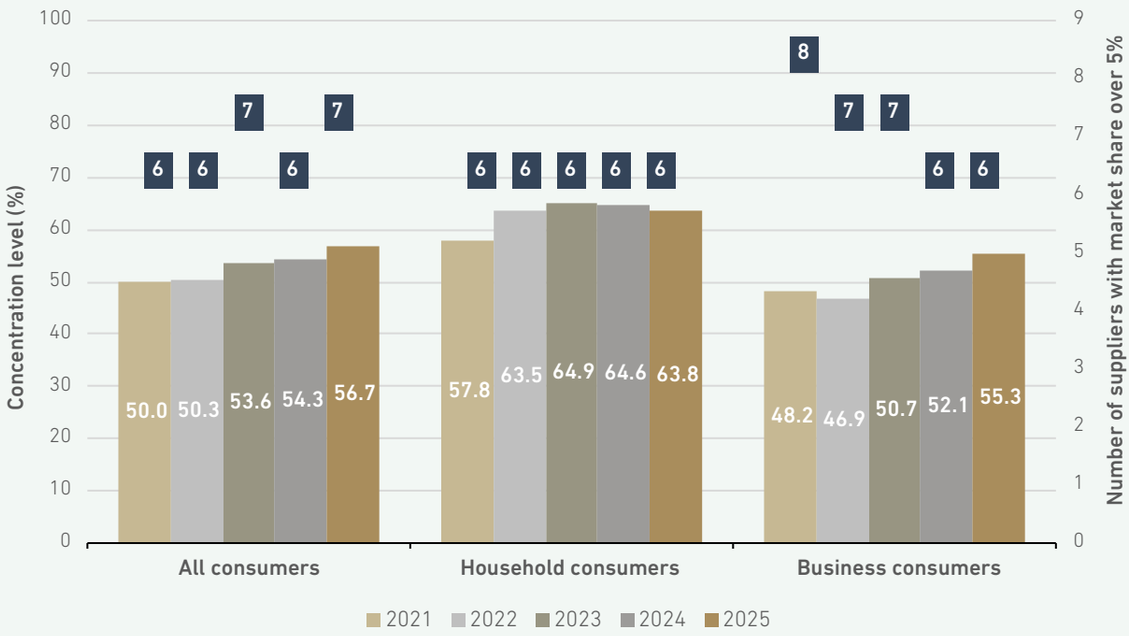
FIGURE 147: HHI EVOLUTION IN RETAIL MARKETS IN THE 2021–2025 PERIOD



SOURCE: EPOS PORTAL

Figure 148 shows the CR3 indicator and the number of suppliers with a market share exceeding 5%. Compared with 2024, the CR3 increased in 2025 in the supply segment for all consumers and in the supply segment for business consumers, a trend that has continued from the previous year. In the supply segment for household consumers, however, the CR3 fell by 0.8 percentage points. The total number of suppliers to all consumers increased by one – Elektro energija, which increased its market share by 0.1 percentage points compared with 2024, thereby reaching the 5% threshold.

FIGURE 148: CONCENTRATION (CR3) IN THE RETAIL MARKETS AND NUMBER OF SUPPLIERS WITH OVER 5% OF MARKET SHARE IN THE 2021–2025 PERIOD



SOURCE: EPOS PORTAL

The Energy Agency set out the market concentration, taking into account ownership links, in its Report on the State of the Energy Sector in 2022, with CR3 reaching a value close to 100% in the retail market for household consumption, while the market share of the virtually dominant, affiliated supplier is almost 50%. In 2025, the situation changed slightly in terms of concentration compared with previous years; specifically, CR3 – which represents the combined market share of the three largest suppliers in the market, taking into account the suppliers' ownership structures – now stands at 82.5% in the retail market for household consumption, while the market share of the virtually dominant, affiliated supplier stands at 40.3%.

High concentrations require appropriate attention from the competent authorities in the area of market power assessment

Switching Suppliers

In 2025, a total of 28,634 consumers switched electricity suppliers, including 19,603 household and 9,031 business consumers, representing a 36% increase in supplier switches compared with the previous year. On average, 1,634 household consumers and 753 business consumers switched electricity suppliers each month.

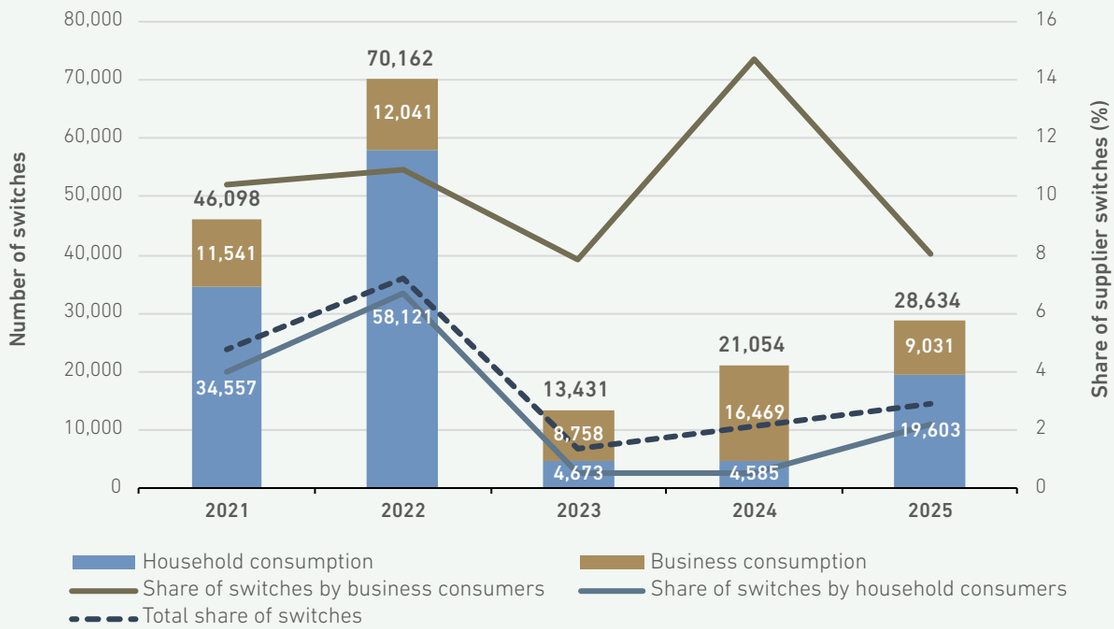
An increase in the number of households switching suppliers following the end of the government's price cap

Due to the government regulation setting electricity prices, which had capped maximum retail prices in previous years, price differences between suppliers narrowed significantly. This resulted in a marked decline in the number of supplier switches among household consumers in 2023 and 2024. In 2025, the number of switches among household consumers increased again; however, compared with the pre-crisis period, it remained at a relatively low level.

In the business segment, where price regulation had already ceased to apply in 2024, the number of supplier switches decreased slightly in 2025 compared with the previous year, but remained at a relatively high level. This indicates that business consumers continue to actively adapt to market conditions, although the intensity of switching has declined somewhat following the sharp increase recorded in the previous year.

Overall, the total number of switches increased in 2025 compared with 2024, mainly due to the rise in switching among household consumers. Nevertheless, the overall switching rate remains relatively low, primarily as a result of government restrictions on retail prices in previous years. Moreover, even after the removal of price regulation, differences between suppliers' offers have remained relatively small, meaning that incentives to switch are still less pronounced. Figure 149 shows trends in the number of supplier switches by consumer segment and switching rates.

FIGURE 149: TRENDS IN THE NUMBER OF SUPPLIER SWITCHES IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, ELES

The share of household consumers switching suppliers amounted to 2.2% in 2025, representing a noticeable increase compared with 2024 (0.5%). Nevertheless, the share remains relatively low, indicating that, while the household consumption market is gradually reviving following the period of price regulation, it has not yet reached the levels typical of more competitive markets. In 2023 and 2024, the market was classified as a so-called dormant market due to government price caps; by 2025, however, a gradual reactivation of consumers is observed, with them increasingly responding to market signals.

In the business consumer segment, the share of supplier switches in 2025 was 8%–a significant decrease compared with 2024 (14.7%). Following the removal of electricity price regulation for small business consumers at the end of 2023, these consumers were fully exposed to market prices for the first time in 2024, which stimulated increased activity in switching suppliers. The observed decline in the share of supplier switches in 2025 can be understood as a consequence of the gradual stabilisation of market conditions, with consumers changing suppliers less frequently following an initial period of adjustment.

The total proportion of supplier switches in 2025 stood at 2.9%, representing an increase compared with the previous year, primarily due to greater activity among household consumers. Nevertheless, the level of switching remains relatively low. The low level of activity may be linked to the relatively small differences between suppliers' offers and the market structure, including ownership links between suppliers, which may affect the intensity of competition.

A low rate of supplier switching and a high concentration in the inactive retail market for household consumption

In 2025, Spain, Italy and Portugal had a household customer switching rate of between 20 and 25%, while other countries recorded lower switching rates. This often correlates with the degree of market concentration and the influence of incumbent suppliers[97].

Figure 150 shows the number of switches in 2025, by month. January stands out in particular, with a markedly high number of switches among business consumers. A higher number of switches among business consumers at the start of the year

97 Suppliers that were linked to public utility service prior to the full opening of the market in 2007 (known as 'incumbent suppliers').

is to be expected, as this is when most one-year electricity supply contracts expire, prompting companies to choose a new supplier

Later in the year, the number of switches amongst business consumers fell significantly and remained at a lower level, with a slight increase during the summer and autumn months. Compared with the previous year, there were 45.2%[98] fewer supplier switches for business consumers.

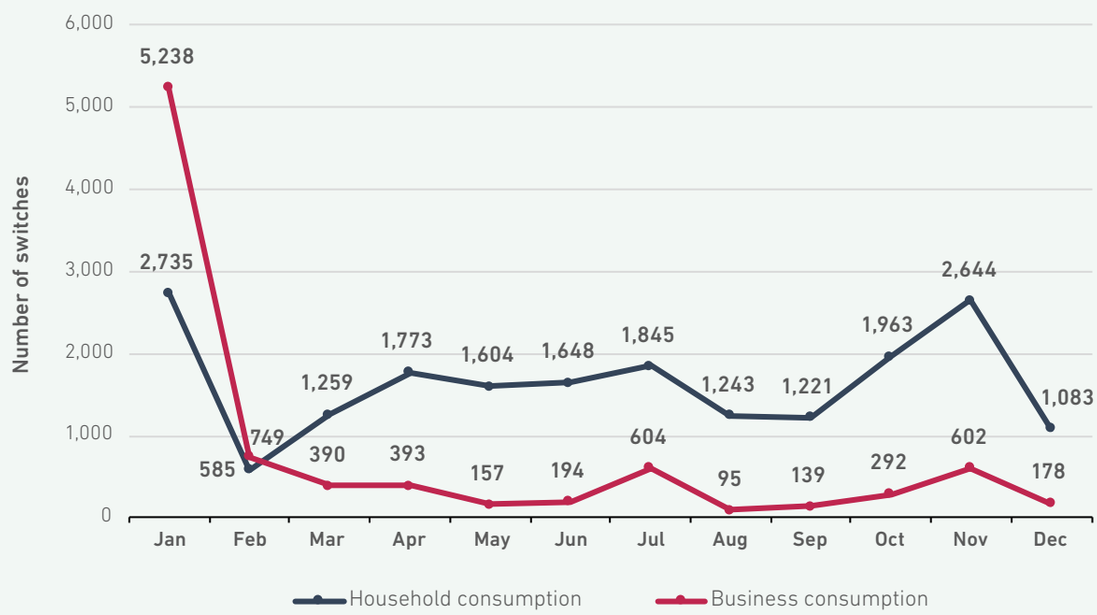
For household consumers, the trend was more consistent throughout the year, with a slightly higher number of switches in the spring and autumn months and a more pronounced peak in November.

At the end of February, price regulation for household consumers ended, which may have contributed to a gradual increase in activity later in the year. Compared with the previous year, there were 327.5% more supplier switches for household consumption.

The share of switches amongst business consumers decreased following a sharp rise in 2024

The overall trend in supplier switches in 2025 reflects a calming of market activity among business consumers after a marked increase in 2024, while activity among household consumers is gradually increasing.

FIGURE 150: DYNAMICS OF THE NUMBER OF SUPPLIER SWITCHES IN 2025 BY CONSUMPTION TYPE



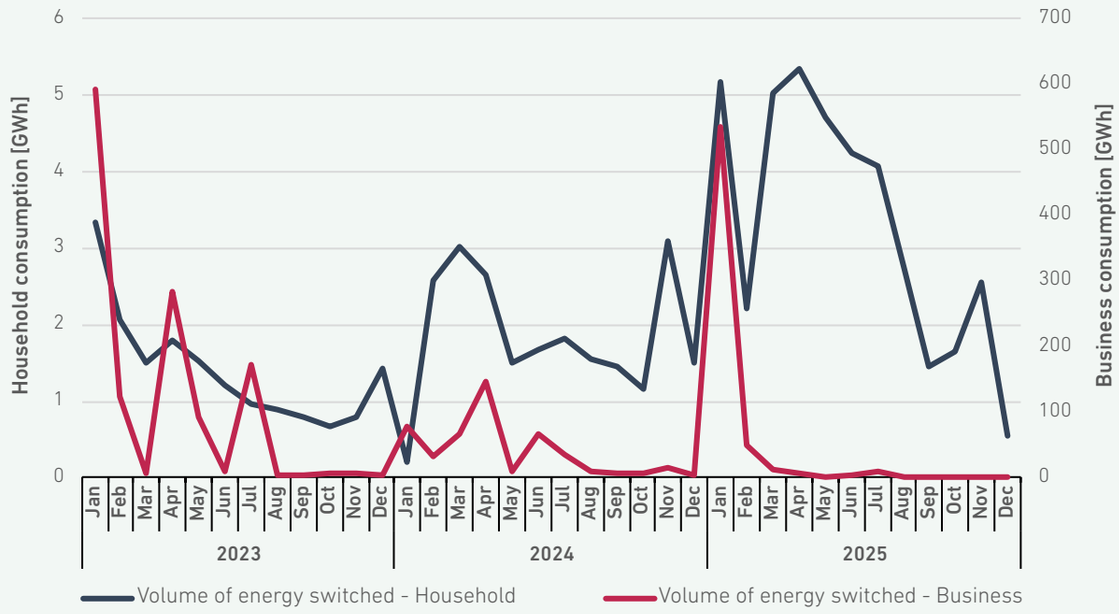
SOURCES: ENERGY AGENCY, ELES

Figure 151 shows the trend in the volume of energy switched over the period 2023–2025. The volume is closely linked to the number of supplier switches. The volume of energy switched is the amount consumed by a consumer over a one-year period and, as a result of switching suppliers, will lead to an increase in energy consumption with the other (new) supplier. Consequently, a higher number of supplier switches by business and household consumers is usually accompanied by a greater volume of energy switched. The figure clearly shows a sharp rise in the volume of energy switched by business consumers at the start of 2025, particularly in January, which is primarily linked to the expiry of one-year electricity supply contracts, which generally end at the close of the calendar year. Later in the year, the volume of energy traded by business consumers decreases significantly and remains at a lower level. For household consumers, the trend in the volume of energy switched is more even, with noticeable increases in the spring and autumn, and more pronounced figures in the first half of 2025.

98 Changes in the share of switches in 2025 compared with 2024 are rounded to one decimal place.

This trend follows a gradual increase in the number of supplier switches following the price regulation period. For household consumers, the volume of energy switched in 2025 is 79.1% higher than in the previous year, with the share of switched energy amounting to 1.2%. For business consumers, the volume of energy switched in 2025 is 29.5% higher than in the previous year, with the share of switched energy amounting to 7.7% – an increase of 2 percentage points compared with 2024.

FIGURE 151: VOLUMES OF SWITCHED ELECTRICITY BY CONSUMPTION TYPE



SOURCES: ENERGY AGENCY, ELES

The following section presents an analysis of supplier switching among household and business consumers in individual geographical areas, as defined by distribution zones, with the aim of identifying any deviations from the Slovenian average. The consumer's choice (supplier, product) is not location-dependent[99], however, the areas vary in terms of economic and demographic development, and there are still suppliers active in the market which historically originated from electricity distribution companies, i.e. the owners and contractual network operators in individual distribution areas, and are the so-called incumbent suppliers; however, these are no longer majority-owned by companies carrying out the public service activities of a transmission or distribution system operator. Higher or lower proportions of switches in individual distribution companies' areas may generally be the result of greater or lesser price elasticity on the demand side in that area. The number of switches is also influenced by greater customer activity, targeted advertising by suppliers, loyalty to suppliers that are or have in the past been integrated with the distribution company, brand trust, etc. If consumer engagement were the same across the whole of Slovenia – i.e. purely theoretically – the number of switches would be proportional to the total number of household consumers connected in each area of the distribution system; consequently, the switching rates would be the same.

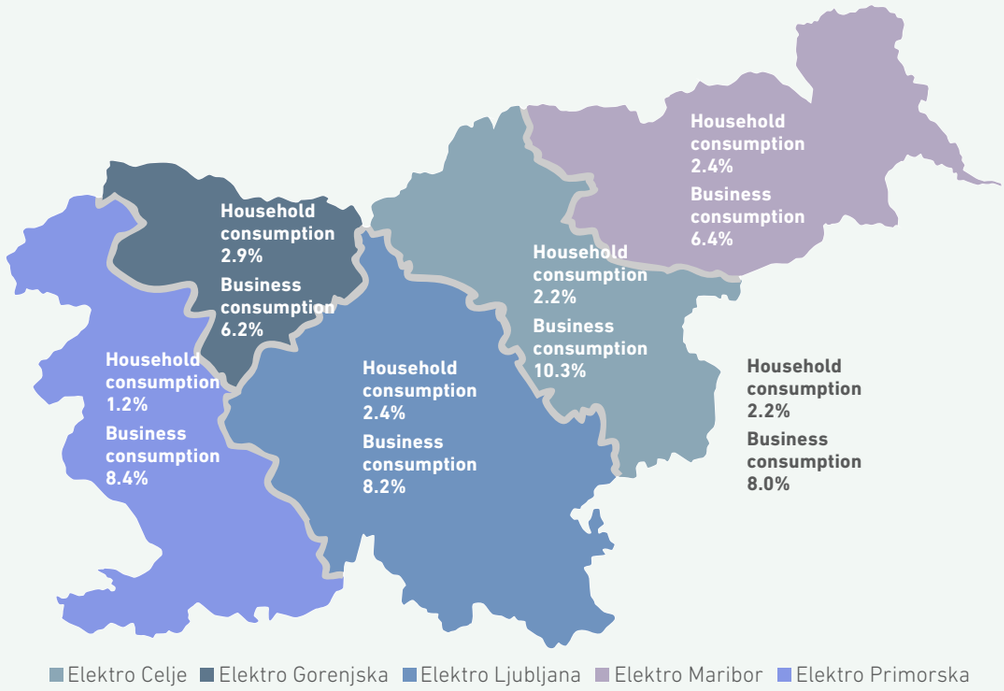
Actual data for 2025 do, however, show varying shares of switches, as can be seen from Figure 152.

An analysis showed that the highest share of supplier switches among household consumers was recorded in the Elektro Gorenjska distribution area, whilst the lowest share was in the Elektro Primorska distribution area.

For business consumers, the differences between individual areas are more pronounced. The highest share of switches was recorded in the Elektro Celje area (10.3%) followed by Elektro Primorska with 8.4% and Elektro Ljubljana with 8.2%. The lowest share of switches was recorded in the Elektro Gorenjska area (6.2%) and the Elektro Maribor area (6.4%). Compared with the previous year, the share of customer switches in the business sector is lower, which is in line with the general trend of a slowdown in activity following a marked increase in 2024.

99 All electricity suppliers supply energy throughout the whole of Slovenia; therefore, all consumers are guaranteed the same choice.

FIGURE 152: SHARE OF SUPPLIER SWITCHES MADE BY HOUSEHOLD AND BUSINESS CONSUMERS IN THE AREAS OF INDIVIDUAL DISTRIBUTION COMPANIES



SOURCES: ENERGY AGENCY, ELES

An analysis of the share of consumers who have not switched suppliers over a three-year period[<?>] reveals very limited activity in the household consumer market. The total number of consumers represents the average number of consumers over the last three years. The result is shown in Table 30.

97% of household consumers have not switched supplier in the last three years

TABLE 30: NUMBER AND PERCENTAGE OF CONSUMERS WHO DID NOT SWITCH SUPPLIER IN THE 2023–2025 PERIOD

SOURCE: ENERGY AGENCY

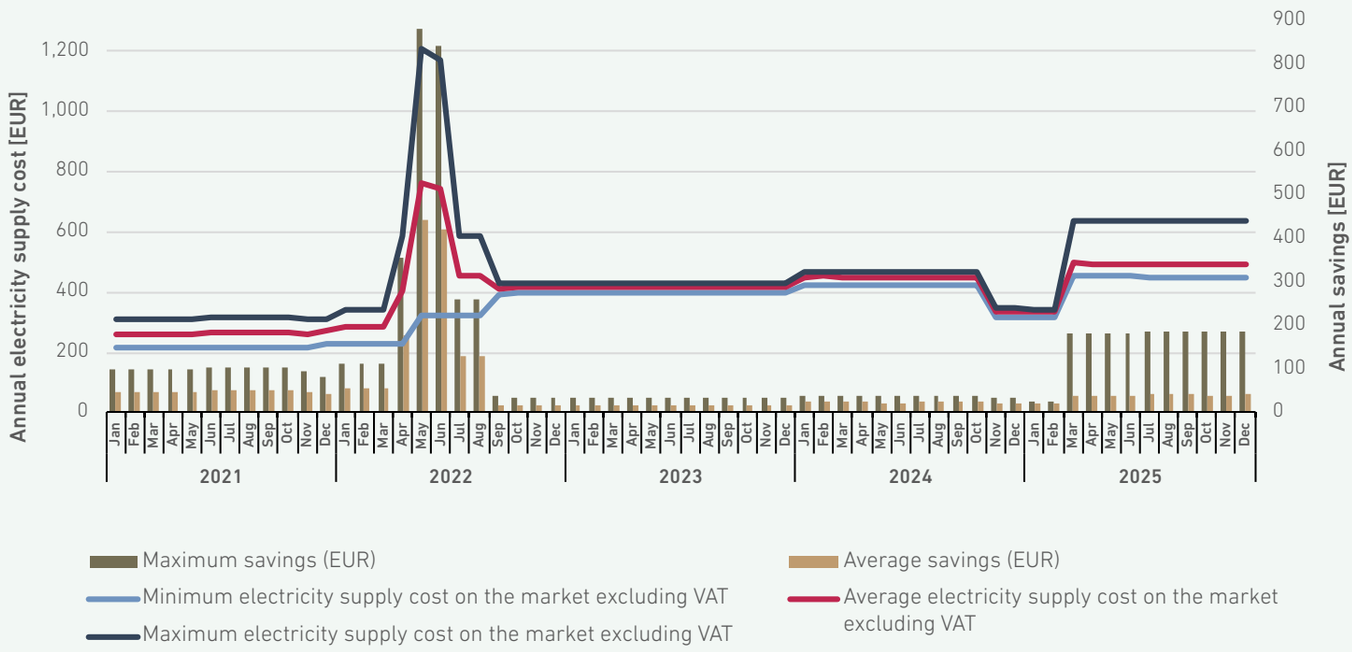
100 Multiple switches are counted only once.

Assessment of the Potential Benefits of Switching Suppliers

By switching its supplier, every consumer can reduce their annual electricity supply costs, coordinate and improve the contractual relations with its supplier and therefore gain additional benefits.

Figure 153 shows trends in the minimum, maximum and average costs of a typical Slovenian household consumer[<?>] for electricity supplied in the retail market on an annual basis, excluding network charges, levies, excise duty and value added tax, based on published offers in the electricity supply cost comparison tool.

FIGURE 153: POTENTIAL ANNUAL SAVING BY SWITCHING SUPPLIER BASED ON THE DIFFERENCE BETWEEN THE MOST EXPENSIVE AND THE CHEAPEST AND BETWEEN THE MOST EXPENSIVE AND THE AVERAGE SUPPLY OFFER IN THE MARKET



SOURCE: ENERGY AGENCY

The maximum annual costs are based on the most expensive offers on the retail market for the supply of electricity[<?>]. The minimum annual costs are based on the most favourable published offer in the supply cost comparison tool, which any consumer can access[<?>]. The average annual cost of electricity supply is calculated as the average of the most favourable and the most expensive offers on the retail market through which supply was provided to customers. At a monthly level, the potential maximum saving is determined by the difference between the maximum and minimum annual costs, whilst the potential average saving is determined by the difference between the average and minimum annual costs.

Maximum annual savings between EUR 25 and 188

Average annual savings between EUR 20 and 44

In 2025, the potential benefit of switching suppliers for household consumers increased more significantly once again, as a result of the wider price spread between offers on the retail market following the period of price regulation. The differences

101 Consumption profile: billing capacity of 8 kW, annual consumption of 2,100 kWh (LT) and 1,996 kWh (HT)
102 According to data from the energy supplier comparison tool, the proportion of household consumers supplied under this offer was approximately 0.09%.
103 According to data from the energy supplier comparison tool, the proportion of household consumers supplied under this offer was approximately 2%.

between the cheapest and most expensive offers increased compared with 2024, which is reflected in higher potential savings for consumers who actively monitor the market and select the most favourable offers.

Despite the increase in the potential benefits of switching suppliers, the average saving remains relatively low, suggesting that the most favourable offers on the market are not significantly lower than the average, but differ primarily from the most expensive offers. This confirms that, by 2025, the market has regained its competitiveness, but has not yet achieved the price dispersion characteristic of the periods prior to the energy crisis.

Measures for Promoting Competition

The Energy Agency monitors the retail electricity market and, in doing so, cooperates with regulatory and supervisory authorities at the national level, e.g. the Market Inspectorate of the Republic of Slovenia, the Slovenian Competition Protection Agency and, when appropriate, independent and non-profit consumer organisations. The Energy Agency's measures are varied and derive from its internal analyses, bilateral operations and the results of public consultations.

In ordinary circumstances, retail electricity prices are not regulated so the Energy Agency does not issue any recommendations on retail pricing. The only exception is the price of electricity for last resort supply, which is regulated and provided by the DSO. The price of that supply is set and made public by the DSO. According to ZOEE, the price must be higher than the market price of the supply to a comparable consumer but it must not exceed it by more than 25%. If the DSO does not set the price or sets it contrary to the regulations, it is set by the Energy Agency. Justified deviations from this methodology are acceptable during a state of emergency in the market.

At the end of 2024, ELES aligned the price of last resort supply for household consumption with market conditions for 2025, setting it at the level of the standard tariff for household consumption of 173.71 EUR/MWh (standard tariff 186.91 EUR/MWh, LT: EUR 158.70/MWh). The price of last resort supply remained unchanged in 2025 and was correspondingly higher than the average market retail price of the seven largest suppliers, which was estimated at EUR 124.03/MWh. The price of last resort supply was set in accordance with the provisions of the ZOEE, as it exceeded the average bid price for a comparable consumer, thereby ensuring the deterrent effect that this mechanism is designed to achieve.

Effective Data Exchange in Key Market Processes

As part of the measures implemented in line with its competences aimed at unifying the most important data exchange processes at the national and regional levels, the Energy Agency has been establishing an efficient data exchange between the market participants, steering the participants towards the use of open standards and the reuse of EU DSO[104] generic models and ENTSO-E models to the greatest extent possible.

The new regulatory framework and the vision for the evolution of energy networks by 2050 envisage the full integration of energy networks (electricity, gas and heat) and the consumers' complete engagement (development of a flexibility market). The harmonisation of data exchange processes using open standards in energy markets is thus becoming even more important and a crucial action to eliminate certain barriers to entry for new market participants and to reduce entry costs. Data exchange has been becoming more and more complex and is usually required in near real-time or real-time.

In retail markets, too, the development of new business models and energy services based on access to detailed metering data there is a clear need to harmonise access to and the exchange of data on consumption and generation, as access to this data must be provided – either centrally or locally (at the metering point) – to authorised parties (aggregators, suppliers, energy service providers, etc.) on the basis of the consumer's authorisation. To support the green transition, legislative frameworks must ensure adequate levels of data protection and privacy, tools to empower and encourage active consumption, a non-discriminatory environment and a level playing field for all stakeholders, and a technology-neutral regulatory framework, while recognising the new roles of traditional actors.

104 Successor to the ebIX® projects.

Directive (EU) 2019/944 sets out not only the requirements for the effective and secure exchange of data but also the context for ensuring interoperability. EU Member States are expected to enable full interoperability of energy services across the EU in order to promote competition and avoid excessive administrative costs. A primary objective is also to further protect consumers and empower them through digitalisation so that they can play a more active role in the energy transition. The European Commission's strategy is to ensure harmonisation through the implementation of a process reference model[105], within which national practices and specificities can largely be accommodated. Directive (EU) 2019/944 requires the Commission to adopt requirements on interoperability, as well as non-discriminatory and transparent procedures for access to data on metering, consumption and the data necessary for customer switching, demand response and other services. The first step is Commission Implementing Regulation (EU) 2023/1162 of 6 June 2023 on interoperability requirements and non-discriminatory and transparent procedures for access to metering and consumption data[106], which will be followed by an implementing regulation to implement the 24-hour supplier switching process, expected in 2026. These implementing regulations are one of the key outcomes of the EU Energy Digitalisation Action Plan. The requirements and procedures implemented in accordance with this new secondary legislation will ensure that a single common reference model is used for the exchange of metering and consumption data across EU Member States.

Under the aforementioned implementing regulation, consumers will be given easy access to their metering data and will be able to consent to the use of their energy consumption or generation data by a third party in ways that benefit them. This may include, for example, receiving a personalised assessment of which contract would be the best and cheapest to meet their energy needs, information on the installation of renewable energy sources, or estimates of energy savings. Subsequent regulations will focus on data relating to the aforementioned supplier switching, demand response and other services. The scope of application of demand response will be regulated at EU level by a dedicated EU network code. In May 2024, ACER received a proposal from the electricity system operators (EU DSOs and ENTSO-E) for a draft of this network code, including amendments to three related electricity regulations. ACER reviewed the draft and consulted on it in autumn 2024. Following final amendments, ACER submitted its proposal to the European Commission; however, the Code has not yet entered into force in 2025.

The new rules on interoperability are a key factor for the European Green Deal and REPowerEU, as they empower consumers to play an active role in the energy transition and give them access to more affordable energy. For businesses and transmission and distribution system operators, these rules will facilitate their operations within the internal market and enable the simple, secure and efficient flow of data to those who need it. On the other hand, this will help operators improve existing processes and encourage the development and provision of new energy services, such as energy sharing and demand response.

The implementation of data exchange between participants in the electricity market in Slovenia largely follows the relevant reference models (e.g. the harmonised model of roles in the energy market ENTSO-E/ebIX/EFET[107], etc.). In 2025, as part of the DSO public service, work began on modelling processes to establish the concept of energy sharing, based on the appropriate management of metering points. The process is still hampered by deviations in implementation from the reference model.

The National Data Hub online data portal mojelektro.si is designed to ensure the compatibility of the centralised data access with the draft implementing act on access to the data on consumption (B2C segment). However, the implementation of data exchange in the area of flexibility is still at an early stage, with some deviations from the reference models, for example in the implementation of roles and responsibilities. As this is a developing area and will be harmonised with the dedicated EU network code, this incompatibility is of a transitional nature.

Interoperability is ensured by the Act on the identification of entities in the data exchange among participants in the electricity and natural gas markets, which market participants to use standardised identifiers of key data entities in the electronic exchange of data in the market. In accordance with the Energy Agency's general act, all key data entities in an electronic data exchange have to be determined using standardised identifiers.

The Energy Agency has been implementing its harmonisation strategy through public consultations, bilateral cooperation and participation in professional platforms, such as the IPET Section.

105 A set of reference procedures for data access, describing the exchange of information between roles (not stakeholders). It includes a semantic model of the data being exchanged, as well as a description and interlinking of the systems and procedures used to control, access and exchange this data.

106 https://eur-lex.europa.eu/legal-content/SL/TXT/PDF/?uri=CELEX:32023R1162

107 The latest version of the model is 2025-01 dated 4 December 2024

In 2025, the IPET Section continued to act as a unifying professional forum for the exchange of data in the energy market, bringing together operators, producers, suppliers, providers of energy and data services, and the regulator. The year was marked by an organisational change, as a new section management team was elected in May. The section focused primarily on current challenges relating to billing, data exchange and adaptation to new market and regulatory conditions. The topics discussed included the quality and timeliness of data for balance settlement, the introduction of the new network code, the expected consequences of integration into European balancing platforms, and technical improvements to data exchange. Energy communities also featured prominently in the discussions, particularly issues relating to data for generation facilities included in such communities. As a professional platform, the Section has also strengthened its membership, with three new full members and one observer member joining.

Provision of Standardised Data Services

Data exchange between electricity distributors and suppliers, end users and their authorised representatives (e.g. aggregators, system service providers) is ensured in a standardised manner, centralised at the EVT data hub.

The following **EVT modules** are relevant for data processing purposes:

- **Moj elektro Portal** – an online user portal intended for all end-consumers and their authorised representatives who can access all the metering points and metering and accounting data they are entitled to, regardless of their supplier or distribution area. It includes the 'Flexibility' service for the collection of flexibility bids from active users of the distribution system and entry into the temporary flexibility register of electricity distribution companies. In 2025, work began on an upgrade to facilitate the registration and management of energy sharing;
- **Portal CEEPS** – it enables centralised imbalancesettlement, access to and export of15-minute data based on balance sheet eligibility,the submission and entry of meter readingson behalf of end-users, carrying out the supplierswitching process in line with the SONDSEE requirements,access to accounting data at the metering points, etc. All electricity suppliers,Borzen, the Centre for RES/CHP support, thclosed distribution systems and the distribution system operator are registered on the portal;
- **Mass data exchanges – B2B services via a messaging queue**, within which mass real-time data transfers are carried out daily for each authorised user, daily transmission of available 15-minute metering data for the previous day, the addition of new metering points to the daily transmission, and real-time queries for available 15-minute metering data;
- **WS/REST-API** are data access services for the distribution system operator (WS) and planned REST API services for end-users or authorised representatives to access data without having to register on the Moj elektro portal each time. The REST API services are under development and will enable further development and utilisation of data from the advanced metering system for consumption monitoring and analysis to support new tariff systems;
- **Web services**, for the transmissionsystem operator to provide real-time generation data and structural data on metering points.

These modules utilise the functionalities of the new intermediate layer of the AMI (AMS) architecture, namely the platform for the centralised management, validation and replacement of detailed metering data (**POMP**). The POMP intermediate layer enables the AMS operator to adopt a unified approach to ensuring the quality of metering data at the highest application layers, i.e. at the level of the national data hub (Moj elektro, CEEPS, etc.). The methodological and technological concepts implemented in POMP enable Informatika d.o.o., as the central IT service provider for EDPC to carry out the necessary data processing in support of network charge billing. Furthermore, they ensure the computerisation of business processes and provide advanced integration mechanisms, while also enabling the implementation of flexible business models. By introducing advanced data and streaming solutions, POMP enables the scalable processing and storage of big data, which can also be utilised directly and effectively in numerous scenarios based on advanced data analytics and machine learning. The evolution of POMP into a platform for advanced analytics is still in the preparatory phase, and POMP's capacity to potentially process increased volumes of data closer to real time has not yet been assessed.

The POMP platform is designed to allow integration with various additional interfaces, ensuring the system's flexibility and scalability. The transfer of metering data from the lower architectural layer – comprising the Head End Systems (HES) of electricity

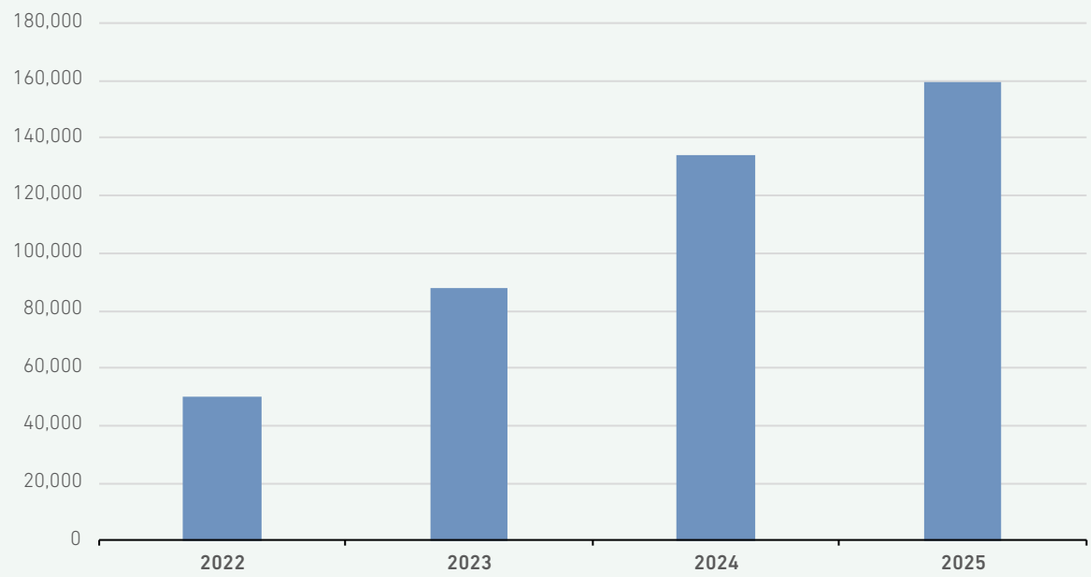
distribution companies – to the POMP platform takes place via real-time data feeding ('push' mechanism) and the retrieval of historical data.

All metering points are included in the EVT, and each metering point owner or their authorised representative is granted access to the data via the EVT. Depending on the equipment at the metering point and the scope of metering data collection, all available data is already being transferred to the system. All standardised data services (B2C, B2B, B2G) are also established and provided at the EVT level.

At the EVT level, development activities took place in 2025 to support adjustments to the network charge calculation methodology and other key process innovations in the field of metering and billing data processing.

Consequently, the number of users of the Moj elektro portal is constantly growing. By the end of 2025, almost 159,500 metering points had been registered on the portal (approximately 19% more than the previous year).

FIGURE 154: TRENDS IN THE NUMBER OF REGISTERED METERING POINTS ON THE MOJELEKTRO.SI PORTAL FOLLOWING THE IMPLEMENTATION OF THE TARIFF REFORM



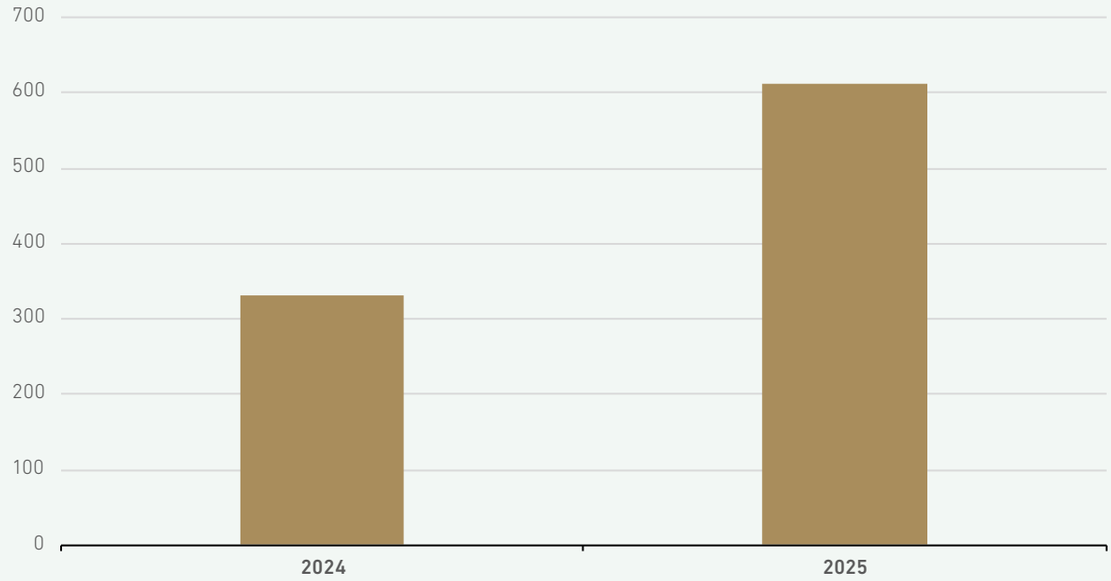
SOURCES: EDCs

This rapid growth is based on gradually raising awareness and keeping consumers informed through the implementation of the Energy Agency's communication strategy regarding the objectives of the network charge reform.

Thanks to the appropriate equipping of metering points for generation sources with an installed capacity of over 100 kW (more than 750 metering points with a total capacity of 420 MW), 15-minute data is transmitted in near real time to the transmission system operator. Solar and hydroelectric power stations dominate this near-real-time exchange of data on renewable energy generation, whilst other sources together account for less than 20%.

The definition of the set of standardised data services, which the distribution system operator provides to system users free of charge or for a fee, has finally been satisfactorily defined in the new version of SONDSEE. Following a consultation process and corrective measures taken by the Energy Agency, the electricity operator has remedied key shortcomings regarding effective local access to real-time metering data (via the I1 interface of the smart meter) for all customers equipped with smart meters, and the conditions for replacing a metering device at the request of an active consumer have also been agreed with the Energy Agency.

FIGURE 155: TREND IN THE NUMBER OF ACTIVE CONNECTIONS TO REAL-TIME METERING DATA VIA THE LOCAL I1 INTERFACE ON THE METERING DEVICE



SOURCES: EDCs

Scope and Quality of the Data Provided in the Framework of the AMS

On the basis of the Regulation and the regulatory oversight associated with this task, the Energy Agency monitors the scope and quality of the provision of metering data within the advanced metering infrastructure using more than 20 different key performance indicators (KPIs). Using these KPIs, the Energy Agency monitors progress in the roll-out of the AMS in terms of the share of smart meters installed and integrated into the AMS, as well as the availability of various sets of metering data of different types (e.g. 15-minute metering data for the previous day (D-1) and for the previous month (M-1), validated/unvalidated) at the level of the handover point, metering point, metering location and user, the proportion of metering devices by individual communication technologies, etc.

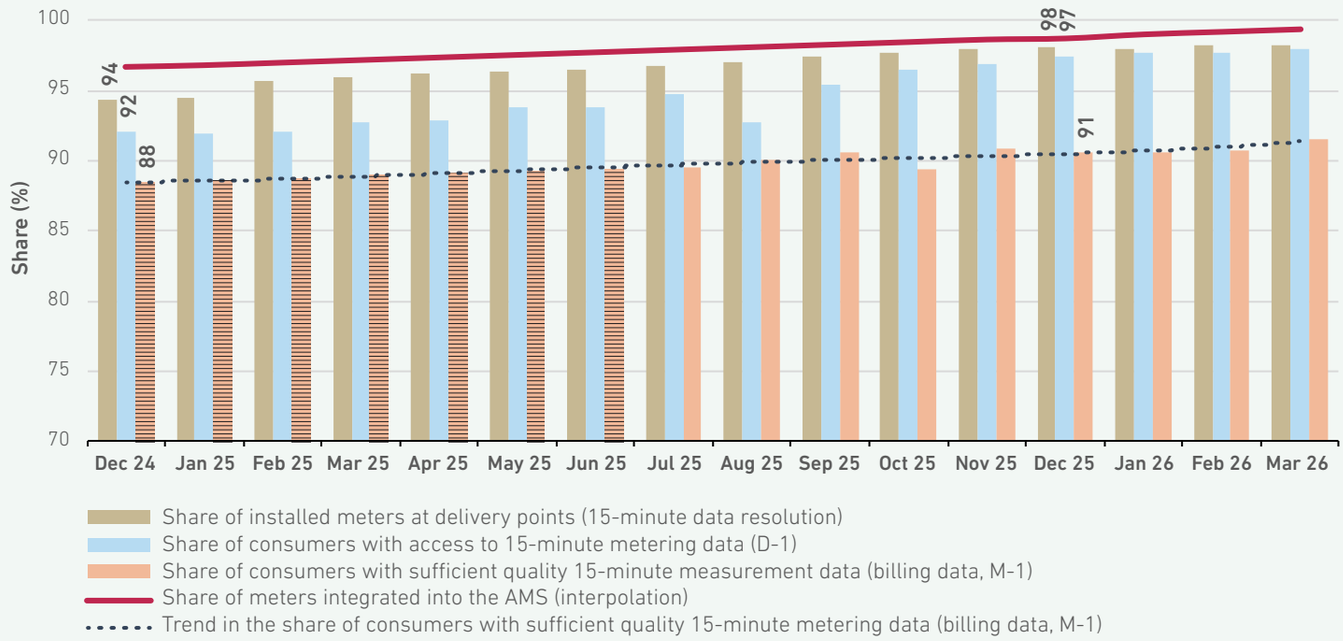
TABLE 31: SELECTED KEY PERFORMANCE INDICATORS RELATED TO THIS ISSUE

#	KPI
1	**The share of installed meters at the point of delivery (15-minute resolution):** the share of metering equipment capable of providing the data necessary for the billing of the network charge and other services
2	**The share of users with guaranteed access to 15-minute metering data (D-1):** user access to unvalidated 15-minute data on use/production for the previous day at the national data hub level (mojelektro.si)
3	**The share of users at the point-of-delivery with 15-minute data of sufficient quality (M-1):** user access to validated 15-minute data on use/production for the previous month (with the substitution of missing values) at the national data hub level (mojelektro.si) – accounting data (15-minute profiles)
4	**The share of built-in meters included in the AMS:** the share of meters with adequate communication facilities included in the AMI whose data is processed in accordance with the range of standardised services of the AMI (this share also includes meters that record measurements with a resolution of more than 15 minutes)

SOURCES: ENERGY AGENCY, ELES

The new network charge methodology is based on the use of 15-minute accounting data on consumption or achieved capacity. The new methodology is fairer in the allocation of costs between the different user groups and mostly results in lower network charges for LV-connected final consumers. It is therefore essential that the largest possible share of consumers is provided with adequate metering to enable billing and ensuring that users enjoy the full benefits of this methodology, which is CEP-compliant and designed to support the green transition.

FIGURE 156: TRENDS OF THE SELECTED KEY INDICATORS IN THE AMS[<?>]



SOURCES: ENERGY AGENCY, ELES

Deviations resulting from unsatisfactory data processing at the measurement centres or the unsatisfactory implementation of the data 'cleaning' process due to sensitivity to interference[<?>], and inefficiencies linked to the incorrect interpretation of EU legislation regarding the use of detailed measurement data within the AMS[<?>], were either reduced or eliminated in 2025. Data on the status indicator for the share of users with 15-minute metered data of assured quality (fewer than 10% of invalid or missing 15-minute values at the M-1 level) also point to a gradual stabilisation of the situation. Although certain fluctuations were observed during the most recent monitoring period (June 25–March 26), there is a noticeable moderate trend towards further improvement, with the rate of improvement gradually increasing.

The trend towards improved quality of measurement data, already observed in the previous period, continues and strengthens further in 2025. Analysis of the trend line for a comparable time period (Mar 25–Mar 26) shows further growth, with the rate of improvement increasing by approximately 2%. This development is also confirmed by the projection curve showing the proportion of users with guaranteed adequate quality of 15-minute data (Figure 156). shows further growth, with the rate of improvement increasing by approximately 2%. This development is also confirmed by the projection curve showing the proportion of users with guaranteed adequate quality of 15-minute data (Figure 156). The graph shows that the proportion of advanced metering devices installed and the proportion of users with guaranteed access to 15-minute data (D-1) are almost identical towards the end of the period (≈98–99%)–indicating a high level of technical availability of the system. At the same time, the proportion of users with guaranteed data quality suitable for billing purposes (M-1) lags behind (≈90–92%) and is growing more slowly, confirming that the key challenges are no longer related to data collection, but rather to data quality, completeness and timely processing.

The AMS communication layer plays a key role in this regard, particularly given the limitations of PLC technology. The proportion of metering devices using G3 PLC communication in the higher frequency range (FCC 154.7–487.5 kHz) remains low (approximately 5% according to ELES), which means that the potential of this technology to improve the reliability and quality of data transmission has not yet been fully utilised. This may be directly reflected in the observed discrepancy between data availability (D-1) and its billing accuracy (M-1). We assess that, despite the technological limitations of PLC technology, further improvements are still possible,

108 Columns with a hatched pattern indicate poor data quality or other anomalies.
109 Due to technical limitations in the use of Power Line Communication (PLC).
110 The data services associated with these data have been inadequately prioritised and not provided for many years.

particularly through greater use of the FCC frequency band on G3 PLC communication links and by specifically addressing critical handover points (PPM) using alternative communication technologies, which may even be decoupled from the meter.

As already noted in the 2024 report, due to the specific characteristics of the networks in individual distribution areas and the varying degrees of maturity in managing the communication weaknesses of PLC technology, the levels of data quality achieved differ between distribution companies and also within their respective areas. Nevertheless, the aggregated indicators confirm a stable and linear trend of improvement without any discernible systemic fluctuations. The Agency's assessment that the proportion of compliant metering devices and the proportion of delivery and collection points with the required data quality is gradually increasing is also being realised, thereby meeting regulatory requirements.

Notwithstanding these positive trends, further improvement in data quality remains a key priority. The introduction of a new network charge calculation methodology, based on 15-minute billing data, increases the dependence of market and system processes on the reliability and timeliness of data. It is therefore necessary to continue implementing measures to improve the reliability of communications, particularly at the level of the PLC infrastructure, whilst at the same time upgrading data processing procedures to ensure that data is made available to market participants as quickly as possible.

Other Measures

On the electricity market, the same rules apply as for other types of goods with regard to preventing restrictions on competition and abuses of a dominant position. The Slovenian Competition Protection Agency (AVK) assesses restrictive agreements between undertakings and abuses of a dominant position within the framework of restrictive practices, in accordance with the provisions of the Competition Protection Act (ZPOmK-2) and, where the conditions are met, also in accordance with Articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU).

Publicly available data for 2025 do not indicate that a final decision was issued in 2025 finding a breach of competition rules by undertakings operating in the electricity market. However, on 18 November 2025, the Competition Authority carried out an unannounced inspection at the business premises of HSE on the basis of an order issued by the District Court in Ljubljana, namely due to substantiated grounds for suspicion that the company had abused its dominant position in the market for the production and wholesale supply of electricity whilst selling electricity wholesale in the Republic of Slovenia. The AVK has expressly emphasised that the conduct of the investigation does not prejudge the existence of a breach of the ZPOmK-2 or the PDEU, nor does it prejudge the outcome of the proceedings or whether such proceedings will be initiated.[<?>]

On the basis of publicly available data for the year 2025, it cannot be concluded that a breach of competition rules has been definitively confirmed on the electricity market; whilst, at the same time, proceedings or investigative measures by the AVK were publicly noted on the wholesale electricity market on suspicion of abuse of a dominant position.

Financial resilience and suppliers risk management

The financial resilience of suppliers is becoming an important element of the functioning of the retail market. The experience of the energy crisis has shown that the risks associated with the inadequate management of procurement strategies, price exposure, liquidity and capital adequacy of suppliers do not merely affect individual market participants, but can also have wider consequences for consumers, confidence in the market and system costs. Consequently, monitoring of the retail market encompasses not only prices, market shares and supplier switching, but also the aspects of financial resilience, risk management and suppliers' ability to ensure energy supply.

In 2025, the Energy Agency developed a methodology for drawing up a strategy and adopting measures to mitigate the risks faced by electricity suppliers in relation to fixed-price electricity supply contracts, in accordance with Article 27a of the ZOEE, which sets out in more detail the obligations of suppliers and the regulator's role in managing risks. The methodology came into effect in 2026.

111 Further information https://www.varstvo-konkurence.si/informacije/novica/agencija-izvedla-nenapovedano-preiskavo-1

Methodology for Developing a Strategy and Adopting Measures to Mitigate the Risks of Electricity Suppliers in Relation to Fixed-Price Electricity Supply Contracts

The energy crisis of 2021 and 2022 exposed significant vulnerabilities in the electricity market, particularly among suppliers offering fixed-price contracts to final customers without adequately hedging their procurement positions. Amid substantial fluctuations in wholesale prices, such suppliers were exposed to considerable financial risks, which in several EU Member States led to the cessation of their operations and had adverse effects on customers and market stability.

In response to these circumstances, Directive (EU) 2019/944 was amended as part of the reform of the European electricity market. Directive (EU) 2024/1711[112] introduced Article 18a, requiring competent authorities to ensure that suppliers establish and implement appropriate risk-hedging strategies and take reasonable measures to mitigate the risk of failure to fulfil their supply obligations. The purpose of this framework is not merely the formal preparation of strategies, but rather the effective enhancement of suppliers' resilience to changes in wholesale electricity prices that could affect the economic viability of their contracts with customers, thereby reducing risks for final customers and supporting the stable functioning of the market.

This requirement was transposed into the Slovenian legal system through Article 27a of the Electricity Supply Act. This provision stipulates that electricity suppliers offering fixed-price contracts must establish and implement a risk-hedging strategy to mitigate risks arising from changes in wholesale electricity prices. At the same time, the Act requires the Energy Agency to prescribe, by means of a general act, the methodology for developing such strategies and to define their mandatory content.

A specific feature of the Slovenian regulatory framework is that the Energy Agency must carry out supervision in a manner that does not impose an undue burden on suppliers or interfere with their day-to-day operations, while it is not permitted to review individual supplier positions or strategies. However, this limitation does not mean that supervision is absent. Within its statutory powers, the Energy Agency may establish general rules, verify the existence of strategies and their compliance with the mandatory requirements, monitor the implementation of prescribed obligations, and review data, indicators and stress-test results.

In developing the methodology, the Energy Agency drew on the European legal framework, good practices from other EU Member States and an in-depth analysis of the Slovenian market. Consideration was given to past cases of suppliers ceasing operations, business conditions, financial indicators, market structure and data collected through a questionnaire addressed to suppliers. The key challenge was to design a system that would be effective while also being proportionate and consistent with the statutory restriction on the direct examination of individual strategies or trading positions.

On this basis, a methodological framework was developed, according to which the risk-hedging strategy comprises several key substantive components. These include general provisions defining the purpose, scope and fundamental concepts, as well as the mandatory content of the strategy, covering objectives, risk management, liquidity and organisational aspects.

The methodology also provides for the adjustment of requirements according to the size of suppliers and the structure of the market, thereby ensuring compliance with the principle of proportionality. Minimum requirements for risk hedging are also established, in particular regarding the reference level of coverage of obligations arising from fixed-price contracts, as well as minimum requirements for conducting stress tests, which enable the assessment of suppliers' resilience to adverse market developments.

In addition, the framework includes requirements concerning reporting, monitoring and supervision by the Energy Agency, with supervision limited to verifying formal compliance and aggregated indicators. It also sets out restrictions and other provisions defining the entities subject to the requirements and applicable exemptions, as well as measures aimed at ensuring the availability of risk-hedging instruments.

Finally, the methodology contains transitional and final provisions governing the introduction of the system and its gradual implementation. An important element of the methodology is the principle of proportionality. The requirements are designed to take into account the size of suppliers, the scale of their customer portfolio, access to their own or contractually secured generation resources, and the extent of their exposure to price risks. In this context,

112 Directive (EU) 2024/1711 of the European Parliament and of the Council of 13 June 2024 amending Directives (EU) 2018/2001 and (EU) 2019/944 as regards improving the Union's electricity market design

exposure to price risks refers in particular to the risk that wholesale electricity prices may change in such a way that, due to previously assumed contractual obligations towards consumers, the structure of sales products, or insufficient hedging of electricity procurement volumes, a supplier is no longer able to perform its contracts on an economically sustainable basis. The methodology therefore does not rely on treating all suppliers in the same manner, but rather on an assessment of their actual risks and business model. This reduces the risk of excessive interference with suppliers' operations while enabling the Energy Agency to monitor risks relevant to market stability and the protection of final consumers.

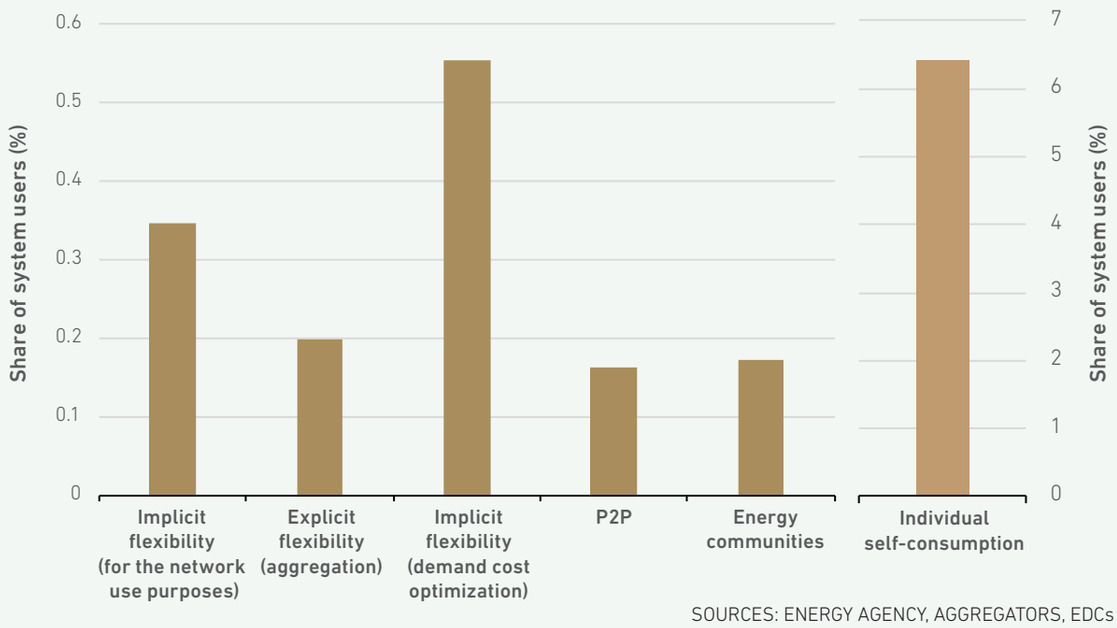
The active involvement of stakeholders, particularly electricity suppliers, who are the key actors responsible for implementing the statutory requirements, also played an important role in the development of the methodology. Such an approach contributed to the improved quality, transparency and acceptability of the final regulatory framework.

The Methodology[113] was published in the Official Gazette of the Republic of Slovenia on 23 January 2026 and entered into force on 7 February 2026. It established a comprehensive framework for managing the risks faced by electricity suppliers in relation to fixed-price contracts.

Active Consumption, Flexibility Market and Other Development-Related Aspects

Active consumption is one of the key factors that would reduce greenhouse gas emissions and increase the share of RES in the end-use of energy and the electrification of heating and traffic, while still ensuring an appropriate level of cost-effective supply quality. Active consumers can adjust their consumption and production of electricity to their needs and external signals and offer flexibility services in the electricity market independently or via aggregators.

FIGURE 157: INDICATIVE SHARES OF DIFFERENT TYPES OF ACTIVE CONSUMPTION



SOURCES: ENERGY AGENCY, AGGREGATORS, EDCs

113 Act on the methodology for drawing up a strategy and adopting measures to mitigate the risks faced by electricity suppliers in relation to fixed-price electricity supply contracts

In May 2024, ACER received a proposal for new network codes on demand response[114], prepared by EU DSOs and ENTSO-E in cooperation with TSOs and DSOs, which also includes amendments to three related electricity network codes on: system balancing, system operation, and consumer connection. ACER supplemented the draft and conducted a public consultation in October 2024. ACER submitted the final proposal for the new code to the European Commission on March 7, 2025, which estimates that it will prepare the final draft of the text during the summer of 2026, followed by coordination at the level of the cross-border committee[115] and subsequently the adoption of the final text.

At the same time, the area of flexibility is developing in a more or less harmonised manner and with varying intensity in the EU and also in Slovenia. Numerous research projects and studies are underway, and the first implementations are already taking place. The absence of a network code for demand response, which will also form the basis for the planned implementing regulations in the field of interoperability, particularly in the area of data exchange, represents a certain obstacle to progress further.

Within the framework of standardised data services, the 'Flexibility' service is available on the Moj elektro and CEEPS portals to collect flexibility offers from active distribution system users and enter them in the temporary register of electricity distribution companies' flexibility. In 2025, Elektro Ljubljana published a call for tenders to find providers of flexibility services[116] for ten overloaded transformer stations. After three months, no one applied.

Aggregation

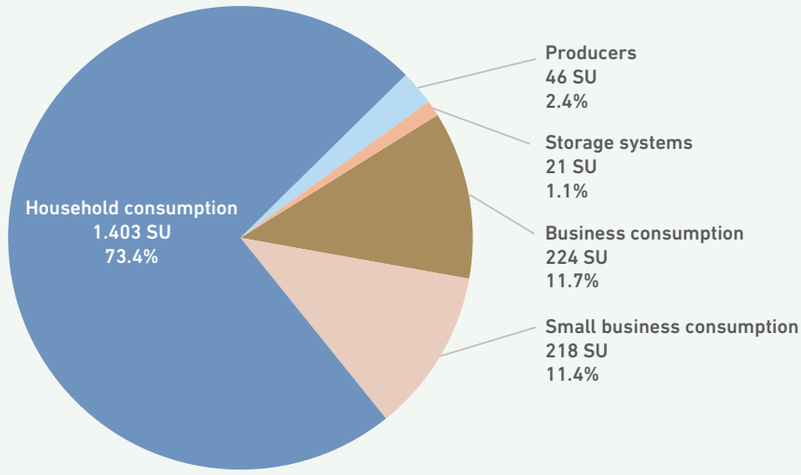
The role of an aggregator on the electricity market may be performed by an independent aggregator or assumed by an electricity supplier. At the end of 2025, there were six[117] active aggregators on the Slovenian electricity market, all of which also acted as electricity suppliers. In addition to their own flexibility resources, the aggregators' portfolios also included 1,912 system users. A given system user may be included in several portfolios at the same time. Aggregators estimate that system users collectively contributed 57.4 GWh of flexibility energy, representing 22.5% of the total energy traded by aggregators. Significantly, the approximately fivefold increase in the volume of aggregated energy traded using external flexibility resources compared with the previous year can largely be attributed to the expanded portfolios of external resources held by two aggregators with storage facilities[118].

Six active aggregators on the Slovenian market

A fivefold increase in trading volume through foreign flexibility resources

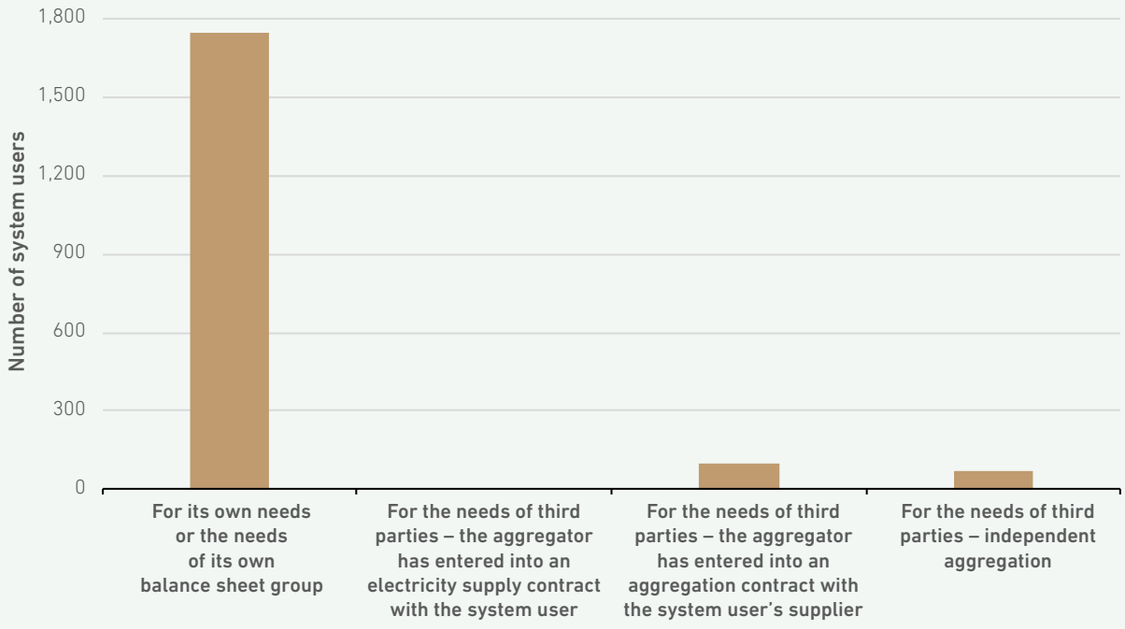
114 Demand response basically means a change in electricity consumption when consumers (individually or collectively) respond to a market signal, such as a change in electricity prices or a financial incentive to increase/decrease/shift the timing of their electricity consumption. In the context of these framework guidelines, only active participation in demand response in electricity markets is covered.
115 Electricity Cross-Border Committee on Demand Response Network Code
116 Product: active energy for congestion management
117 GEN energija, GEN-I, HSE, KOLEKTOR sETup, NGEN, Petrol
118 EDCs also reports accelerated growth in the use of energy storage systems by network users.

FIGURE 158: STRUCTURE[119] OF CONSUMERS (C) IN THE AGGREGATION, WHERE STORAGE AND GENERATION DEVICES MAY ALSO BE LOCATED CONNECTED BEHIND THE DELIVERY POINT OF THE USER



SOURCES: AGGREGATORS

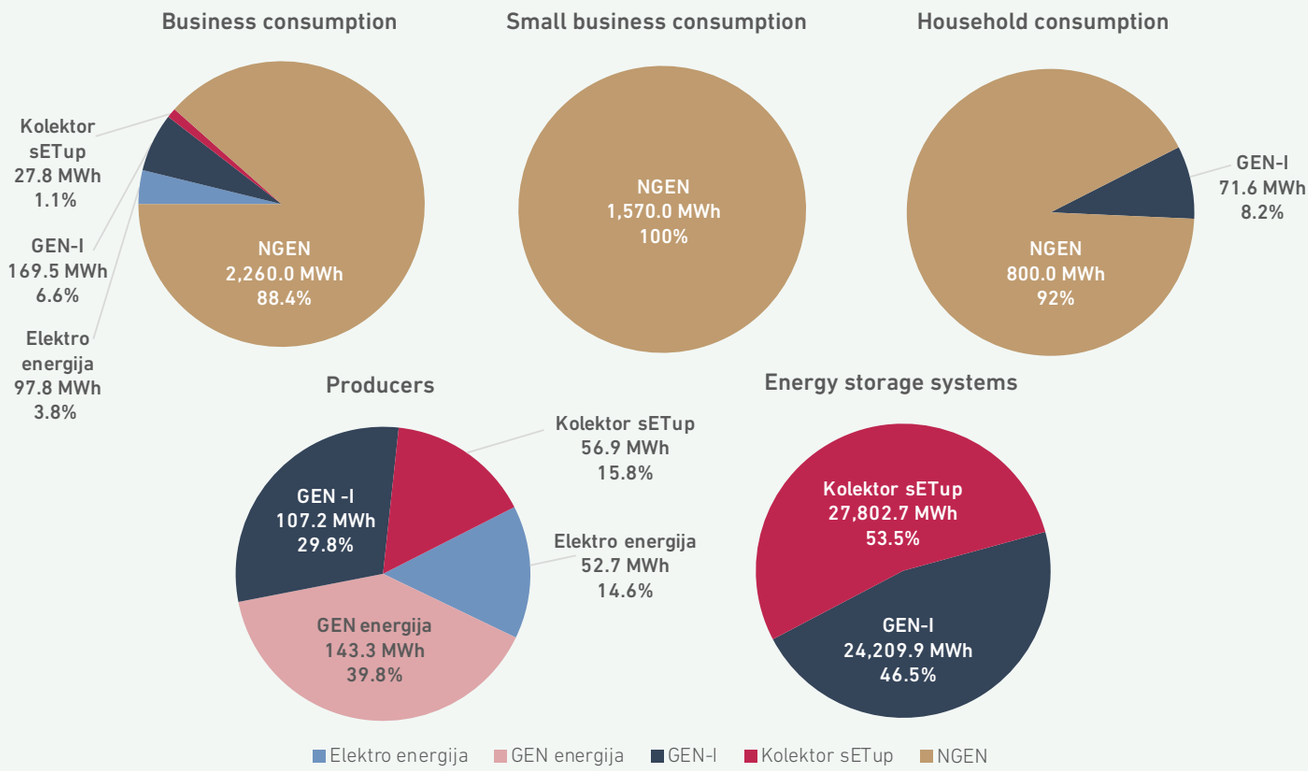
FIGURE 159: THE NUMBER OF SYSTEM USERS IN PORTFOLIOS DESIGNED FOR VARIOUS NEEDS, WITH EACH USER POTENTIALLY BEING PART OF MULTIPLE PORTFOLIOS



SOURCES: AGGREGATORS

119 The difference between the total and the sum of the individual percentages is due to rounding.

FIGURE 160: ESTIMATED SHARES[120] OF FOREIGN SOURCES' FLEXIBLE ENERGY BY AGGREGATORS AND TYPES OF SYSTEM USERS



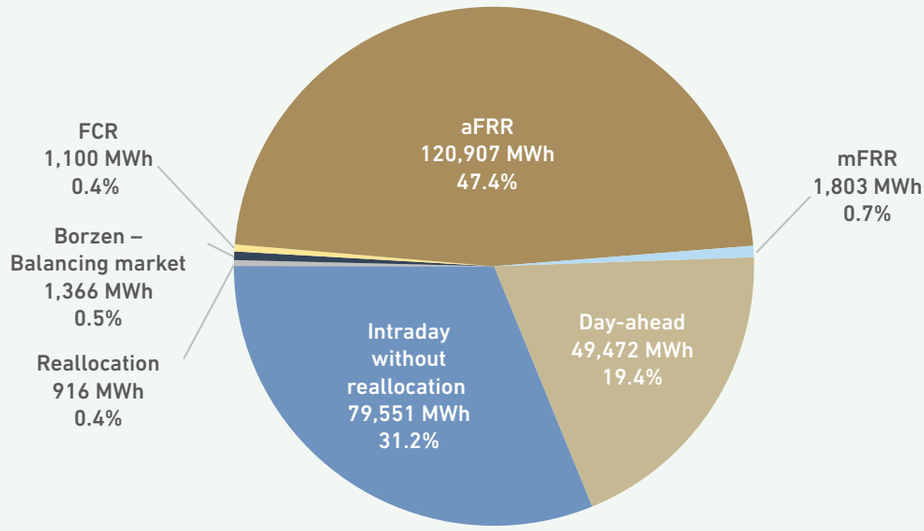
SOURCES: AGGREGATORS

Aggregators traded on all Slovenian wholesale markets. Figures from 161 to 163 show the shares of energy by individual markets or services, calculated as the sum of energy purchases (or a reduction in generation and/or an increase in consumption) and energy sales (or an increase in generation and/or a reduction in consumption) on the markets listed. The total volume of energy traded by aggregators is defined as the sum across all markets and amounted to 255 GWh in 2025.

255 GWh of energy traded by aggregators

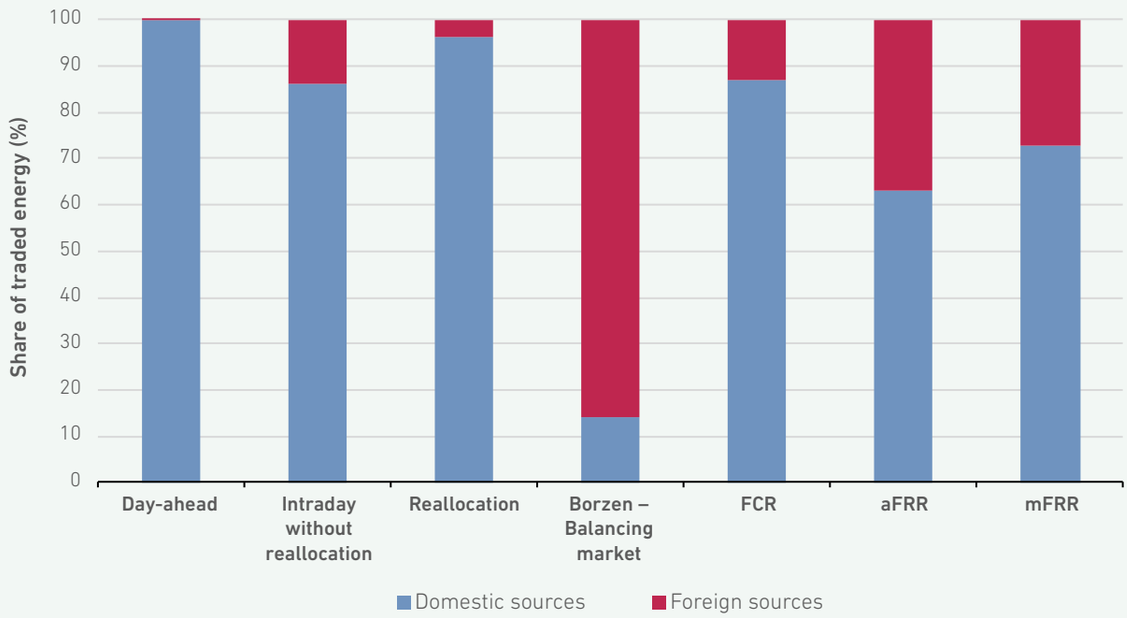
120 The difference between the total and the sum of the individual percentages is due to rounding.

FIGURE 161: STRUCTURE OF AGGREGATED ENERGY TRADING BY INDIVIDUAL MARKETS OR SERVICES AND CORRESPONDING SHARES



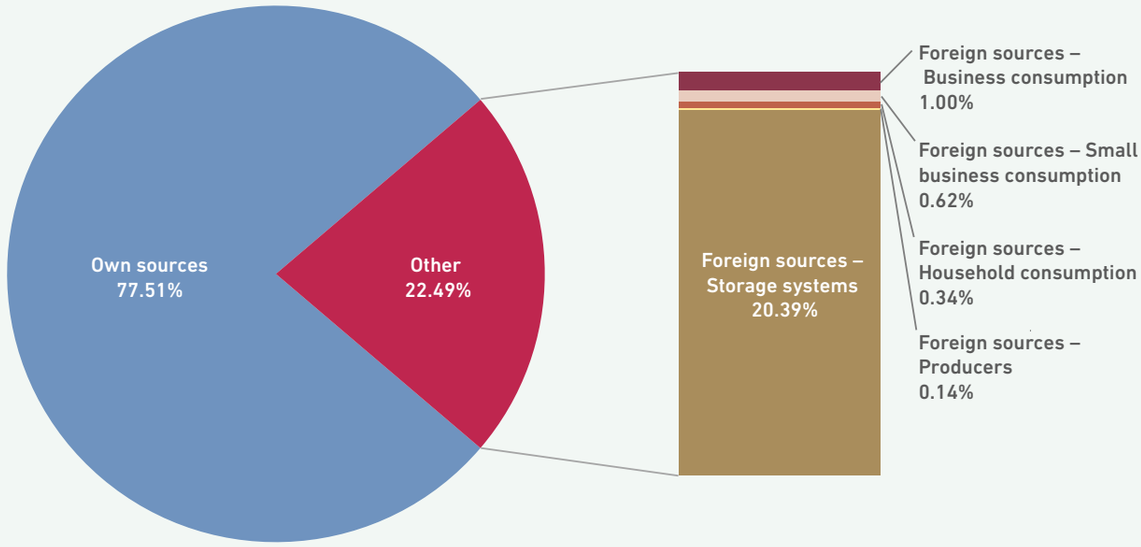
SOURCES: AGGREGATORS

FIGURE 162: MARKET SHARES OF TRADED ENERGY ACCORDING TO THE OWNERSHIP OF RESOURCES



SOURCES: AGGREGATORS

FIGURE 163: STRUCTURE OF THE SOURCES OF TRADED ENERGY FROM AGGREGATION IN TERMS OF THE 255 GWh TOTAL



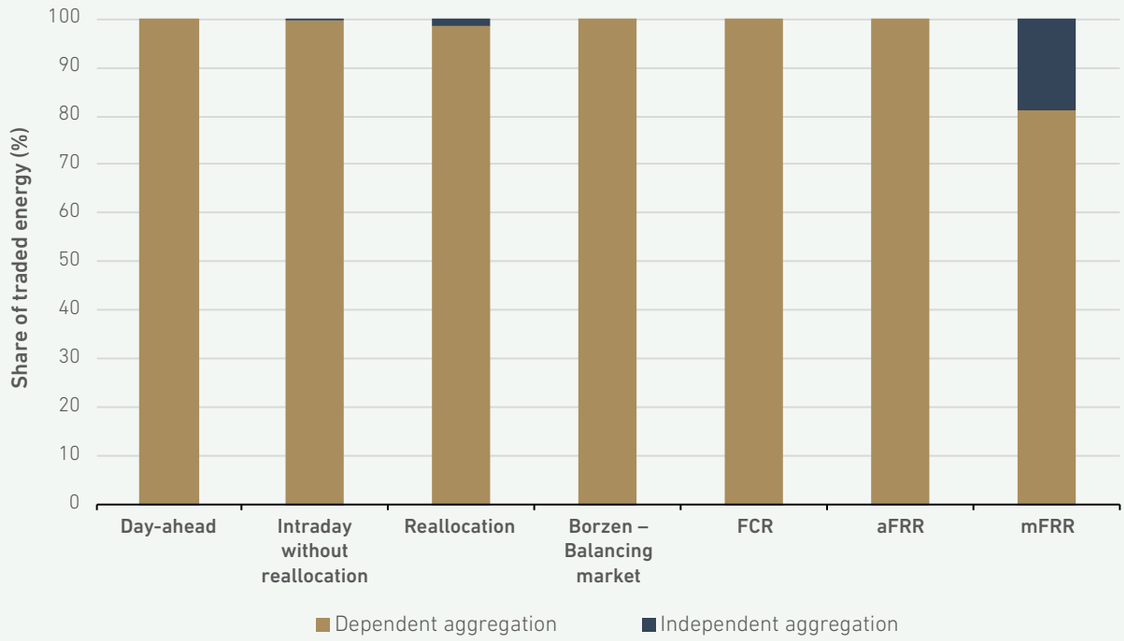
SOURCES: AGGREGATORS

The volumes of independent aggregation shown in Figures 164 and 165 are therefore the aggregated volumes of flexibility resources, to which the aggregator did not itself supply electricity, and for which the aggregator did not have a contractual relationship with the electricity supplier of these flexibility resources for the purpose of aggregation, nor did it have any ownership or operational relationship with the electricity supplier of these flexibility resources.

Data on connected system users and independent aggregation show that, despite the presence of six aggregators on the market and a regulatory framework in line with the 'Clean Energy for All Europeans' legislative package, only a small share of the traded flexibility energy was supplied via independent aggregation, namely 0.3% of the energy traded on the intraday market, 1.5% of the energy for production or consumption rescheduling, and 18.7% of the energy within the mFRR. As regards capacity booking for the provision of balancing services, only 23.7% of mFRR capacity is booked via independent aggregation. Both figures indicate a level of engagement by independent aggregation that, while somewhat widespread, remains immature.

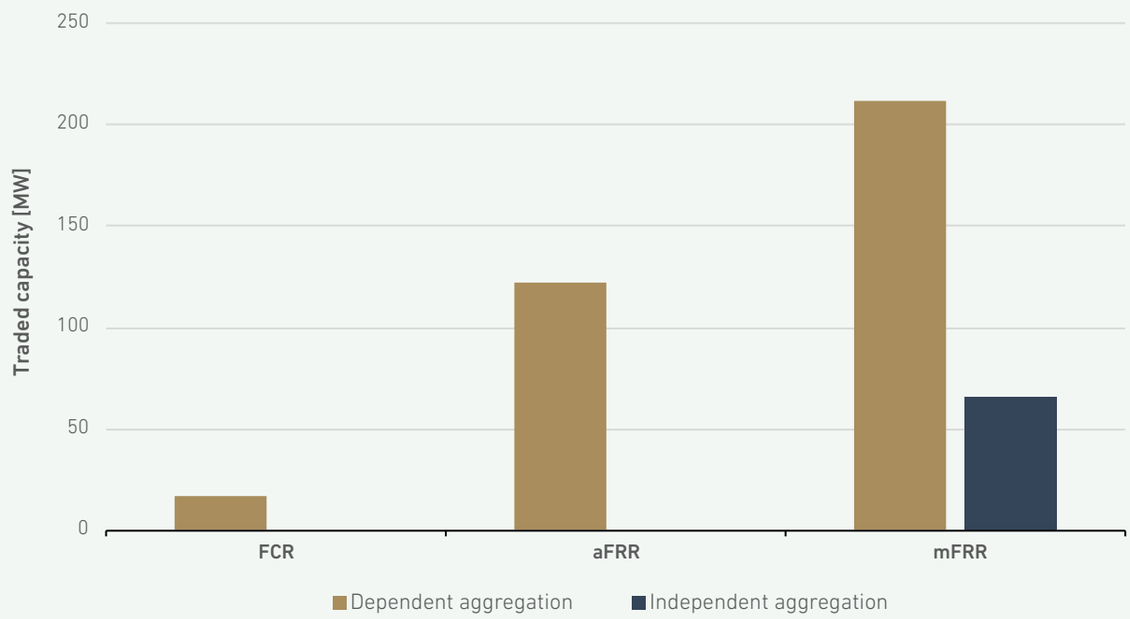
A small share of independent aggregation

FIGURE 164: MARKET SHARES OF TRADED ENERGY ACCORDING TO THE CONNECTION BETWEEN THE AGGREGATOR AND THE SUPPLIER



SOURCES: AGGREGATORS

FIGURE 165: TRADED CAPACITY BY INDIVIDUAL MARKET ACCORDING TO THE AGGREGATOR'S RELATIONSHIP WITH THE SUPPLIER



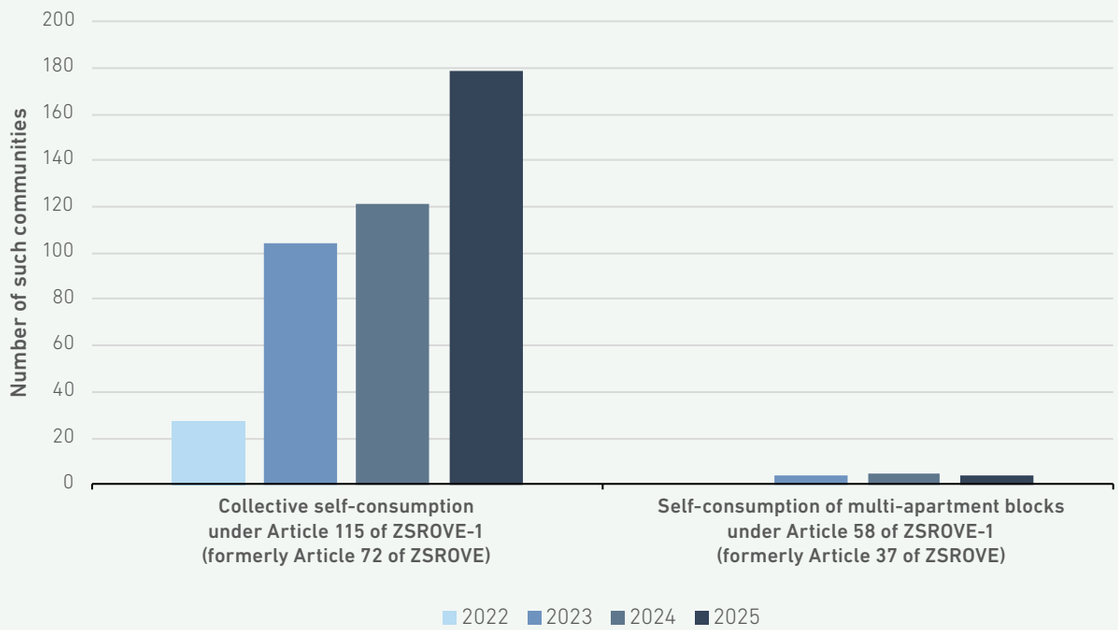
SOURCES: AGGREGATORS

Energy Communities

Another key factor that would reduce greenhouse gas emissions and increase the share of RES in the end-use of energy are different forms of energy communities, which include: community self-supply in accordance with Article 72 of the Act on the Promotion of the Use of Renewable Energy Sources (ZRSOVE), self-supply of multi-dwelling buildings, self-supply of communities for supplying energy from RES in accordance with Article 37 of the ZSROVE, and the Energy Community of citizens in accordance with Article 24 of the ZOEE.

Electricity suppliers report that, in 2025, they supplied electricity to a total of 1,536 final consumers[121], who were part of 183 communities[122]. The number of final consumers included in communities increased by 168% compared with the previous year, and the number of communities increased by 45.2% compared with the previous year.

FIGURE 166: NUMBER OF COMMUNITIES BY TYPE



SOURCES: SUPPLIERS

The total volume of electricity supplied to final consumers in the communities amounted to 25.9 GWh (a 154% increase compared with the previous year). Suppliers purchased a total of 2.96 GWh of

183 energy communities

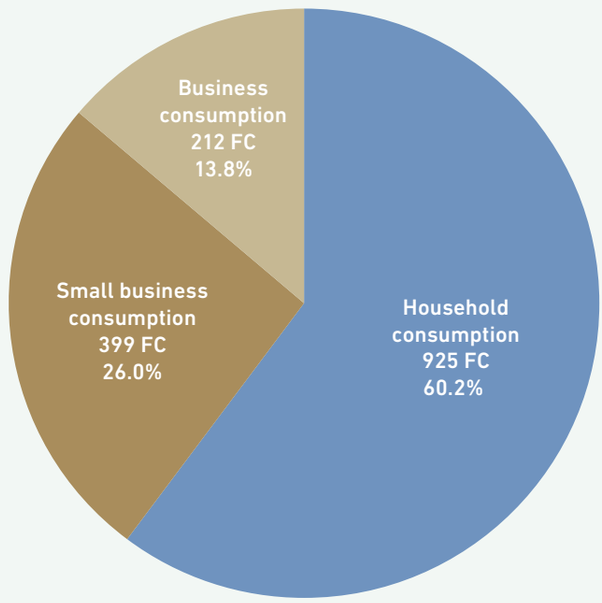
121 Data from suppliers and EDCs differ due to varying levels of implementation across specific communities and the different data sources used in companies' internal processes. EDCs report that, at the end of 2025, a total of 2,152 PPMs for energy consumption from the grid and 566 PPMs for energy feed-in to the grid were connected across all communities. The total number of PPMs for consumption does not correspond to the total number of end users, so a comparison of the two figures is not possible.

122 Final consumers have joined community self-supply schemes in accordance with Article 115 of ZSROVE-1 (previously Article 72 of the ZSROVE), which allows for annual netting, as well as in self-supply schemes for multi-dwelling buildings and community self-supply schemes for energy from renewable sources in accordance with Article 58 of the ZSROVE-1 (previously Article 37 of the ZSROVE).

electricity from communities (a 238% increase), while the total volume of electricity taken from communities free of charge amounted to 1.79 GWh (958%[123]-increase). The data indicate that the accelerated integration of community consumers continued in 2025. The significant increase in electricity supply and purchase in 2025 can also be attributed to the increased involvement of business consumers in the community.

A 154%-increase in electricity supply and a 238%-increase in electricity purchases within the community

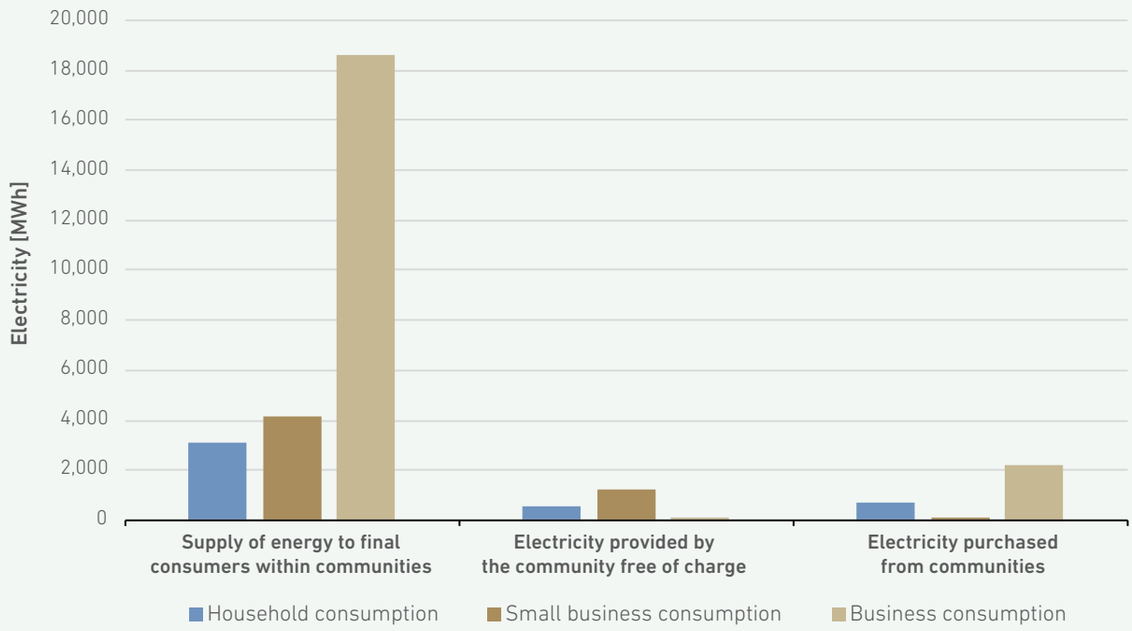
FIGURE 167: STRUCTURE OF FINAL CONSUMERS (FC), INCLUDED IN COMMUNITIES



SOURCES: SUPPLIERS

123 The percentage change is calculated on the basis of unrounded figures, while the reference value from the previous year and the new value are given in rounded form in the text.

FIGURE 168: A COMPARISON OF AGGREGATED ELECTRICITY SUPPLIED TO CONSUMERS IN THE COMMUNITIES, ELECTRICITY PURCHASED FROM COMMUNITIES, AND ELECTRICITY TAKEN FROM THE COMMUNITIES FREE OF CHARGE



SOURCES: SUPPLIERS

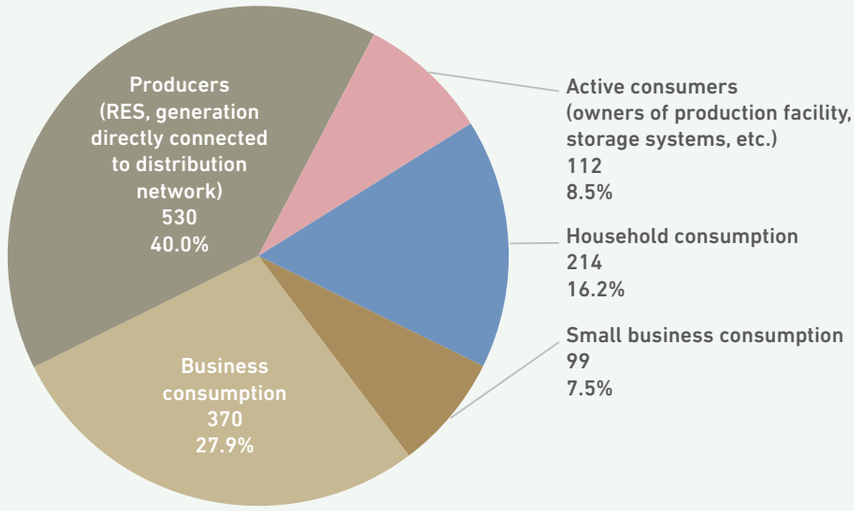
Peer-to-Peer (P2P) Energy Exchange

For the purpose of electricity exchange between active consumers within the same balancing group, one platform was operational in 2025, managed by the company[124]. SunContract has developed a marketplace for the exchange of energy between customers, to whom it also acts as a supplier. In this way, the supplier covers any energy shortfalls up to the required electricity supply volumes.

The volume of this type of trading[125] within the balance group in question amounted to 22.3 GWh. The structure of the system users who participated in this type of trading is shown in the next figure.

124 https://go.suncontract.org/p2p-energetska-trznica/
125 Sum of sales and purchases.

FIGURE 169: STRUCTURE[126] OF SYSTEM USERS IN THE EXCHANGE OF ELECTRICITY BETWEEN ACTIVE CUSTOMERS WITHIN THE SAME BALANCE GROUP



SOURCES: SUPPLIERS

BISOL Energija and FLEXGRID report that they facilitate the transfer of surplus electricity generated between metering points within a balance group on the basis of their own records; however, we do not classify this process as an exchange of electricity between active consumers in accordance with the definition set out in ZSROVE-1. A total of 308 network users were involved in this type of surplus transfer, and they collectively transferred 8.29 GWh of electricity.

The provisions on the right to shared use, which represent a regulatory innovation and will come into force on 1 July 2026 in accordance with the ZOEE-A, will enable a network user with surpluses of unused generated energy (the supplier) to transfer this surplus, for billing purposes, to other network users (recipients), with such sharing not being restricted to energy transfers within a balance group. At the same time, there are no specific geographical restrictions on this type of billing transfer, as the supplier and recipients need only be located within the territory of the Republic of Slovenia. The transfer of energy may be carried out against payment or free of charge. Large enterprises are excluded from the energy sharing framework. Energy operators may not participate in energy sharing, but they may act as organisers of such sharing. End users who are part of a self-supply system with annual netting cannot be recipients of energy under the energy sharing scheme. The DSO has set out in the SONDSEE the procedure for joining the energy sharing scheme, for notifying parties of energy sharing contracts and any amendments to them, and for monitoring and transmitting metering data.

Electromobility

The Energy Agency monitors the development of electromobility from the perspective of electricity market development. As e-mobility booms, electric vehicles can be expected to join the flexibility market with so-called smart charging, where charging parameters can be adjusted according to the needs of the vehicle's user, as well as those of the electricity system. With the help of bi-directional charging technology, which we address in the last part of this sub-chapter, we can expect an even tighter integration of EVs into the electricity system and the flexibility market.

126 The difference between the total and the sum of the individual percentages is due to rounding.

In Slovenia, a total of 29,219[127] electric vehicle (EV) were registered in 2025. As in the previous year, battery electric vehicles (BEVs) made the largest contribution to this figure. In the passenger car category (M1), their number increased by 5,594 vehicles, representing a 33% increase compared with the previous year. The number of plug-in hybrids (PHEVs) in the same category rose by 1,990, or 61.7%, compared with the previous year. The number of light commercial BEVs (category N1) increased by 200 vehicles, representing a 36.6% increase compared with the previous year. The number of light BEVs – namely two-, three- and four-wheeled vehicles (category L) – stood at 89 vehicles, representing a 58.7% increase compared with the previous year. The number of BEV buses (categories M2 and M3) increased by seven vehicles, representing a 23.3% increase compared to the previous year. The number of heavy commercial BEVs (categories N2 and N3) increased by nine vehicles, representing a 1.7%- increase compared to the previous year.

The data provided indicates steady growth in the number of electric vehicles in the Slovenian vehicle fleet. Following a year of moderate growth (2024) in the passenger car (M1) and light commercial vehicle (N1) segments, these two segments are once again showing more rapid growth in 2025, comparable to that seen in 2023.

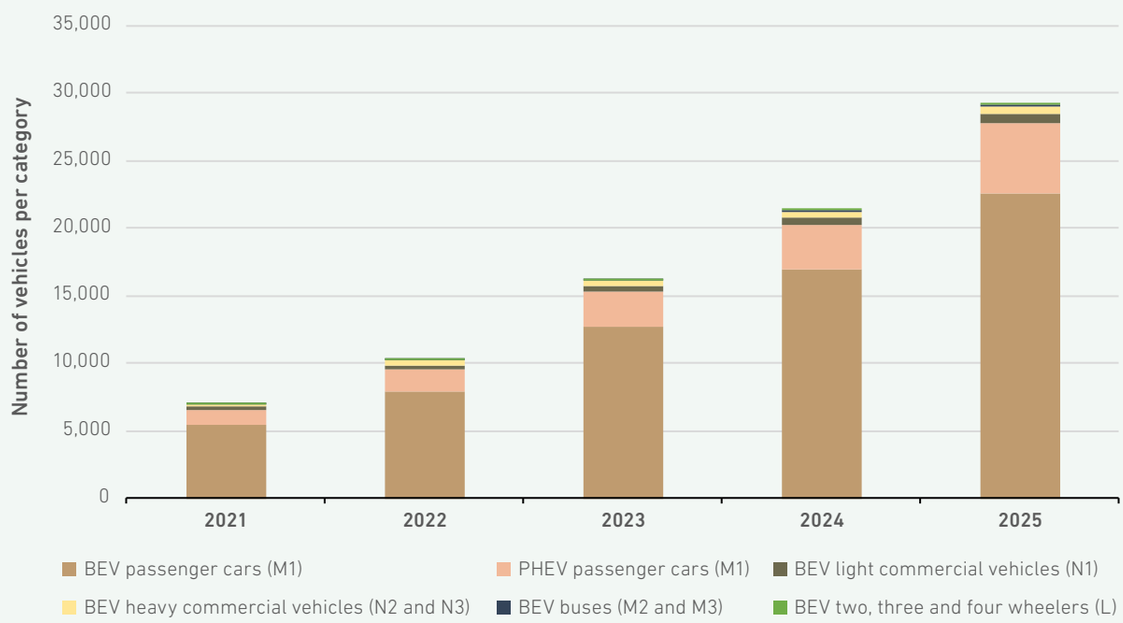
29,219 registered electric vehicles

36.9%-increase in the total number of electric vehicles

Only a 2.05% share of electric vehicles in the passenger and light commercial vehicle categories

Taking into account the figure of 1,395,458[128] for all vehicles in categories M1 and N1 in Slovenia, the combined share of electric vehicles stands at 2.05% in these two categories.

FIGURE 170: NUMBER OF REGISTERED ELECTRIC VEHICLES IN SLOVENIA



SOURCE: EAFO

127 Data as of 21 April 2026 (Source: European Alternative Fuels Observatory - EAFO). The EV growth rates given hereafter are calculated on the basis of the data available on the date stated. Due to the updating of historical data in the EAFO database, the calculations have been aligned with the current benchmark.

128 Data as of 21 April 2026 (Source: SiStat)

EAFO data[129] that at the end of 2025, there were a total of[130] 2,545 public[131] charging statitions[132] in Slovenia.

Regulation (EU) 2023/1804 of the European Parliament and of the Council of 13 September 2023 on the deployment of alternative fuels infrastructure and repealing Directive 2014/94/EU (hereinafter Regulation (EU) 2023/1804) determines, as of 2024, the conditions for the deployment and monitoring of alternative fuels infrastructure. In accordance with Articles 3 and 4 of this Regulation, Member States must ensure the adequacy of the charging network on the basis of cumulative output power targets for light-duty vehicles (categories M1 and N1) in accordance with their share of the vehicle fleet. At the same time, compliance with the requirements regarding minimum coverage and power capacity of refuelling stations on the TEN-T road network, including specific requirements for heavy-duty vehicles (categories M2, M3, N2 and N3), has been mandated by the end of 2025.

For monitoring these targets, Articles 18 and 20 of Regulation (EU) 2023/1804 establish reporting obligations and requirements for the digital exchange of data. Member States were therefore required to report, for the first time by 31 March 2025, on the total power output, the number of publicly accessible recharging points and the number of registered electric vehicles, and have been required to do so annually thereafter. To ensure transparency, operators or owners of publicly accessible recharging points were required to make static and dynamic data relating to the infrastructure they operate available free of charge by 14 April 2025. In the Republic of Slovenia, these data are hosted and technically managed, within the framework of the national access point, by the National Traffic Management Centre (NCUP). In accordance with the Act on Alternative Fuels Infrastructure and the Promotion of the Transition to Alternative Fuels in Transport (ZIAG) and Commission Delegated Regulation (EU) 2025/671,[1] NCUP performs the tasks of the operator of the national access point for the digital platform under the auspices of the ministry responsible for infrastructure.

2,545 public charging stations in Slovenia – the infrastructure complies with the output power requirements in line with the EU legislative framework

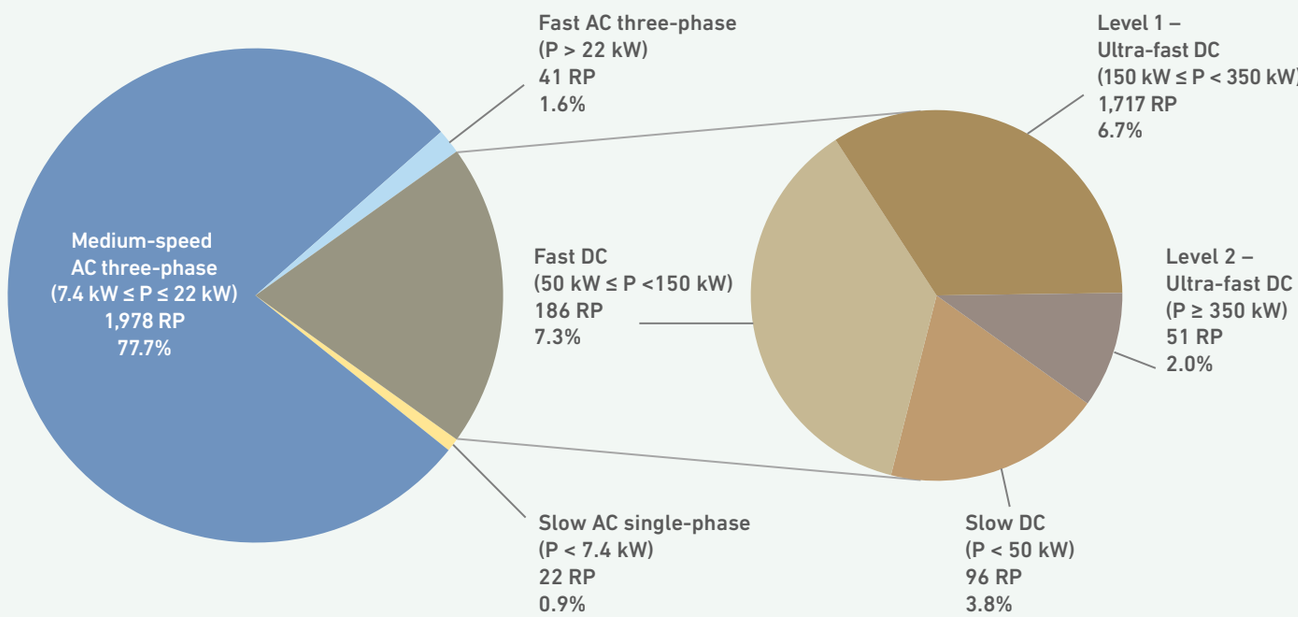
Taking into account the relevant number of electric vehicles registered in Slovenia1[133] and the power output requirements laid down in the first paragraph[134] Article 3 of Regulation (EU) 2023/1804, the cumulative power output target for Slovenia at the end of 2025 can be calculated at 30.30 MW for BEVs and 4.21 MW for PHEVs, amounting to a total of 34.51 MW. EAFO data show that, at the end of 2025, the total installed power capacity of charging infrastructure in Slovenia amounted to 96.3 MW. It therefore follows that the 2025 targets set out in Regulation (EU) 2023/1804 were exceeded by a considerable margin.

129 European Alternative Fuels Observatory
130 Data as of 21 April 2026 (Source: EAFO)
131 The data show that 79.8% of charging points are accessible without restrictions (unrestricted 24/7 access for all users) and the remaining 20.2% have certain access restrictions, where specific, although non-discriminatory, access restrictions apply (such as limited hours of use – e.g. charging points in the car parks of large retail outlets, hotels and catering establishments, etc.).
132 Due to changes in the methodology used to count the number of charging points for electric vehicles, it is not possible to provide a comprehensive overview of the development in the number of such charging points over the years. Furthermore, the Energy Agency's analytical work in monitoring the development of electromobility in Slovenia is hampered by the volatility of data in the reference databases, where, over several years of monitoring, changes to or updates of historical data can be observed.
133 Data on the number of vehicles as of 21 April 2026: 22,563 BEV M1, 747 BEV N1, 5,213 PHEV M1, 46 PHEV N1 (Source: EAFO)
134 Member States shall ensure that, in their territory, publicly accessible recharging stations dedicated to light-duty electric vehicles are deployed in a way that is commensurate with the uptake of light-duty electric vehicles and that they provide sufficient power output for those vehicles. To that end, Member States shall ensure that, at the end of each year, starting from 2024, the following power output targets are met cumulatively:(a) for each light-duty battery electric vehicle registered in their territory, a total power output of at least 1,3 kW is provided through publicly accessible recharging stations; and (b) for each light-duty plug-in hybrid vehicle registered in their territory, a total power output of at least 0,80 kW is provided through publicly accessible recharging stations.

Figure 171 presents a detailed breakdown of recharging points in Slovenia by maximum charging power (P). Of all recharging points, 19.8% enable fast charging using direct current (DC), while the remaining 80.2% enable charging using alternating current (AC).[135] Across the EU, 18.3% of recharging points provide DC charging and 81.7% provide AC charging. In Denmark, which had the highest share of electric vehicles among EU Member States in 2025, 16.9% of recharging points provide DC charging and 83.1% provide AC charging.

Figure 172 also indicates a somewhat different structure of recharging points in Slovenia, the EU and Denmark. Unlike the European average, the share of low-power recharging points (with a power output of up to 7.4 kW) is negligible in Slovenia and Denmark. Their role is correspondingly replaced by normal charging points[136] (with a power output of up to and including 22 kW), whose share in these two countries roughly corresponds to the combined share of low-power and normal recharging points at EU level. Although the structure is somewhat different, the overall share of high-power recharging points[137], and Slovenia therefore also provides comparable capacity for transit.

FIGURE 171: STRUCTURE OF THE NUMBER OF RECHARGING POINTS (RP) FOR ELECTRIC VEHICLES IN SLOVENIA BY MAXIMUM CHARGING POWER (P)



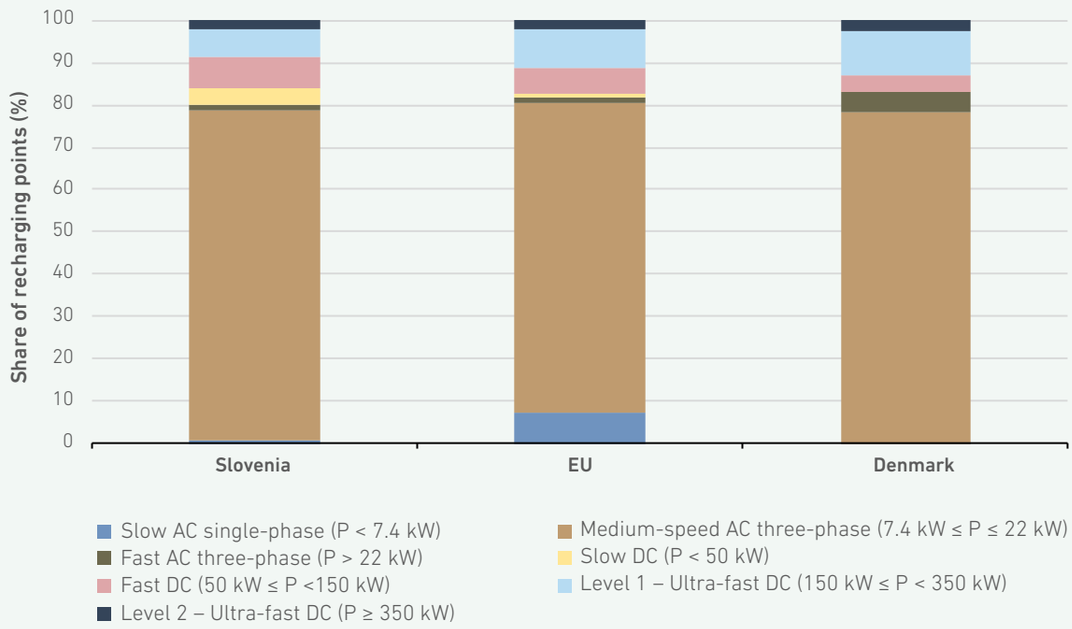
SOURCE: EAFO

135 For example, charging at 22 kW allows an electric vehicle with an average energy consumption of 14.5 kWh to be charged to a range of 100 km in approximately 40 minutes at maximum charging power. With higher charging power, the charging time is correspondingly shorter.

136 A 'normal recharging point' is a recharging point capable of transferring electricity to an electric vehicle at a power level less than or equal to 22 kW, except for devices with a power level less than or equal to 3.7 kW installed in private households or devices not initially intended for charging electric vehicles and not accessible to the public (Act on Alternative Fuels Infrastructure and the Promotion of the Transition to Alternative Fuels in Transport (ZIAG), Official Gazette of the Republic of Slovenia, No. 62/23).

137 'High-power recharging point' means a recharging point with a power output of more than 22 kW for the transfer of electricity to an electric vehicle. (ZIAG).

FIGURE 172: STRUCTURE OF THE NUMBER OF RECHARGING POINTS FOR ELECTRIC VEHICLES IN VARIOUS COUNTRIES BY MAXIMUM CHARGING POWER (P)



SOURCE: EAFO

A comparison of the compiled data with the data from the sectoral strategy and related documents[138] indicates a slower roll-out of electromobility than envisaged by the sectoral strategy, both in terms of electric vehicles and charging infrastructure, which is otherwise intended to keep pace with the growth in the use of electric vehicles.

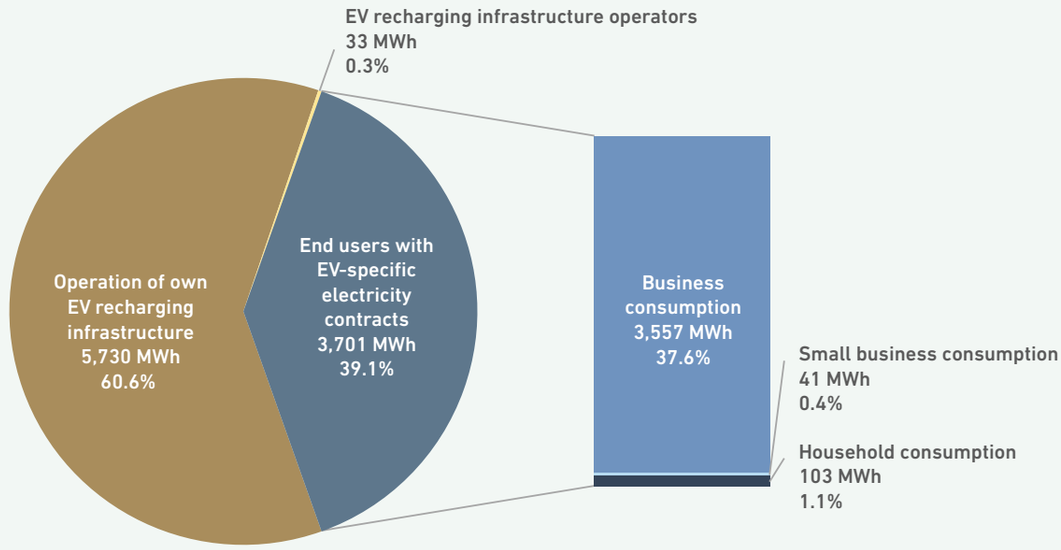
A 17.9% increase in electricity supply associated with retail electric mobility products

In the field of electricity supply, specifically for the needs of electric mobility, there were four suppliers operating in 2025 who either operated their own charging infrastructure, supplied electricity to charging infrastructure operators, or had concluded energy supply contracts with customers, whereby ownership or use of an electric vehicle was a condition for concluding the contract. Data from suppliers show that a total of approximately 9.46 GWh of electricity was supplied for the purposes of electric mobility, representing a 17.9%[139] increase compared with the previous year; the breakdown is shown in Figure 173. Suppliers supplied 3.70 GWh, or 39.1%, of the electricity to final consumers through energy supply contracts tailored to the energy consumption associated with the use of electric vehicles.

138 Strategy on market development for the establishment of appropriate infrastructure relating to alternative fuels in the transport sector in the Republic of Slovenia (12 October 2017), Action Programme for Alternative Fuels in Transport for 2022 and 2023 (23 December 2021), Report on the Implementation of the Action Programme for Alternative Fuels in Transport in 2023 (22 April 2024), Review of the Situation and Activities in the Field of Alternative Fuels in Transport in 2024 (February 2025).

139 The percentage change is calculated on the basis of unrounded figures, while the baseline figure from the previous year and the new figure are in the text given in rounded form.

FIGURE 173: STRUCTURE[140] OF ELECTRICITY SUPPLY FOR ELECTRIC MOBILITY PURPOSES



SOURCES: SUPPLIERS

Charging electric vehicles requires relatively high power, which can significantly alter electricity consumption patterns and, if managed incorrectly, place a considerable strain on the electricity grid. Nevertheless, electric vehicle batteries, which have a considerable energy storage capacity, offer an exceptional opportunity to optimise network management, particularly due to the long periods during which vehicles are parked.

Reliability of the Electricity Supply

The reliability of the electricity supply is determined by the probability that the system will be capable of supplying energy of sufficient quality to all the delivery points in sufficient quantities. The reliability of the supply is quantified using two basic parameters – sufficiency and security. Sufficiency is an indicator of the system's ability to meet the consumers' demand for electricity and power in all the anticipated operational conditions, i.e. taking into account planned and unplanned outages of the system's elements. Operational security is the system's ability to maintain a normal state or to return to a normal state as quickly as possible, that is, to withstand a set of disturbances under a specific operational condition (e.g. short circuits in the network, outages of the system's elements and unexpected changes in consumption in relation to generation constraints) so that the consumers do not feel the consequences of a disturbance, which is eliminated without jeopardising the system's integrity.

The required level of security of the electricity supply in a country is transparently represented by a reliability standard typically expressed using the Loss of Load Expectation (LOLE) indicator. The reliability standard is defined on the basis of a marginal reduction in the Expected Energy Not Served indicator in the results of the latest national, regional and European resource adequacy assessments, which include assessments of the LOLE and EENS indicators.

At the EU level, under the provisions of Regulation (EU) 2019/943, the European Resource Adequacy Assessment (ERAA) is conducted regularly. It is based on state-of-the-art methodologies and probabilistic evaluations, and its results provide policymakers with appropriate signals regarding resource adequacy and the needs related to ensuring the security and reliability of electricity system operation. ERAA also serves as an essential tool in support of strategic decision-making, such as the introduction of capacity mechanisms.

140 The difference between the total and the sum of the individual shares is due to rounding.

The most recent European resource adequacy assessment[141], prepared by ENTSO-E in 2025, indicates an increased risk to the adequacy of electricity generation in the scenarios under consideration, primarily due to the economic unviability of generation from fossil fuels. In the period up to 2035, there is a risk that numerous coal-fired power stations, in particular, will cease operations; the model, however, only indicates a possible expansion of electricity generation from gas and emerging hydrogen-based generation by 2035. However, this expansion is uncertain and depends on the investment strategies adopted by investors, as well as on favourable conditions outside the scope of the ERAA, such as supply chain constraints, the development of the electricity grid, and the availability of primary energy and hydrogen.

Differences in the results between individual editions of the ERAA are due to updates to the input data and improvements to the models, which take into account the latest circumstances or changes in strategy. The LOLE reliability standard assessment for Slovenia is thus projected to rise to 3–5 hours per year as early as 2030, and to range from 3 to 8 hours per year by 2035. The deterioration in the reliability indicator for Slovenia compared with previous ERAA editions is also significantly influenced by the increased difficulty in ensuring sufficient electricity generation in most European countries, which has a negative impact on ensuring sufficiency through cross-border electricity exchanges.

Despite excellent cross-border connections, security of supply can no longer be taken for granted in the future

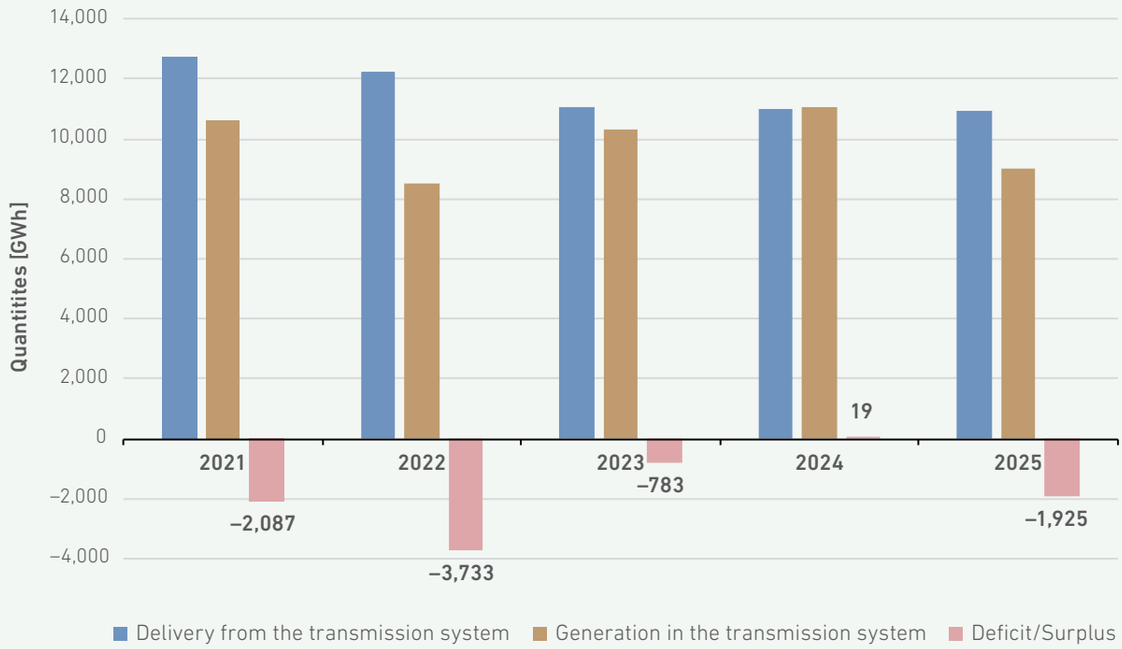
Monitoring the Balance Between Generation and Consumption

Electricity off-take from the transmission system fell by 0.76% in 2025 compared with the previous year. Taking into account that the nuclear power station was operating at half capacity, electricity generation on the transmission system in 2025 was 18.4% lower than in the previous year, which was due to a 25.6% decrease in generation at thermal power stations and a 23.8% decrease at hydroelectric power stations. The lower generation at thermal power stations is primarily due to the reorganisation of the Šoštanj Thermal Power Plant into a public service provider for heat supply.

Poor hydrological conditions and reduced output at the Šoštanj TPP led to a lower coverage of electricity consumption from the transmission system by domestic sources

141 https://www.entsoe.eu/eraa/2025/reports&results/

FIGURE 174: ELECTRICITY CONSUMPTION AND GENERATION IN THE SLOVENIAN TRANSMISSION SYSTEM WITHOUT TAKING INTO ACCOUNT LOSSES IN THE 2021–2025 PERIOD



SOURCE: ELES

Monitoring Investment in Generation Capacities to Ensure a Reliable Supply

When preparing a forecast of future electricity consumption in Slovenia, in addition to expected economic development, the requirements of the European Network of Transmission System Operators for Electricity (ENTSO-E) set out in the 10-year development plan for the EU and the scenarios in the NECP are taken into account to the greatest possible extent. Electricity withdrawn from the transmission system is primarily supplied by sources connected to the transmission system; therefore, in order to forecast conditions in the Slovenian electricity system as accurately as possible, those planned generation sources for which it can be argued that their construction is less likely must be excluded from the set of planned generation sources.

When preparing forecasts for the coverage of electricity consumption from the transmission system, the TSO acquired data from generation companies on planned new generation units or the decommissioning of existing ones, and categorised them into four scenarios based on the likelihood of their implementation. Scenario 1 is the most pessimistic and takes into account only the construction of generation sources that are already under construction or have obtained planning and environmental permits; investment in renewable energy sources on the transmission system is low. Scenario 2 takes into account realistically expected investments, considering delays in the construction of new hydroelectric power stations due to spatial planning issues; investments in renewable energy sources are higher but spread across the distribution system. Scenario 3 is based on the assumptions of the new National Energy and Climate Plan (NECP) for the renewable energy scenario and is very ambitious from the perspective of hydroelectric power stations; in addition to the construction of hydroelectric power stations on the Sava and the Kozjak small hydroelectric power station, it also envisages significant investment in

All scenarios up to 2034 show a shortfall in domestic generation to cover the consumption of electricity from the transmission system

wind and solar power stations on the transmission system. Scenario 4 is based on the RES + JEK2 scenario from the NECP and is similarly ambitious to Scenario 3, except that it envisages a delay in the construction of certain hydroelectric power stations and the second unit of the nuclear power station beyond the ten-year development period. None of the scenarios envisages the construction of a hydroelectric power station on the Mura River by 2034; furthermore, due to difficulties with siting and opposition from environmentalists, the construction of other hydroelectric facilities is also highly uncertain.

TABLE 32: CHANGES TO THE GENERATION FACILITIES IN THE TRANSMISSION SYSTEM BY 2034

	Installed capacty [MW]	Anticipated year of change	Scenario
Hydropower plants			
HPPs on the Drava River			
Kozjak PSHPP	420	2031	2, 3, 4
HPPs on the Sava River			
Mokrice	28	2026	1, 2, 3, 4
Suhadol	45	2033	3
HPPs on the Soča River			
Avče PSHPP	20	2027	2, 3, 4
Plužna PSHPP	110	2032	3, 4
Thermal power plants			
Šoštanj TPP			
Šoštanj TPP Block V	–305	2028	
Šoštanj TPP PT 51	–42	2033	
Šoštanj TPP PT 52	–42	2033	
TEŠ blok VI	–539	2033	
Šoštanj TPP Block 1A0	134	2030	1, 2, 3, 4
Multifuel cogeneration	50	2029	1, 2, 3, 4

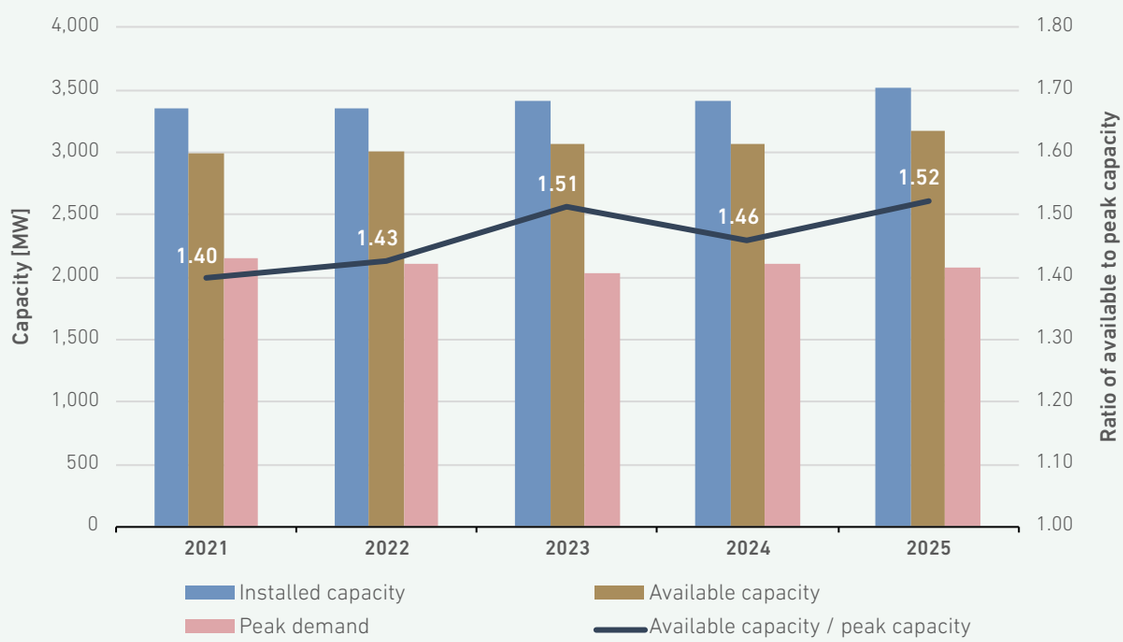
SOURCE: ELES

Investment in new conventional generation sources is severely hampered by inappropriate market signals, as well as environmental concerns. On the other hand, largely due to opposition from local communities, there is also considerable uncertainty regarding the planned construction of alternative sources, particularly large-scale wind and solar power stations. The timelines for implementing the investments in generation capacity shown in the table above are highly questionable, as they are being pushed back by several years with each new development plan from the TSO.

Measures to Cover Peak Demand and Shortages of Electricity

One of the indicators providing information on the adequacy of generation resources is the ratio between the installed or available capacity of generation resources and peak demand. The system must have sufficient capacity available to cover demand and maintain a power reserve during normal operation and in the event of unforeseen circumstances. The actual available capacity for the Slovenian market is equal to the difference between the installed capacity of generation sources and half the capacity of the Krško nuclear power station, which belongs to Croatia. The ratio between available capacity and peak load on the transmission system in 2025 has improved slightly compared with the previous year, mainly due to a slightly higher installed or available capacity of generation units, coupled with a slightly lower peak demand load. Although the actual availability of generation units is determined by weather conditions for renewable sources on the one hand and market signals for thermal power stations on the other, the supply of electricity to end users in 2025 was not at risk, as the Slovenian electricity system is excellently connected to neighbouring countries via cross-border interconnections, and sufficient electricity was also available on the market. However, according to the latest estimates from the pan-European Resource Adequacy Assessment (ERAA), the supply to end users could be at risk in the future due to general issues with the adequacy of electricity generation across Europe.

FIGURE 175: INSTALLED CAPACITIES OF GENERATION FACILITIES, CAPACITIES AVAILABLE FOR THE SLOVENIAN MARKET AND PEAK DEMAND, AND THE RATIO BETWEEN THE AVAILABLE CAPACITY AND PEAK LOAD IN THE TRANSMISSION SYSTEM IN THE 2021–2025 PERIOD

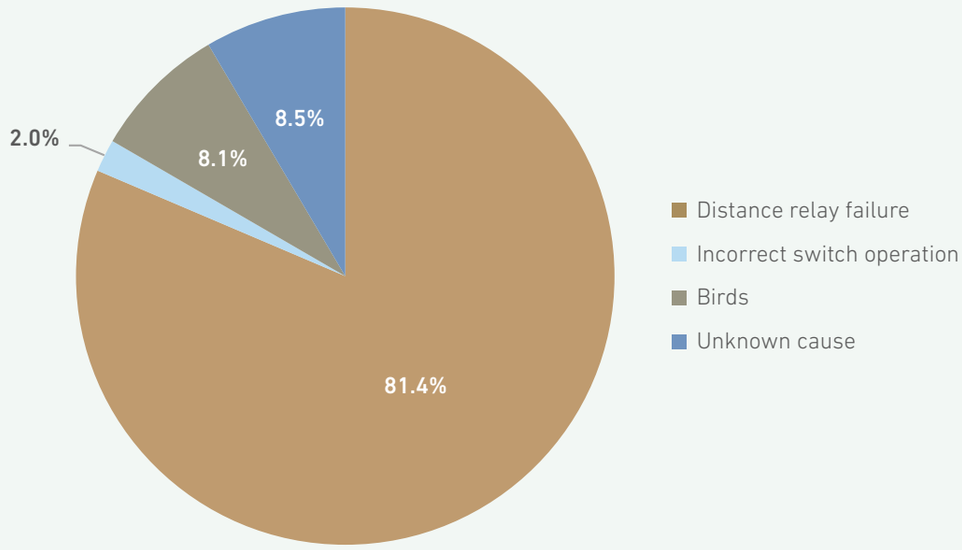


SOURCE: ELES

Extreme weather conditions or grid faults can cause power cuts. Unsupplied energy is the energy that would potentially have been supplied by the system had the power cut not occurred. In 2025, 17.33 MWh of undelivered energy was recorded, which is slightly more than in 2024, when only 7.45 MWh of undelivered energy was recorded, but significantly less than in 2023, when the amount of undelivered energy reached as much as 220.8 MWh. The majority of the undelivered energy was due to an outage caused by a fault in the distance protection relay at the Plave substation (14.11 MWh), while the rest was the result of several minor interruptions caused by incorrect switch operation, birds and unknown causes.

The energy not supplied is calculated in accordance with the Act that regulates the rules for monitoring the quality of the electricity supply; therefore, the actual amount of energy not supplied may be lower than that stated, as it is possible to supply a large proportion of customers in the affected areas via the medium-voltage network.

FIGURE 176: UNSUPPLIED ENERGY ON THE TRANSMISSION SYSTEM IN 2025, BY CAUSE



SOURCE: ELES

GAS

realibility today, opportunity for tomorrow

MORE THAN **90%** OF ALL IMPORTED GAS STILL COMES FROM AUSTRIA

9.3% INCREASE

IN GAS TRANSMISSION VOLUMES DUE TO HIGHER CONSUMPTION ON TRANSMISSION SYSTEM COMPARED TO THE PREVIOUS YEAR

584 FEWER CONSUMERS

ON DISTRIBUTION SYSTEMS

36% DECREASE

IN GAS TRANSMISSION VOLUMES TO OTHER TRANSMISSION SYSTEM MINIMUM VOLUMES OF GAS TRANSMITTED THROUGH SLOVENIA

10% HIGHER CONSUMPTION

BY DOMESTIC GAS CUSTOMERS COMPARED TO 2024

2.3 TIMES HIGHER INVESTMENTS IN THE TRANSMISSION SYSTEM COMPARED TO 2024

25% FEWER CONNECTIONS TO DISTRIBUTION SYSTEMS

19 km OF NEW GAS DISTRIBUTION PIPELINES

A **12%** INCREASE IN INVESTMENT IN DISTRIBUTION SYSTEMS

SHARE OF LONG-TERM CONTRACTS IS NOW ONLY

0.5%

- THE LOWEST TO DATE

ON THE TRADING PLATFORM SOLD

8% MORE GAS,

THE NUMBER OF TRANSACTIONS INCREASED BY

6%

GAS PRICES FOR MOST CONSUMERS LOWER THAN IN 2024

THE RETAIL MARKET CONTINUES TO BE HIGHLY CONCENTRATED ALSO IN 2025

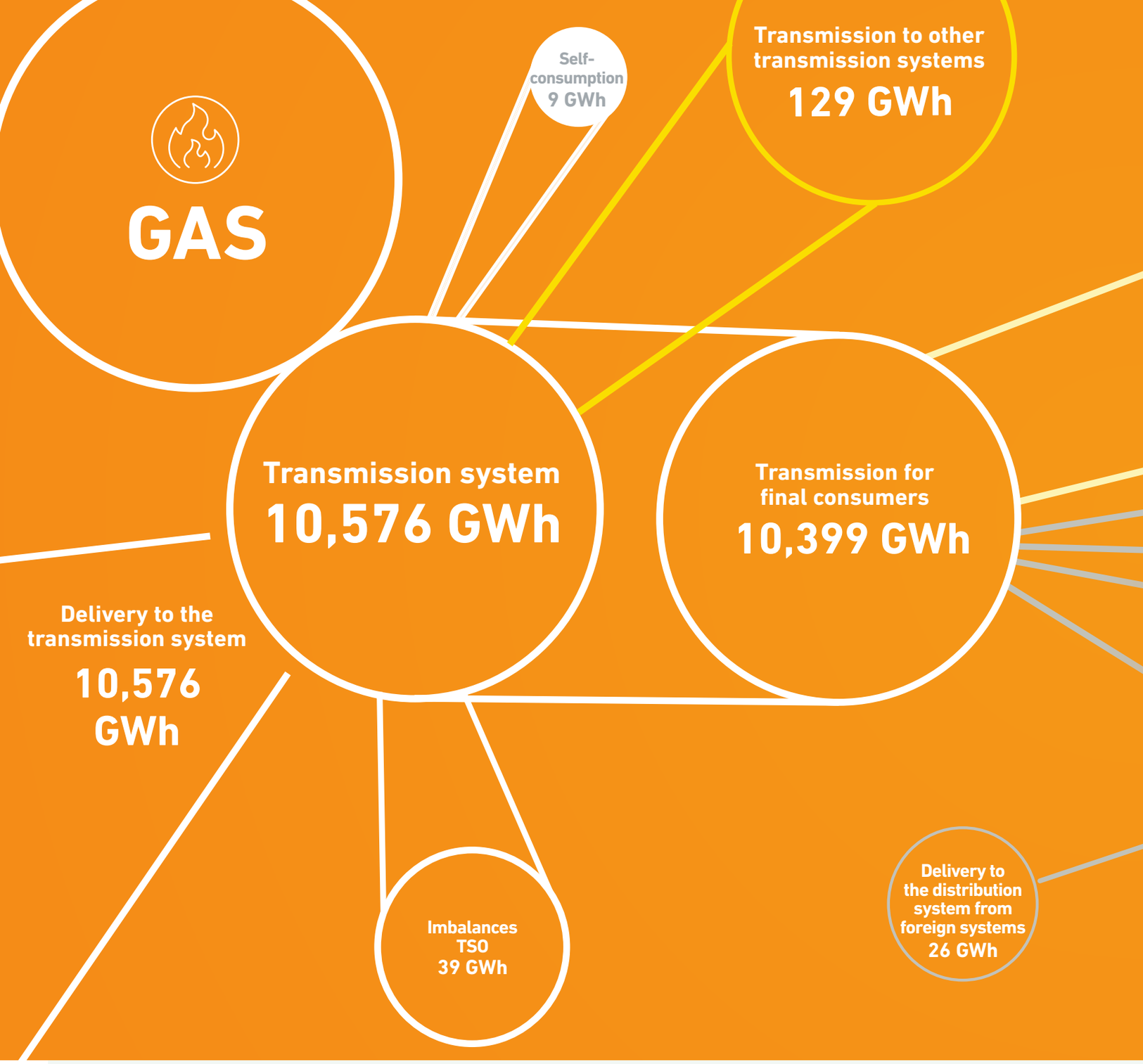
7% LOWER FINAL GAS PRICES FOR HOUSEHOLD CONSUMERS

3.9% HIGHER FINAL GAS PRICES FOR THE SMALLEST BUSINESS CONSUMERS

27% LOWER FINAL GAS PRICES FOR HOUSEHOLD CONSUMERS COMPARED TO THE EU AVERAGE

ONLY **1.4% OF CONSUMERS**

SWITCHED SUPPLIERS –– THE NUMBER OF SWITCHES WAS EVEN LOWER THAN IN 2024



GAS

Supply of and Demand for Gas

In 2025, 10,576 GWh of gas was transmitted through the gas transmission system[142], which is 9.3% more than in the previous year. The increase in volumes transmitted is due to higher consumption by business consumers on the transmission system, while the volume transmitted to neighbouring transmission systems decreased. Consumption by business consumers in the distribution network also fell slightly, whereas gas consumption by household consumers in the distribution network rose.

142 In this document, 'gas' is a collective term for gases transported via a gas transmission or distribution system, which may consist of a mixture of gases of renewable and fossil origin, the predominant component of which is methane.

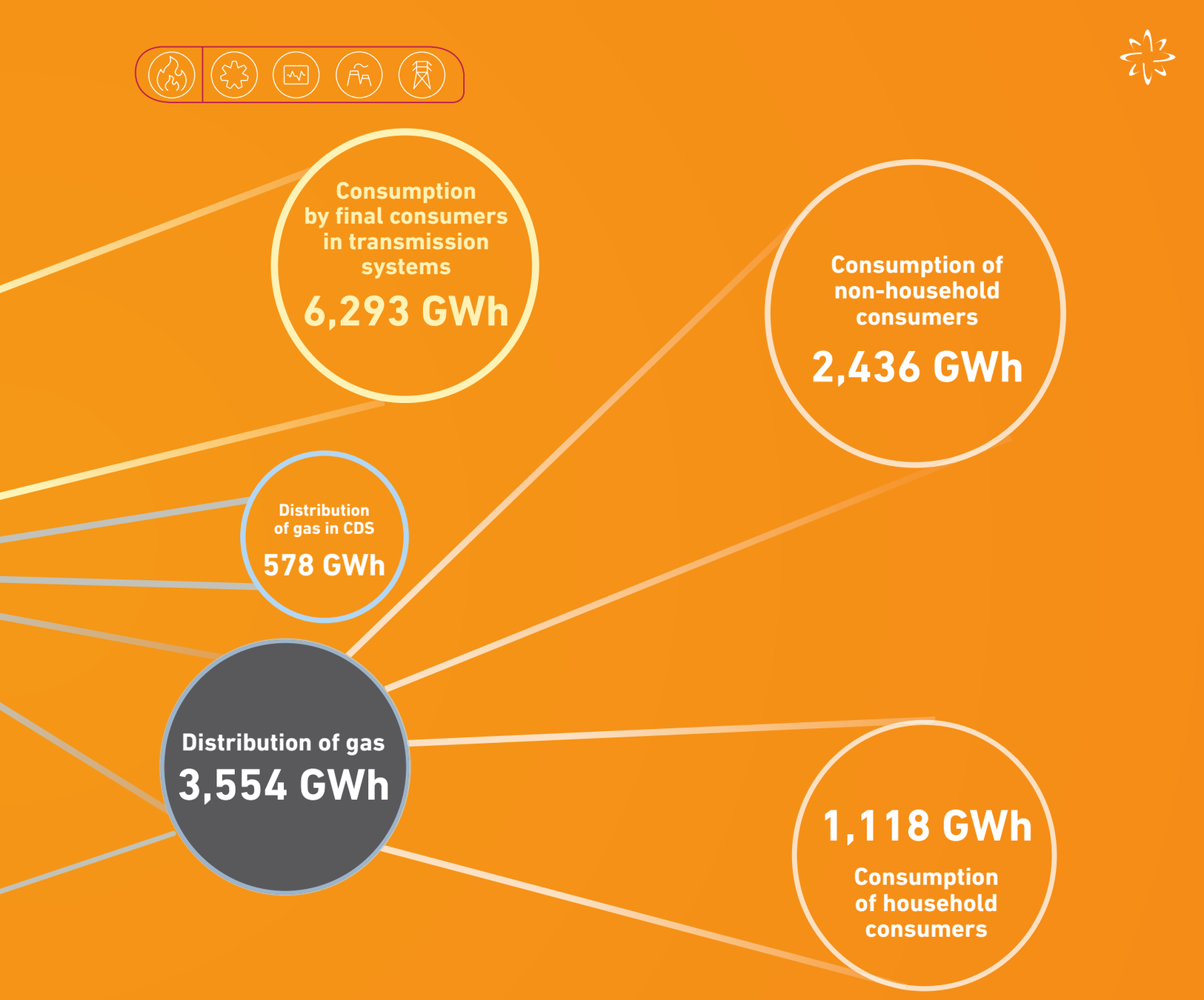


FIGURE 177: BASIC DATA ON THE QUANTITIES OF NATURAL GAS TRANSFERRED, DISTRIBUTED AND CONSUMED [GWh]

SOURCE: ENERGY AGENCY

A total of 10,399 GWh was transmitted to supply domestic customers, representing a 10% increase on the previous year, whilst only 129 GWh of gas was transmitted to other transmission systems, which is 36% less than in the previous year and 97% less than in 2022. This is the lowest volume since records of gas transmission began. The volume of gas transmitted to other transmission systems fell by 96% compared with the annual average over the past five years.

The difference between the volumes received and those delivered, amounting to 48 GWh, consists of system differences and the transmission system's own consumption.

9.3% increase in gas volumes transmitted due to higher consumption of consumers on the transmission network compared with the previous year

36% decrease in gas volumes transmitted to other transmission systems

Total domestic gas consumption amounted to 10,425 GWh, which was 950 GWh, or 10%, higher than the previous year. Gas consumption in 2025 was 18% higher than in 2015.

Consumption by domestic consumers increased by 10.2%. Consumers on closed distribution systems (CDS) consumed 2.86% less gas, while consumers on the transmission system consumed 16.1% more than in 2024. PPE-TOL had a significant impact on the higher consumption on the transmission system, increasing its consumption by 706.4 GWh compared with 2024 (501.6 GWh in 2024, 1,208 GWh in 2025), which is 141% more than the previous year, accounting for 81% of the total increase in gas consumption on the transmission system compared with 2024. PPE-TOL's consumption accounted for 19.2% of consumption on the transmission system and 11.6% of consumption in Slovenia.

A 10% increase in domestic gas consumption compared with 2024

Consumption by non-household consumers on distribution systems was lower, using 0.3% less gas than in the previous year. The data on transmission and gas consumption by consumer type for the years 2021 to 2025 are shown in the table below.

TABLE 33: TOTAL TRANSFERRED QUANTITIES OF GAS AND CONSUMPTION BY GAS CONSUMERS ACCORDING TO THE TYPE OF CONSUMPTION DURING THE 2021–2025 PERIOD

Total quantities of gas	2021	2022	2023	2024	2025
Delivery to the SI transmission system [GWh]	12,015	13,527	10,835	9,673	10,576
Transmission to other transmission systems [GWh]	1,829	4,484	2,028	201	129
Consumption by business consumers in the transmission system [GWh]	5,527	4,868	4,884	5,421	6,293
Consumption by business consumers in CDSs [GWh]	650	622	547	595	578
Consumption by business consumers in the distribution systems [GWh]	2,673	2,329	2,341	2,444	2,436
Consumption by household consumers [GWh]	1,313	1,193	1,028	1,015	1,118

SOURCE: ENERGY AGENCY

The total number of active supply points fell for the fourth year running. At the end of the year, there were 584 fewer active supply points on the distribution networks. The number of household consumers decreased by 110 (0.1%), while the number of non-household consumers on the distribution system also fell by 474 (3.4%). On closed distribution systems and the transmission system, however, the number of connection points remained unchanged.

The total number of consumers decreased by 0.4%. The decline in the number of all active supply points is likely due to numerous disconnections caused by gas prices that remain quite high for the majority of consumers, energy policy objectives aimed at the gradual phasing out of fossil fuels, and changing and unstable geopolitical conditions, which have prompted individual customers to seek alternative sources of supply.

At the end of 2025, 132,608 end users were connected to the transmission system, the distribution system and the closed distribution system. Gas distribution activities were carried out by 12 distribution system operators and five closed distribution system operators.

TABLE 34: NUMBER OF CONSUMERS ACCORDING TO CONSUMPTION TYPE IN 2024 AND 2025

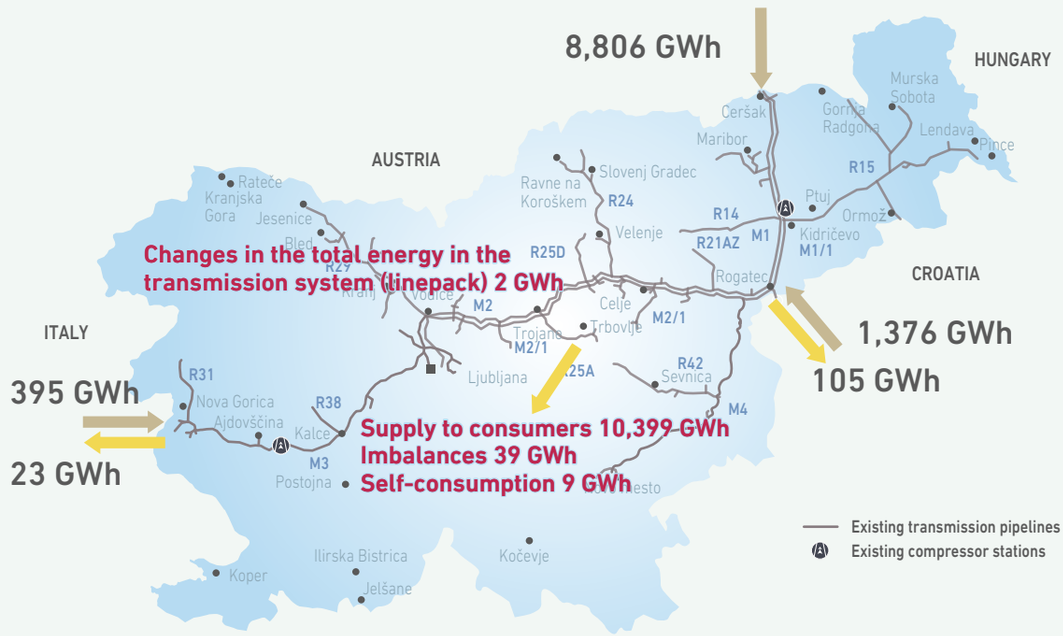
Number of consumers according to consumption type	2024	2025	Indeks
Business consumers connected to the transmission system	153	153	100.00
Business consumers connected to the distribution systems	14,110	13,636	96.64
Business consumers in CDSs	50	50	100.00
Household consumers	118,879	118,769	99.91
Total	**133,192**	**132,608**	**99.56**

SOURCE: ENERGY AGENCY

Gas Transmission

The transmission system is owned and operated by the transmission system operator, Plinovodi. It comprises 1,195 kilometres of pipelines, of which 989 kilometres are high-pressure pipelines with a nominal pressure exceeding 16 bar and 206 kilometres are pipelines with a nominal pressure below 16 bar. The transmission network also comprises 213 metering and regulating stations (MRS), 45 metering stations (MS), eight pressure-reducing stations and compressor stations in Kidričevo and Ajdovščina. There are no gas storage facilities in Slovenia. The transmission network is connected to the gas transmission networks of Austria (MRS Ceršak), Italy (MRS Šempeter pri Gorici) and Croatia (MRS Rogatec). At the border points with Italy and Croatia, two-way gas transmission is possible, whilst at the border point with Austria, gas flows only into Slovenia. The border points are also relevant points of the transmission system. The sixth relevant point is the exit point in the Republic of Slovenia. Gas trading on the wholesale market takes place at a virtual trading point. In 2025, no production source of natural gas, biomethane or synthetic methane was connected to the transmission system. Similarly, no hydrogen was injected into the transmission system.

FIGURE 178: GAS TRANSMISSION SYSTEM AND TRANSFERRED QUANTITIES OF GAS AT THE ENTRY AND EXIT POINTS IN 2025



SOURCES: ENERGY AGENCY, PLINOVODI

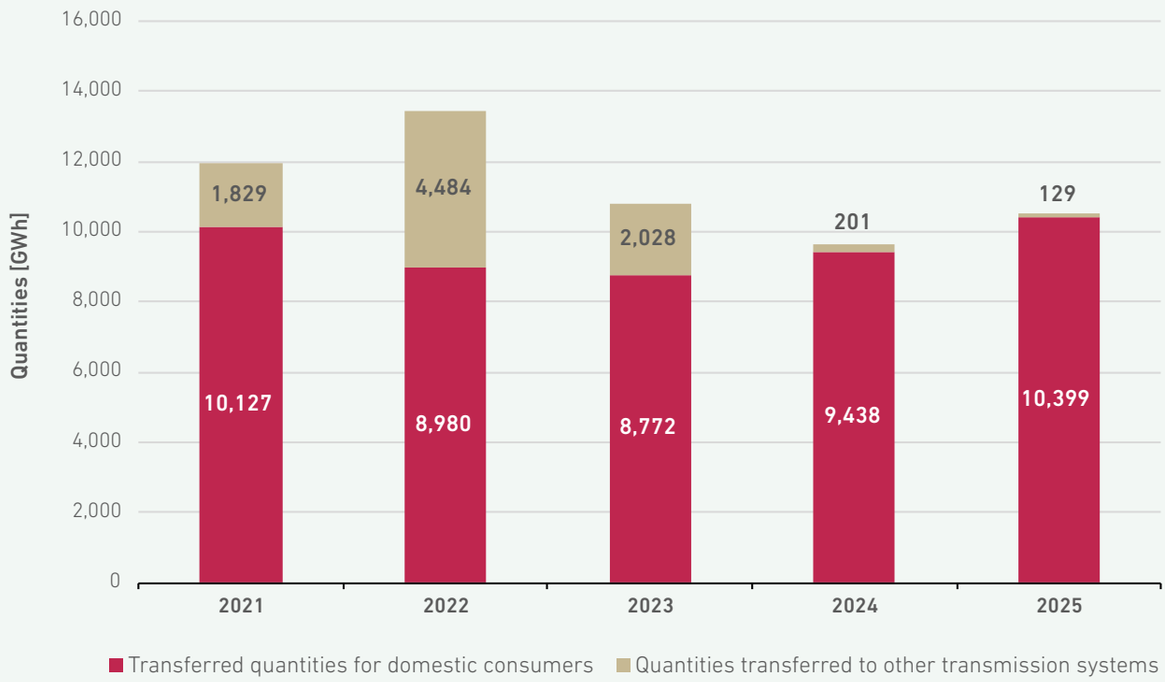
Gas consumption by Slovenian consumers has risen for the second year running; this time it was 10.2% higher than the previous year. However, the quantities of gas transmitted to other transmission systems continued their downward trend. Over the past year, they were 36% lower than the previous year. Figure 180 shows gas consumption by Slovenian customers and the quantities transferred to other transmission systems over the last twenty years. As expected, the long-term trend in gas consumption by Slovenian consumers is negative (a consequence of decarbonisation policy, improved energy efficiency and the transition to other energy sources). Although gas consumption has increased slightly over the last two years, this does not reflect the general trend in gas consumption in

Minimum quantities of gas transmitted through Slovenia

PPE-TOL accounted for 11.6% of total gas consumption in Slovenia (5.3% the previous year)

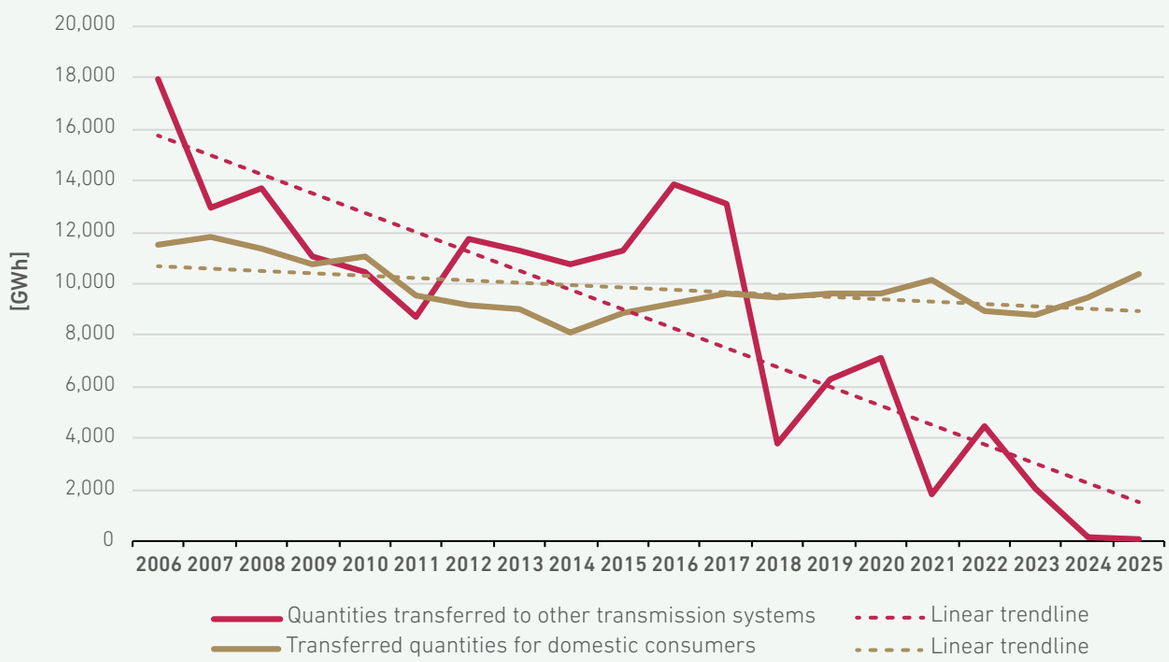
Slovenia, but is the result of the connection of a major consumer (the company Energetika Ljubljana and PPE-TOL Ljubljana unit). The trend in gas quantities transferred to other transmission systems, however, is significantly more negative. In 2025, only 129 GWh of gas was transferred via Slovenia, representing just 0.7% of the gas quantities transferred in 2006.

FIGURE 179: QUANTITIES OF GAS TRANSFERRED IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, PLINOVODI

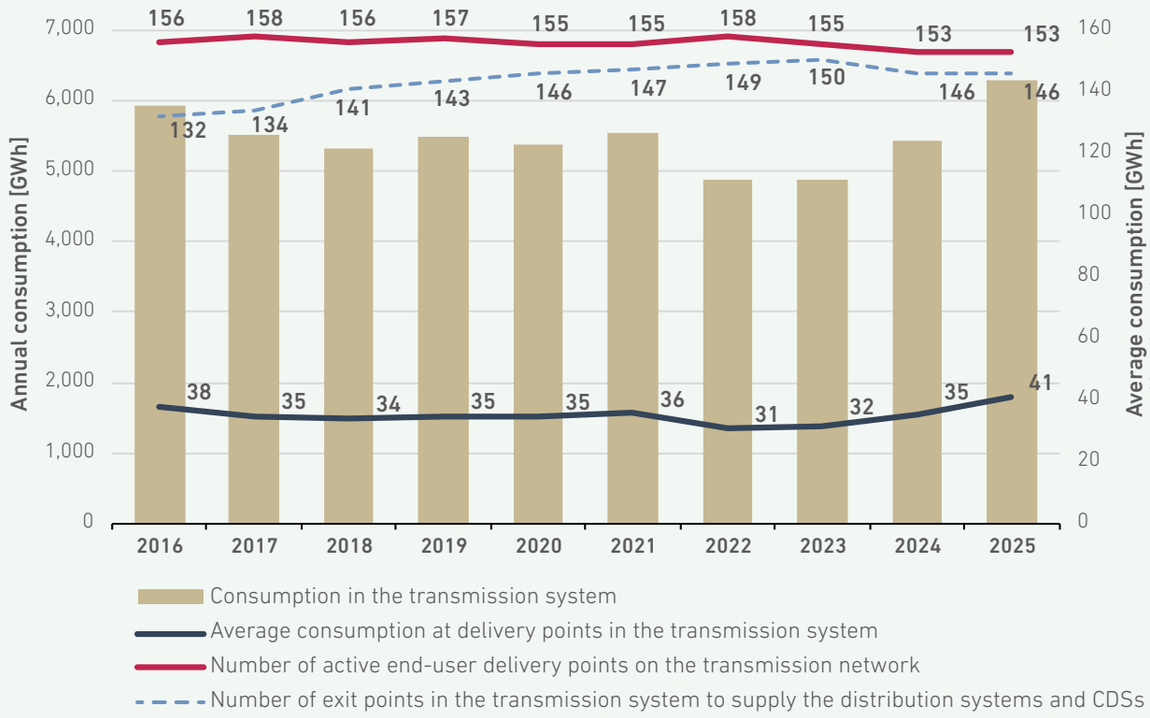
FIGURE 180: TREND IN GAS CONSUMPTION BY SLOVENIAN CONSUMERS AND GAS QUANTITIES TRANSMITTED TO OTHER TRANSMISSION SYSTEMS OVER THE PAST 20 YEARS



SOURCES: ENERGY AGENCY, PLINOVODI

The number of consumer connection points remained the same as the previous year, at 153.

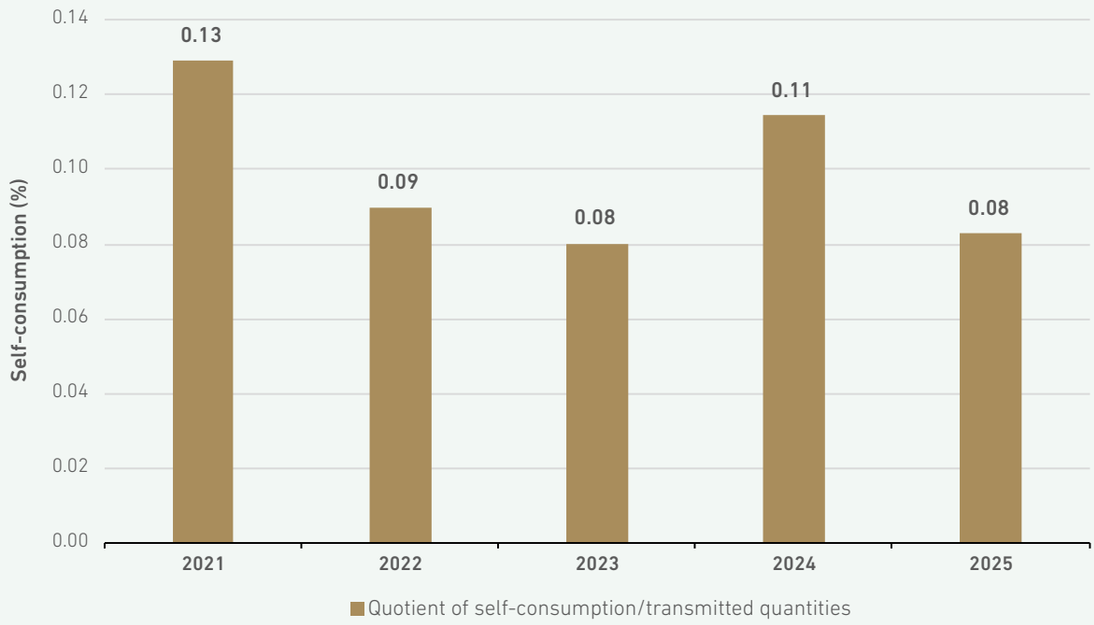
FIGURE 181: TOTAL AND AVERAGE CONSUMPTION PER CONSUMER'S DELIVERY POINT IN THE TRANSMISSION SYSTEM AND NUMBERS OF FINAL CONSUMERS', DISTRIBUTION SYSTEM OPERATORS' AND CLOSED DISTRIBUTION SYSTEM OPERATORS' DELIVERY POINTS IN THE NATURAL GAS TRANSMISSION SYSTEM IN THE 2016–2025 PERIOD



SOURCES: ENERGY AGENCY, PLINOVODI

Gas consumption for own use – required to power compressors and heat gas at metering and regulation stations – amounted to 8.8 GWh, which is 20.9% less than the previous year. Specific gas consumption for own use – defined as the ratio of the volume of gas consumed for own use to the volume of gas transmitted at border entry points – also decreased.

FIGURE 182: SELF-CONSUMPTION, CALCULATED BASED ON TRANSFERRED GAS QUANTITIES IN THE 2021–2025 PERIOD



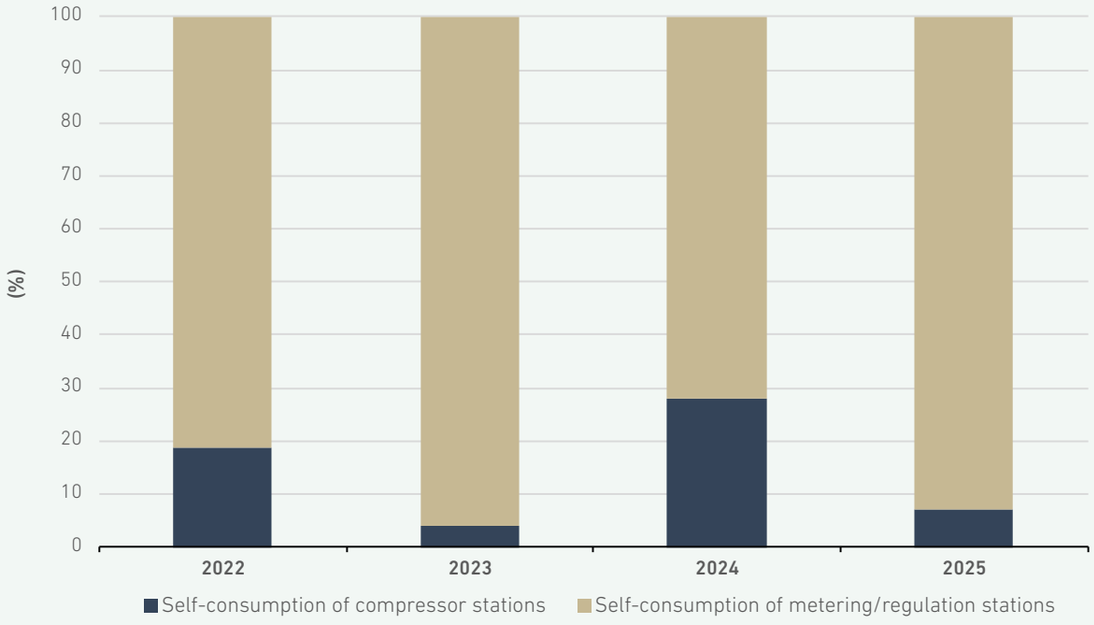
SOURCES: ENERGY AGENCY, PLINOVODI

Gas consumption for own use – required to power compressors and heat gas at metering and regulating stations – amounted to 8.8 GWh, which is 20.9% less than the previous year.

Specific gas consumption for own use also decreased, which is the ratio between the volume of gas consumed for own use and the volume of gas transmitted at the border entry points.

Gas consumption for own use at compressor stations 5 times lower than the previous year

FIGURE 183: SELF-CONSUMPTION RATIO: COMPRESSOR STATIONS VS. METERING AND REGULATION STATIONS DURING THE 2022–2025 PERIOD



SOURCES: ENERGY AGENCY, PLINOVODI

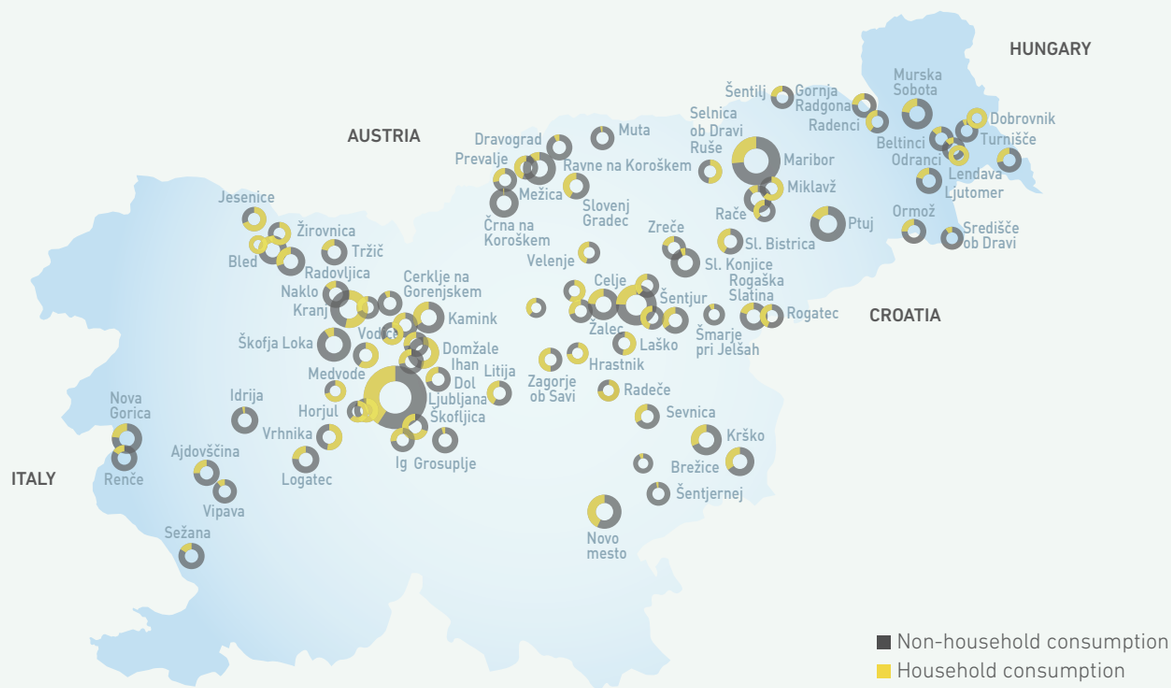
Distribution of gas

Gas distribution is carried out as a service of general economic interest by the distribution system operator to supply large-scale consumers in urban and residential areas, and as distribution to industrial and commercial consumers in CDS areas.

The content and data set out below, unless explicitly stated to relate to CDS areas, describe distribution areas with an organised optional local public utility service. All operators of distribution and closed distribution systems carried out distribution without disruption and ensured a safe and reliable supply to end consumers. In 2025, gas distribution as a public service was carried out in 86 municipalities across most of Slovenia's urban areas, with the exception of the Primorska region. In 2025, gas distribution was not newly established in any municipality. In 2025, gas distribution as a public service was carried out by 12 distribution system operators. In 73 municipalities, this activity is organised through a concession agreement between the concessionaire and the local authority; in 12, it is carried out by public enterprises; and in one municipality, the public service is provided through public capital investment in the operations of a private-law entity. In Šenčur and Hrastnik, two distribution system operators provided the public service on the basis of concession agreements concluded with the municipality. In some municipalities where a concession for gas distribution had already been granted, supply had not yet been made possible because the distribution network had not yet been built or made operational, or because connection to the transmission system was not yet possible.

Gas distribution as a local service of general economic interest is carried out by 12 distribution system operators in 86 municipalities

FIGURE 184: GAS DISTRIBUTION SYSTEMS BY DELIVERED QUANTITIES



SOURCES: ENERGY AGENCY, DISTRIBUTION SYSTEM OPERATORS

In 2025, distribution system operators distributed 3,554 GWh of gas, which was 2.8% more than the previous year and 1% less than the average for the five-year period 2020–2024. The increase in the volume of gas distributed, primarily to domestic customers, was due to a colder winter than the previous year.

A total of 25.6 GWh of gas was transferred from foreign systems into the distribution systems, of which 25.5 GWh came from Italy and 0.1 GWh from Croatia.

Household consumers accounted for 89.7% of the total number of distribution consumers.

According to data from the operators, consumption by household consumers increased by just over 10% in 2025, whilst non-household consumers consumed 0.3% less than the previous year.

Consumers on the distribution networks consumed 3,554 GWh of gas, 2.8% more than in 2024 and 1% less than the average for the previous five years

The number of household consumers fell by 110 (0.1%) while the number of non-household consumers on the distribution network also fell by 474 (3.4%).

At the end of 2025, there were 118,769 household and 13,636 non-household consumers.

The number of end users (household and non-household) on the distribution network increased in 21 municipalities compared with 2024 (the largest increase was in the municipality of Vrhnika, with 39 additional users). In 14 municipalities, the number of end consumers remained the same, whilst in 51 municipalities the number of end consumers fell in 2025 (the largest decrease being in the City Municipality of Ljubljana, by 252 consumers) compared to 2024.

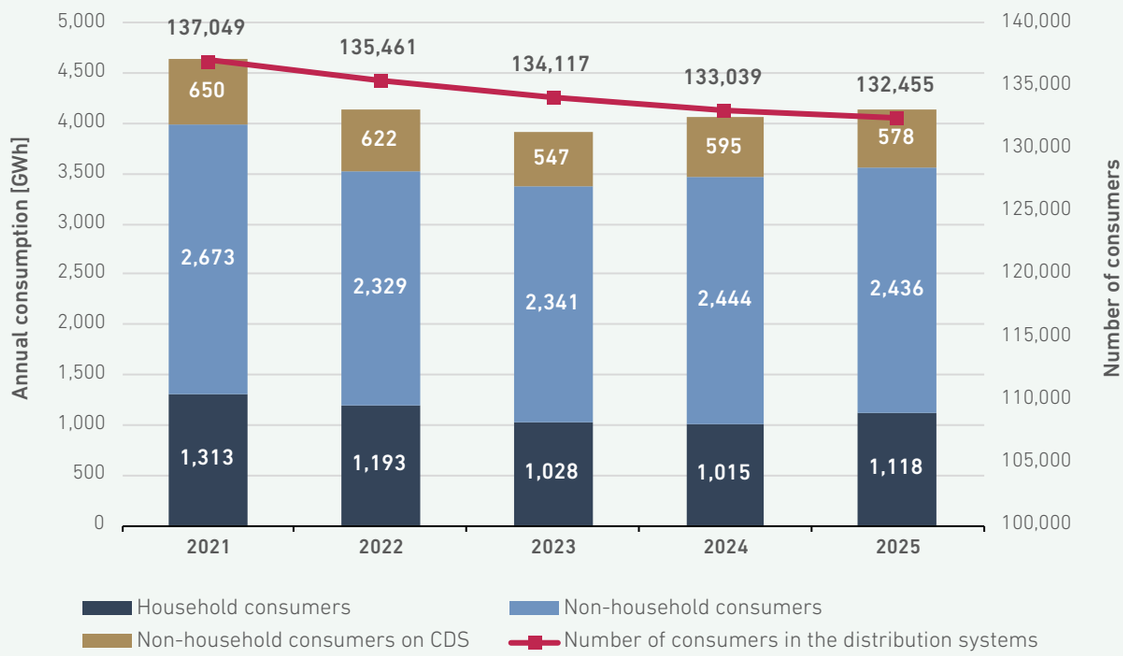
There were 584 fewer consumers on the distribution networks than in 2024

In the five CDS areas – Jesenice, Kranj, Kidričevo, Štore and Anhovo – 50 consumers were registered at the end of 2025, the same number as the previous year. In these closed distribution areas, gas distribution is not carried out as a public service. Access to the CDS is restricted to consumers within the defined geographical area of these systems. CDS operators distributed 578 GWh of gas in these areas. Compared with 2024, consumption was 2.9% lower.

Gas consumption in CDS areas was 2.9% lower than in 2024

The figure below shows the consumption of household and non-household consumers on distribution systems and CDS, as well as their numbers by consumer type and system type, over a five-year period.

FIGURE 185: CONSUMPTION IN THE DISTRIBUTION SYSTEM AND CDSS BY THE TYPE OF CONSUMERS AND THE NUMBER OF CONSUMERS IN THE 2021–2025 PERIOD



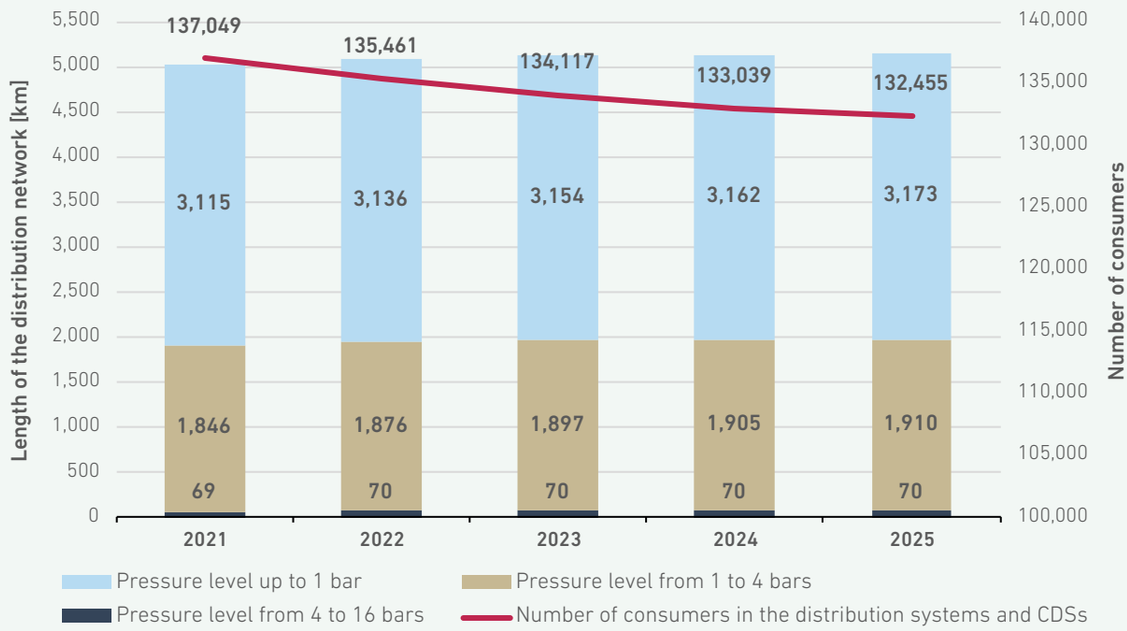
SOURCES: ENERGY AGENCY, DISTRIBUTION SYSTEM OPERATORS

At the end of 2025, the total length of active pipelines in distribution systems and CDSs was 5,153 kilometres, which is 0.3% more than the previous year. Distribution pipelines and their associated infrastructure are mostly owned by distribution system operators.

In the areas covered by the five ZDS, 18.1 kilometres of gas pipelines were recorded, of which 8.3 kilometres were gas pipelines with a pressure level of between 4 and 16 bar, approximately 7.6 kilometres with a pressure level of between 1 and 4 bar, and 2.2 kilometres of gas pipelines with a pressure level of up to 1 bar. The distribution network has been extended by 3.7% over the past five years.

The following figure shows the length distribution of the distribution systems and CDS by pressure level, the extension of gas pipelines including connections, and the number of active supply points for the period 2021–2025.

FIGURE 186: LENGTH OF THE DISTRIBUTION NETWORKS AND CDSS, AND THE NUMBER OF ACTIVE CONSUMERS IN THE 2021–2025 PERIOD



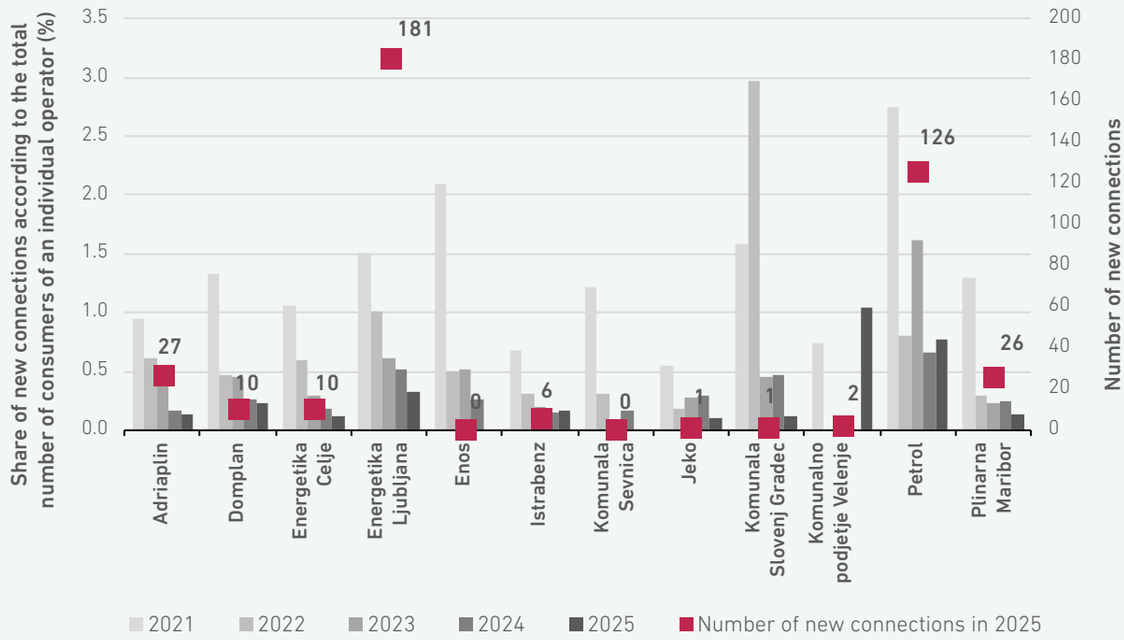
SOURCES: ENERGY AGENCY, DISTRIBUTION SYSTEM OPERATORS

Gas distribution system operators connected 390 new consumers, both household and non-household, to the distribution networks, which is the lowest figure in the last decade. The number of new connections decreased by almost 25% compared with the previous year, marking the fourth consecutive year of decrease in new connections. Up until 2022, growth in the number of active supply points had been recorded. In 2022, a significant decline in the number of consumers was recorded for the first time, and this trend continued in 2023, 2024 and 2025.

25% fewer new connections to distribution networks than in 2024

The figure below shows the share of new connections relative to the total number of consumers of each operator and the number of new connections to each operator's distribution systems. In 2025, there were no new consumer connections on the CDS network.

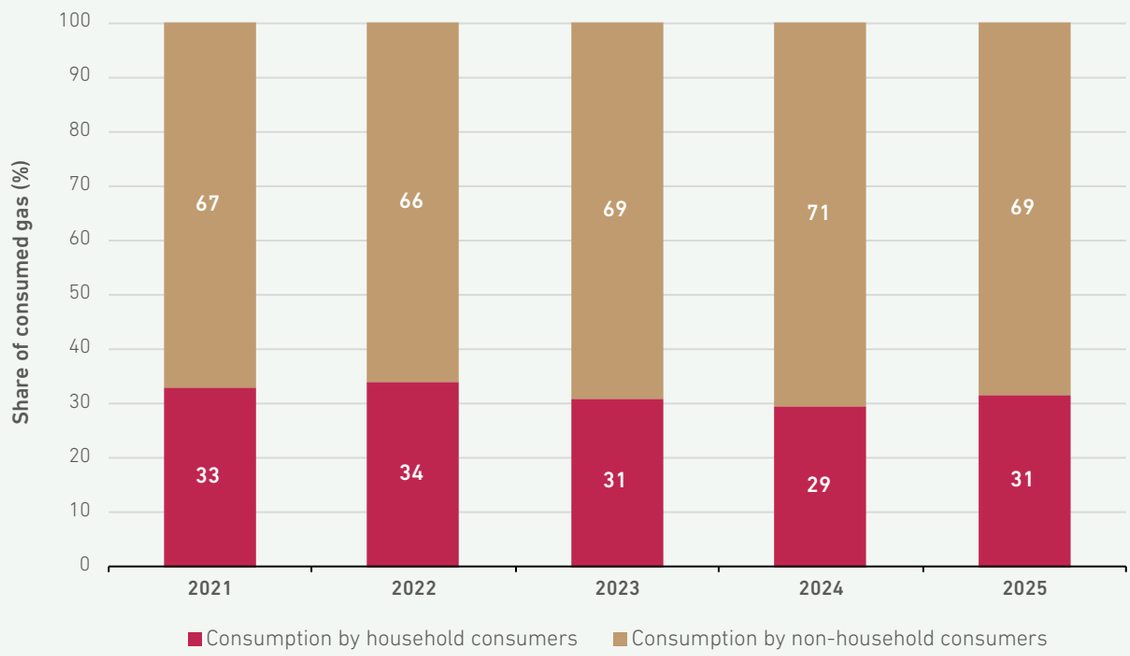
FIGURE 187: SHARE AND NUMBER OF NEW CONSUMERS IN THE DISTRIBUTION SYSTEMS IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, DISTRIBUTION SYSTEM OPERATORS

The structure of consumers remains unchanged. In terms of numbers, household consumers accounted for almost 90% of all consumers on the distribution networks. Data on the volumes of gas distributed in 2025, when compared with previous years, do not show any significant changes in the share of household and non-household consumers.

FIGURE 188: SHARE OF CONSUMED NATURAL GAS FROM THE DISTRIBUTION SYSTEMS BY HOUSEHOLD AND NON-HOUSEHOLD CONSUMERS IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, DISTRIBUTION SYSTEM OPERATORS

In 2025, 92% of all consumers on distribution systems consumed less than 25,000 kWh of gas at the point of consumption, accounting for 96% of consumers in the household sector and 57% in the non-household sector.

Household consumers use gas primarily for heating living spaces and producing domestic hot water, and to a lesser extent for cooking.

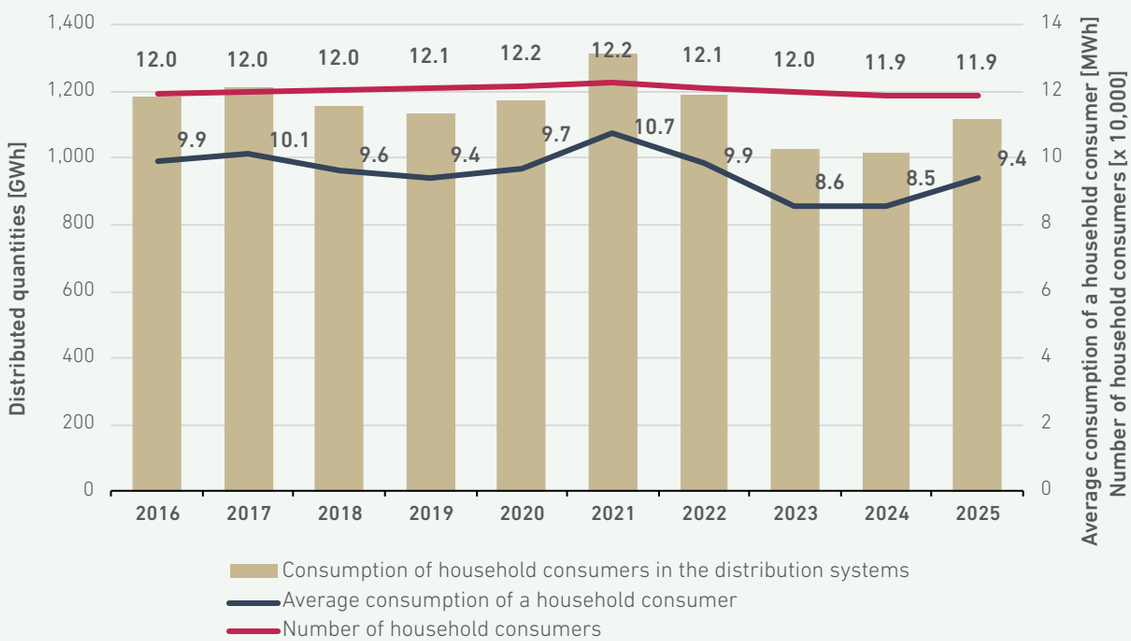
The average annual consumption of domestic customers rose by 10.2% to 9.4 MWh.

The average 10-year consumption of household consumers was 9.5 MWh, which indicates an average winter temperature in 2025.

Average consumption by domestic consumers increased by 10.2% compared with 2024

The following figure shows the total and average gas consumption of household consumers and the number of such consumers in each year of the period 2016–2025.

FIGURE 189: TOTAL AND AVERAGE CONSUMPTION OF HOUSEHOLD CONSUMERS IN THE DISTRIBUTION SYSTEMS IN THE 2016–2025 PERIOD



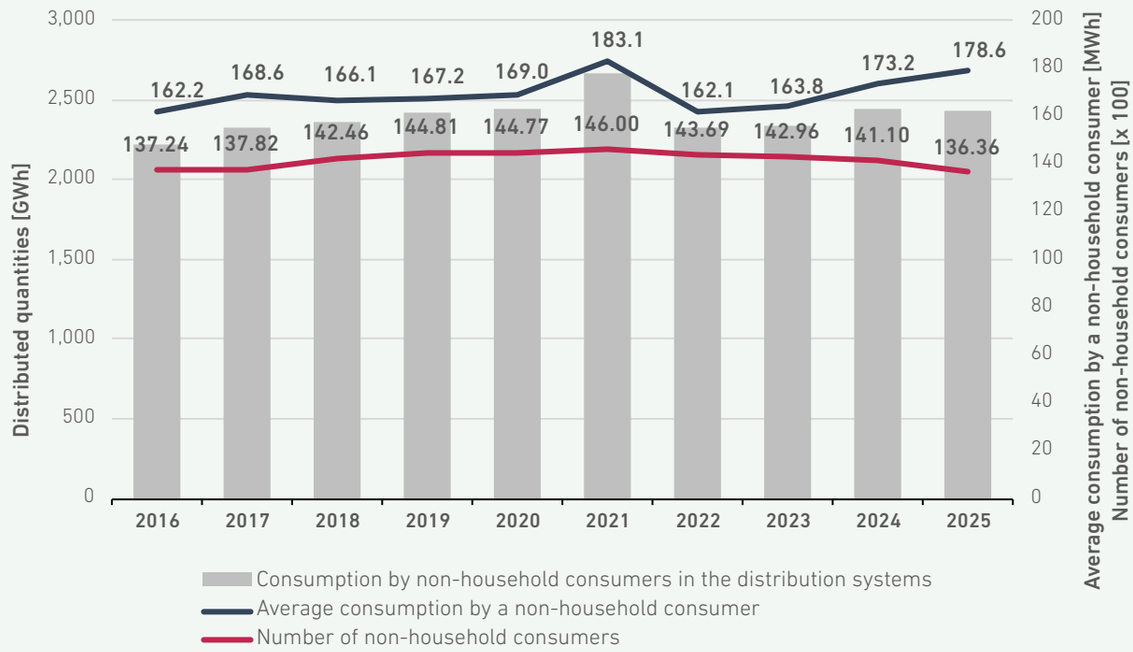
SOURCES: ENERGY AGENCY, DISTRIBUTION SYSTEM OPERATORS

Non-household consumers used gas not only for heating but also for technological and production processes, cooling and other activities. At the end of 2025, there were 474 fewer non-household consumers connected to the distribution system than a year earlier.

Consumption by non-household consumers in 2025 was 5.11% lower than the average for the five-year period 2020–2024, while average annual consumption by non-household consumers fell by 3.36% compared with 2024. The following graph illustrates the trends in consumption and the number of non-household consumers.

A reduction of 474 in the number of business consumers and a 3.36% decrease in the average gas consumption of business consumers on the distribution network compared with 2024

FIGURE 190: TOTAL AND AVERAGE CONSUMPTION BY NON-HOUSEHOLD CONSUMERS IN THE DISTRIBUTION SYSTEMS IN THE 2016–2025 PERIOD



SOURCES: ENERGY AGENCY, DISTRIBUTION SYSTEM OPERATORS

In none of the five CDS areas did operators supply household consumers. The average annual consumption of gas consumers connected to the CDS was 11.6 GWh, which is 2.5% less than in 2024. Most of the consumption in the CDS areas is for the technological and production processes of industrial consumers, while a negligible share of consumption is accounted for by smaller business consumers, who use gas primarily for space heating and domestic hot water. None of the distribution system operators or CDS had any connected production sources of natural gas, biomethane or synthetic methane, nor was hydrogen injected into any of the distribution systems.

Distribution systems still without connected generation sources

Other Energy Gases from Distributions Systems

Distribution of other energy gases (energy gases used as an energy fuel other than natural gas) from distribution systems not directly or indirectly connected to the gas transmission system was carried out by four distribution companies in Slovenia in 2025. Propane and a mixture of propane and butane were the primary other energy gases distributed. The distribution of other energy gases was carried out from 514 distribution systems in 119 Slovenian municipalities. In 113 municipalities, distributors supplied gas as a commercial activity from 461 distribution systems, while in the remaining 53 distribution systems across nine municipalities, this was carried out as a public service.

A 2.6% increase in consumption of other energy gases

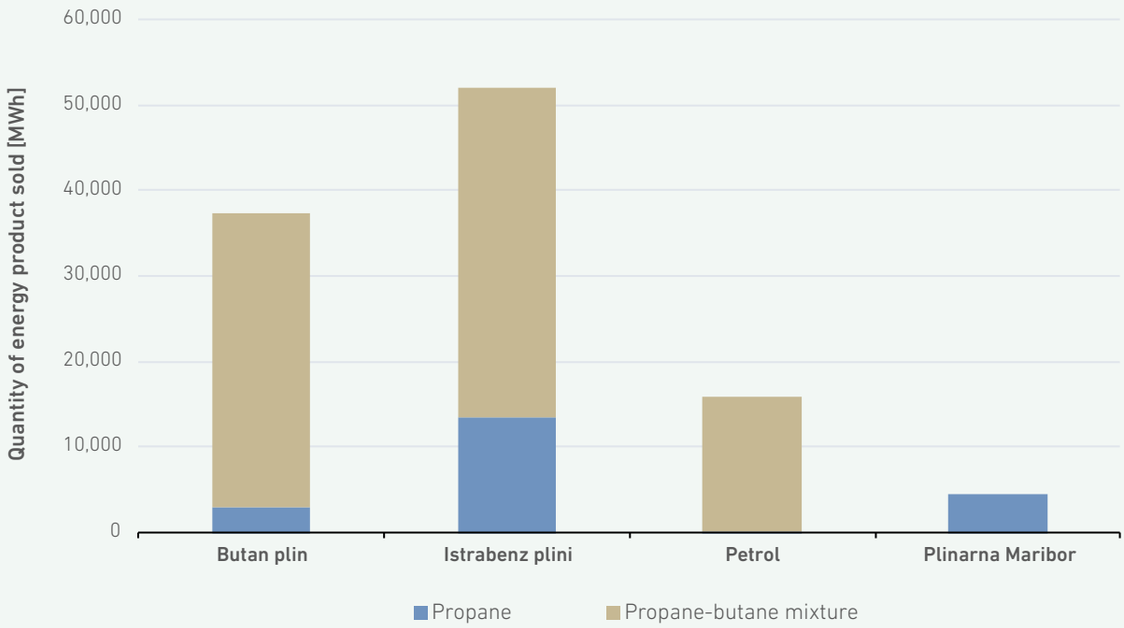
In 2025, 6,195 customers were supplied from distribution systems for other energy gases, which is 5.4% less than the previous year, while the distributed energy value of the gases[143] reached 109.9 GWh, representing a 2.6% increase compared with the previous year. The average annual consumption

143 Due to data corrections for 2024 received from reporting entities following the publication of last year's report, the comparative changes between 2025 and 2024 may differ from the figures presented in last year's report.

per consumer in 2025 was 17.7 MWh, which is 7.9% more than in the previous year. The number of consumers connected to distribution systems in individual municipalities ranged from two to 1,316, while the average number of consumers connected to was 12.

The total length of distribution systems decreased by 1.8% compared with 2024, amounting to 112.2 kilometres. Figure 191 shows distributors categorised by type and quantity of other energy gases sold.

FIGURE 191: DISTRIBUTED QUANTITIES OF OTHER ENERGY GASES BY DISTRIBUTORS AND THE TYPE OF GAS



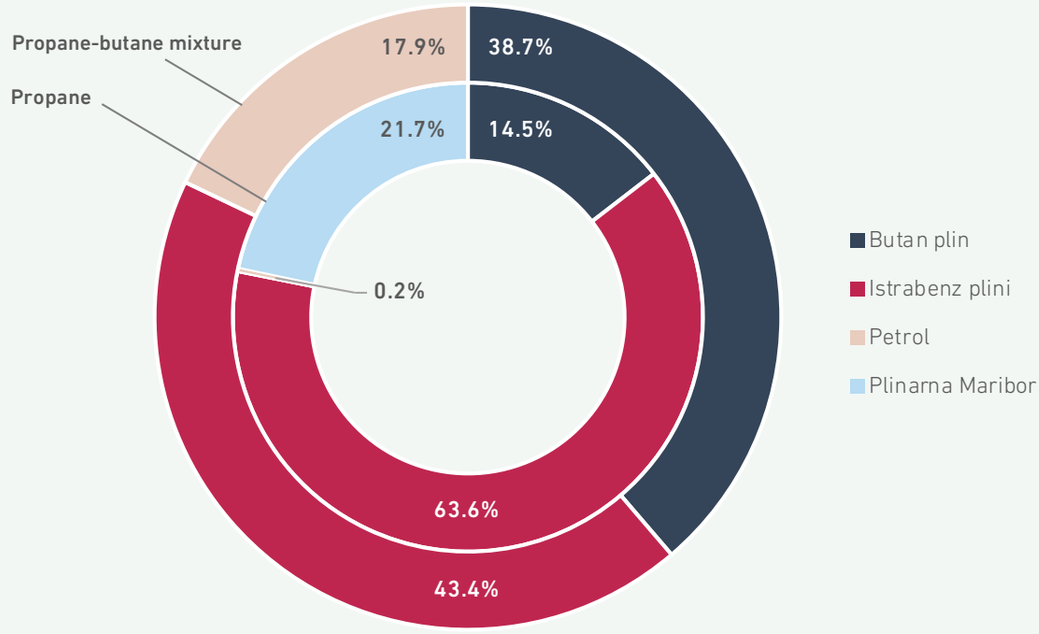
SOURCE: ENERGY AGENCY

Figure 192 shows the market shares[144] of distributors of other energy gases by type of gas and the energy value of quantities sold in 2025, while

Figure 193 shows the market shares of distributors by type of energy gas sold and the number of consumers supplied.

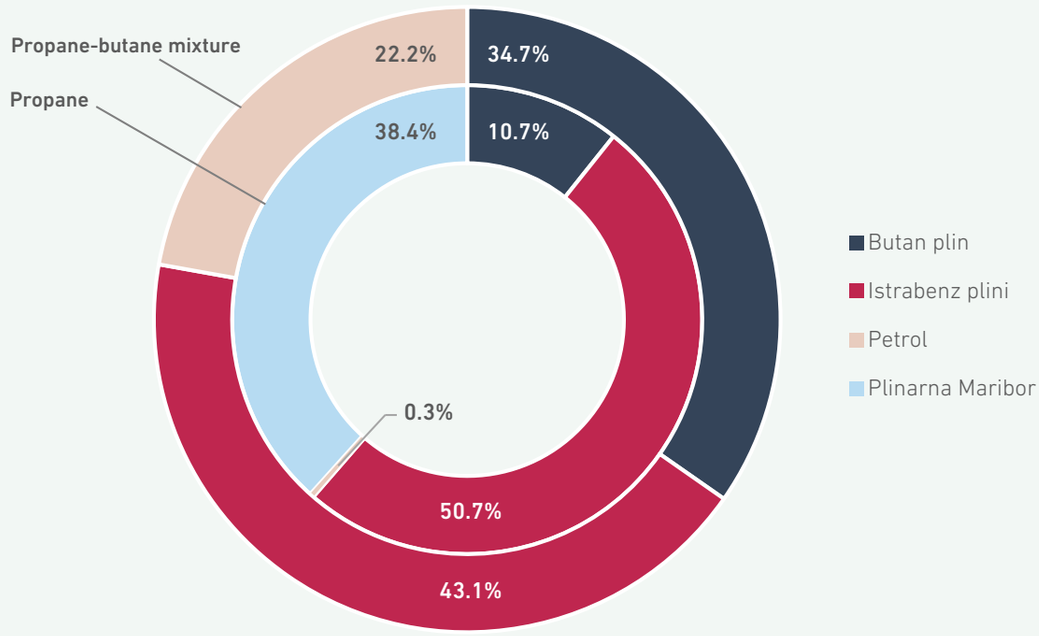
144 The difference between the total and the individual sums is due to rounding to one decimal place.

FIGURE 192: MARKET SHARES OF DISTRIBUTORS OF OTHER ENERGY GASES (ENERGY VALUE OF VOLUMES SOLD)



SOURCE: ENERGY AGENCY

FIGURE 193: MARKET SHARES OF DISTRIBUTORS OF OTHER ENERGY GASES (NUMBER OF CONSUMERS)



SOURCE: ENERGY AGENCY

Regulation of Network Activities

Unbundling

In 2025, the mandatory public service obligation activity of the transmission system operator (TSO) for natural gas in Slovenia was performed by a single entity, while the number of entities carrying out the optional local DSO activity was 12 and remained unchanged from the previous year. The transmission system operator, Plinovodi, owns the assets used to perform its activity and is both certified and designated as an independent transmission system operator. The owner of the transmission system operator is Plinhold, whose majority shareholder, with a 77.08% stake, is the Republic of Slovenia.

Distribution system operators are not legally separated, as there are no more than 100,000 consumers connected to each distribution system. Given that other energy and market activities were carried out by the distribution system operators, they prepared separate accounts following Article 101 of the Gas Supply Act. System operators are required to prepare annual financial statements as required by the Companies Act for large companies. In the audited annual financial statements, natural gas undertakings have to disclose the criteria for business allocation. The adequacy of the requirements and the correctness of the application have to be audited annually by an auditor who makes a special report.

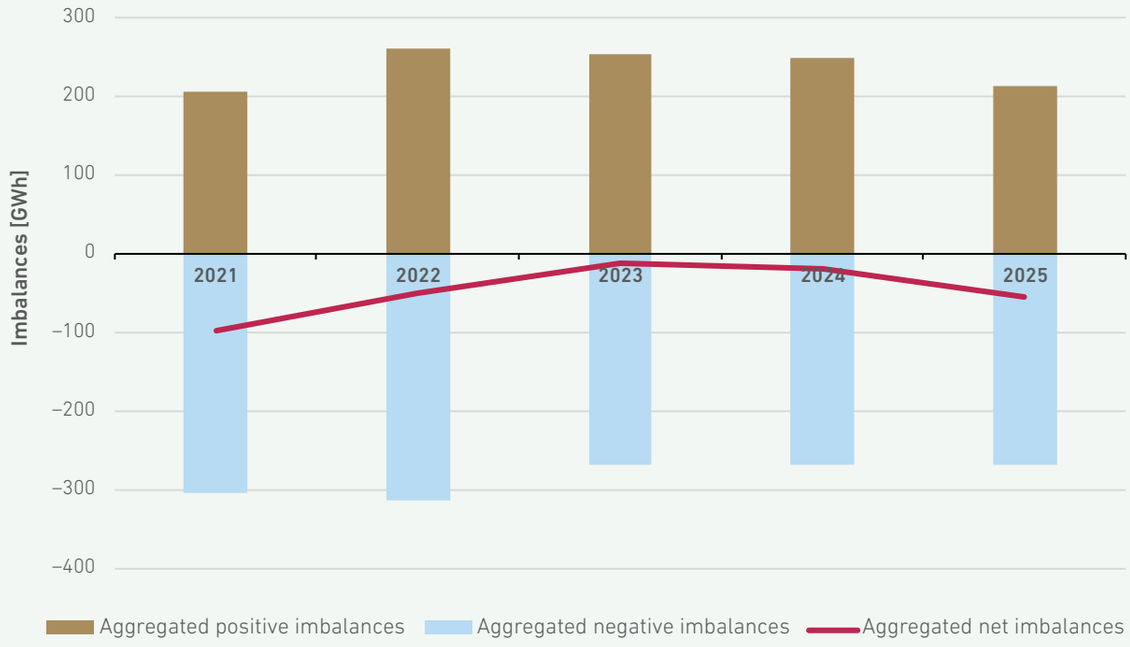
Technical services provided by operators

Balancing

At the end of 2025, there were 12 active balance group leaders in Slovenia, one fewer than the previous year. Of these, nine were also gas suppliers to Slovenian consumers. The transmission system operator ensured the balance of the transmission system by buying and selling gas on the trading platform and through an annual balancing contract, and carried out the settlement of imbalances. The entire transmission system constitutes a single balancing zone; imbalances are determined on a daily basis and settled monthly for each individual gas day.

215 GWh of positive imbalances (a 14% year-on-year decrease), 269 GWh of negative imbalances (almost the same as the previous year)

FIGURE 194: AGGREGATED NET IMBALANCES OF THE BALANCING GROUP LEADERS IN THE 2021–2025 PERIOD



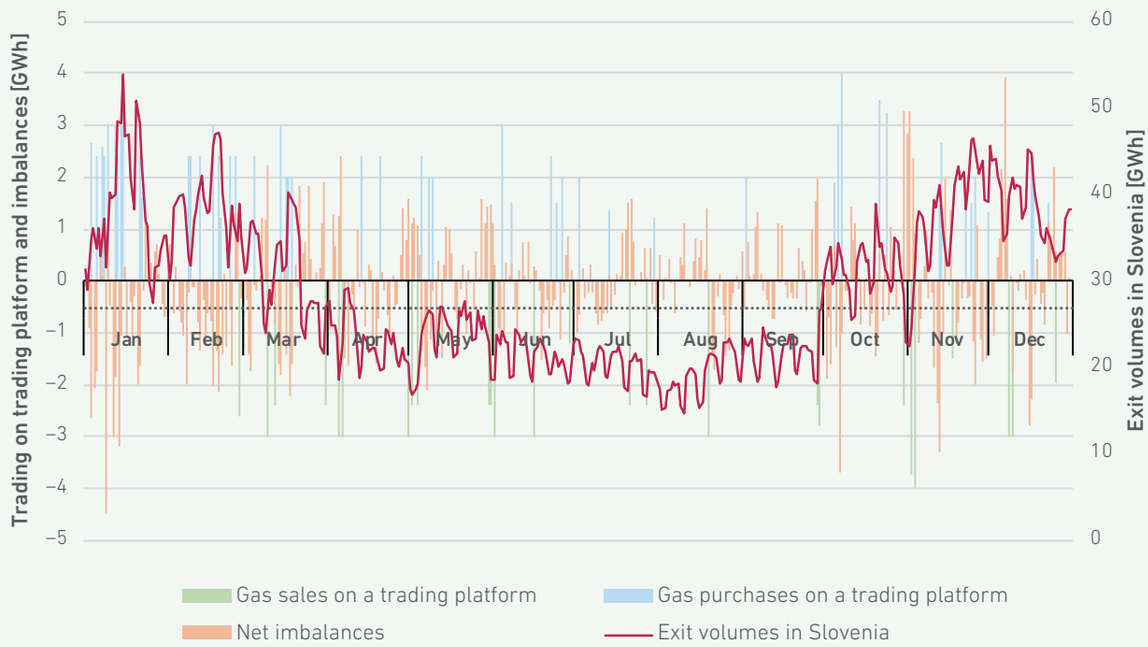
SOURCES: ENERGY AGENCY, PLINOVODI

Compared with the previous year, the positive imbalances of balance group operators decreased, whilst the negative imbalances remained at the same level. In absolute terms, the negative imbalances were 25% higher than the positive imbalances (8% the previous year). The net balance of positive and negative imbalances is thus 17 percentage points lower than the previous year.

The imbalances of balance group leaders amount to 4.6% of the annual consumption of Slovenian gas consumers, which is 0.8 percentage points less than the previous year.

Through trading on the trading platform and dynamic pressure regulation, the transmission system operator succeeded in ensuring the normal operation of the transmission system. After having to use the transmission system balancing service as many as 16 times during the crisis year of 2022, there has been no need to use this service in the last two years.

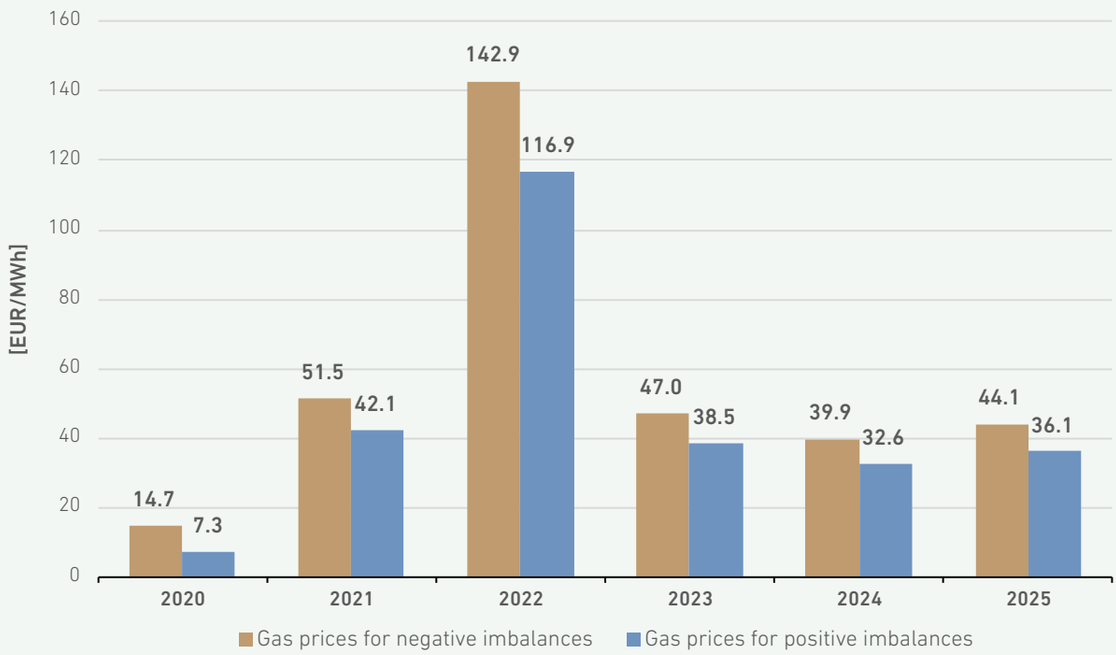
FIGURE 195: GAS PURCHASES AND SALES BY THE TSO ON THE TRADING PLATFORM, AGGREGATED NET IMBALANCES OF BALANCING GROUP LEADERS, AND EXIT GAS VOLUMES IN SLOVENIA IN 2025



SOURCES: ENERGY AGENCY, PLINOVODI

Average gas prices for imbalances increased by 11% compared with the previous year. Compared with prices during the crisis year of 2022, prices are 3.2 times lower, but are still 3.6 times higher than in 2020, when prices were at a record low.

FIGURE 196: AVERAGE GAS PRICES FOR IMBALANCES IN THE 2020–2025 PERIOD



SOURCES: ENERGY AGENCY, PLINOVODI

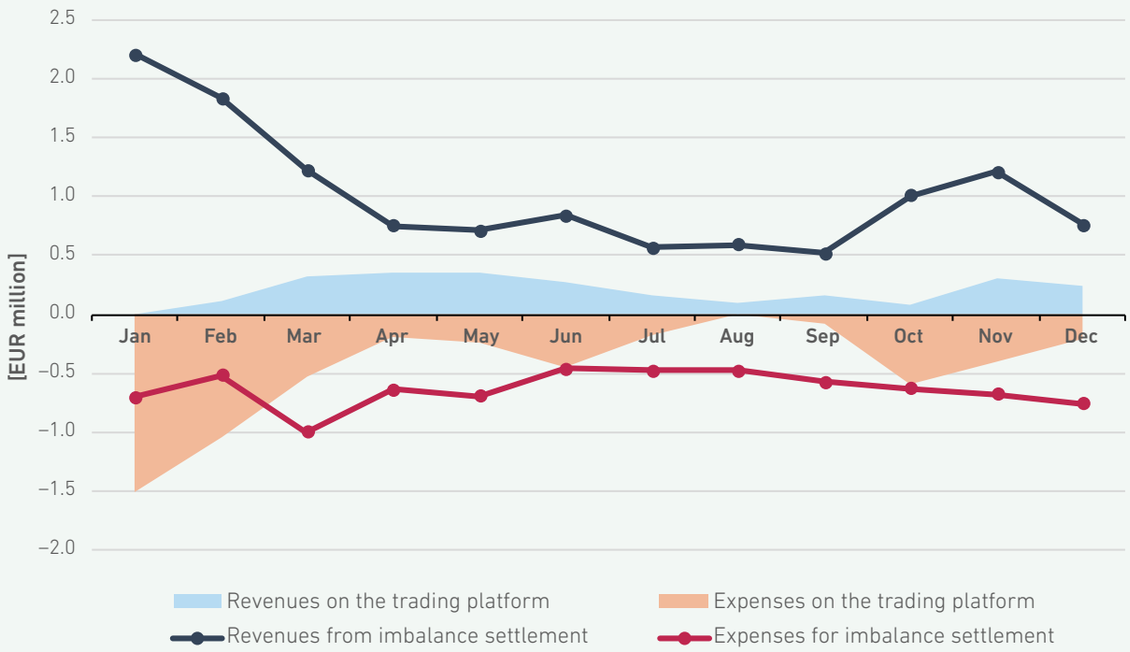
On the trading platform, the TSO generated roughly the same revenue as in the previous year, while its expenditure was 36% higher. Revenue from imbalance settlement was 15% higher than in 2024, and expenses were 4% lower. The higher expenses on the trading platform, coupled with higher revenue from imbalance settlement, are the result of larger net negative imbalances on the part of balance group holders. The TSO is cost-neutral when settling imbalances, purchasing and selling gas to balance the transmission system, and trading on the trading platform; this means that surpluses or deficits are distributed proportionally amongst the balance group operators. In 2025, it thus generated a surplus of 1.74 million euros, which is approximately 27% more than in the previous year.

TABLE 35: REVENUES AND EXPENSES OF THE TSO ON THE TRADING PLATFORM, FOR THE PROVISION OF THE BALANCING SERVICES, AND FOR THE SETTLEMENT OF DAILY IMBALANCES, AVERAGE SELLING/PURCHASE PRICES

Activity/ TSO's services		2021	2022	2023	2024	2025
Trading platform	Revenues [EUR million]	3.4	12.8	4.1	2.5	2.5
	Average sales price [EUR/MWh]	37.9	110.5	37.5	33.6	35.3
	Expenses [EUR million]	–10.1	–20.6	–5.7	–4.0	–5.4
	Average purchase price [EUR/MWh]	50.4	124.0	48.2	40.5	44.7
System balancing service	Revenues [EUR million]	1.1	1.9	0.1	0	0
	Average sales price [EUR/MWh]	103.4	113.2	65.6	/	/
	Expenses [EUR million]	–0.2	–1.3	0	0	0
	Average purchase price [EUR/MWh]	76.3	149.7	/	/	/
Gas balancing	Revenues [EUR million]	16.4	38.9	13.0	10.7	12.2
	Average marginal purchase price – settlement of negative imbalances [EUR/MWh]	51.5	142.9	47.0	39.9	44.1
	Expenses [EUR million]	–9.8	–28.8	–10.2	–7.9	–7.6
	Average marginal sales price – settlement of positive imbalances [EUR/MWh]	42.1	116.9	38.5	32.6	36.1

SOURCES: ENERGY AGENCY, PLINOVODI

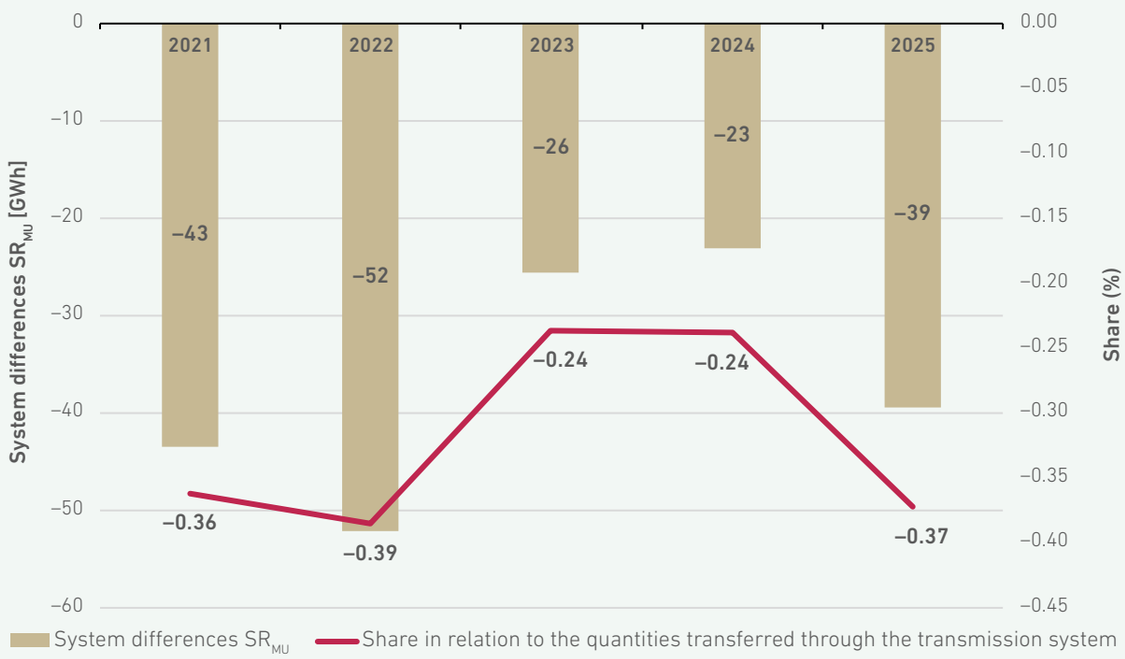
FIGURE 197: REVENUES AND EXPENSES OF TSOS ON THE BALANCING MARKET IN 2025



SOURCES: ENERGY AGENCY, PLINOVODI

System differences due to SR_{MU} measurement uncertainties were 70% higher in absolute terms compared with the previous year; consequently, the share of quantities transmitted via the transmission system also increased in absolute terms. Unlike in previous years, the SR_{MU} system differences were positive in at least one month (April), and negative in the remaining months.

FIGURE 198: SYSTEM DIFFERENCES DUE TO METERING UNCERTAINTIES AND THEIR SHARE OF THE QUANTITIES TRANSMITTED THROUGH THE TRANSMISSION SYSTEM OVER THE 2021–2025 PERIOD

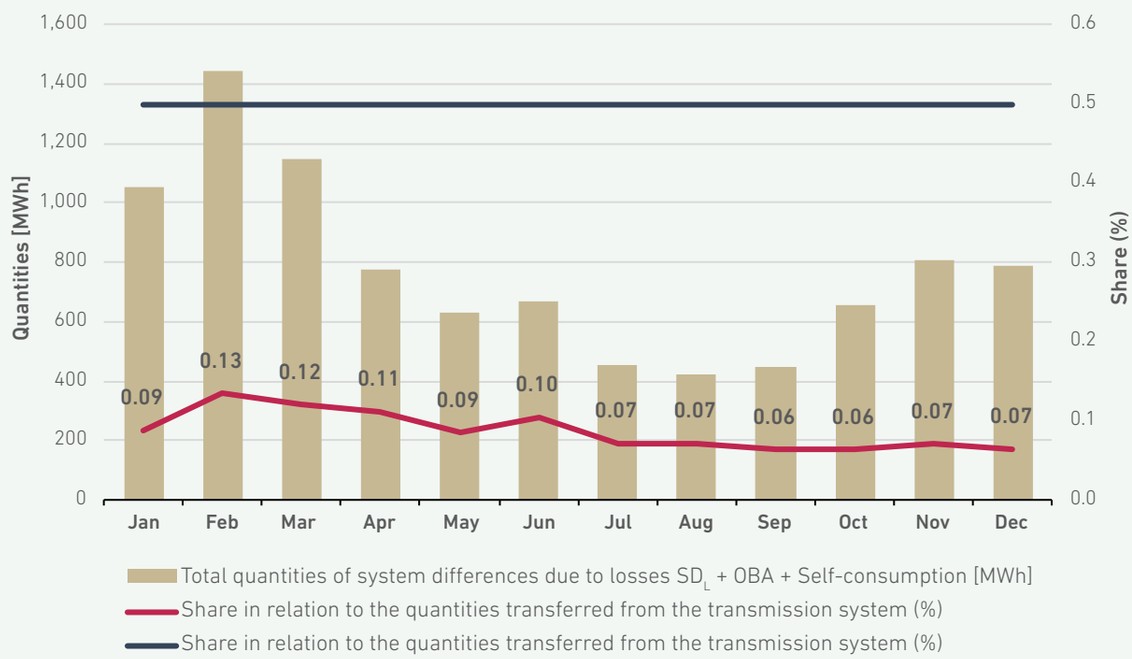


SOURCES: ENERGY AGENCY, PLINOVODI

System differences due to SD_L losses are considerably smaller than the SR_{MU} system differences and, in 2025, amounted to 53 MWh – 64% less than the previous year.

The transmission system operator is reimbursed for costs relating to system differences due to losses, quantities for own use and quantities for the purposes of settlement under the OBA (Operational Balancing Agreement), totalling up to 0.5% of the quantities transmitted via the transmission system. In 2025, the sum of these quantities averaged 0.09%.

FIGURE 199: MONTHLY TRENDS IN THE SUM OF SYSTEM DIFFERENCES (SD_L), SELF-CONSUMPTION, AND OBA BILLING IN 2025

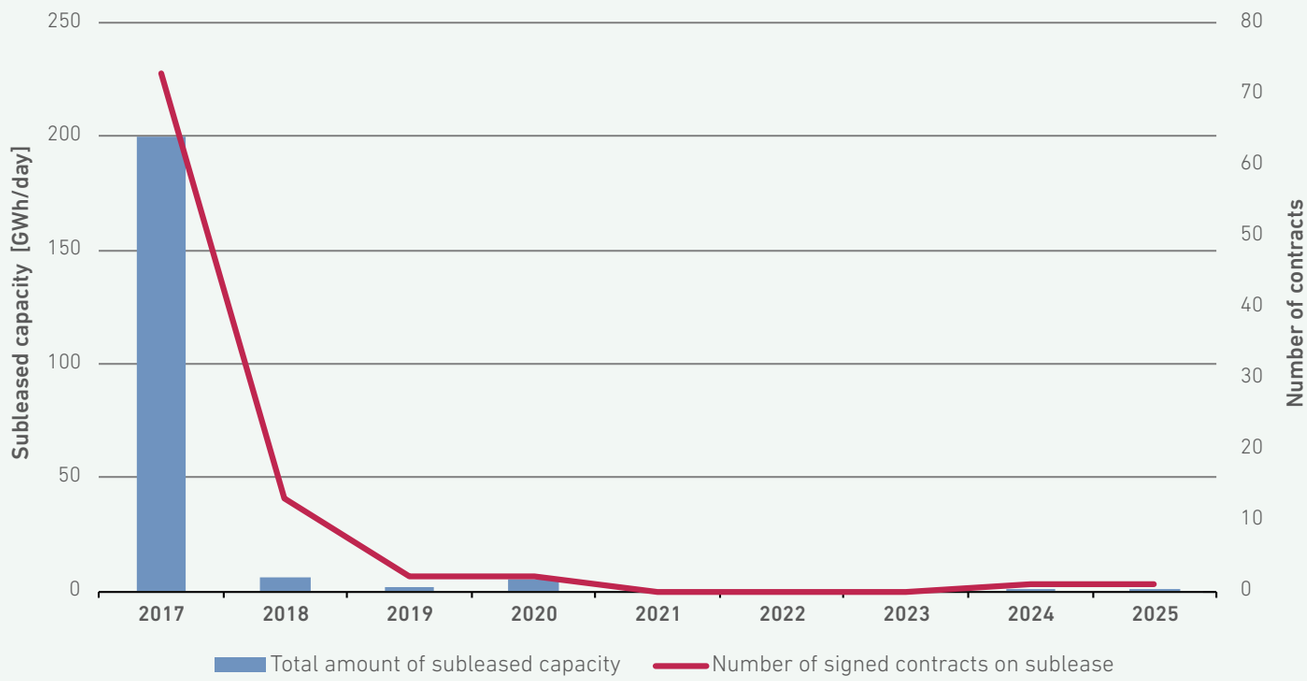


SOURCES: ENERGY AGENCY, PLINOVODI

Secondary Market for Transmission Capacity

As in the previous year, trading of secondary capacity in 2025 took place exclusively at the Rogatec entry interconnection point. For the second year running, this border interconnection point was both contractually and physically congested.

FIGURE 200: TREND IN THE DEVELOPMENT OF THE SECONDARY TRANSMISSION CAPACITY MARKET IN THE 2017–2025 PERIOD



SOURCES: ENERGY AGENCY, PLINOVODI

The year 2017 marked a turning point for trading on the secondary market for transmission capacity, as most long-term transmission contracts expired. The decline in the role of the secondary market was also driven by a sharp reduction in capacity purchases at border points, an increasingly strong trend towards short-term capacity purchases, the introduction of electronic capacity auctions, and improved optimisation of capacity purchases by transmission system users.

The Multi-Year Development of the Transmission Network

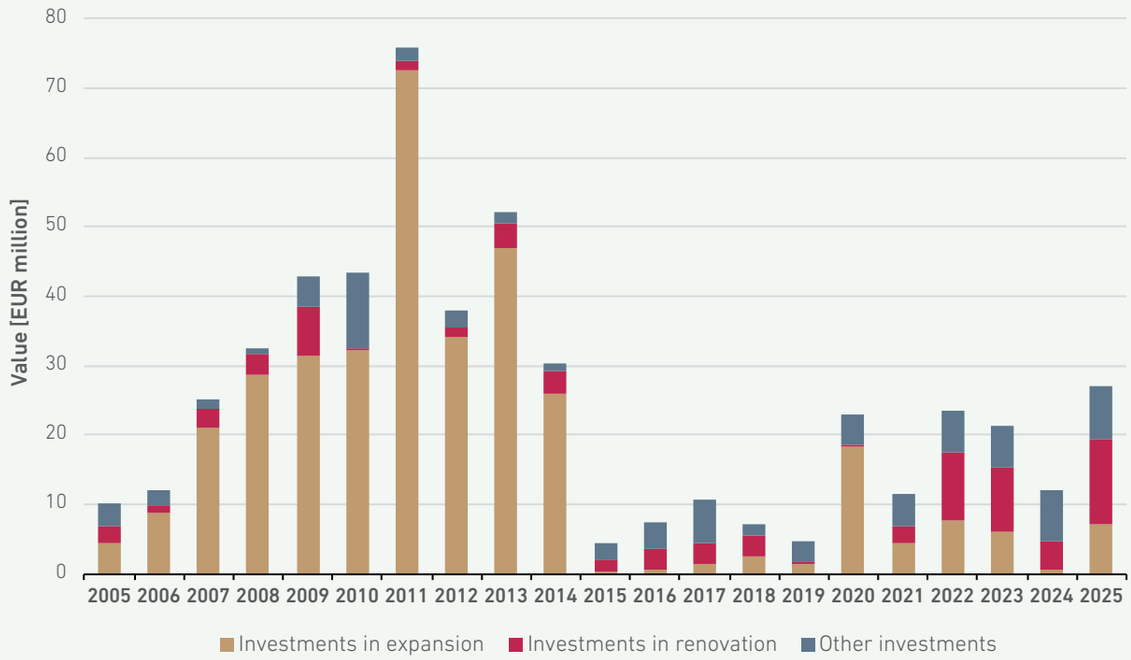
Investments in the Natural Gas Transmission System

The transmission system operator allocated EUR 27.1 million to investments in the transmission system, which is 2.3 times more than in the previous year. Investments in expansion amounted to EUR 7.2 million, investments in refurbishment to EUR 12.1 million, and other investments to EUR 7.8 million. All investments were financed from depreciation of fixed assets and other own sources.

EUR 27.1 million invested in the transmission system – 2.3 times more than the previous year

The length of the transmission system's gas pipelines remained unchanged in 2025, meaning that no new gas pipelines were brought into service, nor were any gas pipelines decommissioned.

FIGURE 201: INVESTMENTS IN THE GAS TRANSMISSION SYSTEM IN THE 2005–2025 PERIOD



SOURCES: ENERGY AGENCY, PLINOVODI

The most significant activities in 2025 relating to the implementation of investments were linked to the construction of the new Vrtojba border metering and regulation station, the start of construction of the first phase of the Zreče gas pipeline loop, and the start of construction of the M6 gas pipeline on the section from Ajdovščina to Sežana. The transmission system operator also carried out numerous activities relating to site selection, the regulation of property rights and the obtaining of planning permission.

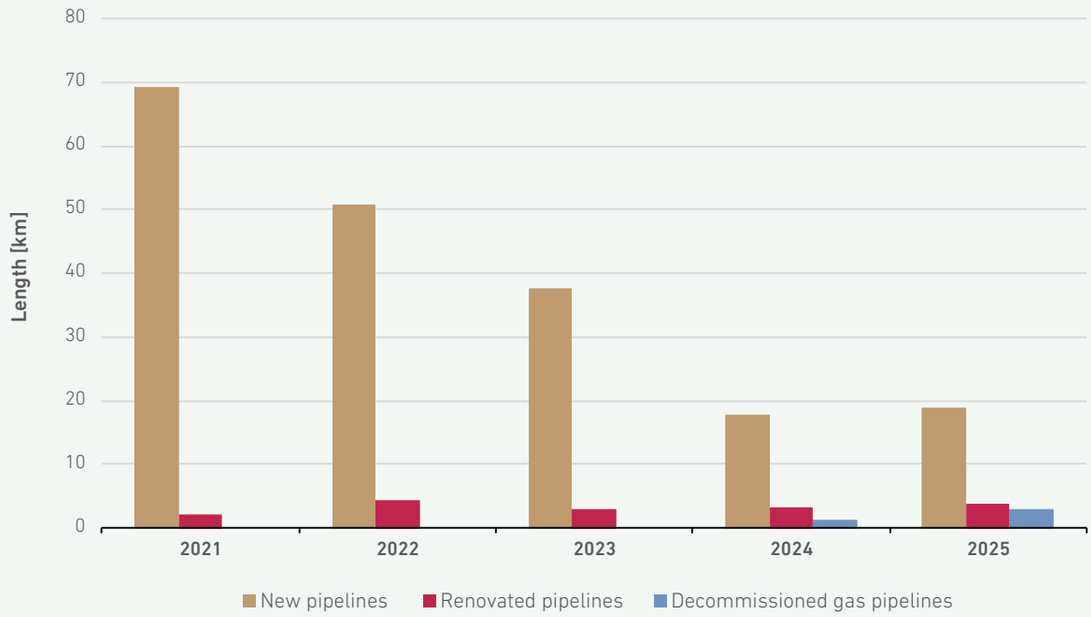
In 2026, the transmission system operator will complete the construction of the Vrtojba MMRP and continue with the construction of the M6 Ajdovščina–Lucija gas pipeline and the R21AZ Konjiška vas–Oplotnica transmission gas pipeline. Construction is also scheduled to begin on the R25A/1 Trbovlje–Hrastnik project and the R51b TE-TOL–Fužine/Vevče transmission pipeline. Among the connection projects, the construction of the Koto and Dobrunje MRS is planned.

Investments in the Gas Distribution Systems

Distribution system operators constructed 19.0 kilometres of new gas pipelines, which is 1.3 km more than in the previous year. A total of 3.9 km of distribution gas pipelines were renovated, which is 18% more than in 2024. A total of 2.9 km of gas pipelines were decommissioned due to disuse, which is twice as much as the previous year.

19.0 km of new distribution pipelines, – 7% more than in 2024

FIGURE 202: TREND IN THE CONSTRUCTION, RENOVATION AND DECOMMISSIONING OF GAS DISTRIBUTION PIPELINES OVER THE 2021–2025 PERIOD

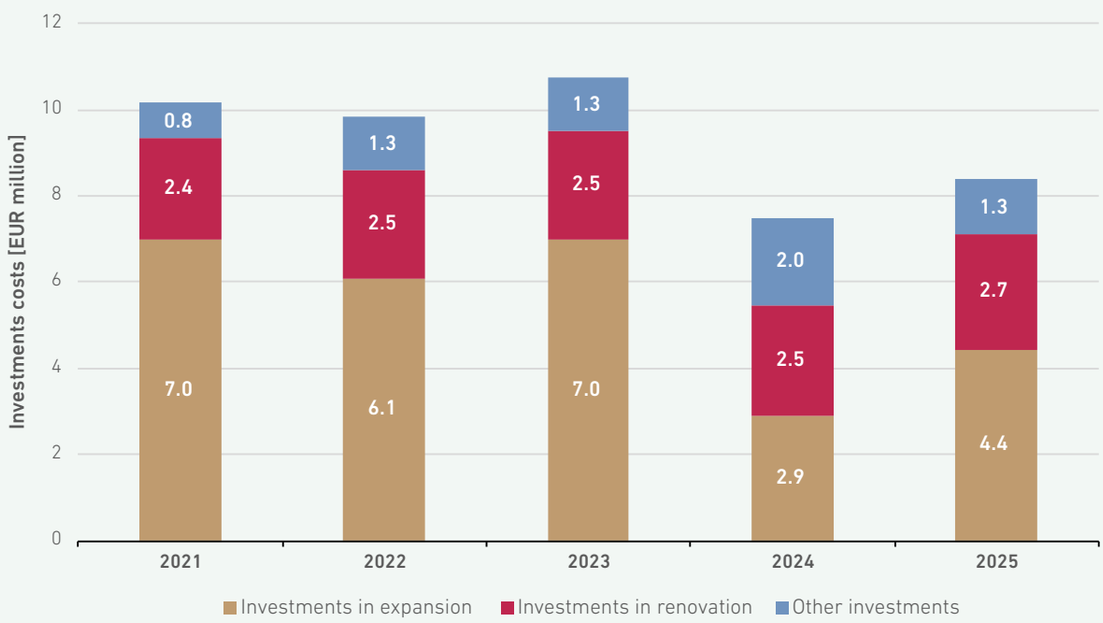


SOURCE: ENERGY AGENCY

The total value of investment in distribution systems amounted to EUR 8.41 million, which is 12% more than the previous year. Investments in network expansion totalled EUR 4.44 million, investments in the refurbishment of distribution systems amounted to EUR 2.68 million, while other investments not directly related to the construction or refurbishment of distribution systems totalled EUR 1.30 million.

3.9 km of distribution gas pipelines upgraded and 2.9 km decommissioned

FIGURE 203: COSTS OF INVESTMENTS IN GAS DISTRIBUTION PIPELINES IN THE 2021–2025 PERIOD

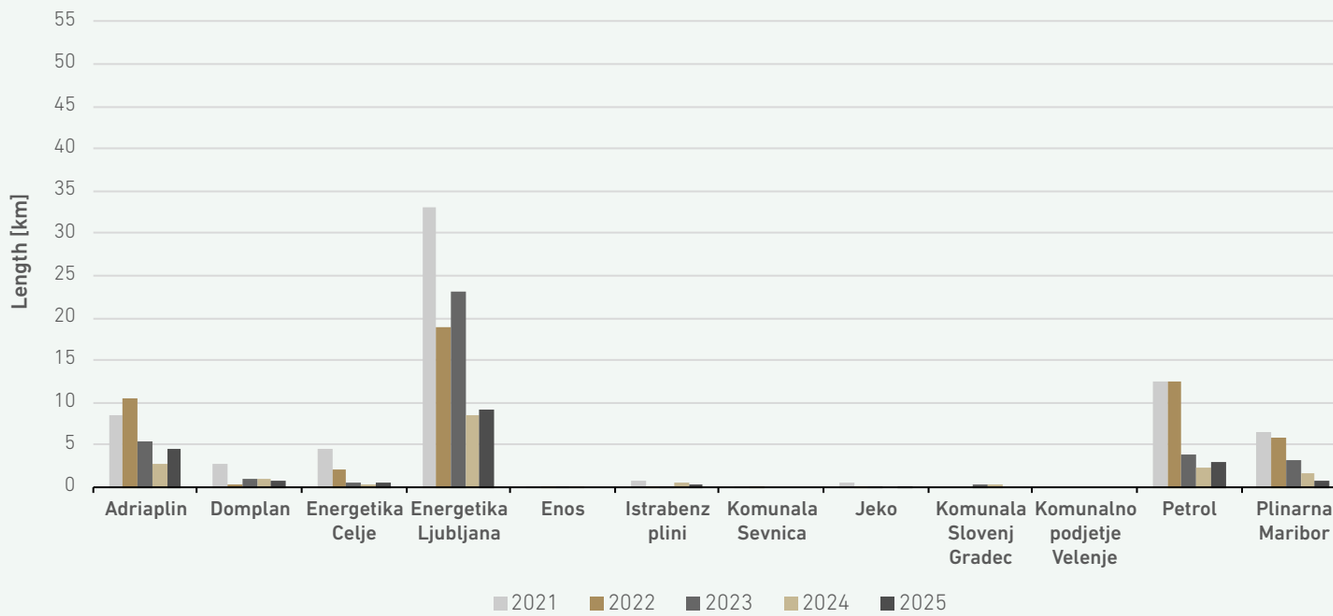


SOURCE: ENERGY AGENCY

Figure 204 shows the intensity of new gas pipeline construction by individual distribution system operators. Over the last five years, the three most active operators have together built 82% of new gas pipelines, and six operators have made almost no expansion of their distribution systems, having together built only 2% of new gas pipelines.

EUR 8.4 million invested in distribution systems – 12% more than in 2024

FIGURE 204: LENGTH OF THE NEW DISTRIBUTION NETWORKS IN THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

Security and Reliability of Operation and the Quality of Supply

The TSO, DSOs and CDSs operators ensured the safe and reliable transport of gas across their networks, connected consumers and carried out all necessary maintenance work on the networks.

The daily peak load on the transmission network was recorded during the winter period (15 January 2025) and amounted to 2,242 MWh/h.

The daily peak load on the transmission network was recorded during the winter (15 January 2025) and amounted to 2,242 MWh/h

The transmission system operator issued three connection approvals, the same number as the previous year. No new supply points were connected to and commissioned on the transmission system in 2025[145].

A 30% decrease in connections to distribution systems compared with 2024

In 2025, gas distribution system operators received 569 applications for connection approval and issued 571 approvals. The number of consents issued fell by almost 16% compared with the previous year, and by 28% compared with 2023. In 2025, operators connected 364 supply points, which is

145 The number of new connections does not reflect the difference in the number of active consumption points on the transmission system at the end of 2025 compared with the previous year, as the total number of active consumption points only includes those with a concluded transmission capacity purchase agreement.

just under 30% fewer than the previous year and a decline of almost 56% compared with 2023.

The average duration of the entire process of connecting new consumers to the distribution system was up to 15 working days for eight operators, following the submission of a complete connection application. For the others, the entire connection process took an average of between 30 and 72 working days.

Ten operators took an average of up to six working days to carry out the physical connection to the network, while two operators required an average wait of ten working days for the physical connection, and another required an average of 34 working days.

No connections were recorded in the areas of five CDSs in 2025.

The transmission system operator and the gas distribution system operators ensured reliable and safe operation for the uninterrupted supply of customers through regular and emergency maintenance work.

In 2025, the transmission system operator carried out 44 planned and 180 unplanned works on the transmission system. Thanks to well-planned works, the gas supply remained uninterrupted. Similarly, the gas supply remained uninterrupted in 2025 despite the unplanned works.

On the distribution systems, operators carried out 2,749 planned works. Their number increased by 10% in 2025. The total duration of the works, however, was just over 4% longer than in the previous year.

Compared with 2024, the total duration of supply interruptions due to planned works increased by approximately 30%

Due to the longer duration of the works, planned works resulted in gas supply interruptions for customers that were just over 30% longer than in 2024.

The figure for the total duration of planned interruptions in 2025 is in fact higher than in previous years.

The number of planned outages carried out in 2025 was 2,776, with the total duration of supply interruptions amounting to 3,338 hours. On the distribution systems of the three operators, the planned works were carried out without any disruptions or supply interruptions. On the distribution system of one operator, the total duration of all outages due to planned works amounted to 2,816 hours. In the areas covered by the remaining eight operators, the total duration of outages due to planned works ranged from two to 356 hours.

There were 781 unplanned interventions on distribution systems, a figure which increased by 1% compared with the previous year. These interventions caused 111 supply interruptions. The total duration of unplanned supply interruptions was 1,168 hours, which is 51.6% less than in the previous year. The causes of the unplanned interruptions were force majeure, accounting for 56 hours, and the actions of third parties, accounting for 1,112 hours. Three operators experienced no such interruptions; for eight operators, the total duration of unplanned interruptions ranged from one to 86 hours; and for one operator, the total duration of unplanned interruptions amounted to 907 hours.

The indicators of supply continuity are SAIDI, which shows the duration of outages per consumer, and SAIFI, which shows the number of outages per consumer. The number of consumers is based on the average number of consumers on distribution systems during the reporting year.

The SAIDI indicator for distribution systems for 2025, which takes into account the duration of all outages, stands at 40.7 minutes per consumer, compared with 19.3 minutes per consumer in 2024.

The SAIDI indicator for unplanned outages reached 32.6 minutes per consumer in 2025, compared with 11.1 minutes per consumer in 2024. These trends are also reflected in the change in the SAIFI indicator, which for the same period and across all distribution networks stood at 0.04 interruptions per consumer in 2025, compared with 0.023 interruptions per consumer in 2024.

The SAIFI indicator for unplanned interruptions reached a value of 0.03 interruptions per consumer, and 0.016 interruptions per consumer in 2024.

Maintenance work was carried out in the areas covered by all CDS operators, resulting in a total of three hours of service disruption. The total duration of planned works carried out on the CDS network amounted to 6,913 hours, of which 3,705 hours were spent on routine maintenance, 16 hours on reconstruction, 2,500 hours on inspections, 318 hours on testing and 374 hours on control measurements.

The activities of the transmission system operator and gas distribution system operators in relation to the connection of system users and maintenance work on the system during the period 2023–2025 are shown in the following table.

TABLE 36: CONNECTION AND MAINTENANCE WORK PARAMETERS IN THE 2023–2025 PERIOD

Gas operator	TSO			DSO		
	2023	2024	2025	2023	2024	2025
CONNECTION-RELATED SERVICES						
Number of approvals issued	5	3	3	796	678	571
Average duration of the administrative procedure [days]	16	17	56	7	6	7
Maximum length of the administrative procedure [days]	-	-	-	15	15	12
Minimum length of the administrative procedure [days]	-	-	-	1	1	1
Number of connections performed	1	0	0	822	518	390
Average duration of the entire connection procedure [days]	429	0	0	15	15	21
Maximum length of the entire connection procedure [days]	429	0	0	30	35	72
Minimum length of the entire connection procedure [days]	-	-	-	8	2	2
MAINTENANCE WORK ON THE SYSTEM						
Number of planned works performed	75	55	44	2,368	2,498	2,776
Total duration of the planned work [hours]	107,568	110,000(*)	110,400	106,314	104,879	109,585
Total duration of supply interruption due to planned work [hours]	71	0	58	1,036	2,543	3,338
Maximum duration of each scheduled interruption [hours]	54	0	12	192	726	238
Minimum duration of each schedule interruption [hours]	6	0	6	1	1	1
Number of unplanned interventions performed	329	316	180	929	773	781
Total duration of the unplanned interventions [hours]	777	774	413	6,169	4,141	3,003
Number of supply interruptions due to unplanned work	1	-	0	78	105	111
Total duration of the supply interruption due to unplanned interventions [hours]	14	-	0	6,908	2,415	1,168

(*) corrected parameter value

SOURCE: ENERGY AGENCY

Network Charges for Gas Transmission and Distribution Systems

Setting the Network Charge

The Energy Agency regulates gas transmission and distribution activities using the regulated network charges methodology. The methodology ensures system operators can cover all the eligible costs of the regulatory period and any network charge deficit from previous years by setting network charges and other revenues, considering the network charge surpluses of earlier years. The eligible costs of a system operator are the costs necessary for the performance of the distribution or transmission of gas and that meet the criteria set out in the methodology for establishing the regulatory framework issued following Article 104 of the Gas Supply Act.

Through economic regulation, the Energy Agency promotes the cost-efficiency of the system operators, ensuring their continued and stable operations, a stable environment for investors or owners, and stable and predictable conditions for system users. Incentives are conditional on the realisation of eligible costs, the assets taken over free of charge and the achievement of a 25% difference between the TSO's revenues and costs when purchasing additional capacity under the excess leasing and repurchase programme.

Before the start of the regulatory period, system operators, with the agreement of the Energy Agency, determine the planned eligible costs and the planned resources to cover these costs on the basis of the methodology for setting the regulatory framework. At the same time, taking into account the methodology for the calculation of the network charge, they determine the tariffs for the regulatory period.

After the end of each regulatory period year, the system operators must identify any deviations from the regulatory framework as the difference between the recognised eligible costs and the recognised resources to cover the eligible costs, calculated based on the criteria for their determination set out in the methodology for setting the regulatory framework. In the context of identifying deviations from the regulatory framework, the eligibility of system operators for incentives is also verified. Deviations from the regulatory framework are reflected in a deficit or surplus of the network charge.

The Regulated Network Charge method requires system operators to consider the network charge surplus as a dedicated resource to cover network charge deficits from previous years or eligible costs in subsequent years. At the same time, the method gives the system operator the right to take the network charge deficit into account when setting the network charge in subsequent years.

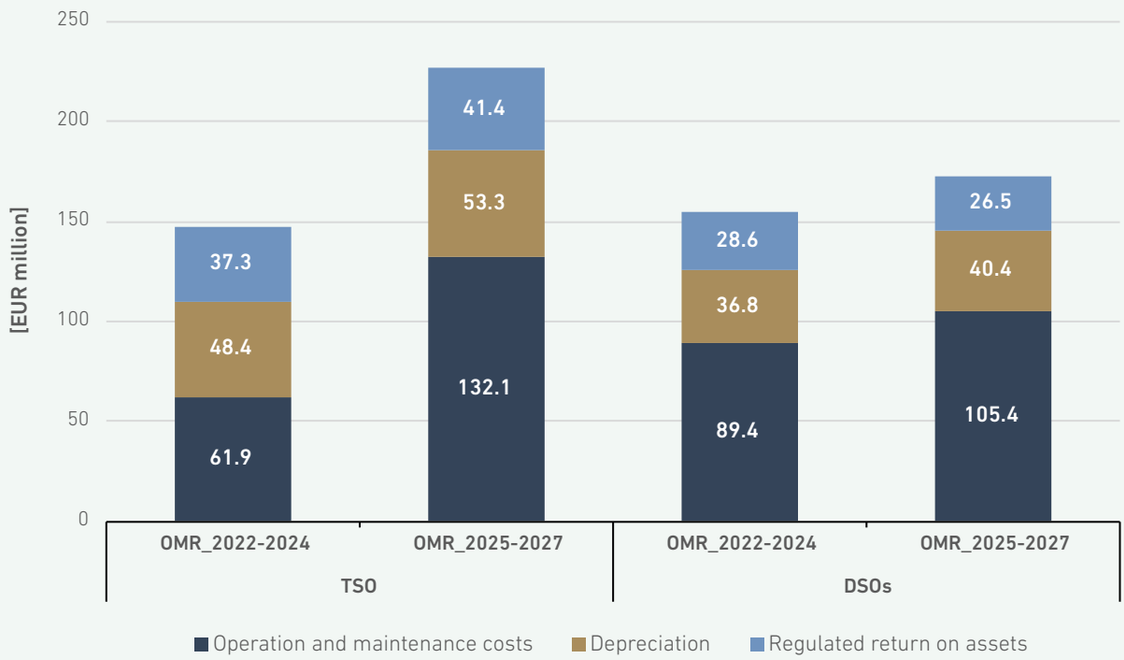
In 2024, the Energy Agency adopted the Act on the Methodology for Determining the Regulatory Framework for Gas System Operators[146]. On this basis, in 2024, the system operators, subject to the Energy Agency's prior approval, established the regulatory framework, network tariffs and tariffs for other services for the 2025–2027 regulatory period.

For this regulatory period, the transmission system operator has projected eligible costs of EUR 226.7 million, representing a 54% increase compared with the previous three-year regulatory period. The increase is mainly due to the costs of purchasing and selling gas for balancing purposes, which were not planned in advance during the previous regulatory period but were recognised within the framework of annual deviations from the regulatory framework. Such costs are not covered by the network charge but by other revenue.

Distribution systems operators have collectively planned eligible costs of EUR 166.3 million for the 2025–2027 regulatory period, representing an 8% increase compared with the previous regulatory period. The reason for the increase is higher planned operating and maintenance costs.

146 Act on the Methodology for Determining the Regulatory Framework for the Gas System Operator (Official Gazette of the Republic of Slovenia, Nos. 30/24, 50/25 and 16/26)

FIGURE 205: COMPARISON OF THE PLANNED ELIGIBLE COSTS OF SYSTEM OPERATORS IN THE REGULATORY PERIODS 2022–2024[147] AND 2025–2027



SOURCE: ENERGY AGENCY

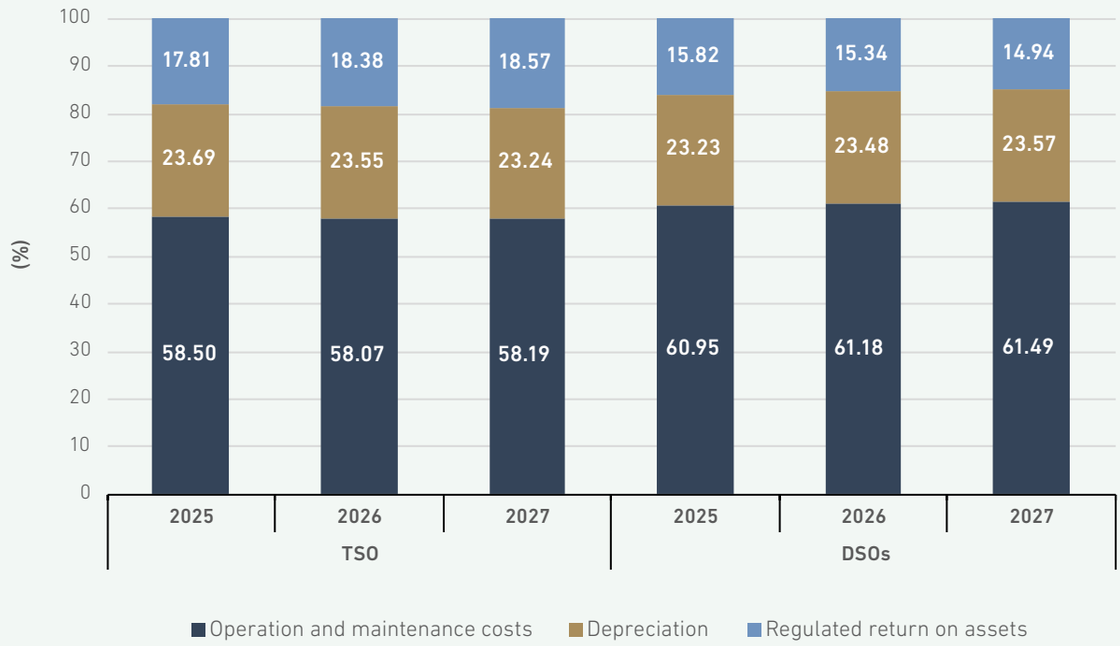
EUR 226.7 million for the operation of the transmission system during the 2025–2027 regulatory period

EUR 166.3 million for the operation of the distribution systems during the 2025–2027 regulatory period

Figure 206 shows the structure of the system operators' planned eligible costs for each year of the 2025–2027 regulatory period. A comparison of the structures of planned eligible costs by individual year of the 2025–2027 regulatory period shows that their structure does not change significantly for either the distribution system operators or the transmission system operator.

147 OMR_2022-2024 - TSO - it does not include items relating to the purchase and sale of gas for balancing purposes

FIGURE 206: THE STRUCTURE OF THE PLANNED ELIGIBLE COSTS OF THE SYSTEM OPERATORS IN THE 2025–2027 PERIOD

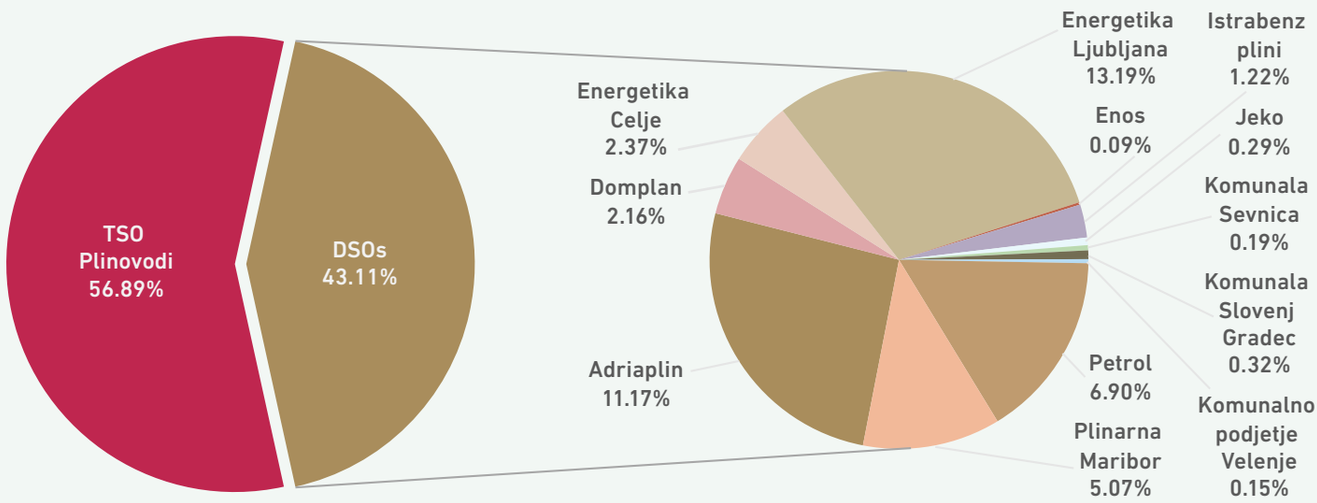


SOURCE: ENERGY AGENCY

For 2025, distribution systems operators have planned eligible costs of EUR 57.4 million, while the transmission system operator has planned eligible costs of EUR 75.8 million. Figure 207 shows the structure of planned eligible costs for 2025 for the transmission and distribution operators' activities.

The difference between the total and the sum of the individual components is due to the rounding of figures.

FIGURE 207: THE STRUCTURE OF THE PLANNED ELIGIBLE COSTS OF SYSTEM OPERATORS FOR 2025



SOURCE: ENERGY AGENCY

Network Charge for the Gas Transmission System

The network charge for the natural gas transmission system is levied on transmission system users and consists of:

- network charge for the entry point,
- network charge for the exit point,
- network charge for self-consumption; and
- network charge for measurements.

The network charge for each entry/exit point depends on the product's capacity and booked capacity. Transmission system users book the capacity of interconnection points or border points via an online booking platform as an annual, quarterly, monthly, daily or intraday standard capacity product.

System users leasing capacity within Slovenia may, however, lease annual, monthly or daily standard capacity products and day-ahead standard capacity products. For these users, the network charge for the intra-Slovenian exit point until 2024 will also be determined based on their classification into a consumption group according to the level of capacity booked.

For users who contract entry or exit capacity for a standard capacity product with a duration of less than one year, the network charge for the entry or exit point is also determined taking into account a multiplier and a seasonal factor, both of which are set by the Energy Agency for each individual year.

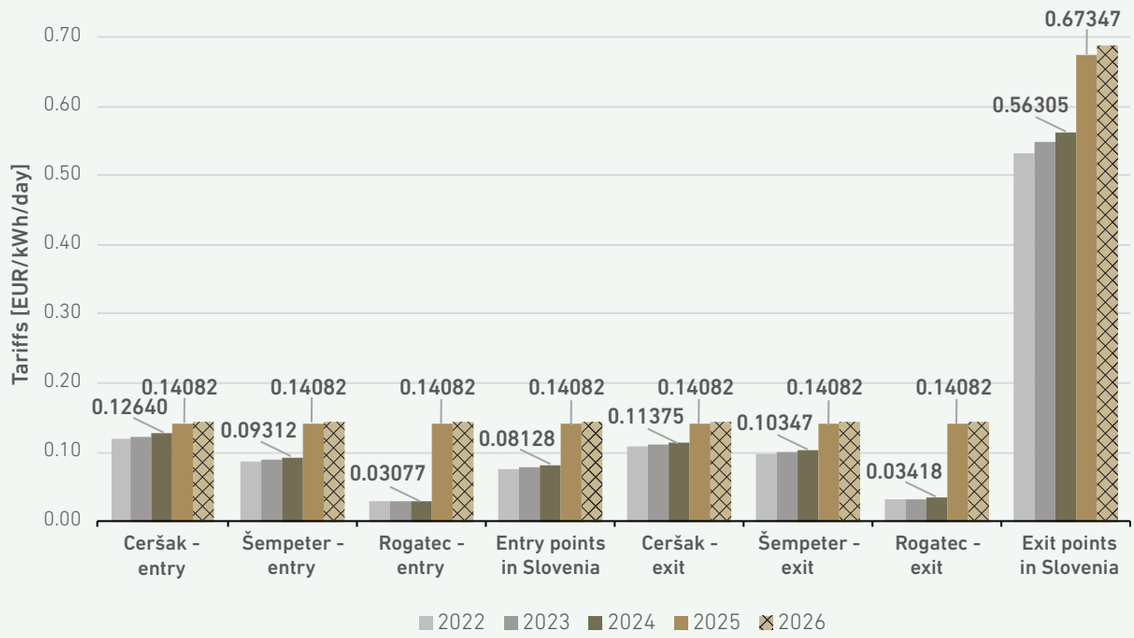
Transmission system users who purchase exit capacity are also charged a network charge for own use and a network charge for metering. The network charge for own use depends on the volume of gas transmitted at each exit point, while the network charge for metering depends on the size of the metering device and the number of pressure reductions.

The network charge tariff items for 2025 were set by the transmission system operator as part of the determination of the 2025–2027 regulatory period. In 2025, the network charge tariff items increased at all entry and exit points compared with 2024. At border points, the network tariff rates for entry and exit have been harmonised and amount to 0.14082 EUR/kWh/day.

The smallest increase, of 11%, was recorded at the Ceršak border entry point, while the largest, of 358%, was recorded at the Rogatec border entry point. The network charge tariff for exit points within Slovenia has increased by 20% to 0.67347 EUR/kWh/day.

The network charge for exit points within Slovenia has increased by 20%

FIGURE 208: MOVEMENT OF THE NETWORK CHARGE TARIFFS FOR THE ENTRY AND EXIT POINTS OF THE TRANSMISSION SYSTEM DURING THE 2022–2026 PERIOD



SOURCE: ENERGY AGENCY

Network Charges for the Gas Distribution Systems

The network charge for the gas distribution system comprises the distribution network charge and the metering network charge.

The network charge tariffs are set by the distribution system operator uniformly for all areas in which it carries out gas distribution. Only in specific cases may the network charge tariff items differ for different areas of operation.

The distribution network charge is paid by users of the distribution system based on the quantities of gas distributed, which constitutes the variable part of the distribution tariff, and on the contracted capacity, which reflects the fixed part of the network charge. For smaller consumers, this is charged as a monthly flat rate, whilst for larger ones it is charged based on the connected power or contracted capacity.

The metering network charge depends on the size and type of the metering device, as well as on the ownership or operation of that device.

The tariffs for the network charge for 2025 were determined in 2024, when approvals were granted for the regulatory framework for the period 2025–2027. In 86 municipalities, 17 acts setting out the tariffs for the distribution network were applied when calculating the network charge.

Only one distribution operator has maintained the 2024 network charge level; the other operators have raised their network charges significantly, by up to 60%

Distribution system operators must show the costs of gas distribution and metering separately on the distribution system user's bill.

Changes in the distribution network charge per megawatt-hour (MWh) of gas consumed by typical household consumers and medium-sized industrial consumers in each year of the 2021–2025 period for the seven operators distributing gas in the ten largest municipalities by number of consumers are shown in the figures following.

These operators are responsible for distribution in a further 71 municipalities, which means that the network charges shown apply to 81 local authorities out of a total of 86, and to almost 98% of all distribution consumers. Two local authorities have two different distribution system operators.

In these areas, typical small households (consumption group D1 with an annual consumption of 3,765 kWh), average-sized household consumers (consumption group D2 with annual consumption of 10 MWh), medium-sized household consumers (consumption group D2 with annual consumption of 32 MWh) and large household consumers (consumption group D3 with an annual consumption of 215 MWh), the network charge increased by between 27% and 37% compared with the previous year for four gas distributors supplying 16 local authorities. In 36 local communities, the increase ranged from 6% to 22%.

In 31 local communities, consumers paid the same distribution network charge as the previous year, where Petrol carries out distribution network operations.

The average changes in the annual distribution network charges for individual types of domestic customers varied between 2021 and 2025 as follows:

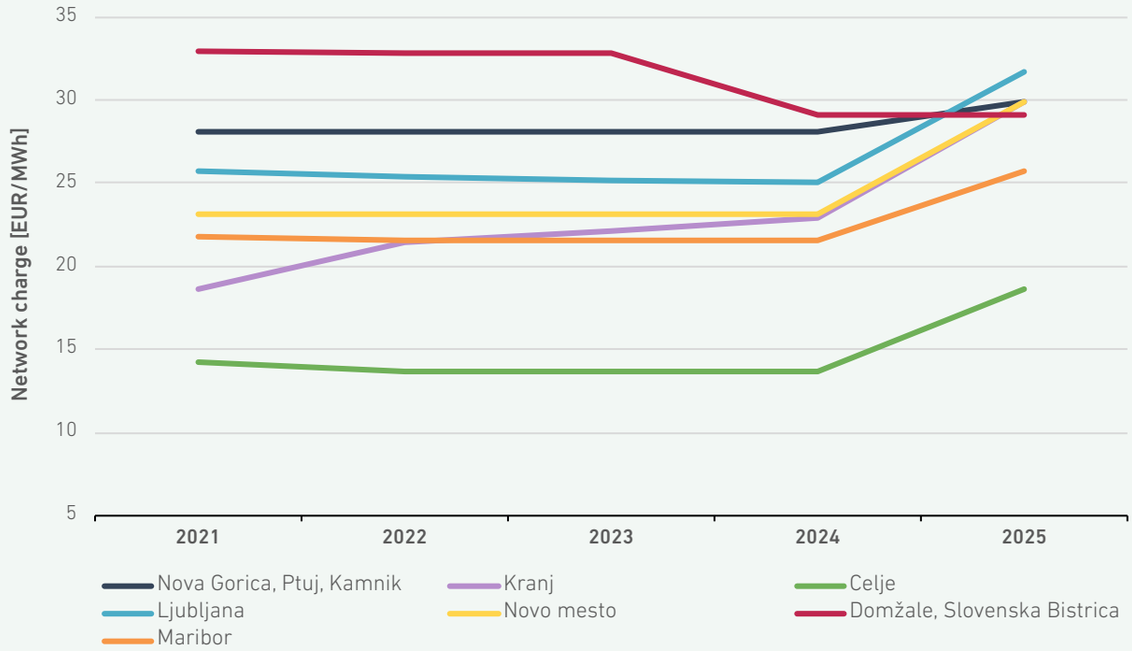
- small household consumers (consumption group D1 with an annual consumption of 3,765 kWh) in the range from –11.5% to +60.4% (annual average from –2.3% to +12.1%);
- medium-sized household consumers (consumption group D2 with annual consumption of 10 MWh) ranging from –11.9% to +59.6% (annual average from –2.4% to +11.9%);
- medium-sized household consumers (consumption group D2 with annual consumption of 32 MWh) in the range from –11.2% to +61.9% (annual average from –2.2% to +12.4%);
- large household consumers (consumption group D3 with annual consumption of 215 MWh) in the range from –11.3% to +57.5% (annual average from –2.3% to +11.5%).

Distribution system operator Petrol's annual distribution network charges were between 11.25% and 11.87% lower than five years ago.

The largest increase in distribution network charges between 2021 and 2025 was recorded by the distribution system operator Domplan, namely for all consumers (from those with an average annual consumption of 3,765 kWh up to the largest with an average annual consumption of 215,200 kWh). For the smallest consumers, the distribution network charge was 60.4% higher than five years ago, while for the largest household consumers it was 57.46% higher than in 2021.

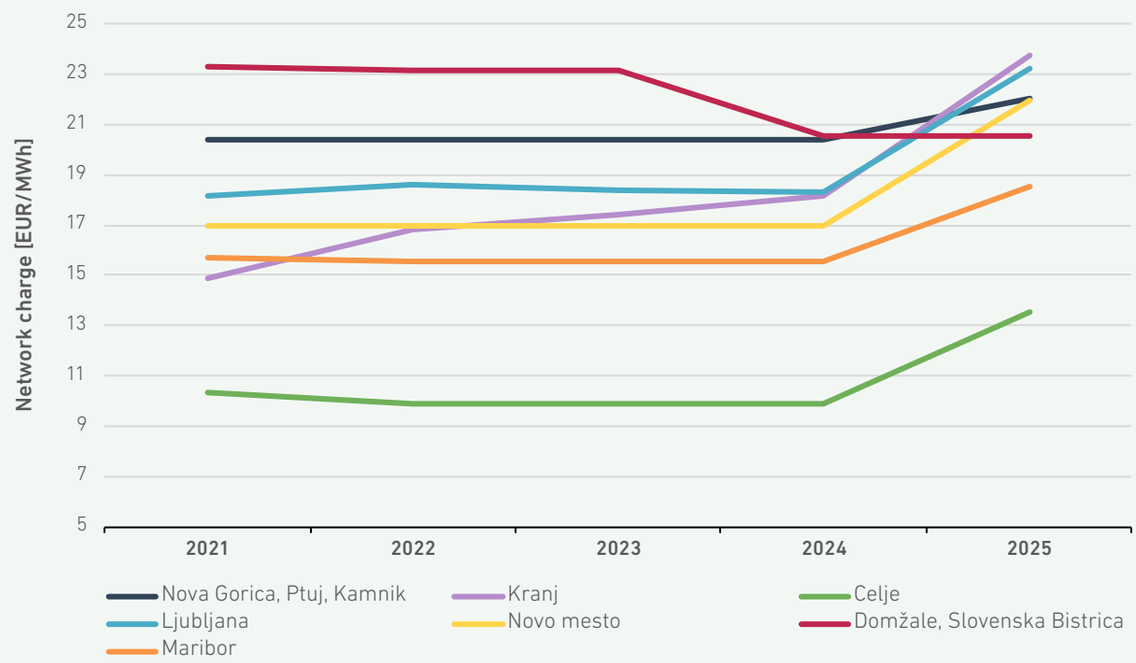
The trends in distribution network charges for the period 2021–2025 are shown in the figures following.

FIGURE 209: DISTRIBUTION NETWORK CHARGE MOVEMENT FOR SMALL HOUSEHOLD CONSUMERS D1 (3,765 kWh) DURING THE 2021–2025 PERIOD



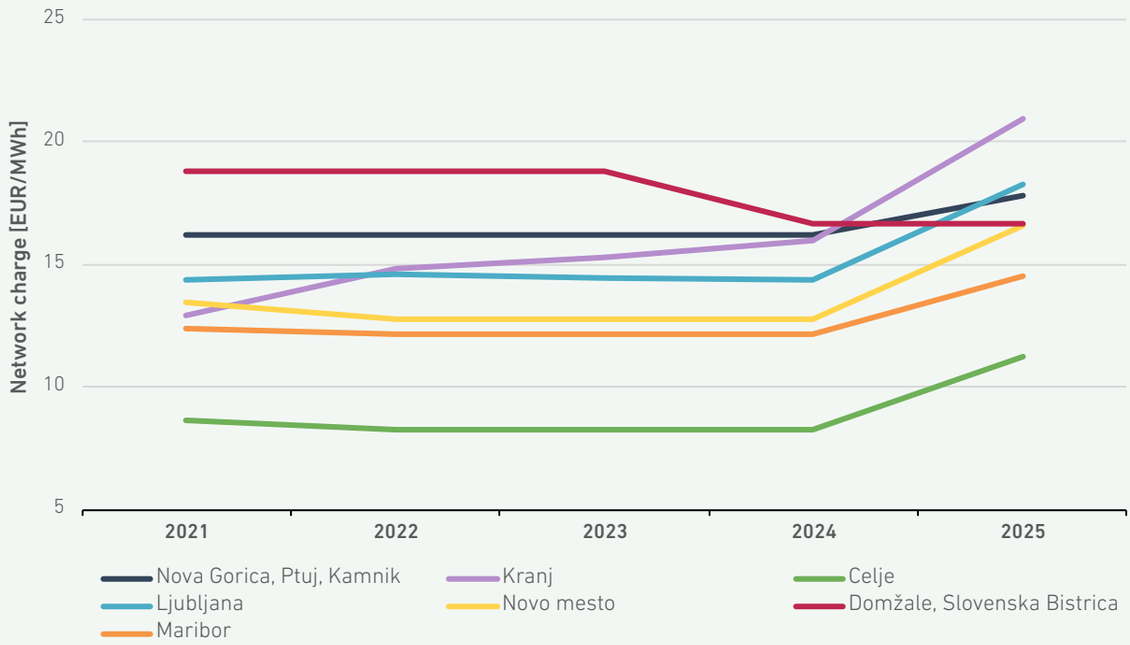
SOURCE: ENERGY AGENCY

FIGURE 210: DISTRIBUTION NETWORK CHARGE MOVEMENT FOR MEDIUM-SIZED HOUSEHOLD CONSUMERS – D2 (10 MWh) DURING THE 2021–2025 PERIOD



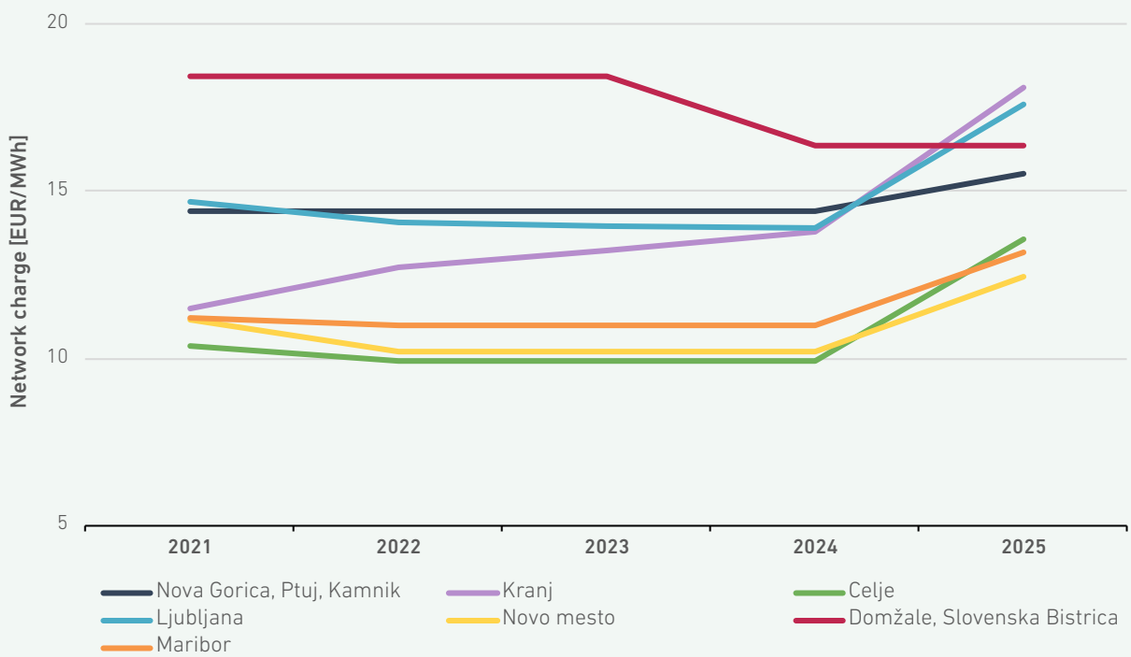
SOURCE: ENERGY AGENCY

FIGURE 211: DISTRIBUTION NETWORK CHARGE MOVEMENT FOR MEDIUM-SIZED HOUSEHOLD CONSUMERS – D2 (32 MWh) DURING THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

FIGURE 212: DISTRIBUTION NETWORK CHARGE MOVEMENT FOR LARGE HOUSEHOLD CONSUMERS – D3 (215 MWh) DURING THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

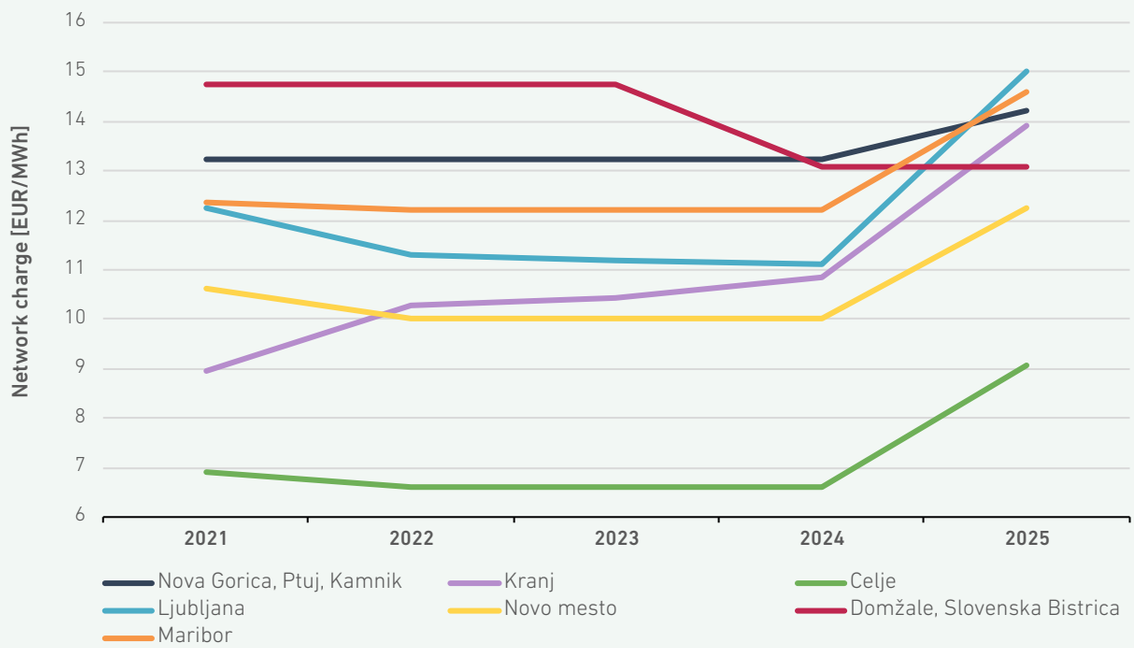
For medium-sized industrial consumers (consumption group I3 with an annual consumption of 8,608 MWh), the average annual distribution network charge increased by between 22.37% and 36.79% compared with the previous year in 16 local authorities, in 36 local authorities, consumers paid between 7.4% and 19.39% more than in the previous year, while in 31 local authorities there was no change compared with 2024.

The average annual change in distribution network charges for these consumers over the last five-year period ranged from –2.3% to +11.1%, depending on the individual operator.

Differences in the annual network charges across individual municipalities reflect variations in the structure of the consumer base and their consumption patterns, as well as the age and scale of the distribution systems. The trend in network charges for medium-sized industrial consumers over the period 2021–2025 is shown in the Figure 213.

Most medium-sized industrial consumers were paying higher network charges in 2025

FIGURE 213: DISTRIBUTION NETWORK CHARGE MOVEMENT FOR MEDIUM-SIZED INDUSTRIAL CONSUMERS – I3 (8,608 MWh) DURING THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

Capacity at Border Points

Capacity at border points was allocated on the basis of market-based methods via the PRISMA online booking platform. Auctions were organised for firm and interruptible capacity, with 65,818 auctions published. Both individual and bundled capacities were offered at the auctions. There were 473 successful auctions for firm capacity, which is 31% fewer than in the previous year. Of all successful auctions for firm capacity, 81% were for bundled capacity. These accounted for 0.7% of all successful auctions. In contrast to 2024, when there were as many as 38 successful auctions for interruptible capacity at the Rogatec entry point, there were no successful auctions for interruptible capacity in 2025. Similarly, there were no auctions for expansion capacity in 2025. The newly introduced excess forecast procedure was not utilised.

TABLE 37: NUMBER OF SUCCESSFUL FIRM CAPACITY AUCTIONS IN 2025

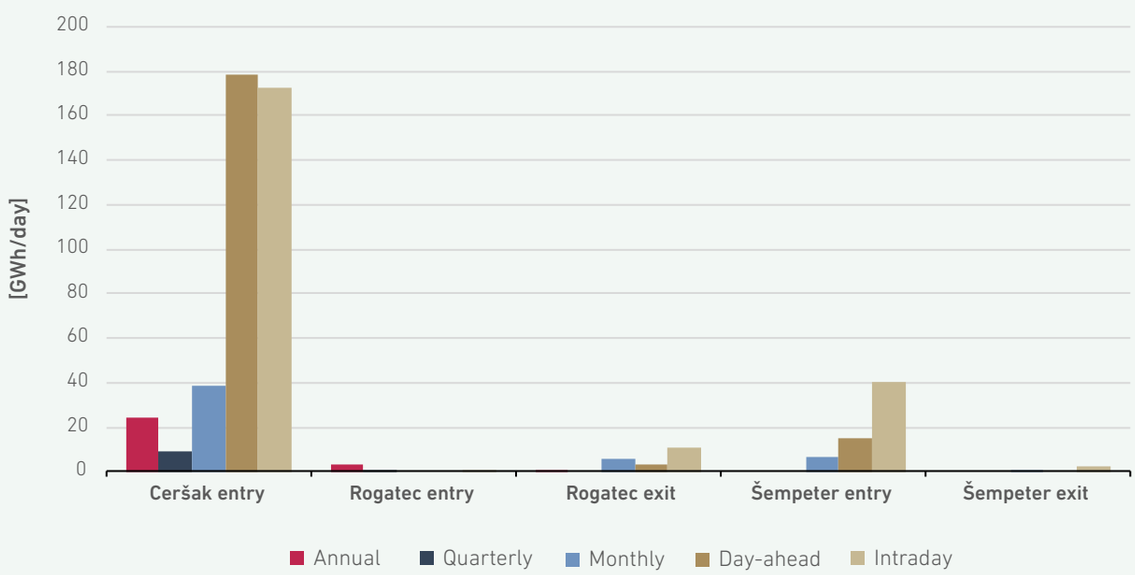
Auction	Ceršak entry	Rogatec entry	Rogatec exit	Šempeter exit	Šempeter exit	Total
Annual	2	2	1	0	0	5
Quarterly	5	3	0	0	0	8
Monthly	18	0	4	2	2	26
Day-ahead	211	0	3	8	0	222
Intraday	165	1	9	32	5	212
Total	**401**	**6**	**17**	**42**	**7**	**473**
Bundled	314	6	16	42	7	385
Individual capacity	87	0	1	0	0	88

SOURCES: ENERGY AGENCY, PLINOVODI

The following figure shows the transmission capacity leased at auctions in 2025, by border points. Capacity leased at day-ahead auctions (38%) and intraday auctions (44%) account for as much as 82% of all leased capacity.

At the auctions, 82% of the total capacity at the Ceršak entry point booked

FIGURE 214: LEASED TRANSMISSION CAPACITIES AT AUCTIONS IN 2025

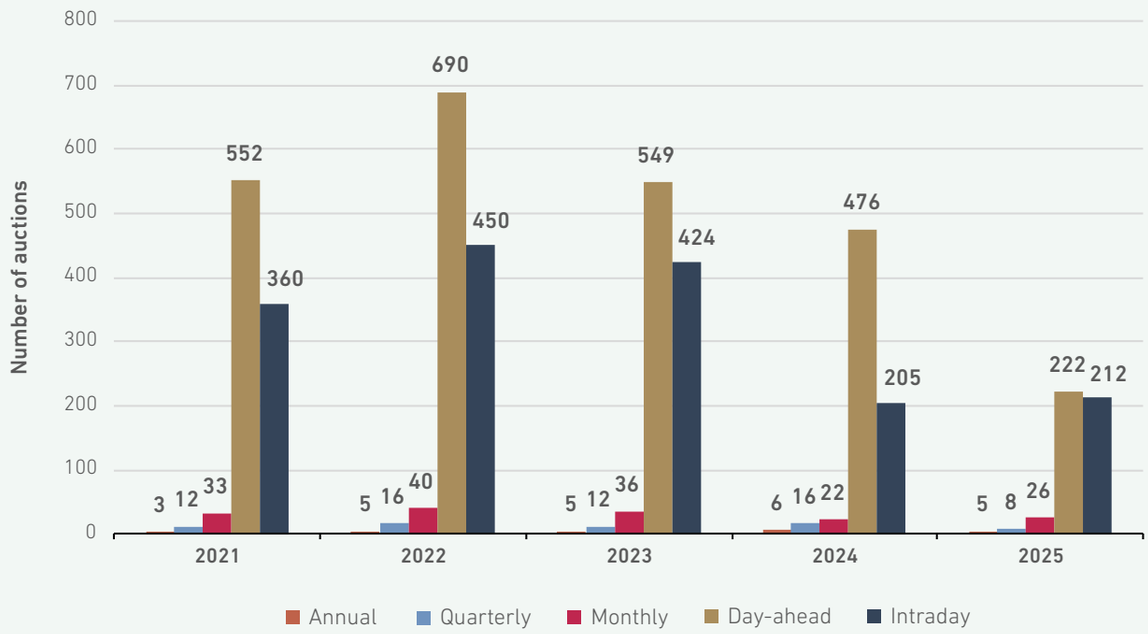


SOURCES: ENERGY AGENCY, PLINOVODI

A comparison of successfully conducted auctions of transmission capacity (firm and interruptible) over the last five years shows that the number of successful auctions has been falling over the last three years – from a record high of 1,201 in 2022, the number of successful auctions fell to 473 in 2025.

The downward trend in the number of successful capacity auctions

FIGURE 215: SUCCESSFUL AUCTIONS OF CAPACITY DURING THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, PLINOVODI

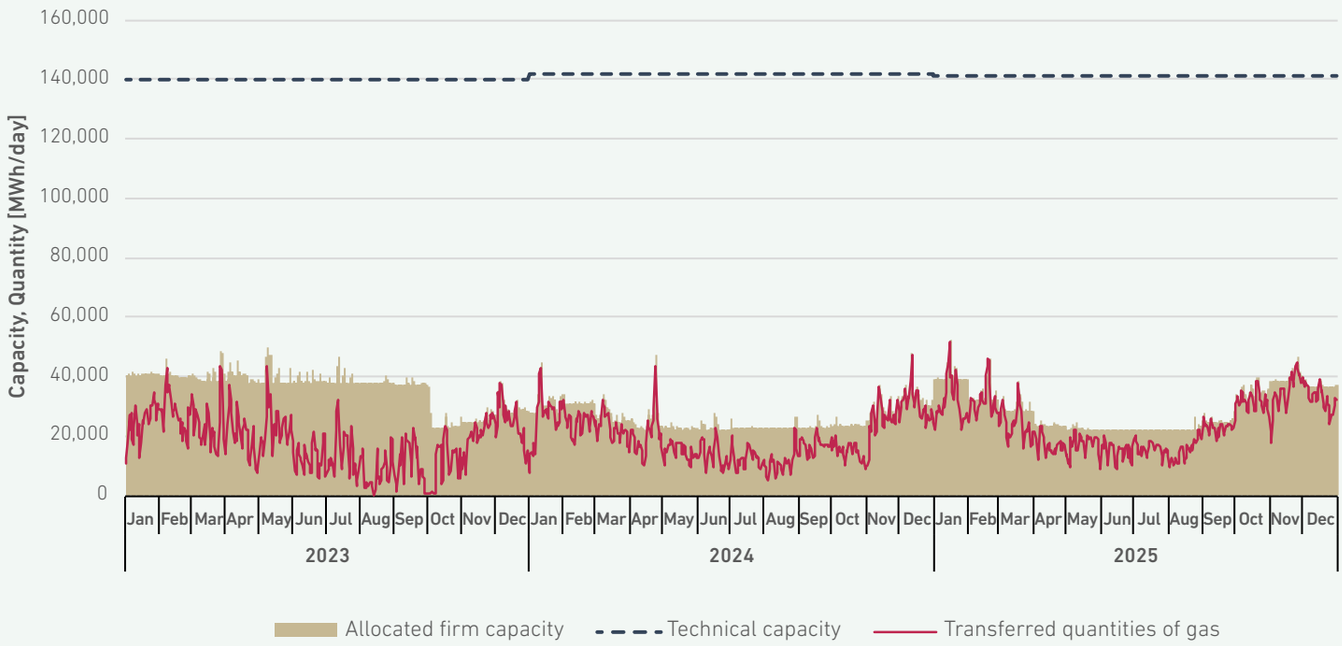
Despite a decrease in the last three years, day-ahead and intraday transmission capacity leasing remain the most commonly used methods of capacity procurement. The reasons for this are: high unpredictability in the gas market, ever-improving optimisation of capacity procurement, and generally sufficient capacity availability at border points.

In 2025, the transmission system operator carried out estimates of demand for additional transmission capacity on the Slovenian gas market. It did not receive any non-binding offers for the booking of gas capacity, but did receive one non-binding offer for the booking of hydrogen capacity at the Pince/Tornyiszentmiklós border point. The offer was submitted for the leasing of capacity in both directions (entry/exit) at various levels during the gas years 2029/2030 and 2050/2051.

Following two years of a decline in the purchase of firm transmission capacity at Ceršak, Slovenia's largest border entry point, the volume of capacity purchased in 2025 was 12% higher than in the previous year, while 24% more gas was transmitted than in the previous year. No interruptible capacity was purchased.

In Ceršak, 12% more capacity booking and 24% more gas was transported

FIGURE 216: DYNAMICS OF THE DAILY TRANSFERRED QUANTITIES OF GAS, TECHNICAL CAPACITY, AND ALLOCATED FIRM AND INTERRUPTIBLE CAPACITY AT THE CERŠAK ENTRY POINT IN THE 2023–2025 PERIOD



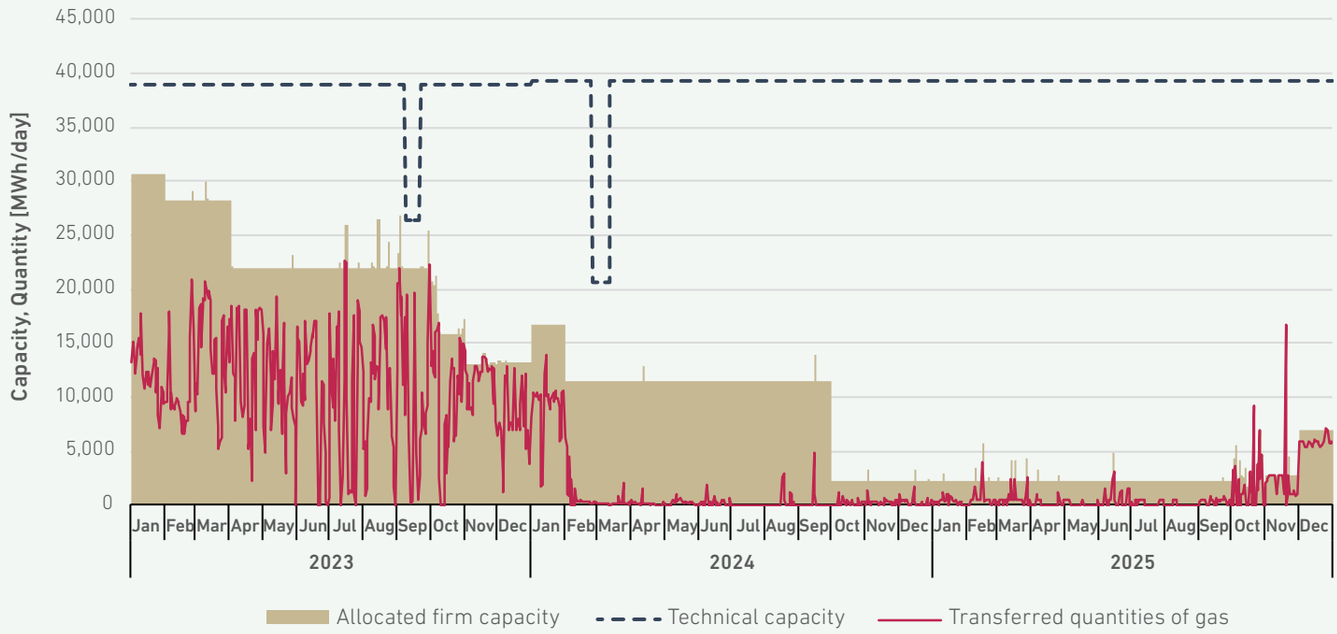
SOURCES: ENERGY AGENCY, PLINOVODI

At the Ceršak border crossing, there is no physical flow of gas from Slovenia to Austria, and in 2025 there were no virtual flows in the form of swapping.

A significant 72% drop in capacity leasing was recorded at the Šempeter entry point. Nevertheless, 5% more gas was transmitted than in the previous year.

In Šempeter, 72% less capacity booked and 5% more gas was transported

FIGURE 217: DYNAMICS OF THE DAILY TRANSFERRED QUANTITIES OF GAS, TECHNICAL CAPACITY, AND ALLOCATED FIRM AND INTERRUPTIBLE CAPACITY AT THE ŠEMPTER ENTRY POINT DURING THE 2023–2025 PERIOD

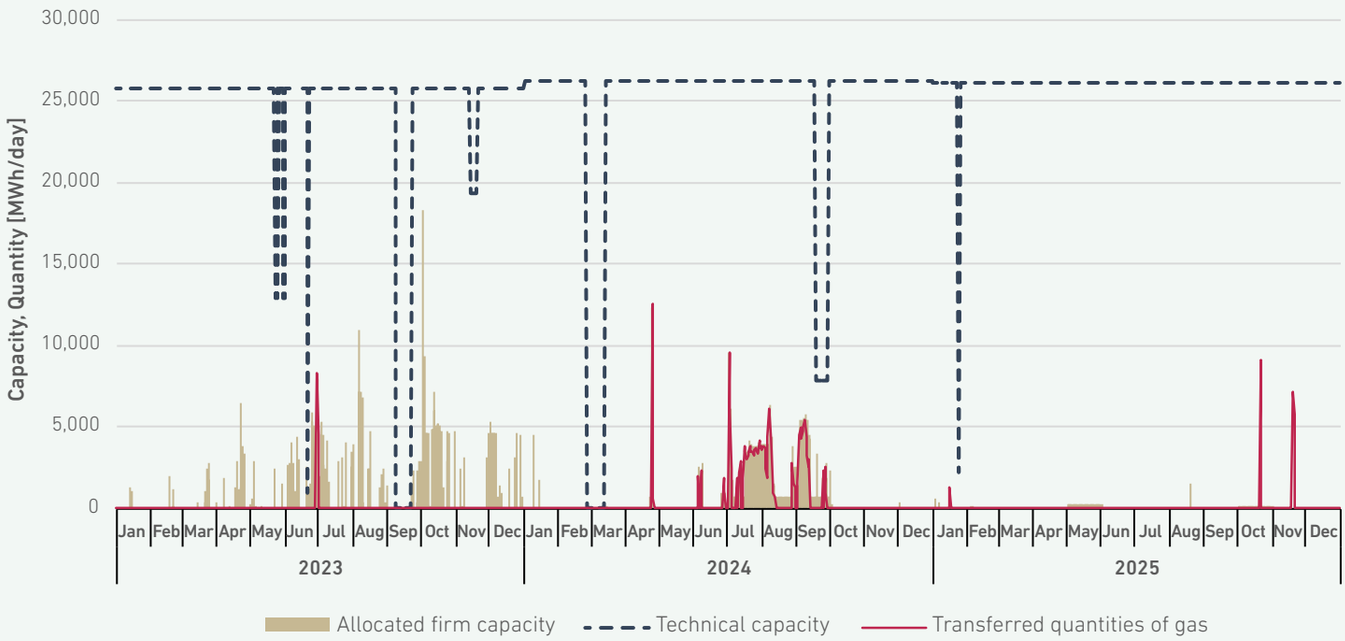


SOURCES: ENERGY AGENCY, PLINOVODI

At the Šempeter exit point, where there are no long-term capacity contracts, 96% less capacity was leased than in the previous year. The quantities of gas transmitted were also minimal, amounting to just 12% of the quantities from 2024.

Due to maintenance work, technical capacity was reduced by 92% for two days in January 2025; however, given the low utilisation of this exit point, this had no impact on gas transmission.

FIGURE 218: DYNAMICS OF THE DAILY TRANSFERRED QUANTITIES OF GAS, TECHNICAL CAPACITY, AND ALLOCATED FIRM CAPACITY AT THE ŠEMPETER EXIT POINT DURING THE 2023–2025 PERIOD

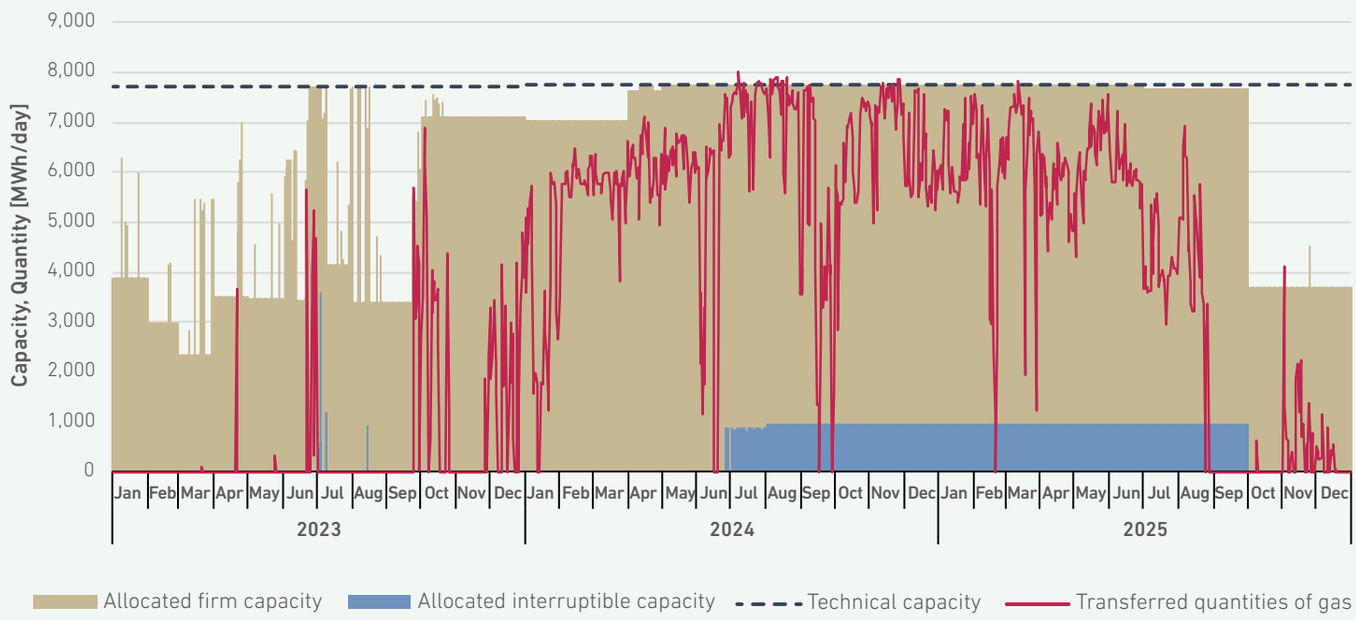


SOURCES: ENERGY AGENCY, PLINOVODI

At the Rogatec entry point, contractual congestion persisted due to low technical capacity (7.7 GWh/day) and changes in gas flows in the region; and for 13 days, daily gas transmission volumes exceeded 95% of technical capacity, meaning that physical congestion also occurred. Interruptible capacity was also allocated on a daily basis during the first three quarters.

Continued contractual and physical congestion at the Rogatec entry point

FIGURE 219: DYNAMICS OF THE DAILY TRANSFERRED QUANTITIES OF GAS, TECHNICAL CAPACITY, AND ALLOCATED FIRM AND INTERRUPTIBLE CAPACITY AT THE ŠEMPTER ENTRY POINT DURING THE 2023–2025 PERIOD

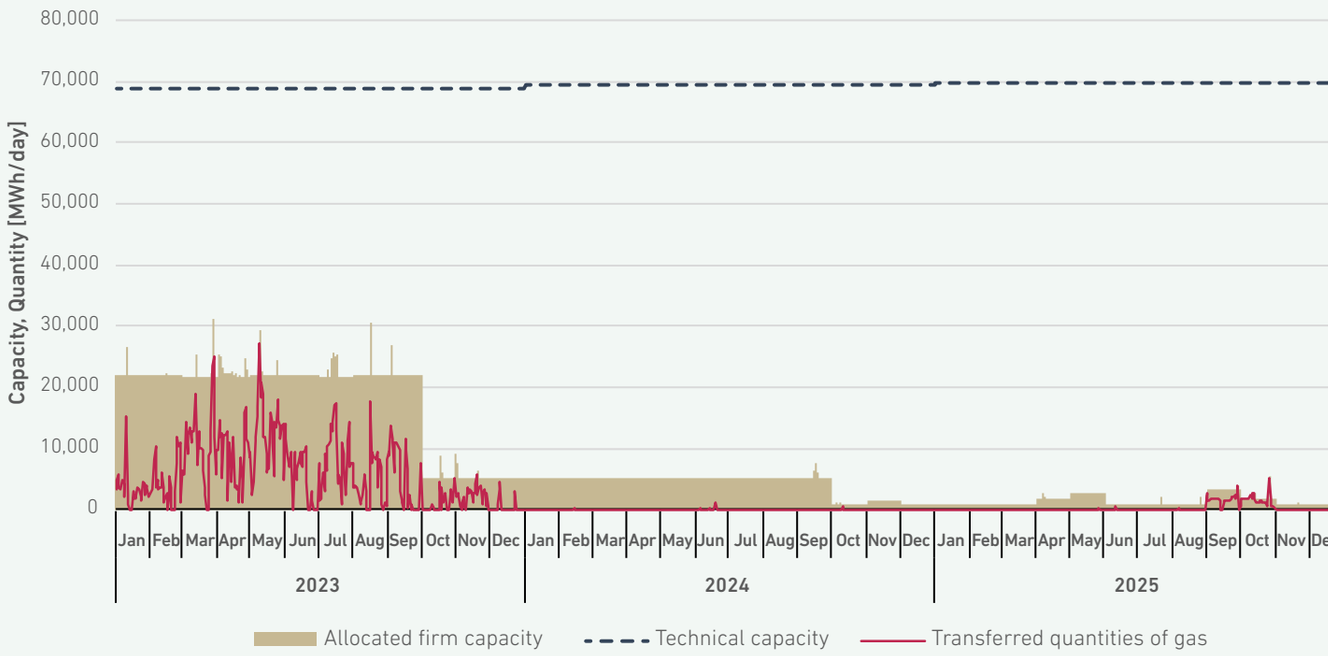


SOURCES: ENERGY AGENCY, PLINOVODI

At the largest exit point, Rogatec, booked gas transmission capacity decreased significantly for the second consecutive year (by 76% year-on-year in 2024 and by 65% in 2025). On average, only 2% of the technical capacity was booked. Gas transmission volumes were slightly higher than in the previous year, but remained far below the levels recorded when Croatia was also supplied with gas via Slovenia.

Booking of transmission capacity at the Rogatec exit point has once again been significantly reduced

FIGURE 220: DYNAMICS OF THE DAILY TRANSFERRED QUANTITIES OF GAS, TECHNICAL CAPACITY, AND ALLOCATED FIRM CAPACITY AT THE ŠEMPETER EXIT POINT DURING THE 2023–2025 PERIOD

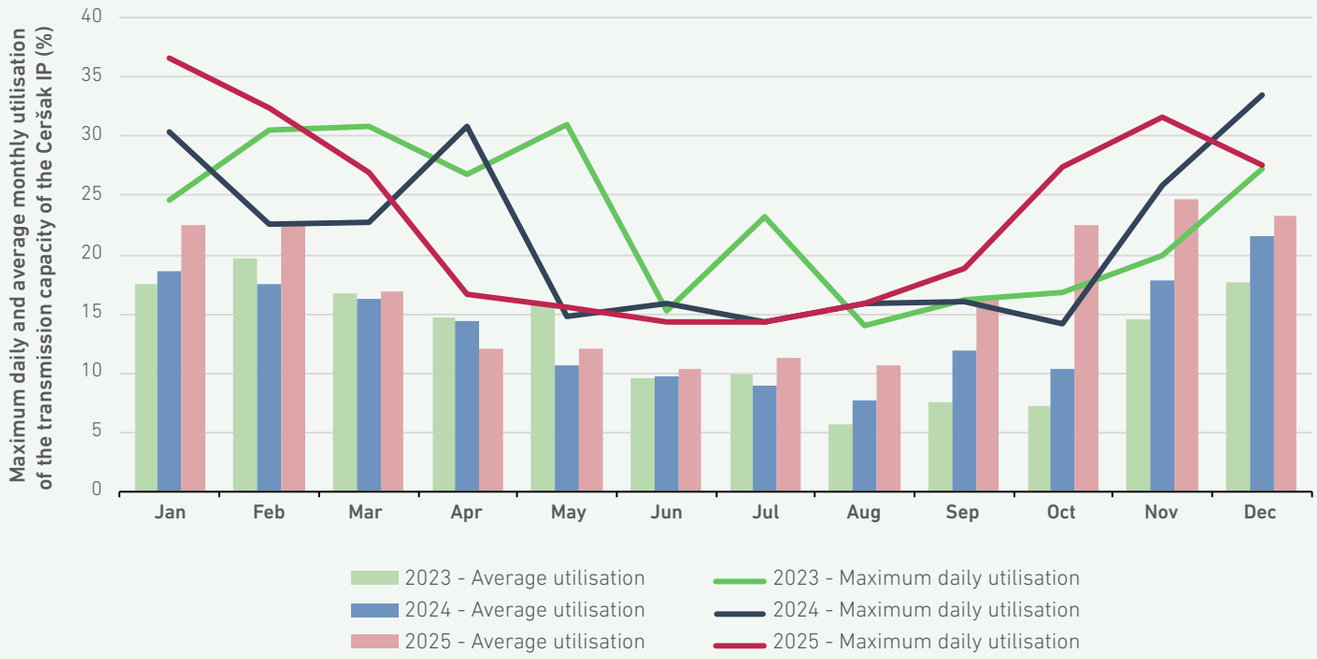


SOURCES: ENERGY AGENCY, PLINOVODI

The highest monthly utilisation of the technical capacity at the Ceršak entry point was recorded in November (24.6%), while the lowest was recorded in June (10.4%). The highest daily utilisation of technical capacity, at 36.6%, was recorded in January. Due to lower gas flows for the injection of gas into storage facilities in Croatia during the summer months, the highest flows over the past three years were recorded during the winter months and were associated with the heating season.

The average monthly utilisation of technical capacity at the Ceršak entry point was 17%, which was 3 percentage points higher than in the previous year.

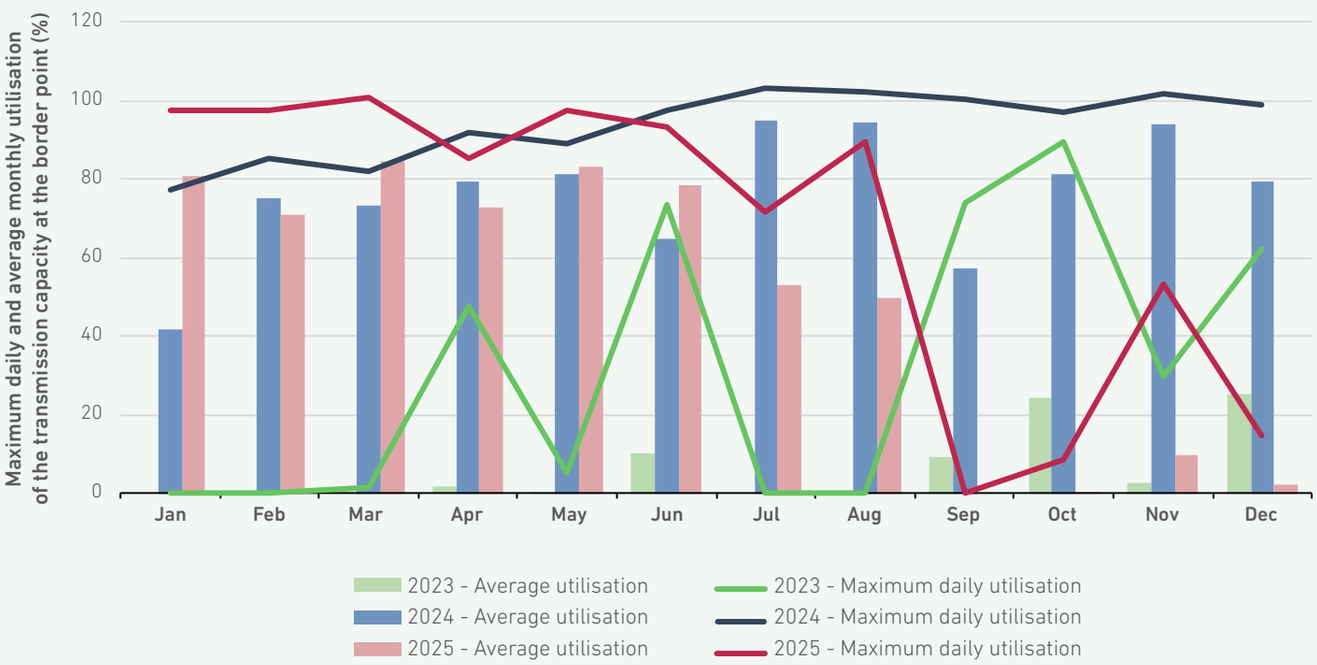
FIGURE 221: MAXIMUM DAILY AND AVERAGE MONTHLY UTILISATION OF THE CAPACITY OF THE CERŠAK BORDER ENTRY POINT DURING THE 2023–2025 PERIOD



SOURCES: ENERGY AGENCY, PLINOVODI

The highest monthly utilisation of the technical capacity at the Rogatec entry point was recorded in March (84.4%), while the lowest was recorded in September, when there were no flows at all. Physical congestion also occurred in March, with daily utilisation of the technical capacity reaching 100%. The average monthly utilisation of technical capacity at the Rogatec entry point was 48.7%, which was 28 percentage points lower than in the previous year.

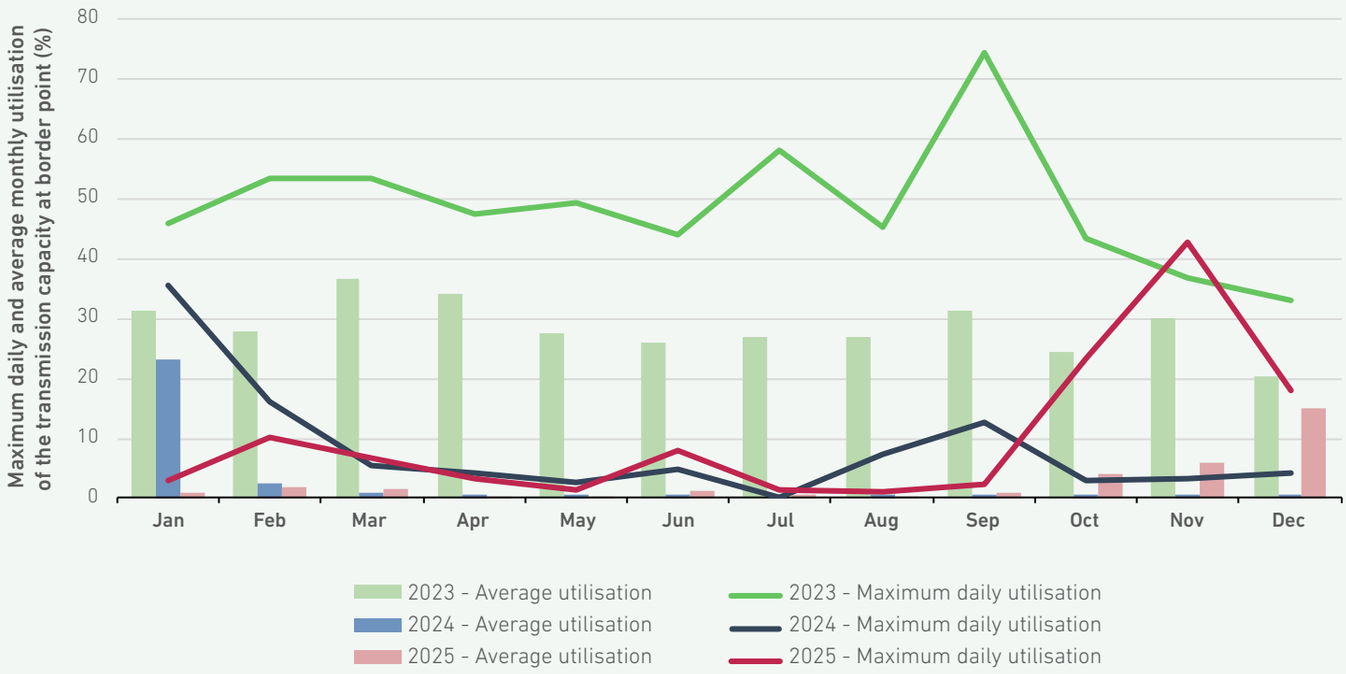
FIGURE 222: MAXIMUM DAILY AND AVERAGE MONTHLY UTILISATION OF THE CAPACITY OF THE ROGATEC BORDER ENTRY POINT DURING THE 2023–2025 PERIOD



SOURCES: ENERGY AGENCY, PLINOVODI

The average monthly utilisation of technical capacity at the Šempeter entry point was only 2.7%, approximately the same as in the previous year and 11 times lower than in 2023. The highest monthly utilisation of technical capacity was recorded in December, at 14.9%. The highest daily utilisation of technical capacity was recorded in November (42.7%).

FIGURE 223: MAXIMUM DAILY AND AVERAGE MONTHLY UTILISATION OF THE CAPACITY OF THE ŠEMPETER BORDER ENTRY POINT DURING THE 2023–2025 PERIOD

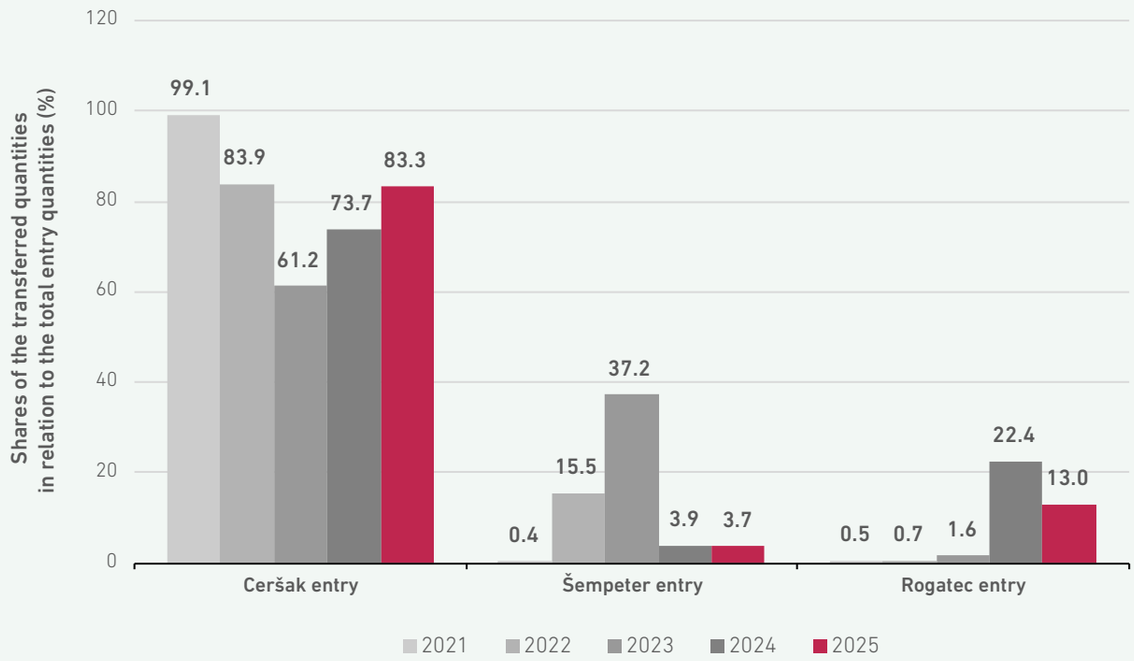


SOURCES: ENERGY AGENCY, PLINOVODI

The unpredictability of the European gas market, largely resulting from uncertain geopolitical circumstances, is also reflected in the volatility of gas flows through Slovenia's entry points. Over the past two years, the Ceršak entry point has once again consolidated its position as Slovenia's main entry point. Although in 2023, following the upgrade of its technical capacity, the Šempeter entry point appeared likely to become Slovenia's most important entry point, transmitted volumes have declined significantly over the past two years. Meanwhile, the ongoing upgrade of the technical capacity at the Rogatec entry point could substantially strengthen its role in the coming years and alter the dynamics of gas flows at the cross-border entry and exit points.

Gas flows from Austria are increasing again; flows from Italy are lower than expected; flows from Croatia are constrained by limited capacity

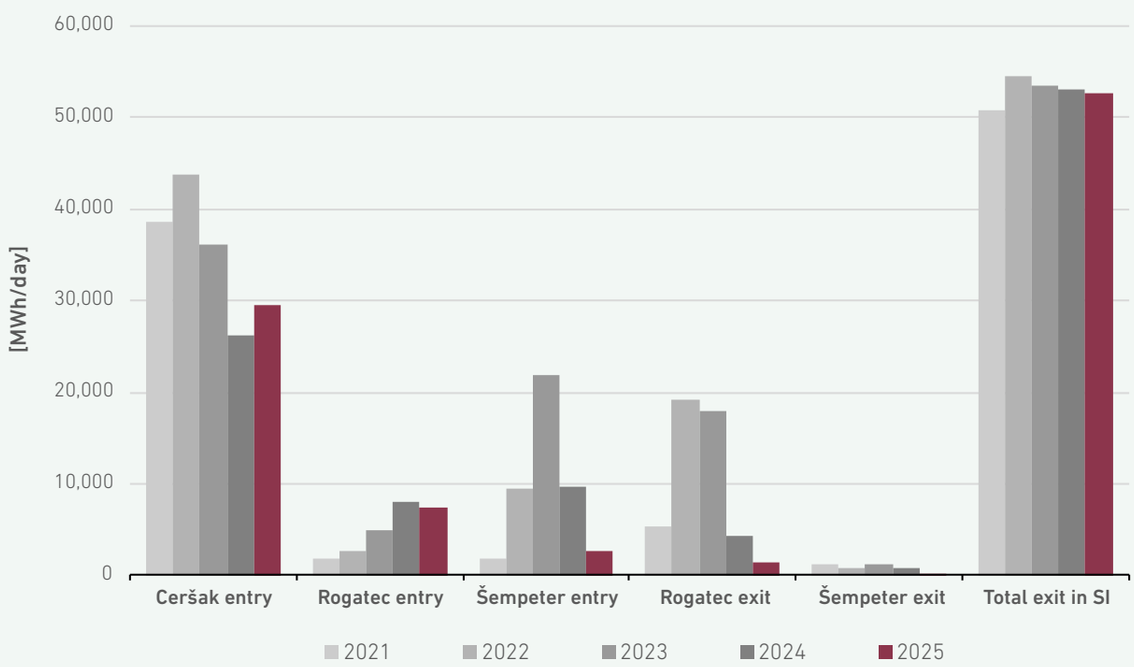
FIGURE 224: AVERAGE DAILY GAS TRANSPORT AT ENTRY POINTS TO SLOVENIA DURING THE 2021–2025



SOURCES: ENERGY AGENCY, PLINOVODI

The high volatility of flows at cross-border points is also reflected in significant fluctuations in capacity bookings at the relevant points. In 2025, capacity bookings increased only at the Rogatec entry point, while the largest decrease in booked capacity was recorded at the Šempeter exit point.

FIGURE 225: AVERAGE LEASED CAPACITY AT RELEVANT POINTS DURING THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, PLINOVODI

Market Functioning and Outcomes for Consumers

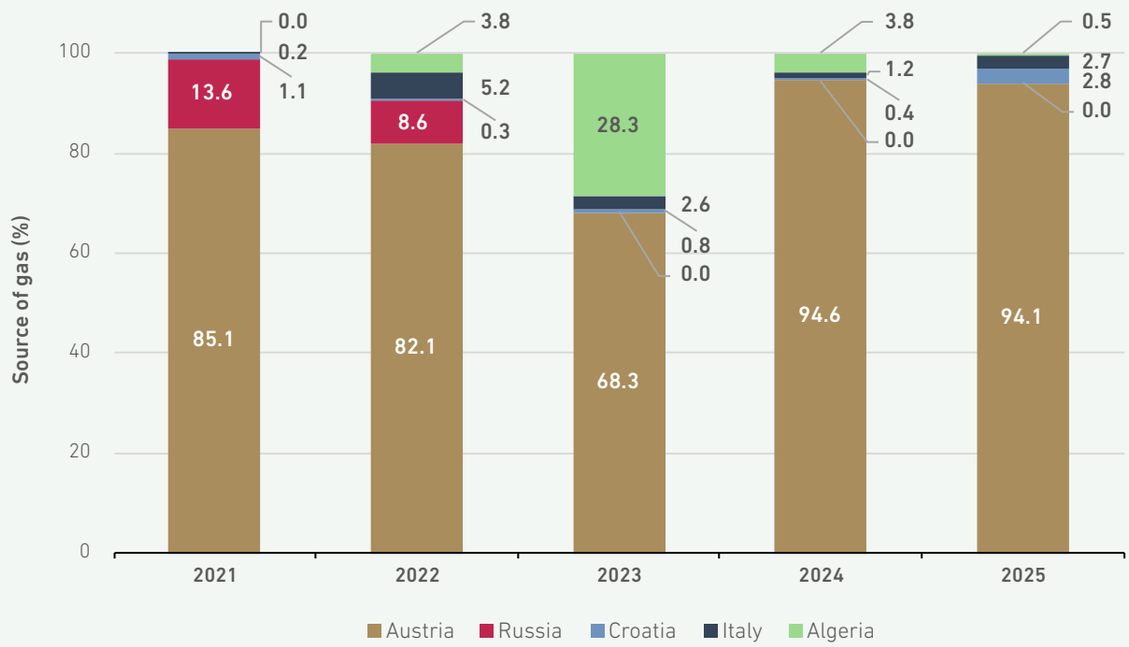
The following section presents the state of the gas markets, covering pricing (factors influencing prices, price developments, the impact of liquidity on prices, etc.), market transparency and integrity, and market efficiency (openness and competitiveness). The public disclosure of the results of ongoing market monitoring, together with other measures adopted by the Energy Agency, contributes to strengthening market competitiveness and transparency and to ensuring high-quality energy supply services at optimal prices.

Wholesale Market

Slovenia has no domestic sources of natural gas, natural gas storage facilities or liquefied natural gas (LNG) terminals. Consequently, the Slovenian wholesale gas market is supplied exclusively with gas imported by traders from neighbouring countries through the transmission systems. In previous years, the Slovenian wholesale market was supplied predominantly with gas from Austria, Russia, Croatia and Italy. In line with the decline in volumes of Russian gas, imports of gas from Algeria resumed in 2022. In 2025, the pronounced dominance of gas imports from Austria continued, accounting for approximately 94% of total import volumes. Imports from Algeria almost completely dried up, accounting for less than 1% of total imports, while the shares of imports from Italy and Croatia increased slightly. As in the previous two years, no gas declared as being of Russian origin was imported into Slovenia in 2025.

More than 90% of all imported gas still comes from Austria

FIGURE 226: SOURCES OF GAS DURING THE 2021–2025 PERIOD BY PLACE OF PURCHASE



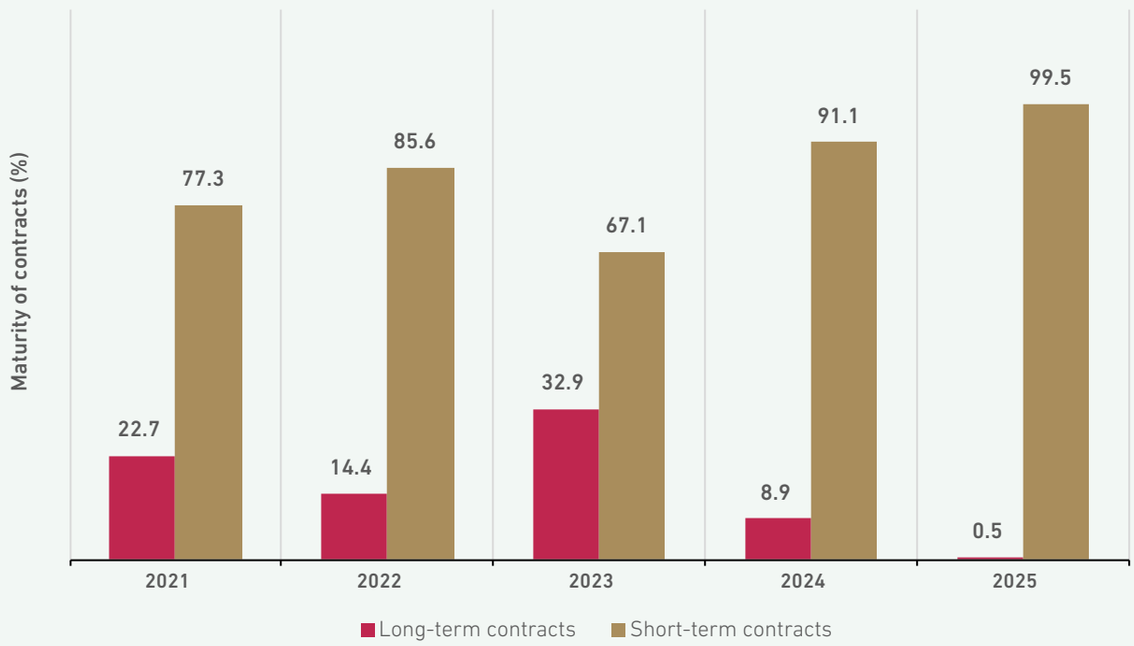
SOURCE: ENERGY AGENCY

In previous years, Slovenia was heavily dependent on gas originating from Russia. The Agency monitors the quantities of gas imported for domestic consumption, but does not track their actual country of production. Slovenian traders purchase most of their gas at the Austrian gas hub, where gas of Russian origin had long been predominant. Following the cessation of Russian gas transit through Ukraine in 2025, the flow of Russian gas to the Austrian gas hub via this transit route came to an end.

In recent years, long-term contracts between gas traders and producers have been replaced by short-term contracts concluded at gas hubs, exchanges and other trading venues within the EU. The energy crisis in 2022 prompted suppliers and traders to some extent to resume entering into long-term contracts, as the duration of contracts – or the ratio of short-term to long-term contracts – can affect the reliability of supply. Following an increase in 2023, the share of capacity contracted under long-term contracts fell by 24 percentage points in 2024 and reached just 0.5 percentage points in 2025.

Share of long-term contracts down to just 0.5% – the lowest ever recorded

FIGURE 227: STRUCTURE OF IMPORTED GAS IN RELATION TO THE MATURITY OF CONTRACTS



SOURCE: ENERGY AGENCY

In 2025, market concentration increased slightly compared with 2024, as the HHI increased to 6,654. Geoplin strengthened its market share to 79.5%, while HSE's share fell to 18.3%. Energetika Ljubljana recorded a significant decline in its market share to 0.4% in 2025, while Plinarna Maribor and ECE maintained small but stable shares.

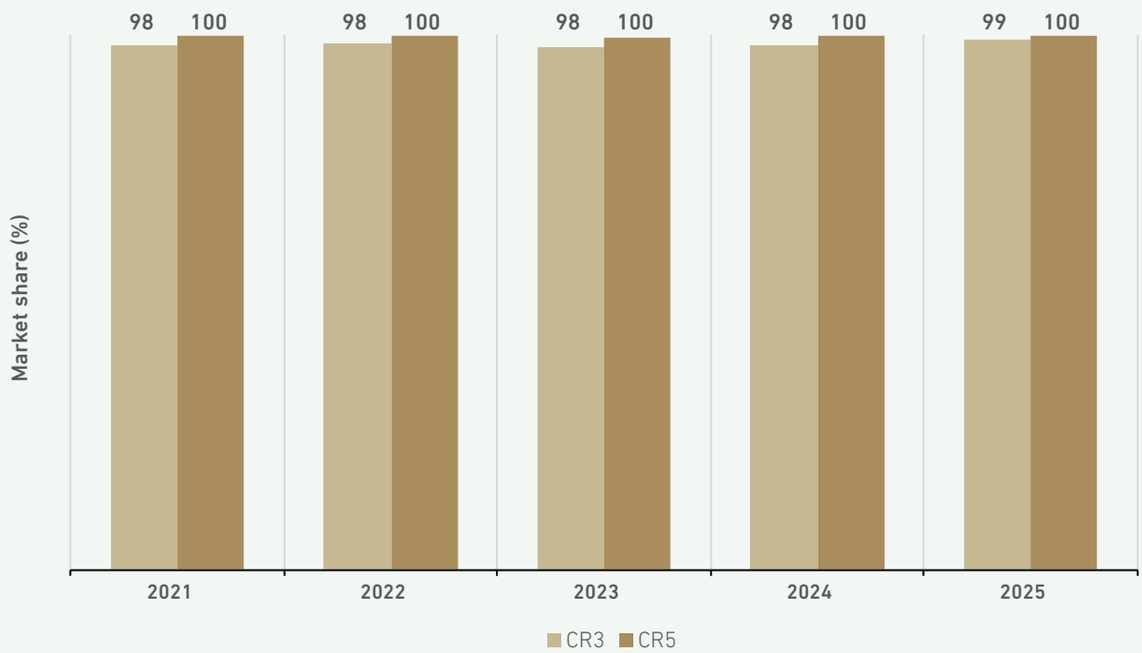
TABLE 38: MARKET SHARES AND THE HHI OF THE WHOLESALE GAS MARKET

Company	Market share (%)	
	2024	2025
Geoplin	76.3	79.5
HSE	19.2	18.3
Energetika Ljubljana	3.0	0.4
Plinarna Maribor	0.9	1.3
ECE	0.5	0.5
Others	0.1	0.0
HHI of the wholesale market	**6,202**	**6,654**

SOURCE: ENERGY AGENCY

The CR3 and CR5 indices also indicate a high level of concentration. The CR3 index reflects the market shares of the three largest suppliers, while the CR5 index reflects those of the five largest suppliers. In 2025, the three largest suppliers accounted for as much as 99% of the wholesale market, while the five largest accounted for the entire Slovenian market. Concentration has changed only marginally over the last five years.

FIGURE 228: WHOLESALE GAS MARKET CONCENTRATION



SOURCE: ENERGY AGENCY

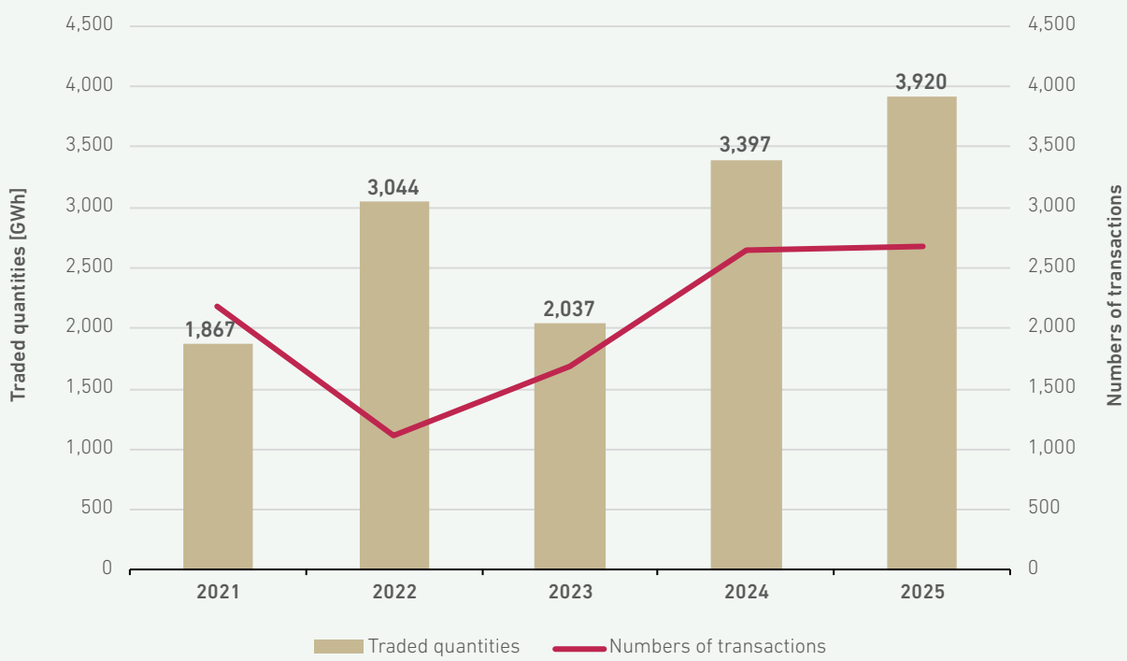
Market Transparency

The legal framework for ensuring the integrity and transparency of the wholesale energy market, including the gas market, is set out in Regulation (EU) No 1227/2011 (REMIT), as amended by Regulation (EU) 2024/1106 (REMIT II), together with the Commission's implementing and delegated acts and the applicable national legislation on gas supply. It should be noted that Implementing Regulation (EU) No 1348/2014[148] has been replaced by Commission Implementing Regulation (EU) 2026/256, subject to the transitional provisions. This area is discussed in more detail in the chapter on transparency in the wholesale electricity market, as REMIT applies to the wholesale energy markets for electricity and gas.

Market Effectiveness

A record volume of gas was sold at the virtual trading point since its establishment in 2016, while the number of transactions grew by just 1.5% from 2024 to 2025.

FIGURE 229: TRADING IN THE VIRTUAL POINT (FREE MARKET) IN THE 2021–2025 PERIOD

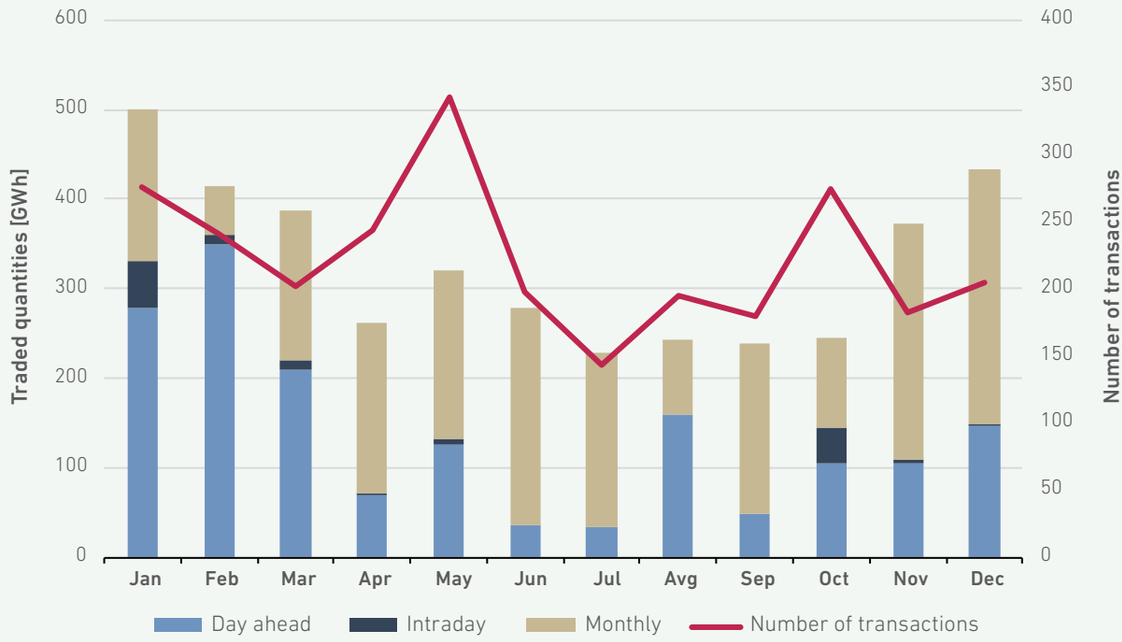


SOURCES: ENERGY AGENCY, PLINOVODI

The largest share (54.2% of the total volume) was sold on a monthly basis, 42.5% for the day ahead, and only 3.3% were made on an intraday basis, which is a change from last year, when the largest share of sales was for the day ahead (as much as 75%), and only 22% on a monthly basis. The share of volumes traded on an intraday basis, however, remained unchanged compared with last year. In terms of the number of trades, which totalled 2,682, day-ahead products predominated (91%); monthly transactions accounted for 3% and intraday transactions for 6%, a trend identical to that of last year. As was the case last year, no transactions were carried out using the weekly product this year either. On average, 11 traders traded at the virtual trading point each month, which is one more than the previous year.

148 On 17 April 2024, Regulation (EU) 2024/1106, known as the REMIT II Regulation, was published, concerning the strengthening of protection against market manipulation in the energy market. For further details, see the sub-section on Market Transparency within the Electricity chapter.

FIGURE 230: TRADING IN VIRTUAL POINT BY TRADING PRODUCTS IN 2025

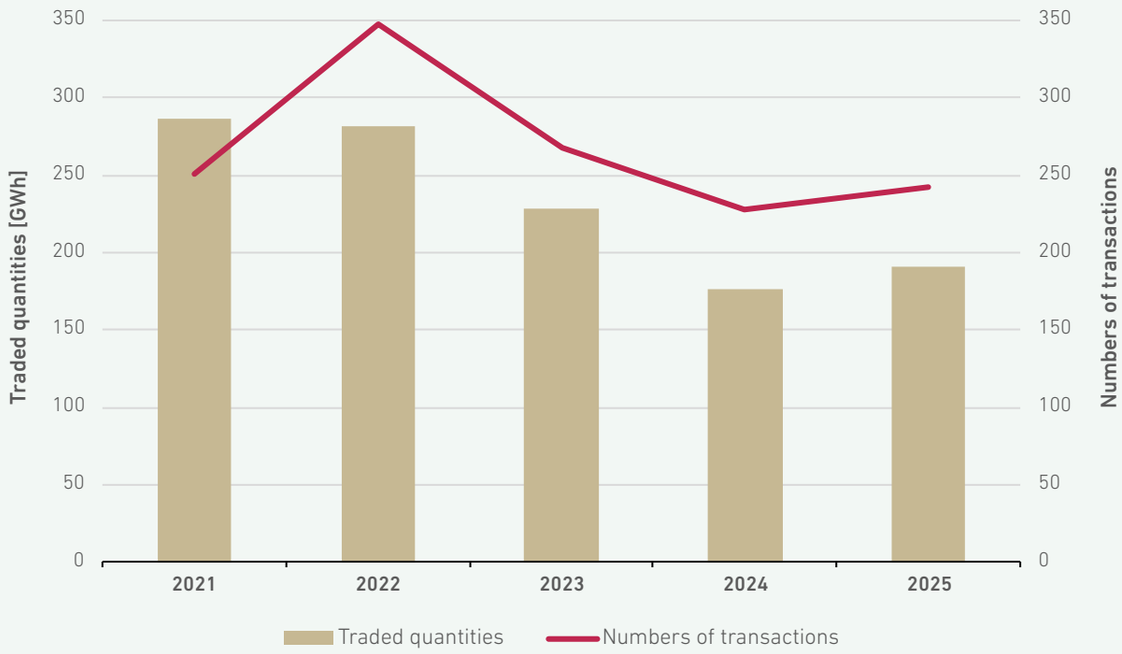


SOURCES: ENERGY AGENCY, PLINOVODI

While the transmission system operator does not trade at the virtual trading point, on the trading platform – where trading takes place for the purpose of balancing daily imbalances – the vast majority of transactions are carried out between the transmission system operator and the balance group leaders. Transactions between balance group leaders are very rare; in 2025, there were none at all. A total of 191 GWh of gas was traded, which is 8% more than the previous year. The number of transactions also increased, by 6% compared with 2024.

Gas sales on the trading platform up 8%; the number of transactions up 6%

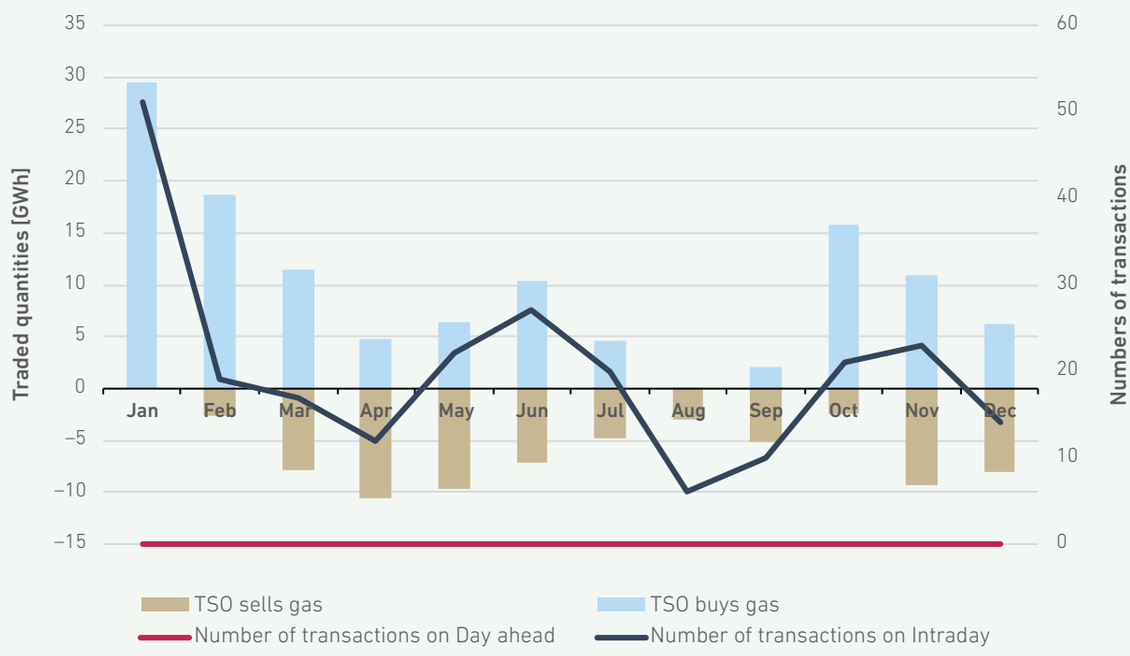
FIGURE 231: TRADING ON A TRADING PLATFORM (BALANCING MARKET) IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, PLINOVODI

All transactions were executed on the same day (242), while no day-ahead transactions were recorded. On average, three balance group leaders traded on the trading platform each month alongside the transmission system operator, which is the same as the previous year.

FIGURE 232: TRADING ON TRADING PLATFORM IN 2025



SOURCES: ENERGY AGENCY, PLINOVODI

The weighted average trading price on the trading platform tracked the CEGHIX stock index from the CEGH gas hub in Vienna. On approximately two-thirds of the days, the price was on average around 6–7% higher, and on approximately one-quarter of the days, it was on average around 5% lower than the CEGHIX. The maximum deviation of the weighted average price from the CEGHIX index was 20% upwards and 23% downwards.

FIGURE 233: WEIGHTED AVERAGE PRICE ON THE TRADING PLATFORM AND VALUES OF THE CEGHIX IN THE 2023–2025 PERIOD

SOURCES: PLINOVODI, CEGH

Members of the virtual trading point did not post their offers or requests on the noticeboard. Furthermore, the transmission system operator did not post any offers on the trading platform.

Retail Market

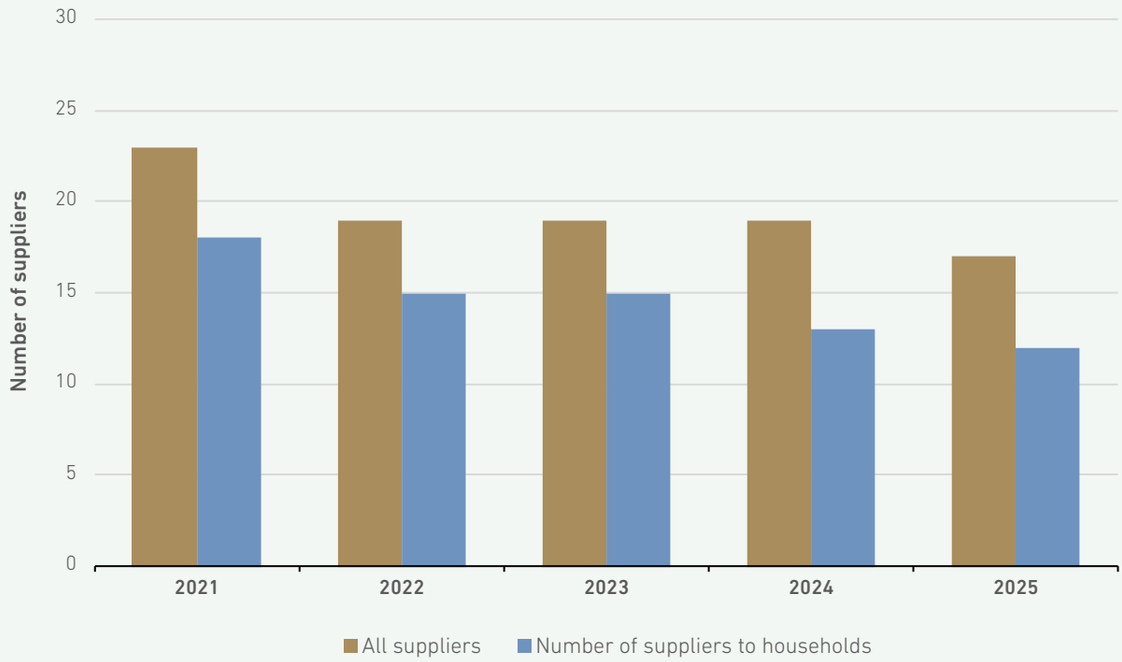
At the end of 2025, there were 17 active gas suppliers[149] on the retail market in Slovenia. Of these, 12 suppliers supplied gas to household consumers connected to distribution systems under concluded contracts, whilst 17 supplied gas to business consumers connected to distribution systems and the transmission system. Compared with the previous year, the number of suppliers has fallen by two. Thus, in 2025, ENOS ceased supplying gas, whilst JAVNO PODJETJE KOMUNALA d.o.o. Sevnica ceased supplying gas with effect from 1 March 2025.

17 suppliers in the retail market, two fewer than in 2024

Consumers can choose from the offers of all suppliers providing gas in their local community. Individual gas suppliers, which are smaller in terms of annual supply volume, supply gas to consumers only in those local communities where they also carry out gas distribution activities under the umbrella of the same company. Consumers pay for the gas supplied on a monthly basis, either on the basis of the actual quantity consumed, as measured by a meter, or on the basis of an estimated consumption[150], if the operator does not have a meter reading available.

149 The Energy Agency has considered as suppliers those companies that are members of a balance group or balance subgroup.
150 Calculated on the basis of the provisions of the Methodology for forecasting non-daily measured off-takes of natural gas network users.

FIGURE 234: NUMBER OF SUPPLIERS ON THE RETAIL MARKET IN SLOVENIA DURING THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

In 2025, no direct price controls were imposed by the state in Slovenia, as had been the case during certain previous periods of crisis. Pricing therefore took place on a market basis, with suppliers adjusting prices in line with conditions on the international energy markets.

Gas Prices in the Retail Market

Price monitoring in the retail market is carried out on the basis of publicly available data and data from offers to household and small business consumers obtained from suppliers as part of the Energy Agency's comparison services.

During periods of stable market conditions, retail gas prices in supply offers depend primarily on price movements in wholesale markets, the procurement terms secured by suppliers through trading, and the business decisions of individual suppliers.

Gas prices lower than in 2024 for most consumers

In 2025, gas prices for household consumers fell, while for business consumers a slight increase in prices was observed only in the category of the smallest business consumers (I1); for all other groups, prices were lower.

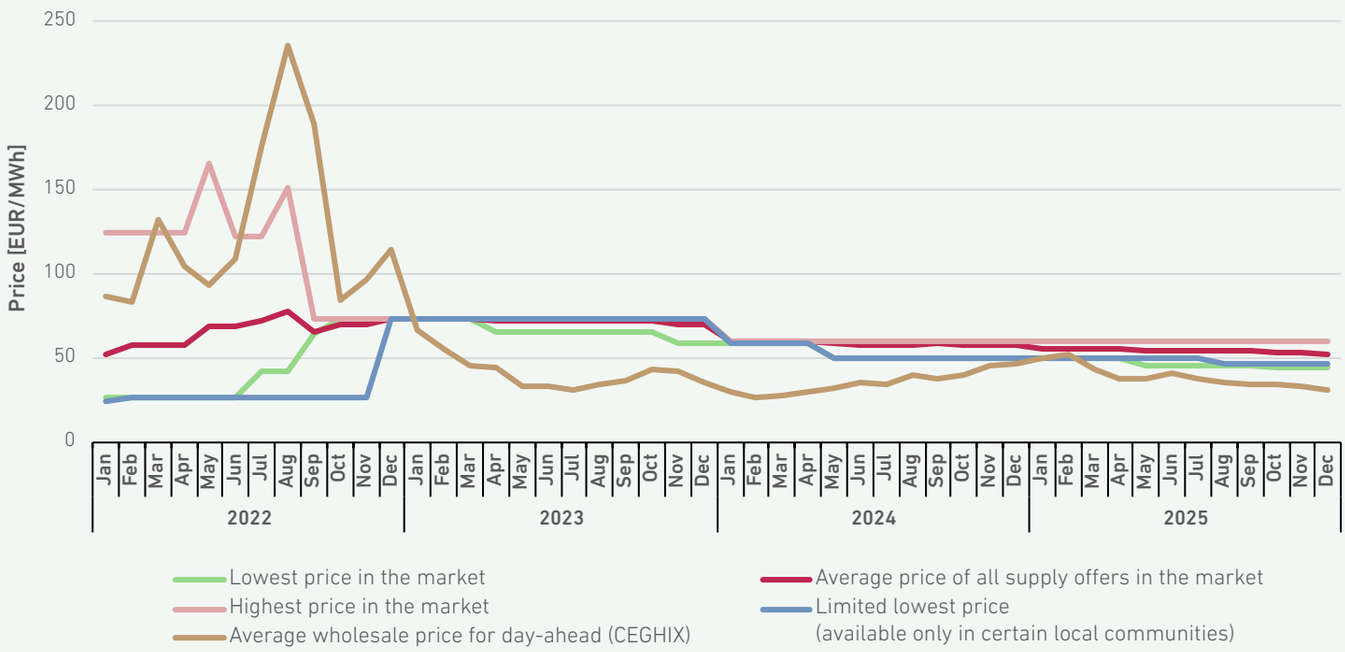
Retail Price Index

As part of monitoring the relevant market, the Energy Agency determines the Retail Price Index (RPI). The RPI is based on the cheapest offer available on the market that is accessible to all consumers. This allows consumers to switch suppliers without contractual penalties for an unlimited period of time. Based on the contracts concluded, it only reflects the price potential, not the realised price.

Figure 235 shows the trend in the following prices for a typical household consumer:

- limited lowest price (available only in certain local communities),
- the lowest price in the market,
- the average price of all offers in the market, and
- the highest price in the market.

FIGURE 235: RETAIL PRICE INDEX AND SOME TYPICAL GAS PRICES FOR HOUSEHOLD CONSUMERS WITHOUT THE NETWORK CHARGE, DUTIES AND VAT IN THE 2022–2025 PERIOD



SOURCE: ENERGY AGENCY

From January to the end of April, the supplier Energija plus offered the lowest gas price, at 49.4 EUR/MWh, whilst GEN-I had the second-cheapest gas price, offering a promotional rate of 49.6 EUR/MWh. Some other suppliers reduced their gas prices for household consumers in May (Energetika Ljubljana: 45.0 EUR/MWh) or during the summer months. At the end of 2025, only one supplier had the highest price, at 59.9 EUR/MWh. Most household consumers had a price below 54.0 EUR/MWh at the end of 2025.

Day-ahead wholesale gas prices on the Austrian CEGH exchange fell throughout 2025. Thus, in January, the day-ahead wholesale price of gas was 49.3 EUR/MWh, while in December 2025 30.6 EUR/MWh. In December 2025, the lowest gas price offered on the market was 46% higher than the average wholesale price.

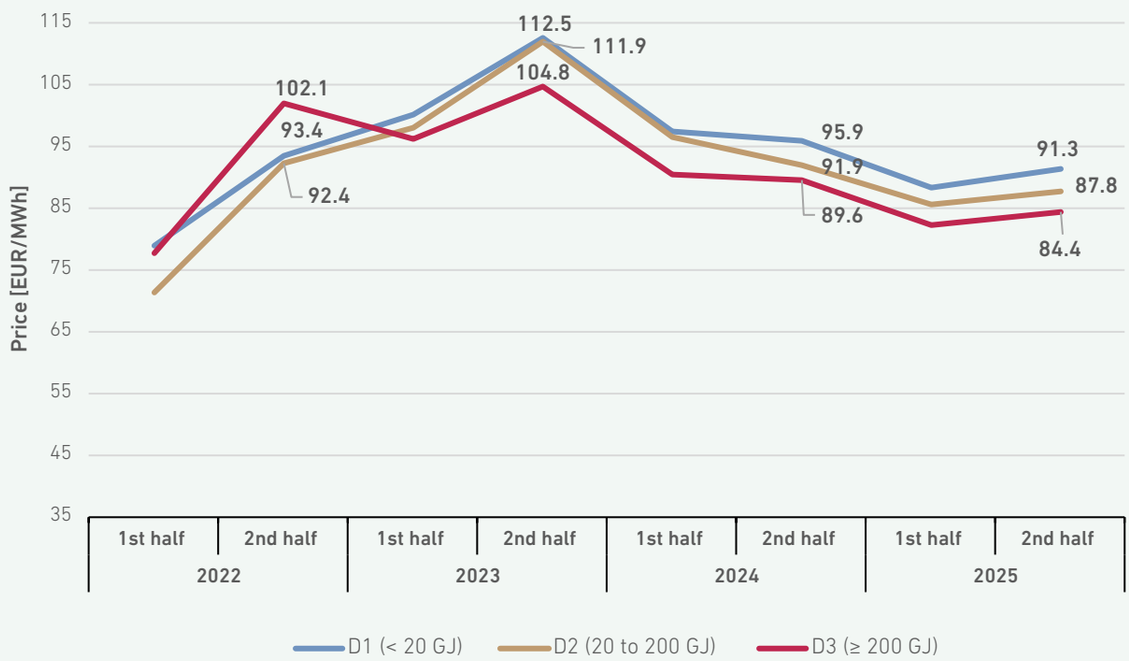
The average monthly price of gas supply decreased by 9% by the end of the year

Final Gas Prices

The figure below shows the trend in gas prices, including all taxes and levies, for household consumers over the period 2022–2025. For all household consumer groups (D1, D2 and D3), gas prices in the first half of 2025 were at least 6% lower than in the second half of 2024. In the second half of 2025, gas prices rose slightly and were only 4.8% lower for the smallest household consumers than in the second half of 2024, and 4.5% lower for household consumers in group D2. For a typical D2 household consumer, the average price in 2025 was 86.7 EUR/MWh, which was 7.9% lower than in 2024, 17.3% lower than in 2023, but 5.9% higher than in 2022.

Final gas prices for household consumers lower by more than 7%

FIGURE 236: FINAL GAS PRICES FOR HOUSEHOLD CONSUMERS IN SLOVENIA WITH ALL TAXES AND DUTIES IN THE 2022–2025 PERIOD

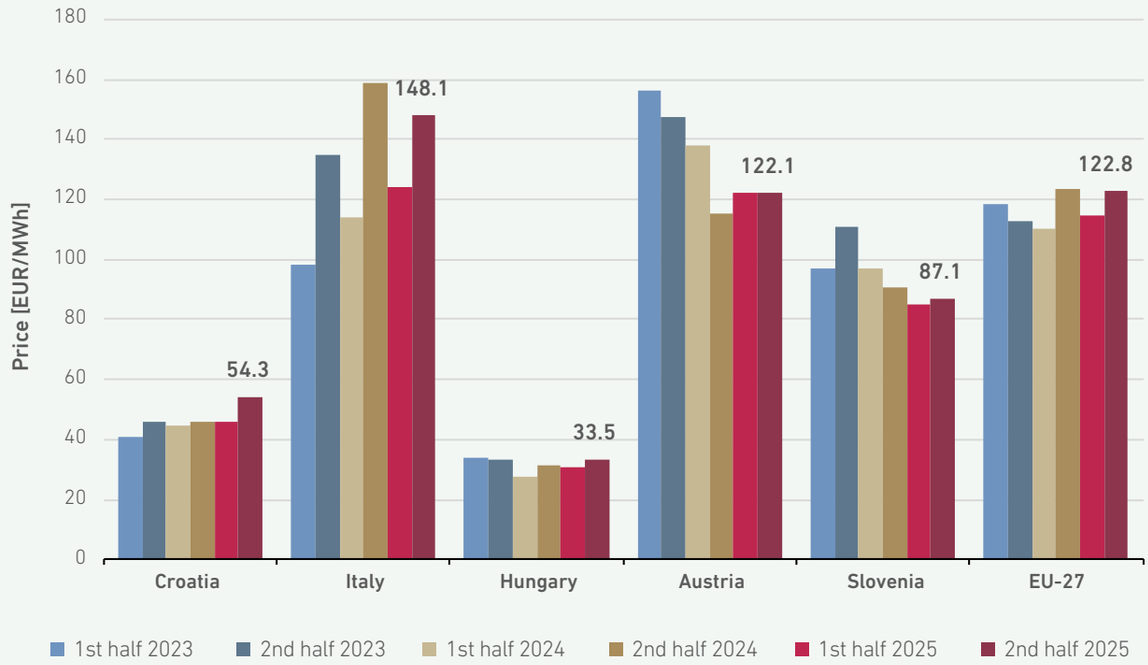


SOURCE: STATISTICAL OFFICE OF THE REPUBLIC OF SLOVENIA

Final gas prices for household consumers 27% lower than the EU average

Figure 237 shows the trend in final gas prices, including all taxes and levies, in 2023, 2024 and 2025 for a typical D2 household gas consumer in Slovenia and neighbouring countries. Final gas prices in Slovenia fell by 9% in 2025 compared with the previous year on an annual basis, while in 2025 they were also lower than in the previous year in Austria (–7%), whereas in Italy the price did not change significantly. By contrast, they were higher in Croatia and Hungary than in the year before. Final gas prices for typical household consumers in Slovenia remain well below the EU average.

FIGURE 237: FINAL PRICES OF GAS FOR TYPICAL D2 HOUSEHOLD CONSUMERS, INCLUDING TAXES AND LEVIES, IN SLOVENIA AND IN NEIGHBOURING COUNTRIES IN THE 2023–2025 PERIOD



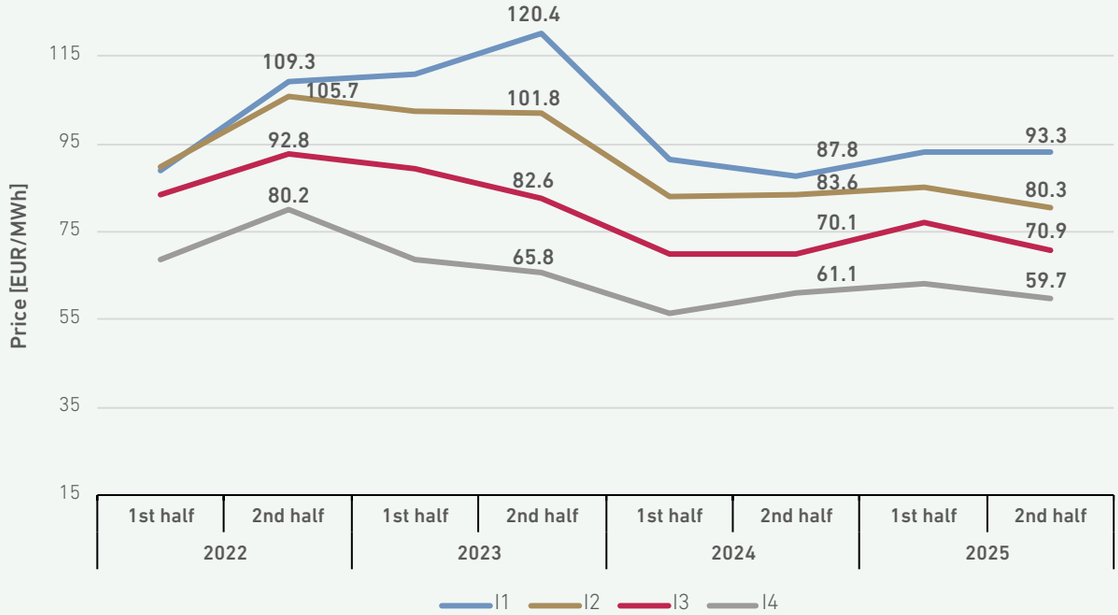
SOURCE: EUROSTAT

Final gas prices for business consumers in Slovenia increased slightly in 2025 compared with 2024, but were still lower than in 2023. For the smallest business consumers I1, the final gas price at the end of 2025 amounted to 93.1 EUR/MWh, which was 3.9% higher than in 2024, but 5.9% lower than in 2023.

Final gas price for the smallest business consumers 3.9% higher than in 2024

Figure 238 shows that a trend of diverging final gas prices between individual business consumer groups is once again emerging. In the second half of 2024, the gas price for group I1 was 44% higher than for group I4, and in the second half of 2025 this difference increased to 56%. While the average annual gas price increased for consumer groups I1 and I3, a slight decrease (0.7%) was observed for consumer group I2.

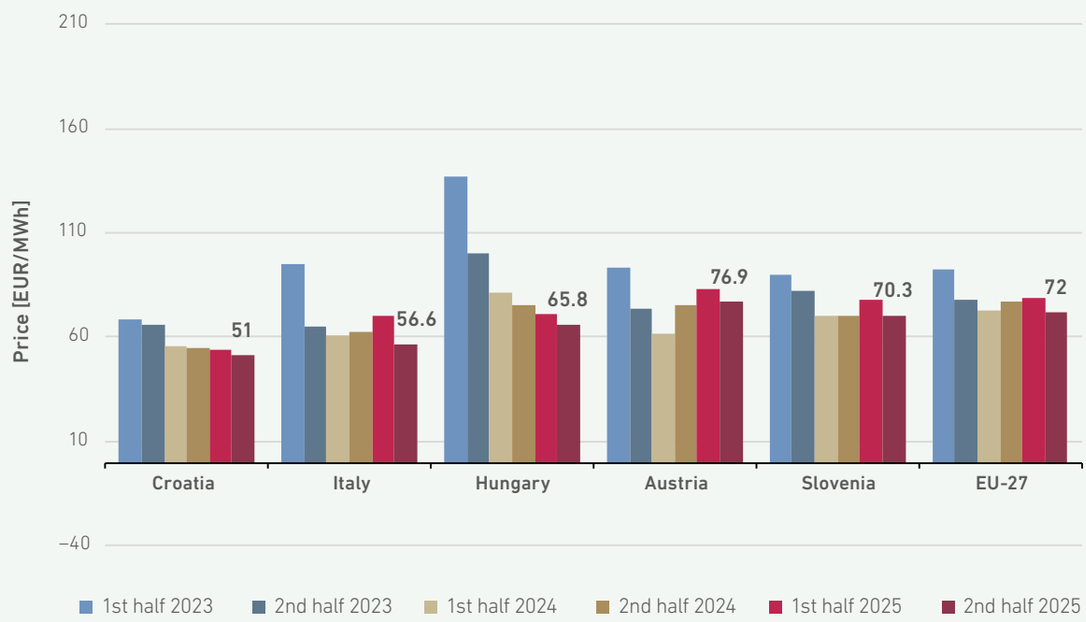
FIGURE 238: FINAL PRICES OF GAS FOR BUSINESS CONSUMERS IN SLOVENIA, INCLUDING TAXES AND LEVIES, IN THE 2022–2025 PERIOD



SOURCE: STATISTICAL OFFICE OF THE REPUBLIC OF SLOVENIA

Figure 239 shows final gas prices for typical I3 business gas consumers in Slovenia and neighbouring countries. For these consumers, final gas price in Slovenia rose by 5% on an annual basis, while the price change from the second half of 2024 to the second half of 2025 was barely noticeable. The final gas price for typical business consumers was 2% below the EU average. Compared with the previous year, average prices were lower only in Croatia and Hungary. On an annual basis, final gas prices fell most sharply in Hungary, by 16.0%, whereas the largest half-yearly price reduction was observed in Italy, where final prices in the second half of the year fell by as much as 19% compared with the first half of the year.

FIGURE 239: FINAL PRICES OF GAS FOR TYPICAL I3 BUSINESS CONSUMER, INCLUDING TAXES AND LEVIES, IN SLOVENIA AND IN NEIGHBOURING COUNTRIES IN THE 2023–2025 PERIOD

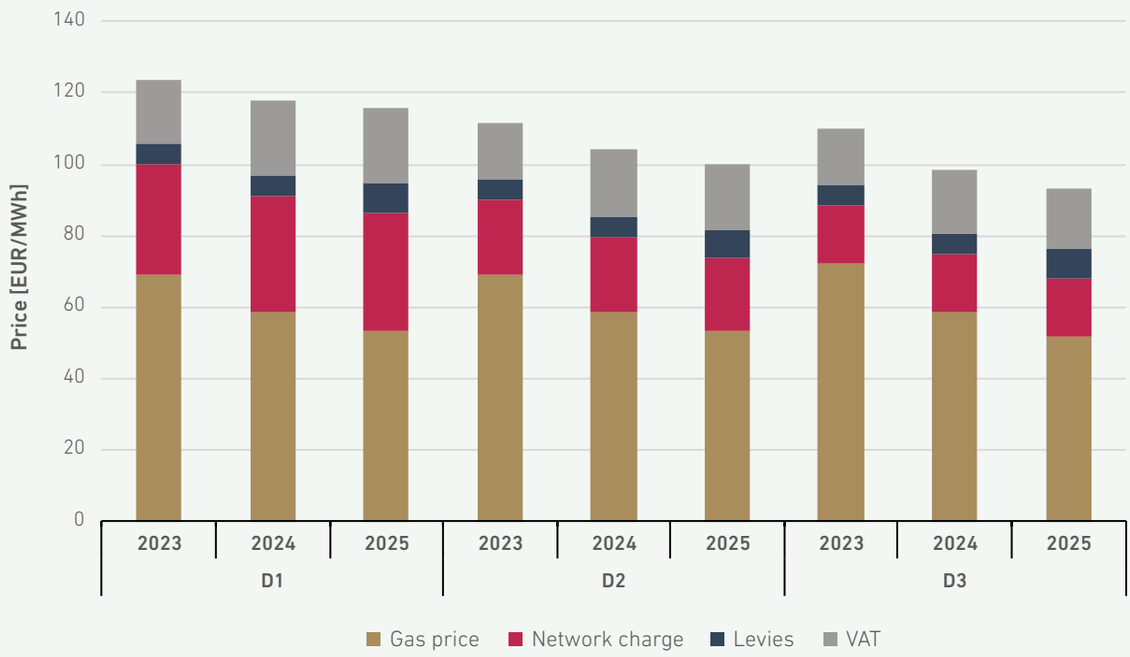


SOURCE: EUROSTAT

Figures 240 in 241 show the structure of the final price for typical household and business consumers connected to distribution systems during the period 2023–2025.

In the structure of the final gas price for household consumers, the share of energy fell in 2025 compared with the previous year across all consumer groups. As in previous years, the share of energy in the final gas price was highest for consumer group D3 in 2025, amounting to 55.6% of the final gas price. The network charge accounted for the highest share of the final gas price for consumer group D1, at 28.5%. User group D1 had the highest share of the network charge throughout the entire period under review, while user group D3 had the lowest.

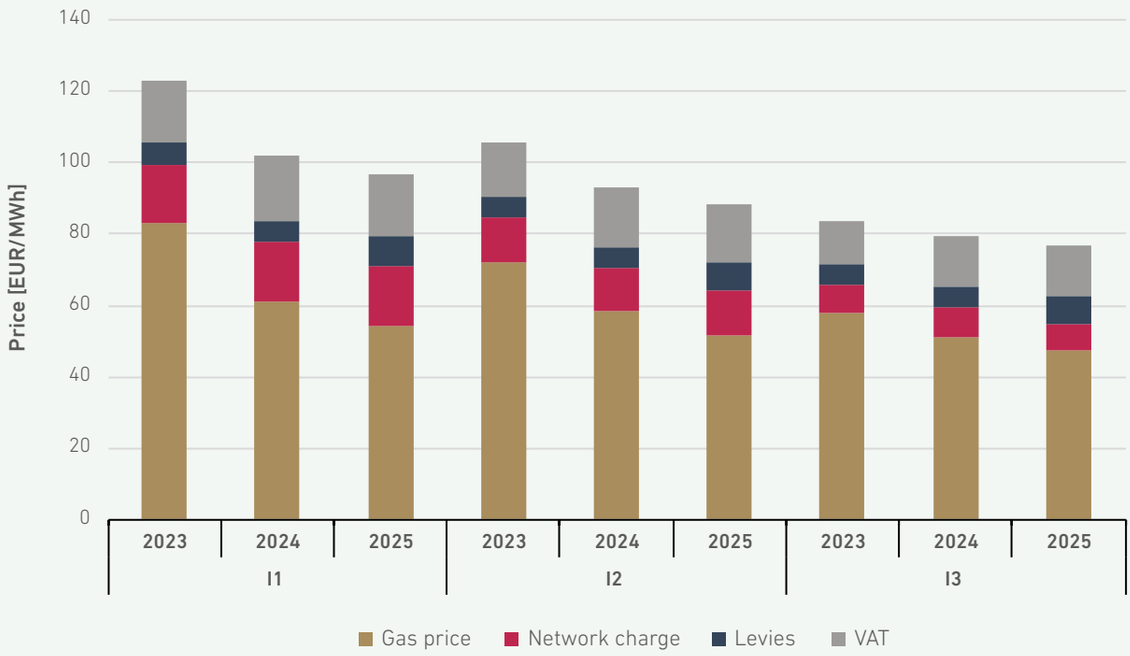
FIGURE 240: STRUCTURE OF THE FINAL GAS PRICE FOR HOUSEHOLD CONSUMERS IN THE 2023–2025 PERIOD



SOURCES: SUPPLIERS

In 2025, the share of energy in the final gas price for business consumers also fell compared with the previous year for all consumer groups. For the smallest business consumers (group I1), the share of the gas price accounted for 55.9% of the final gas supply price, while for the largest groups (I3) it accounted for 61.8%. The network charge as a share of the final gas supply price was highest for user group I1 – 17.6% – and lowest for user group I3, at 9.3%.

FIGURE 241: STRUCTURE OF THE FINAL GAS PRICES FOR BUSINESS CONSUMERS IN 2023–2025 PERIOD



SOURCES: SUPPLIERS

Market Transparency

The results of the monitoring of the efficiency and competitiveness of the retail gas market presented further below are based on the continuous processing of data submitted to the Energy Agency by reporting entities.

Financial Transparency of Suppliers and Transparency of Invoices

Under the Companies Act (ZGD-1), gas suppliers must prepare annual reports to ensure adequate financial transparency in their natural gas supply activities. The consolidated yearly reports must give an accurate and fair view of the company's financial position and profit or loss. They are audited by independent auditors and submitted to the AJPES for public publication. The applicable legislation regulates the accounts' transparency in a systemic manner. The invoice for gas supplied thus separately shows the amounts for gas consumed, the network charge (distribution amount and metering amount), the energy efficiency contribution, the RES and CHP contribution, the environmental levy (CO_2 tax), the excise duty and the VAT. In the absence of innovative offers on the retail gas market, the current legislation ensures adequate transparency in the cost of supply accounting.

Obligation to Publish Supply Offers

Suppliers must provide household and small business consumers with transparent information on their offers for the supply of gas and the relevant price lists, as well as the general terms and conditions for the supply service.

Energy Agency's Activities for Providing Transparency

The Energy Agency regularly monitors the functioning of the retail gas market, including the number and characteristics of published offers, with a focus on taking swift action in the event of identified contentious practices. Obligated parties submit data on current offers and any changes to the characteristics of these offers to the Energy Agency on a monthly basis; the agency uses this data, via the single point of contact, to provide comparison services in accordance with the ZOP

To ensure transparency in the retail gas market, comparative e-services are available to users on the agency's website, the key one being the 'Gas Supply Cost Comparator' web application. This enables the calculation and comparison of gas supply costs for individual consumption profiles based on offers entered into the online application by suppliers. Users of the comparison services were provided with access to all price lists and basic information on all suppliers' offers. Among other things, users were able to quickly access individual price lists and suppliers' general terms and conditions via the list of suppliers or offers in the comparison.

Market Effectiveness

Market Shares and HHI of the Gas Retail Market

Supply of Gas to Final Consumers

Table 39 shows the market share by suppliers in 2025 to all final consumers in the retail gas market in Slovenia.

TABLE 39: MARKET SHARES AND HHI OF SUPPLIERS TO ALL FINAL CONSUMERS IN THE GAS RETAIL MARKET IN 2025

Supplier	Delivered energy [GWh]	Market share
Geoplin	4,147	39.7%
Energetika Ljubljana	2,180	20.9%
GEN-I	1,028	9.9%
Petrol	863	8.3%
HSE	482	4.6%
ENNA Next	376	3.6%
Energija plus	356	3.4%
Adriaplin	279	2.7%
Plinarna Maribor	233	2.2%
ECE	201	1.9%
Other small suppliers	145	1.4%
Goodyear Slovenija	143	1.4%
Total	**10,432**[151]	**100.0%**
HHI of the retail market		**2,248**

SOURCE: ENERGY AGENCY

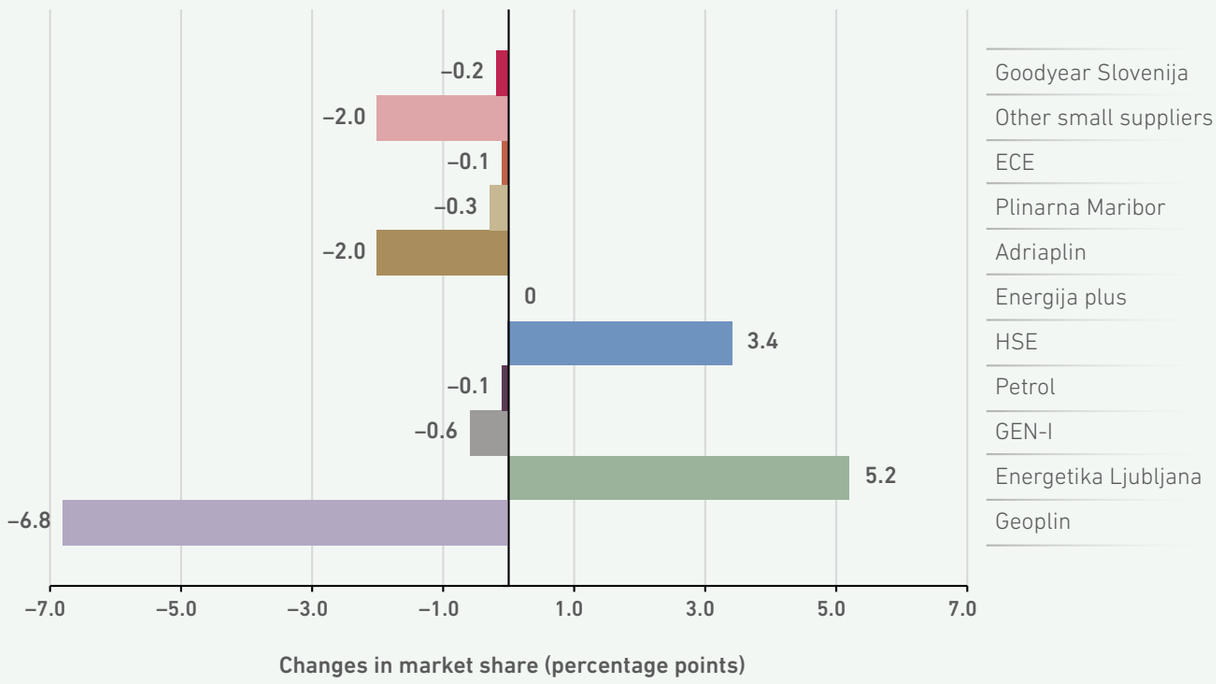
151 The difference between the total and the sums of the energy supplied by the suppliers is due to the rounding of numbers.

The HHI figure indicates that the retail market remains highly concentrated (the HHI is over 2,000), although it decreased by 15.4% compared with 2024.

The retail market remains highly concentrated

Looking at supply quantities to all consumers, in 2025, compared with 2024, the suppliers Energetika Ljubljana and HSE saw the largest increases in market share, while Geoplin suffered the greatest loss, followed by Adriaplin and a group of smaller suppliers labelled 'Other smaller suppliers'. The following figure shows the year-on-year changes in the market shares of suppliers to final consumers.

FIGURE 242: CHANGES IN SHARES OF THE FINAL CONSUMERS MARKET IN 2025 IN COMPARISON T 2024[152]



SOURCE: ENERGY AGENCY

The increase in Energetika Ljubljana's market share may be due to promotional or regular offers that were lower than the average gas price of other suppliers.

Supply of Gas to Business Consumers

The market shares of gas suppliers supplying business consumers in 2024 are shown in next Table.

152 Changes in market shares are rounded to one decimal place.

TABLE 40: MARKET SHARES AND HHI OF SUPPLIERS TO BUSINESS CONSUMERS IN THE GAS RETAIL MARKET

Supplier	Delivered energy [GWh]	Market share
Geoplin	4,146.7	44.3%
Energetika Ljubljana	1,860.1	19.9%
GEN-I	761.8	8.1%
Petrol	739.7	7.9%
HSE	482.0	5.1%
ENNA Next	375.7	4.0%
Energija plus	343.6	3.7%
ECE	170.1	1.8%
Goodyear Slovenija	142.5	1.5%
Adriaplin	136.7	1.5%
Plinarna Maribor	113.0	1.2%
Other small suppliers	97.5	1.0%
Total	**9,369**[153]	**100.0%**
HHI of the retail market		**2,547**

SOURCE: ENERGY AGENCY

The HHI decreased by 19.3% compared with the year before. Nevertheless, the retail market remained highly concentrated (the HHI is over 2,000).

In the business customer supply market, too, Energetika Ljubljana and HSE secured the largest market shares. Energetika Ljubljana increased its market share by 5.8 percentage points, whilst HSE increased its share by 3.7 percentage points. The share of smaller suppliers fell by 2.2 percentage points, while Geoplin lost the largest share – 8.4 percentage points – followed by Adriaplin, whose share decreased by 2.3 percentage points[154].

The share of other suppliers changed by 0.6 percentage points in absolute terms.

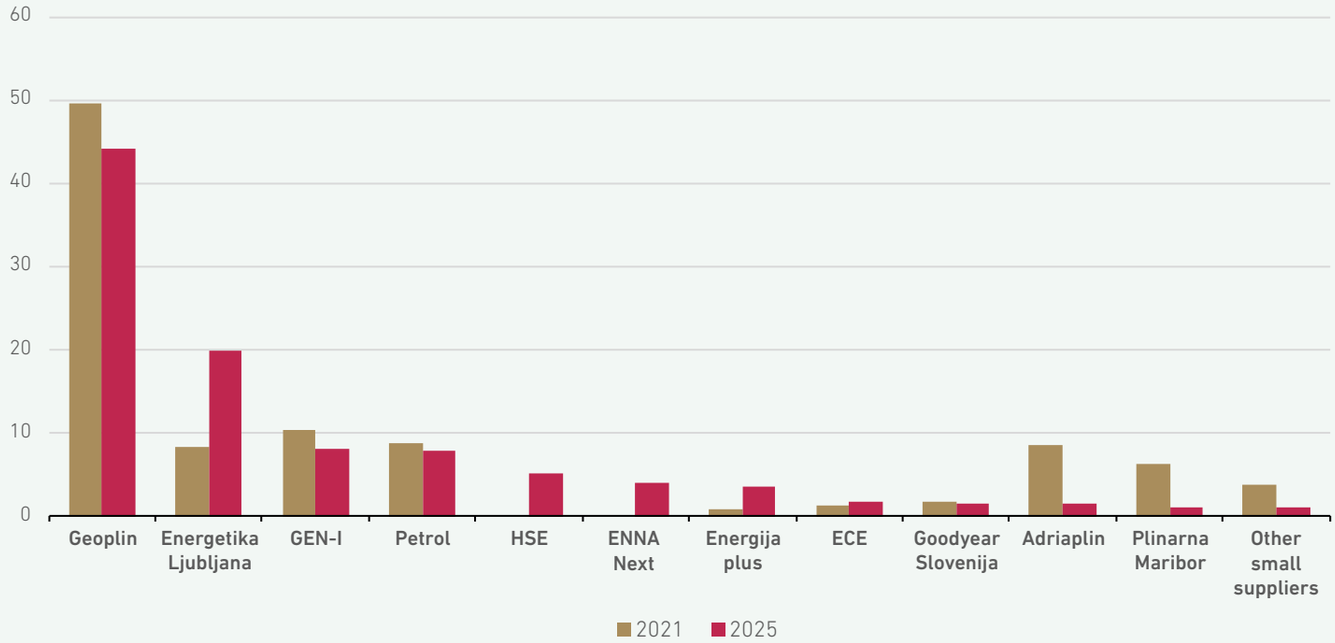
A comparison of suppliers' market shares among business consumers in 2021 and 2025, as shown in Figure 243, reveals that over the five-year period, Energetika Ljubljana (+11.6 percentage points), Energija plus (+2.8 percentage points), while the most significant decline was again seen at Adriaplin (–7.2 percentage points), Geoplin (5.3 percentage points), Plinarna Maribor (–5.2 percentage points) and a group of smaller suppliers (–2.8 percentage points).

The four largest gas suppliers to business consumers have an 80% market share

The shares of gas supplied to business consumers still indicate low market competition for consumers, as the combined share of volumes supplied by the four largest suppliers has fallen by just 3 percentage points compared with last year and now stands at 80%.

153 The difference between the total and the sums of the energy supplied by the suppliers is due to the rounding of numbers.
154 Changes in suppliers' market shares in 2025 compared with 2024 are rounded to one decimal place. Due to rounding, a direct comparison with last year's figures may result in a difference of +/– 0.1 percentage points.

FIGURE 243: COMPARISON OF THE SUPPLIERS' MARKET SHARES TO BUSINESS CONSUMERS IN 2021 AND 2025



SOURCE: ENERGY AGENCY

Supply of Gas to Household Consumers

The market shares of gas suppliers in the retail market for household consumers in 2024 are shown in Table 41.

TABLE 41: MARKET SHARES AND HHI OF SUPPLIERS TO HOUSEHOLD CONSUMERS IN THE GAS RETAIL MARKET

Supplier	Delivered energy [GWh]	Market share
Energetika Ljubljana	320	30.1%
GEN-I	266	25.0%
Adriaplin	143	13.4%
Petrol	123	11.6%
Plinarna Maribor	120	11.3%
ECE	31	2.9%
ISTRABENZ PLINI	24	2.3%
Energija plus	12	1.2%
Other small suppliers	24	2.2%
Total	**1,063**	**100.0%**
HHI of the retail market		**1,991**

SOURCE: ENERGY AGENCY

The HHI value indicates that the retail market for supply to household consumers remained low in concentration (the HHI is less than 2,000), although the HHI value has risen for the fourth consecutive year. Compared with 2023 and 2024, when the HHI stood at 1,892 and 1,925 respectively, the HHI increased by 66 in 2025.

HHI value for the retail market higher for the fourth consecutive year

The market share of the three largest suppliers (CR3) stood at just over 68.6%, which is 1.5% higher than the previous year. The top two suppliers by market share remain unchanged from last year, while Adriaplin has replaced Petrol in third place.

In 2025, compared with the previous year, Energetika Ljubljana managed to increase its market share by 1.5 percentage points, Adriaplin by 1.4 percentage points and GEN-I by 1 percentage point[155].

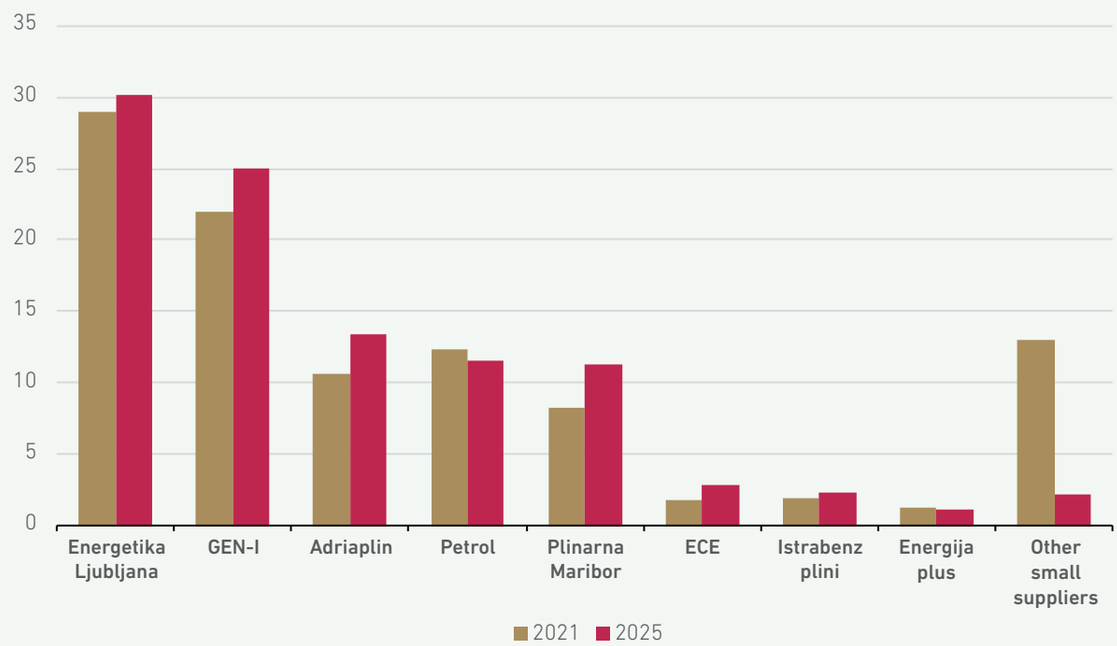
On the other hand, the largest decreases in market share in the household consumer segment were seen at Petrol (–2.9 percentage points) and Plinarna Maribor (–1.3 percentage points).

The supply share of other smaller suppliers also increased by 1.9 percentage points, primarily due to the inclusion of the supplier Energetika Celje in this category. As for the other changes in market shares, these were caused by unpredictable conditions in the gas market.

Changes in the market shares of suppliers to household consumers in 2021 and 2025 are shown in Figure 244. The largest increases in market share were recorded by GEN-I (3.1%) and Adriaplin (2.8%).

The market share fell most significantly for other smaller suppliers during these years (–10.7%), while Petrol's share also fell slightly, by 0.7 percentage points.

FIGURE 244: COMPARISON OF THE SUPPLIERS' MARKET SHARES TO HOUSEHOLD CONSUMERS IN 2021 AND 2025



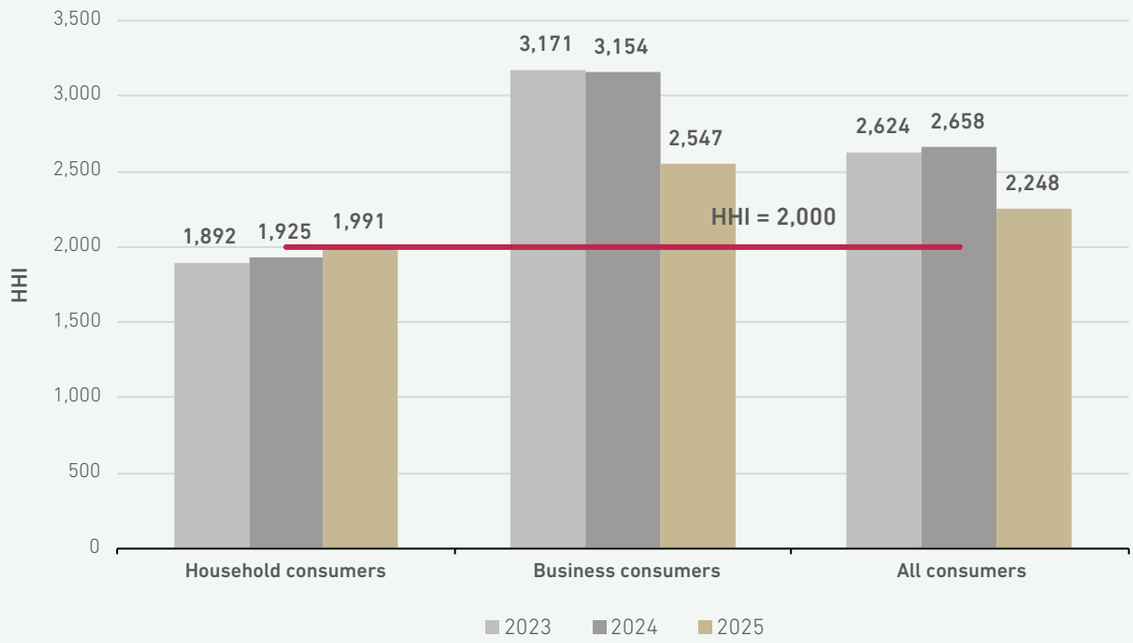
SOURCE: ENERGY AGENCY

155 Changes in suppliers' market shares in 2025 compared with 2024 are rounded to one decimal place. Due to rounding, a direct comparison with last year's figures may result in a difference of +/– 0.1 percentage points.

Comparison of Concentrations on the Relevant Markets

In 2025, the HHI value increased again in the supply segment of the retail market for household consumers, but decreased for business consumers, as was the case last year. The HHI value also fell in the segment covering all consumers under observation. Figure 245 shows the HHI values for the three-year period. The state of the retail market does not reflect the desired state of a competitive market. The household consumer segment remains the only observed market with low concentration, but over the last three years it has approached the threshold value (HHI=2,000). The business consumers' market is a highly concentrated market in terms of the HHI value, although this value has fallen due to an increase in the market share of the suppliers Energetika Ljubljana and HSE, the entry of a new supplier, ENNA Next, and a decrease in the market share of the previously dominant supplier, Geoplin.

FIGURE 245: HHI IN THE RETAIL MARKETS DURING THE 2023–2025 PERIOD

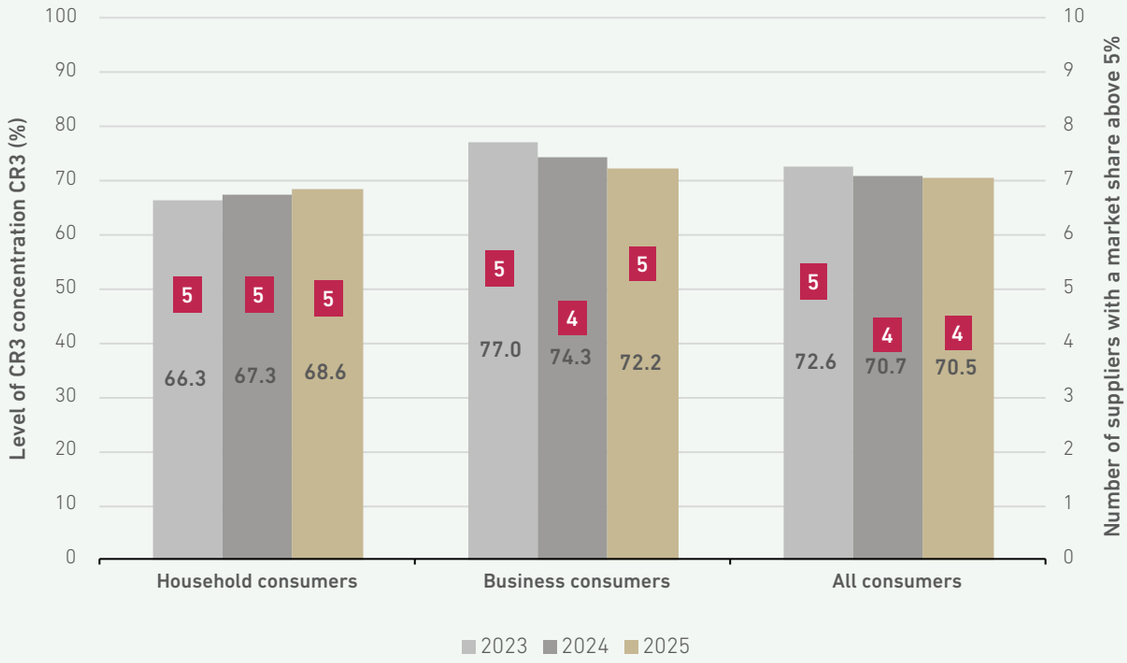


SOURCES: SUPPLIERS

Figure 246 shows the concentration ratio index for the three largest suppliers in the CR3[156] market across individual market segments over the last three years. The CR3 values for the business and all consumers supply segments in 2025 still exceed the threshold for a high concentration level (70%) – just as they did last year. A negative trend of increasing concentration in 2025 compared with 2023 and 2024 can be observed in the supply to household consumers. For business consumers, a downward trend is evident, while in the 'all consumers' segment the figure is barely noticeable compared with last year.

156 The total market share of the three largest suppliers in the market

FIGURE 246: LEVEL OF CR3 CONCENTRATION AND THE NUMBER OF SUPPLIERS WITH A MARKET SHARE ABOVE 5% DURING THE 2023–2025 PERIOD



SOURCES: SUPPLIERS

Switching Supplier

The number of supplier switches is one of the key indicators of a well-functioning retail market. In 2025, consumers had greater scope to switch suppliers compared with 2024, given that gas prices were already fully market-determined in 2025, with suppliers adjusting prices primarily in line with conditions on the wholesale markets and gas purchase prices, and a greater variety of offers being available throughout the year than in 2024.

The retail gas market remained fairly static in 2025, as evidenced by the statistics on supplier switches. The number of supplier switches was even slightly lower than in 2024. Only 1,826 customers switched suppliers, comprising 1,250 household and 576 business consumers.

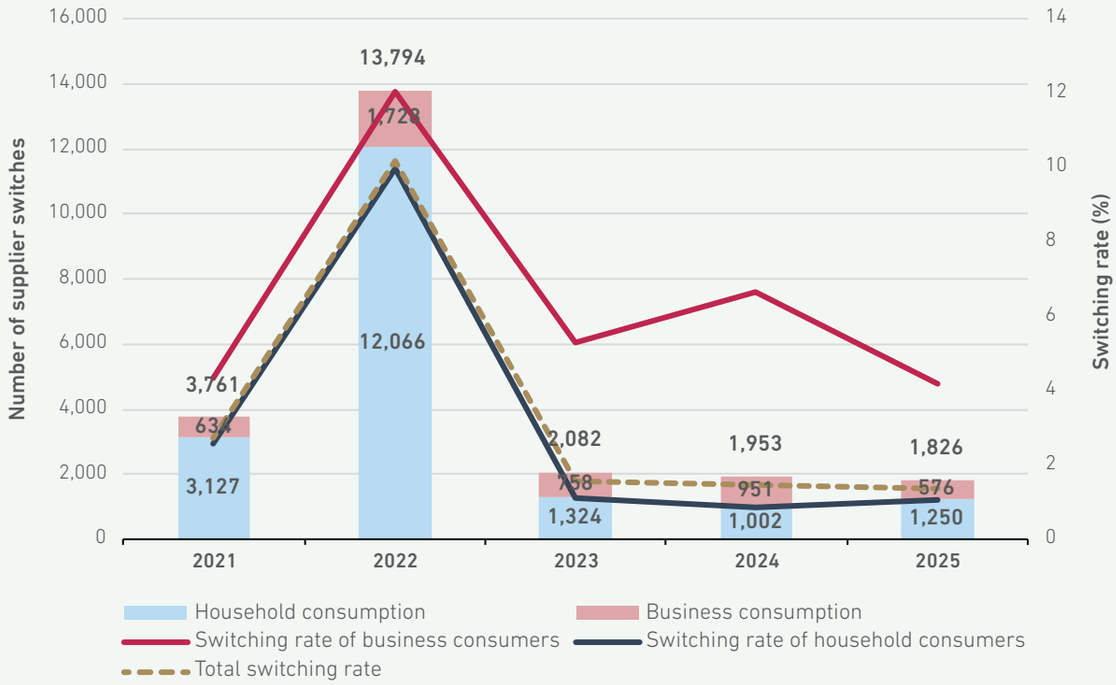
In closed distribution systems, four switches of gas supplier were recorded in 2025.

Compared with 2024, the total number of switches was 7% lower. Among household consumers, the number of switches actually increased by 25% (from 1,002 in 2024 to 1,250 in 2025), while for business consumers it fell by as much as 39% (from 951 in 2024 to just 576 in 2025).

The number of supplier switches decreased further compared with 2024

If we exclude 2022 – when the number of supplier switches was high due to consumers switching to another supplier following the termination of this activity – a downward trend in the number of supplier switches has been evident since 2015. Thus, the number of supplier switches in 2025 was 78% lower than in 2015 and almost 70% lower than the average for the period 2012–2024, which is the same as last year.

FIGURE 247: NUMBER OF SUPPLIER SWITCHES IN THE 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

The share of household consumers switching suppliers reached just 1.1% in 2025, which is admittedly higher than the previous year (0.8%), but still indicates a high level of inactivity amongst consumers, even though a variety of offers with significantly different prices were available to household consumers on the retail market. The share of supplier switches amongst business consumers reached 4.2%, which is also lower than the previous year (6.6%).

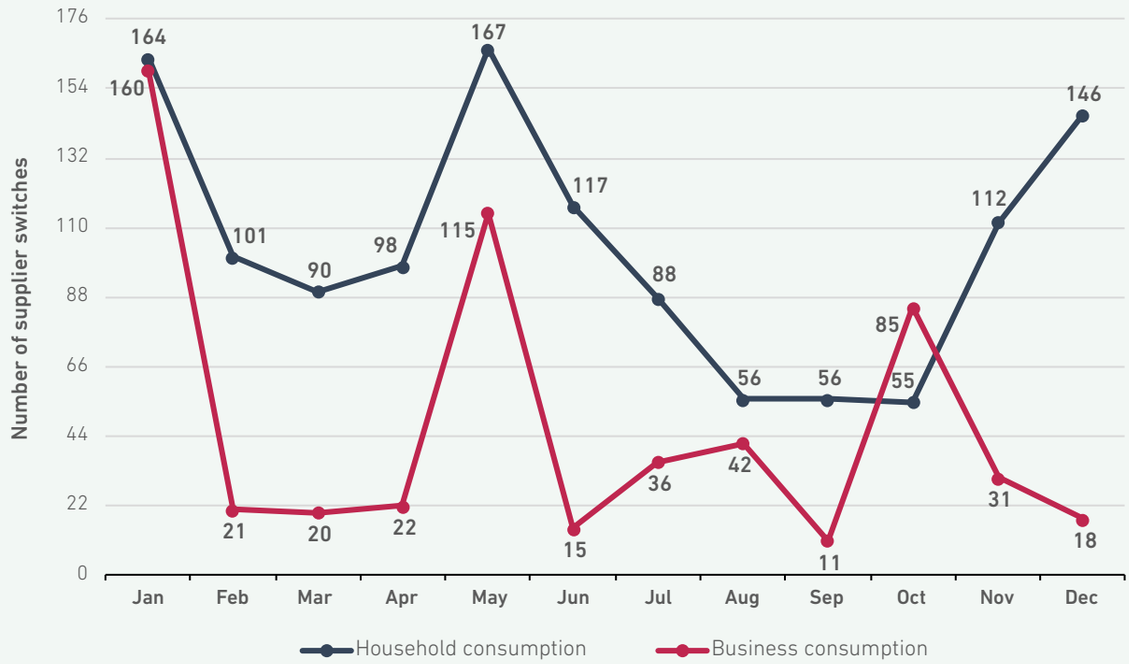
In January, May and October, as many as 62% of all supplier switches carried out by business consumers in 2025

In 2025, a slight increase in the number of supplier switches among business consumers was observed in January (160 consumers), which is usually due to the expiry of fixed-term supply contracts, which are often concluded for a calendar year. Nevertheless, the number of supplier switches is lower than in January 2024, when it was 550. Later in the year, the highest number of supplier switches occurred in May (115 consumers)

Only 1.4% of all consumers switched suppliers

The share of supplier switches in January, May and October – when the number of switches was highest – accounted for as much as 62% of all switches carried out during the year. The number of supplier switches among household and business customers by month is shown in Figure 248.

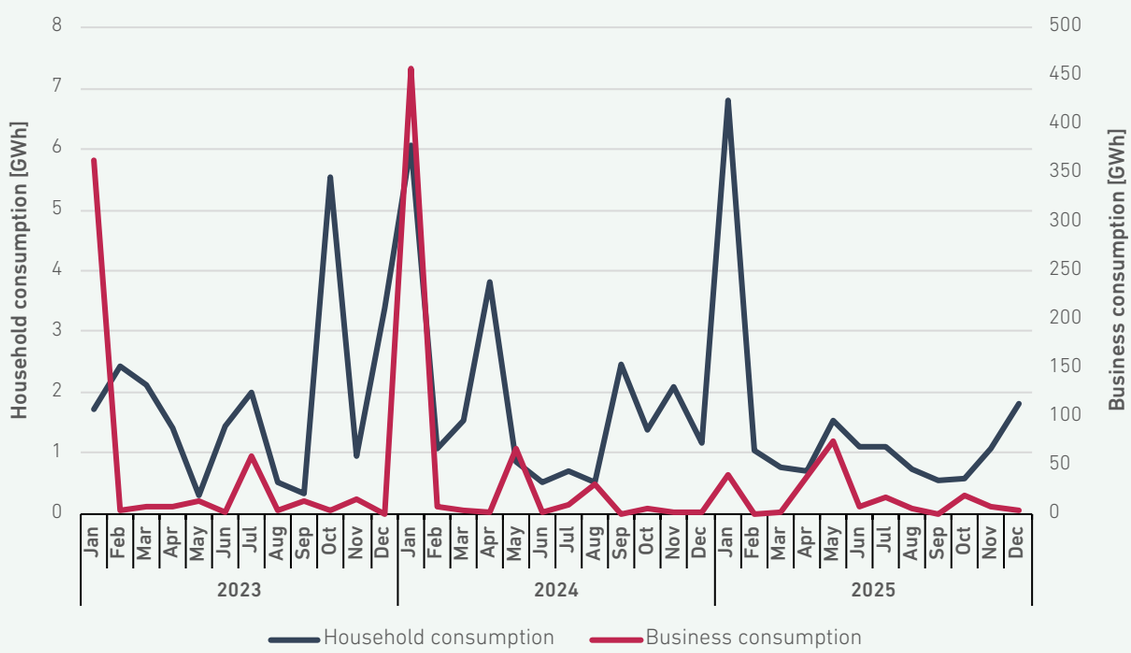
FIGURE 248: QUANTITIES OF EXCHANGED GAS WITH RESPECT TO THE TYPE OF CONSUMPTION



SOURCE: ENERGY AGENCY

The quantities of energy switched represent the estimated annual gas consumption of consumers who have switched suppliers. Among business consumers, a 62% decrease was recorded on an annual basis. For household consumers, the volume of energy switched was slightly lower than in 2024. Figure 249 shows the trend in the volume of gas switched by month over the period 2023–2025.

FIGURE 249: DYNAMICS OF THE NUMBER OF SUPPLIER SWITCHES DEPENDING ON THE TYPE OF CONSUMPTION



SOURCE: ENERGY AGENCY

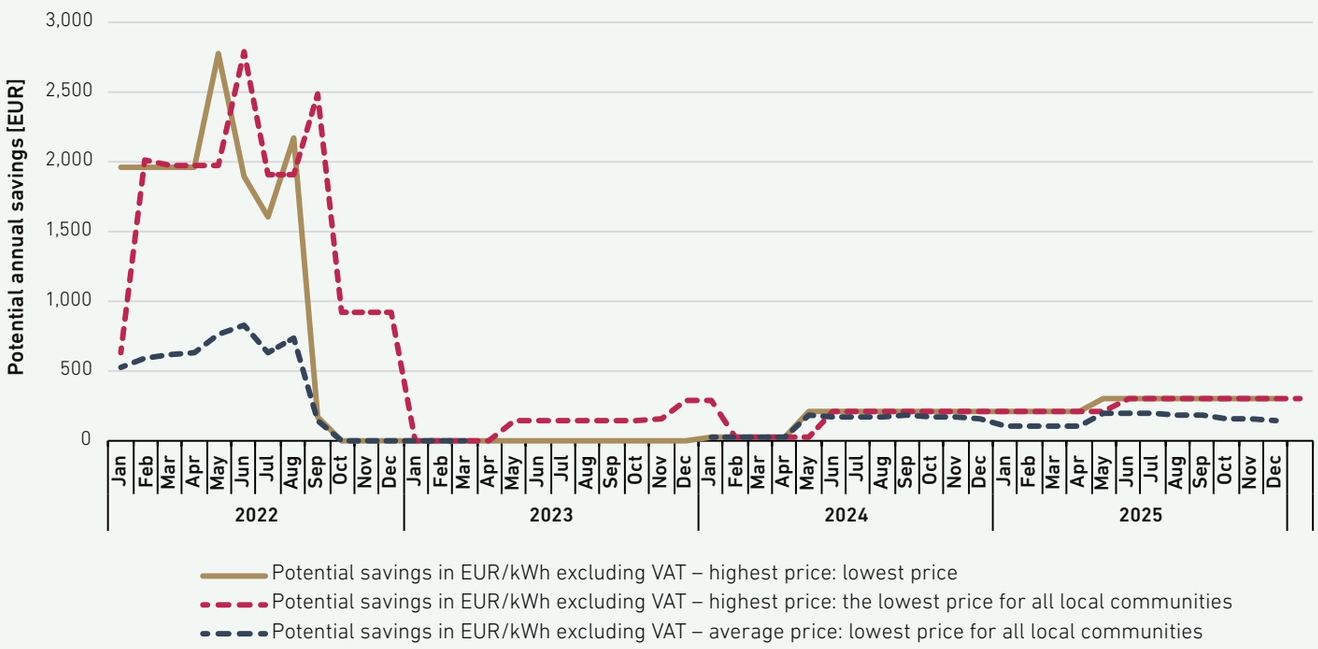
The volume of gas consumed by household consumers was highest in January 2025, accounting for 38% of the total annual volume.

In the business segment, the volume of gas switched was highest in May, when 34% of the annual switched volume was switched. A higher share of the volume switched was also recorded in January, when this share amounted to 18.6%, and in April, when it was just under 18%.

Estimation of the Potential Benefits of Switching Supplier

A well-functioning retail market is characterised by a variety of supply offers, offering consumers the possibility to be supplied with a variety of terms and conditions, as well as the opportunity to make savings by keeping up-to-date with the suppliers' offers and choosing the most favourable ones for them. By switching supplier, any household or legal entity can reduce its annual cost of natural gas supply, influence the payment terms and other provisions of its contractual relationship with the supplier or obtain additional benefits linked to a particular offer, but only if there is sufficient competition in the market to attract new customers and increase the share of supply. As regulated or capped prices for household consumers were no longer in force in 2025, the differences between the gas prices offered by suppliers were determined freely in line with market conditions throughout the year. For most household consumers, monthly gas consumption is linked to the heating season; therefore, during the colder months – when consumption is generally at its highest – consumers have the opportunity to make savings if they are supplied on the basis of the most cost-effective offers.

FIGURE 250: POTENTIAL ANNUAL SAVINGS FROM SWITCHING SUPPLIERS FOR A TYPICAL HOUSEHOLD CONSUMER DURING THE 2022–2025 PERIOD



SOURCE: ENERGY AGENCY

The potential saving shown for each month when switching from the supplier with the highest price to the supplier with the lowest price is calculated on the assumption that the supply continues uninterrupted for 12 months under unchanged conditions. Given the highly variable conditions in gas supply, the shown potential saving of 300 euros is purely theoretical. The potential saving between the average and the lowest gas price over 12 months amounts to approximately 160 euros.

Given the availability of offers during periods of lower consumption, this saving was significantly lower. The supplier Energetika Ljubljana offered the lowest price of 44.9 EUR/MWh between May and the end of the year.

Measures to Promote Competition

The Energy Agency monitors the retail gas market. It cooperates with the regulatory and supervisory authorities at the national level, such as the Market Inspectorate of the Republic of Slovenia, the Public Agency for the Protection of Competition of the Republic of Slovenia and, where appropriate, independent and non-profit consumer organisations. The Energy Agency's actions are multifaceted and are based on the Energy Agency's internal analyses, bilateral actions and the results of public consultations. The Energy Agency ensures that relevant information on market developments is kept up-to-date through its online single contact point.

Security of Gas Supply

Gas supply in 2025 proceeded without disruption and was not compromised. From the perspective of security of supply, conditions remained stable throughout the year and showed a slight improvement compared with previous years; this applies to both Slovenia and other EU Member States. As gas transmission to Slovenia proceeded smoothly and at full capacity, while the situation on the European gas market stabilised, the competent authority (MOPE) declared an end to the early warning crisis level – the first stage of a gas supply crisis – in March 2025. Between 2022 and 2024, investments in infrastructure enabled the transmission of gas between Member States to consumers. In Slovenia and across the EU, we maintained a high level of preparedness for a possible deterioration in the situation through regular exchanges of information on the situation within the framework of the Gas Coordination Group.

Gas supply situation in the EU and Slovenia remains stable

The voluntary reduction in gas consumption in the EU, which had been in place since 2022, remained in force in 2025, specifically until 31 March 2025.

The 15% reduction in consumption was based on the average gas consumption over the five-year period from 1 April 2017 to 31 March 2022.

At EU level, the reduction target was achieved; however, in Slovenia, gas consumption increased due to the switch from coal to gas at PPE–TOL Energetika Ljubljana, which is an exemption designed to encourage the phasing out of coal and the transition to gas use in thermal power stations. Taking this exemption into account, other consumers in Slovenia reduced their gas consumption by 6.4% between 1 April 2024 and 31 March 2025.

Storage obligations and storage levels in the EU are more flexible than in previous years

Since 2022, Member States in the EU have been required to ensure that gas storage facilities are filled to capacity. In the first year, the target fill rate was 80% at EU level, rising to 90% in subsequent years, with storage facilities playing a very important role in ensuring market flexibility and contributing to the security of gas supply in the EU. In 2025, Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 on measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010 (hereinafter Regulation (EU) 2017/1938) in the part setting out the storage obligation, so that Member States may reduce the target storage level by up to ten percentage points. A more flexible target also applies to Member States without gas storage facilities. Each of them, including Slovenia, must ensure that gas companies have concluded agreements under which, by 1 December, they store quantities corresponding to at least 15% of the average annual gas consumption in that Member State over the previous five years.[157]

157 Regulation (EU) 2017/1938 was amended in 2025 by Regulation (EU) 2025/1733 of the European Parliament and of the Council of 18 July 2025 amending Regulation (EU) 2017/1938 as regards the role of gas storage in ensuring gas supply ahead of the winter season.

According to the Energy Agency's data, the average total volume of gas consumed by all balance group leaders (BGL) in Slovenia amounted to 9,419.4 GWh. They reported to the Energy Agency that, on 1 November 2025, they had 1,417.2 GWh of gas stored in storage facilities in other EU Member States, which corresponds to 15% of the average consumption of these BGLs over the last five years. The overall storage obligation at the national level in Slovenia for 2025 was met.

The Ministry of the Environment, Climate and Energy and the Agency regularly participated in the Gas Coordination Group. This group continued to meet regularly in 2025 and ensured the necessary flow of information between the competent authorities, regulatory bodies and associations at EU level. Due to the increasingly stable situation, the number of these meetings was not increased. In Slovenia, the crisis group no longer met due to the stable situation. However, the competent and regulatory authorities monitored developments in the field of gas supply at all times and would have convened the crisis group if necessary.

The Gas Supply Preventive Action Plan Order requires suppliers to meet a supply standard each year. This means they must provide gas to supply protected customers in three cases. The quantities of gas needed to meet the supply standard for the period from 1 October 2024 to 30 September 2025 are as follows:

a) during the seven-day minimum temperature period: 12,270.44;
b) during the 30-day period with exceptionally high demand: total 30-day quantities of 241,202 MWh or an average of 8,040 MWh/day;
c) during a 30-day period with an interruption on each major infrastructure: 9,174 MWh/day.

Suppliers to protected customers must be able to provide the above gas quantities for case (a) for seven consecutive days and cases (b) and (c) for 30 consecutive days. The suppliers have provided gas from different sources and through various transmission routes. Slovenia has sufficient transmission capacity for the indicated quantities.

Participation in the Gas Coordination Group at the EU level and in Slovenia

CONSUMER PROTECTION

IN DECEMBER 2025, 65 FINAL CONSUMERS WERE SUPPLIED UNDER LAST RESORT CONDITIONS

The right to reliable, quality and affordable energy

NO SUBSTITUTE SUPPLY WAS PROVIDED

THERE WERE NO CONSUMERS ELIGIBLE FOR EMERGENCY SUPPLY OF EITHER ELECTRICITY OR NATURAL GAS

THE MOST COMMON REASON FOR ELECTRICITY DISCONNECTION WAS NON-PAYMENT, WHILE THE MOST COMMON REASON FOR NATURAL GAS DISCONNECTION WAS A REQUEST BY THE FINAL CONSUMER

FEWER COMPLAINTS FROM HOUSEHOLD CONSUMERS TO ELECTRICITY AND GAS SUPPLIERS

35.6%
FEWER COMPLAINTS TO ELECTRICITY SUPPLIERS

18.8%
FEWER COMPLAINTS REGARDING GAS

CONSUMER PROTECTION

In addition to the right to a reliable, secure, high-quality, and affordable energy supply, which must be sustainable, applicable legislation also guarantees consumers other rights, namely:

- the right to emergency electricity and a substitute and a basic supply of natural gas,
- the right to last resort supply,
- the right to complain to suppliers and out-of-court dispute resolution,
- the right to the protection of rights in administrative proceedings,
- the right to safe and reliable operation of the system and a quality supply of electricity or gas at a reasonable price.

The Right to be Informed

On its website, as part of the single point of contact, the Energy Agency provides a central hub for informing household and small business consumers about their rights and options in the retail energy market. Consumers can access information on their rights regarding the supply of electricity and gas, procedures for switching suppliers, complaint procedures, dispute resolution, options for emergency and essential supply, and the applicable regulations and general acts governing the exercise of public powers.

To make it easier and clearer to compare offers, the Energy Agency's website features an electricity and gas supply cost comparison tool, which enables household and small business consumers to check and compare current offers from suppliers on the market, including offers for contracts with dynamic electricity prices. Consumers can also use the network charge comparison tool to calculate network charges for the electricity transmission and distribution systems. More active consumers can also access information on products linked to dynamic electricity prices. The Energy Agency's website also describes the procedure for switching suppliers and publishes a list of alternative gas supply providers for each distribution system, which are provided to customers eligible for alternative supply by one of the four suppliers designated for the period up to 31 August 2026. More on this in the section on market transparency.

Electricity and gas distribution system operators and suppliers must provide end users with effective access to consumption data and, prior to their connection to the system, inform them of their right to freely choose a supplier on the market. Suppliers must inform electricity and gas consumers of the general terms and conditions of supply before concluding a supply contract; these must be fair, clear and comprehensible, and published on their websites. Suppliers must notify household and small business gas consumers and household electricity consumers of any changes to the general terms and conditions relating to the performance of the contract in a timely, transparent and comprehensible manner, namely at least one month before they come into force, and to other electricity customers, in accordance with the ZOEE, at least two weeks before they come into force. Due to a change in the general terms and conditions of supply, domestic or small business consumers may withdraw from the supply contract within one month of the general terms and conditions coming into force, without notice or any obligation to pay a contractual penalty; and suppliers must specifically inform them of this right in the notice of changes to the general terms and conditions. The notice must be sent to household consumers free of charge in the manner specified in the supply contract. Amendments to the ZOEE in 2025 further strengthened suppliers' obligations regarding the provision of information to and the protection of consumers. Suppliers must provide domestic and small business consumers with information, free of charge, on alternative measures to prevent disconnection – such as payment plans, advice, emergency supply, social security benefits and energy audits – no

later than when the final reminder is issued. Suppliers must clearly set out consumers' rights and details of prices, payment methods, contact details and any additional services in a summary of the main terms and conditions of the contract. Price lists, tariffs and general terms and conditions must be published on their website.

Under the ZOEE-A[158], suppliers with more than 100,000 final consumers must offer both fixed-price contracts, concluded for a minimum of one year, and contracts with dynamic electricity prices. A supplier may not unilaterally amend or terminate fixed-price contracts before their expiry, except in cases where the customer has breached their contractual obligations. Before concluding a contract, the supplier must fully inform the consumer of the opportunities, costs and risks associated with each type of contract, as well as the method of notifying prices in the case of contracts with dynamic prices. A switch to a contract with dynamic prices is only possible with the consumer's prior consent. Furthermore, the supplier may not terminate the contract on the grounds of complaints lodged or proceedings initiated until such matters have been concluded, unless the complaint is lodged following receipt of a notice of termination due to non-fulfilment of obligations.

Suppliers, operators or other electricity companies, as well as gas companies, must inform consumers free of charge and on a regular basis, via the bills issued, of their consumption and costs, the origin of the electricity supplied and the characteristics of their consumption. The information on the bills issued must be accurate, clear, comprehensible and comparable, so that customers can manage their consumption with a view to reducing energy use. Upon request, customers must be provided, free of charge, with an explanation of how their bill is prepared, and must also be offered the option of receiving bills and the information contained therein electronically. The issued bill and the suppliers' websites must provide consumers with information on the internal complaints-handling procedure and on the body to which they may submit a request to initiate a dispute resolution procedure, which is free of charge for consumers.

In 2025, the Energy Agency continued to provide regular updates on developments in the retail market and informed self-supplying consumers with net metering arrangements – who had received notice of termination of their electricity supply contracts from their supplier – of their rights and advised them on the next steps to take. As the agency received a large number of complaints relating to the termination of electricity supply contracts, it referred these complaints to the Market Inspectorate of the Republic of Slovenia for further investigation and published additional guidance for these end consumers on its website. The examination of these complaints has not yet been completed, as there is disagreement regarding the competence to resolve these matters.

Due to the increased number of terminations of supply contracts, in 2025, following an amendment to the provisions of Article 32 of the Electricity Supply Act, emergency supply was extended to include cases where a supplier terminates a contract with household and small business consumers, provided that such a supplier has terminated supply contracts with at least 5,000 consumers and their membership of the balance scheme has not been terminated.

The Right to Last Resort, Substitute, Basic and Emergency Supply

The Right to Last Resort for Electricity Consumers

Last resort supply is provided by the electricity distribution system operator where a supply contract with a household or small business consumer ceases to be valid as a result of measures arising from the supplier's insolvency or illiquidity, or if the supplier loses its status as a member of the balancing scheme, or at the explicit request of household and small business electricity consumers, who must be properly informed of this. The ZOEE places no time limit on the provision of emergency supply; however, in accordance with the SONDSEE, the provision of last resort supply at the request of household and small business electricity consumers may be provided for an indefinite period,

ZOEE-A is extending last resort supply to other cases as well

158 Effective from 12 July 2025 onwards.

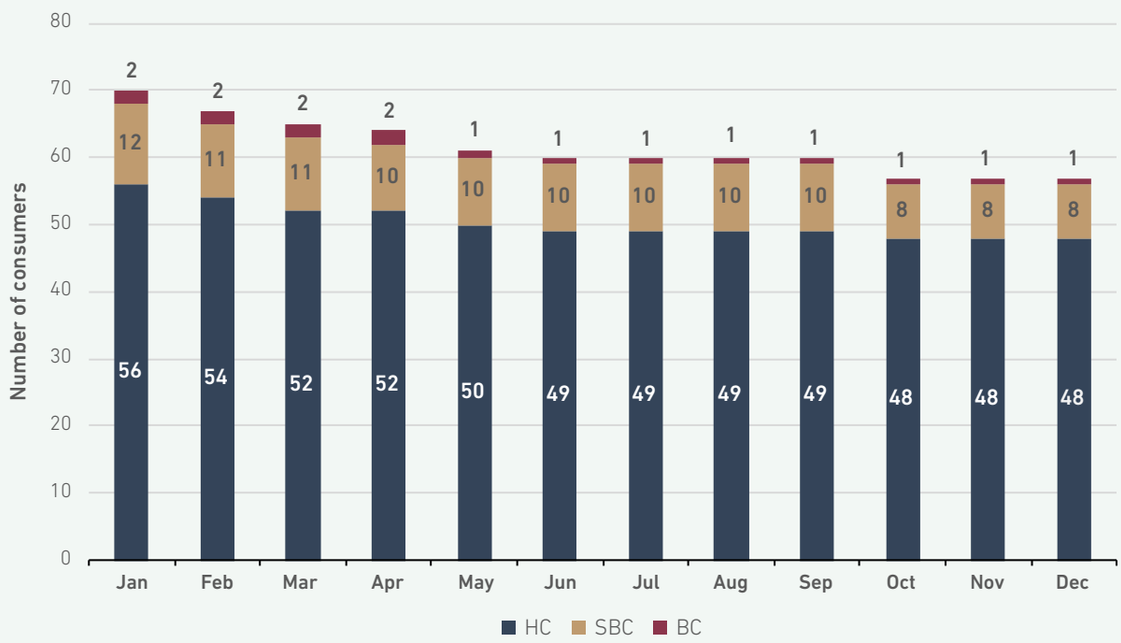
provided that all outstanding obligations arising from the provision of last resort supply have been settled.

As already mentioned in the previous chapter, following the amendment to the ZOEE in 2025, last resort supply may also be provided in certain cases involving a significant number of terminations of supply contracts with household and small business consumers. As the supply of electricity for last resort supply is carried out by the electricity distribution system operator, which does not otherwise engage in electricity supply activities, the price of last resort supply is determined by the electricity distribution system operator in accordance with the provisions of the ZOEE and is published. The price must be higher than the market price for supply to a comparable customer, but must not exceed it by more than 25%. In this way, in addition to protecting consumers' rights, it also ensures that they take action to find a new supplier more quickly and secure more favourable terms for their electricity supply.

In December 2025, 65 final consumers supplied under last resort supply provisions

In December 2025, 48 households, eight small business consumers and one business consumers were supplied under last resort supply provisions for reasons attributable to the supplier, which is fewer than the previous year, while four household consumers and four small business consumers were supplied on request, totalling 65 end consumers. The next figures show the number of consumers supplied under last resort supply provisions due to reasons attributable to the supplier, by month, in 2025.

FIGURE 251: LAST RESORT SUPPLY DUE TO SUPPLIER-RELATED REASONS BY MONTH IN 2025

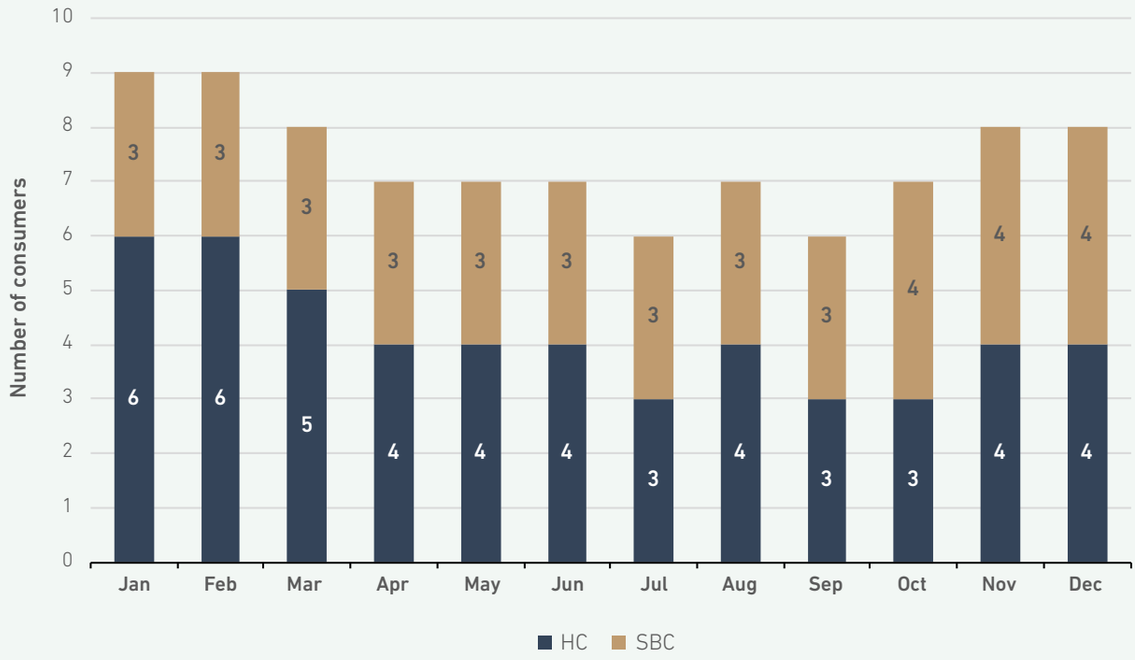


SOURCES: ENERGY AGENCY, OPERATORS

At the explicit request of household and small business electricity consumers, the electricity distribution system operator continued to supply household and small business consumers in 2025. In 2025, it thus received two new requests from household consumers and one request from a small business consumer. The number of end consumers supplied under last resort supply arrangements at their request remained low throughout the year (in 2025, two household consumers and one small business consumer newly requested last resort supply, while four household consumers ceased to be supplied under these conditions).

Emergency supply at the consumer's request, by month in 2025, is shown in the following figure.

FIGURE 252: NUMBER OF CONSUMERS SUPPLIED UNDER EMERGENCY SUPPLY TERMS AT THEIR OWN REQUEST IN EACH MONTH OF 2025



SOURCES: ENERGY AGENCY, OPERATORS

The Right to a Substitute Gas Supply

While the electricity DSO carries out the last resort supply of electricity, a gas substitute supply is carried out by gas suppliers appointed by the Energy Agency. Household consumers, small business consumers, joint household consumers and protected consumers, connected to the distribution system are eligible for this supply if their gas supply contract is terminated as a result of measures resulting from the insolvency or illiquidity of the supplier or if the supplier loses its status as a member of the balancing scheme for any other reason.

The price of gas for the substitute supply may be higher than the market price for the supply of gas to a comparable consumer, but it must not exceed the maximum purchase price of gas on the balancing market, as published by the gas transmission system operator, increased by 25%. The price of gas for substitute supply is set by the substitute supply provider, who must publish it at least on their website and notify the Energy Agency.

Substitute supply was not carried out

Four substitute supply providers were appointed for 2025 (Petrol, GEN-I, Adriaplin and Energetika Ljubljana); however, no gas supply under substitute supply conditions took place in 2025.

The Right to a Basic Gas Supply

All gas suppliers must, upon request, ensure the supply of gas to consumers who do not have a gas supply contract; nor may they refuse to enter into a contract with such consumers. The price for the basic supply is set by the suppliers; the price of gas for the basic supply may be higher than the market price of gas for comparable new consumers of the supplier, but by no more than 20 EUR/MWh. If consumers who have concluded a supply contract under the basic supply terms breach the provisions of that contract or the terms and conditions of supply (e.g. unpaid obligations), the supplier may terminate the supply contract in accordance with the published general terms and conditions of supply and the concluded supply contracts.

According to reports from gas suppliers, in 2025 four gas suppliers supplied their consumers under basic supply terms, with one supplier supplying only two household consumers under these terms, one supplying only one small business consumer, one supplied only collective household consumers (12), and one supplied collective household consumers (50) and protected consumers (50). A total of 115 end consumers were supplied under basic supply terms in 2025.

Four suppliers provided basic supply

The Right to Emergency Supply

If a consumer is unable to pay the costs of the electricity and gas supply due to poor financial circumstances and their life and health or the lives and health of persons living with them are endangered due to special circumstances, e.g., time of year, temperature, place of residence, state of health and other similar circumstances, they may apply for a postponement of the disconnection and exercise the right to an emergency supply.

In 2025, too, there were no beneficiaries of emergency electricity or gas supplies

Vulnerable consumers, as defined in the ZOEE and ZOP, are household consumers who, due to their financial situation, the share of their energy expenditure in their disposable income and other social circumstances, are unable to provide themselves with an alternative source of energy for household use or heating, which would cause them to incur the same or lower costs for essential household use or the heating of their dwelling. The household consumers can prove their vulnerable consumer status and thus their eligibility for emergency supply with a certified statement from the Centre for Social Work (CSD), which must show that the household consumer has applied for regular social assistance before receiving the notification from the electricity or gas distribution system operator of the intended disconnection and that the decision procedure has not yet been completed with the CSD.

All DSOs must inform household consumers of their right to an emergency supply, the conditions under which it is possible and the deadlines for submitting evidence before disconnection.

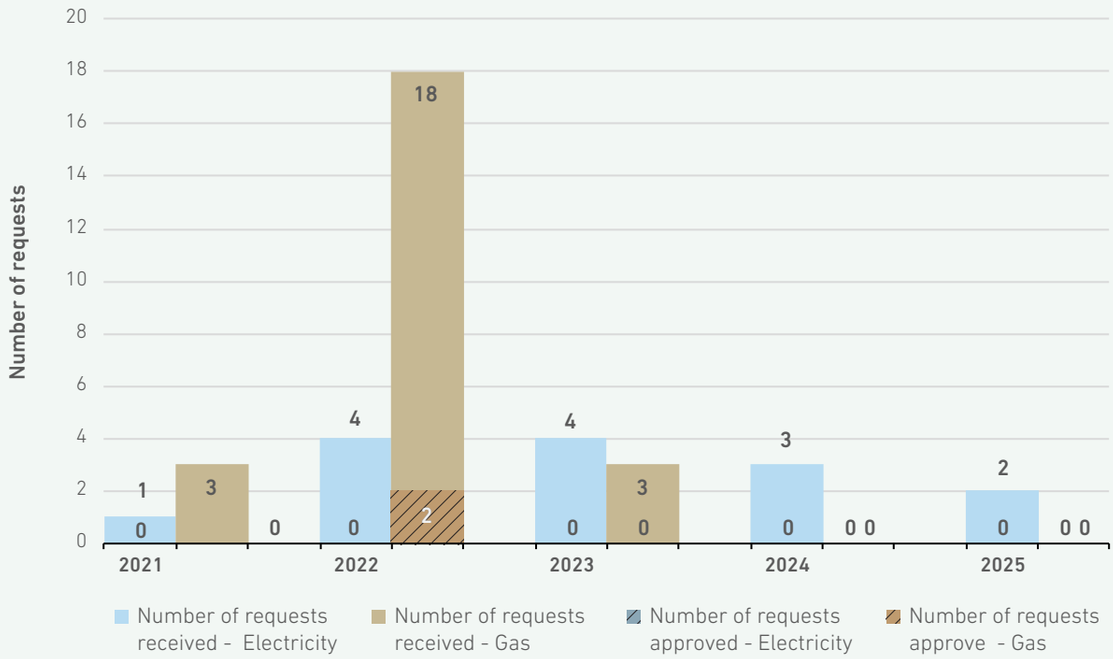
The costs of an emergency supply of electricity to vulnerable consumers are eligible costs of the electricity DSO, while in the case of the supply of gas, the costs of the emergency supply are borne by the gas DSO until the vulnerable consumer pays them.

Eligibility for emergency supply is assessed by the electricity DSO in accordance with the procedure laid down in the System Operating Instructions for the Electricity Distribution System and with the rules and criteria established by the Energy Agency in the Legal Act on the Criteria and Rules for Providing an Emergency Supply of Electricity, and gas DSOs according to the procedure laid down in their system operating instructions

In 2025, the electricity distribution system operator received two requests for emergency supply approval, which is one fewer than the year before. The requests were not approved, and neither of the two applicants for emergency supply was actually disconnected. In the gas sector, gas distribution system operators did not receive any requests for emergency supply in 2025 either.

The following figure shows a comparison of submitted and approved applications for the right to emergency electricity supply and the postponement of gas disconnection over the last five years.

FIGURE 253: COMPARISON OF REQUESTS RECEIVED AND GRANTED FOR EMERGENCY SUPPLY



SOURCES: ENERGY AGENCY, OPERATORS

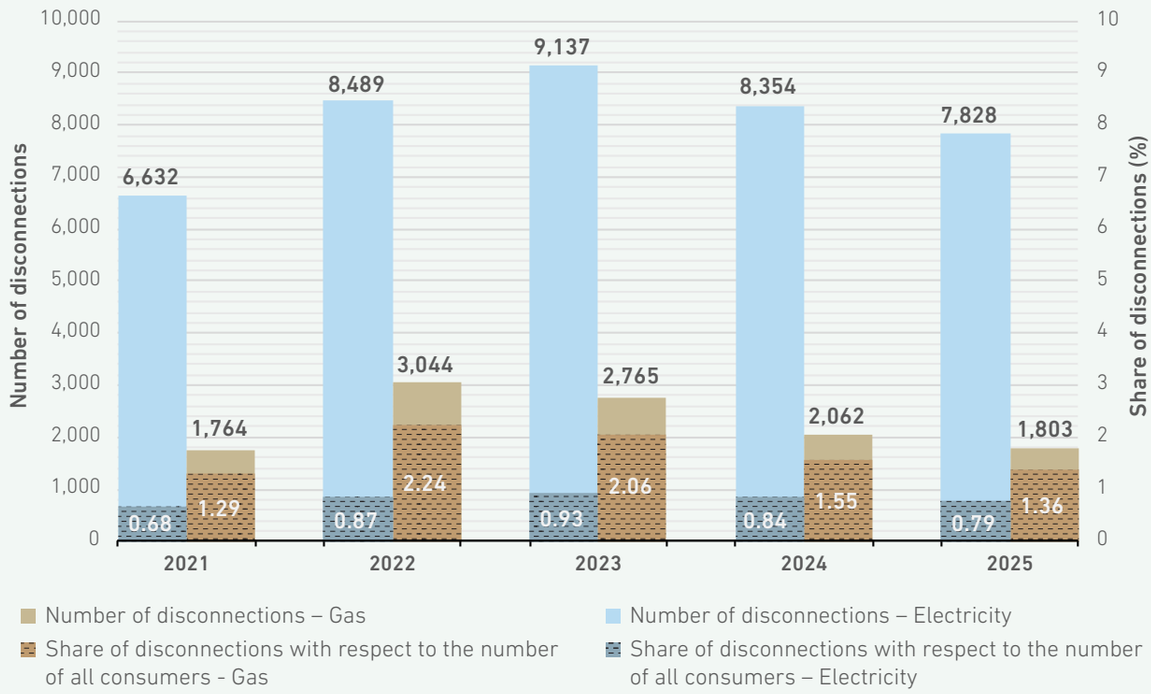
If an application for emergency supply is not approved and the consumer fails to settle the energy supply bill, the supply will be disconnected. Given that the costs of emergency supply, including the network charge, are borne by all other electricity consumers, the eligibility criteria for emergency supply are very strict. This is in line with the guidelines of European legislation, which stipulate that Member States should ensure measures to protect vulnerable consumers primarily through general social policy measures and other measures that are not solely linked to the postponement or non-payment of electricity bills.

Disconnection of Consumers

Disconnecting a customer is one of the most extreme measures for correcting infringements that the consumer has caused or is causing through its actions. An electricity or gas distribution system operator may disconnect a consumer due to the termination of the supply contract by the energy supplier (most often due to non-payment), or for other reasons (infringements) which are exhaustively listed in the ZOEE and ZOP. Depending on the type of violation, the disconnection is carried out with or without prior notice, and a consumer may also be disconnected at his or her own request.

As in the previous year, the number of electricity disconnections fell slightly in 2025 (7,828 disconnections, or 6.3% fewer disconnections). We also recorded a decrease in the number of gas disconnections compared with the previous year (1,803, or 12.6% fewer) In both the electricity and gas sectors, disconnections among household consumers are still the most common (5,637 in the electricity sector and 1,561 in the gas sector). A comparison of the number of disconnections for all end-users over the last five years and their share in relation to the total number of all customers is shown in the following figure.

FIGURE 254: COMPARISON OF THE NUMBER OF DISCONNECTIONS OF FINAL CONSUMERS



SOURCES: ENERGY AGENCY, OPERATORS

As was the case the year before, the most common reason for disconnecting an electricity consumer was non-payment and the consequent termination of the supply contract (disconnection following prior notice, 4,748), while in the gas sector, the majority of disconnections were carried out at the end consumer's request (1,532).

The most common reason for an electricity disconnection is non-payment, while the reason for a gas disconnection is a request from a final consumer

Under the ZOEE and ZOP, electricity and gas distribution system operators must give household consumers at least ten days' prior notice of an intended disconnection, and business consumers at least eight days' prior notice. During this period, consumers can remedy the reasons for which they are at risk of disconnection, and household consumers may exercise any right to emergency supply. In such cases, household and small business electricity consumers may also request that the electricity distribution system operator provide them with last resort supply.

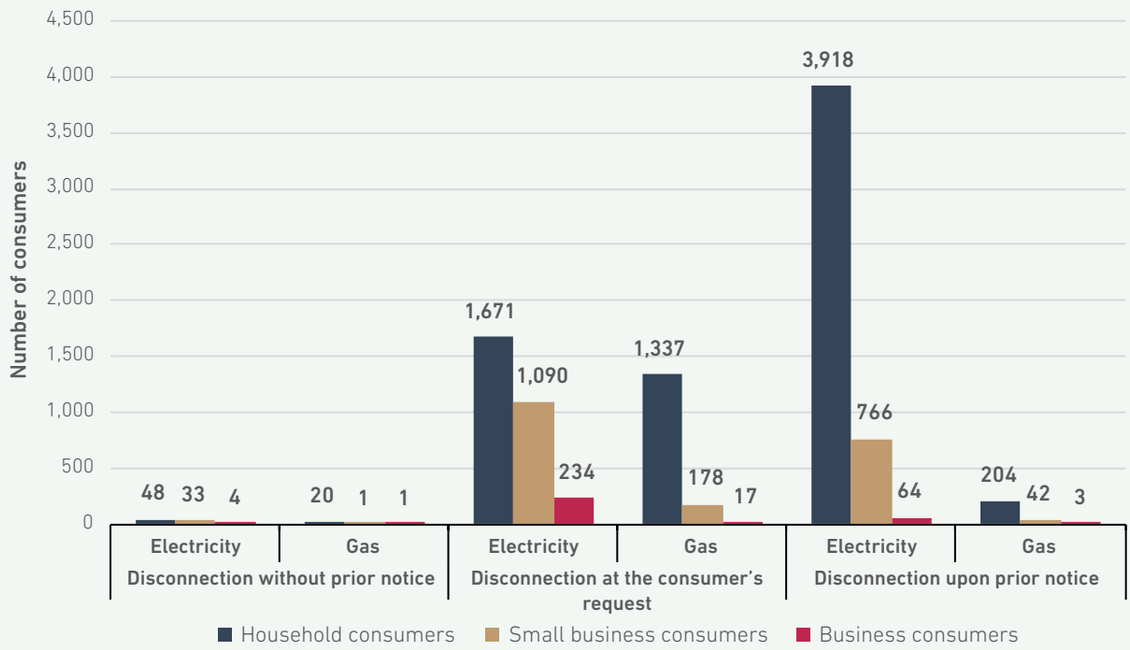
The table below shows the breakdown by number of the various disconnection procedures for final consumers. A comparison of the various disconnection procedures for electricity and gas is presented in the following figure.

TABLE 42: FINAL CONSUMERS' DISCONNECTIONS BY DISCONNECTION PROCEDURE

	Electricity	Gas
Disconnection without prior notice	85	22
Disconnection upon prior notice	4,748	249
Disconnection at the consumer's request	2,995	1,532
All disconnections	**7,828**	**1,803**

SOURCES: ENERGY AGENCY, OPERATORS

FIGURE 255: COMPARISON OF INDIVIDUAL DISCONNECTION PROCEDURES ACCORDING TO CONSUMER GROUPS FOR ELECTRICITY AND GAS



SOURCES: ENERGY AGENCY, OPERATORS

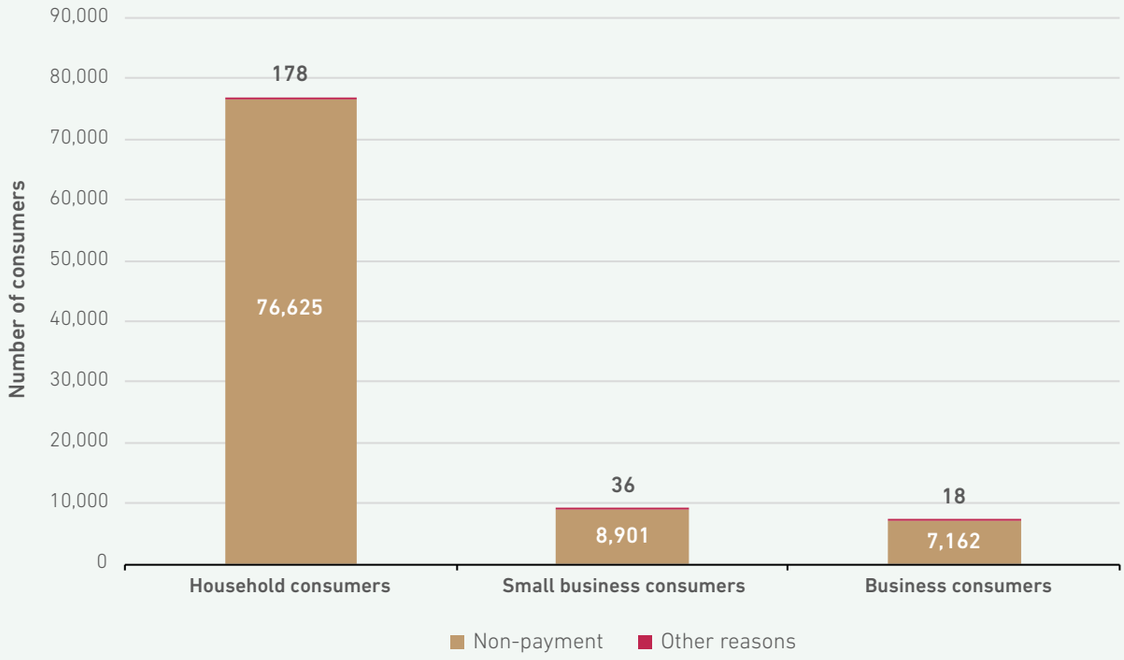
In 2025, electricity suppliers issued a total of 92,920 notices of termination of supply contracts to final consumers, with 99.75% of these notices (92,688) relating to non-payment of debt. Gas suppliers issued 1,688 notices of termination of supply contracts to end users, 97.51% of which were due to non-payment of debt. Electricity suppliers revoked 88.64% of the terminations of electricity supply contracts due to non-payment following immediate settlement of the debt; in the gas sector, 95.26% of consumers whose gas supply contracts were terminated due to non-payment settled their debts immediately.

If a consumer fails to settle the debt, disconnection follows, which the system operator implements following a prior notice procedure. In 2025, 4,748 end-users were disconnected from the electricity system and 249 from the gas system following prior notice procedures, which is slightly fewer than the previous year.

Most terminations of supply contracts due to non-payment

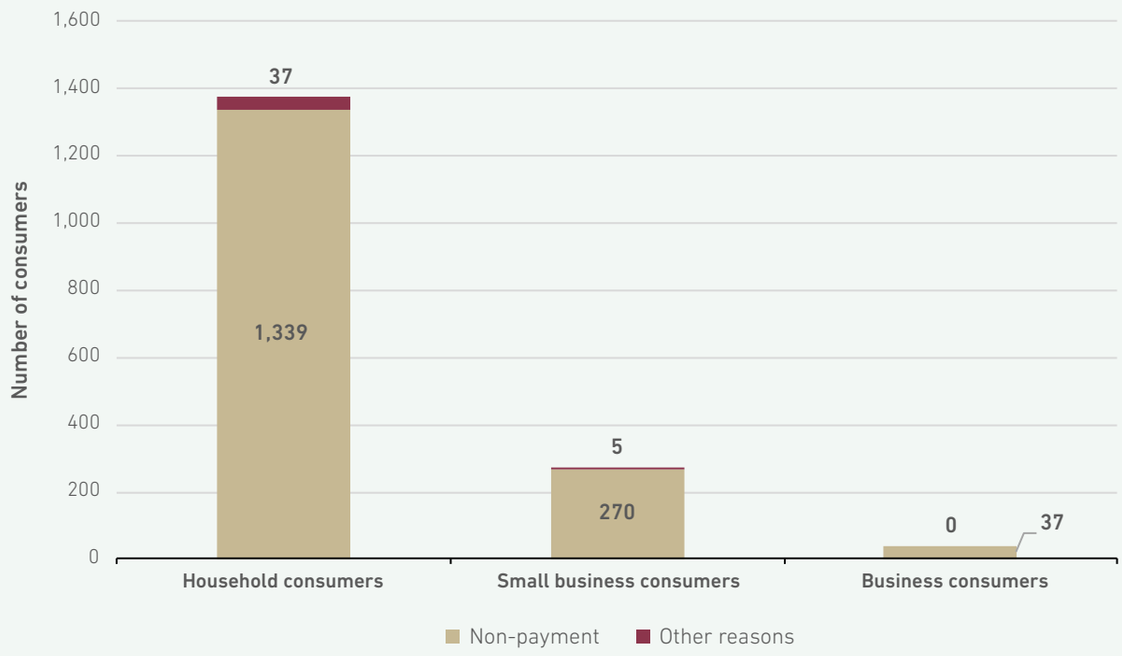
The following two figures show the number of terminations of electricity or gas supply contracts by customer size and reason for disconnection.

FIGURE 256: NUMBER OF CANCELLATIONS OF ELECTRICITY SUPPLY CONTRACTS BY REASON



SOURCES: ENERGY AGENCY, SUPPLIERS

FIGURE 257: NUMBER OF CANCELLATIONS OF GAS SUPPLY CONTRACTS BY REASON



SOURCES: ENERGY AGENCY, SUPPLIERS

As in previous years, there were no disconnections on closed distribution systems in 2025.

Consumers' right to complain

Consumer complaints and out-of-court settlement of consumer disputes with electricity and gas suppliers

All consumers have the right to complain to their energy supplier. Disputes between small or large business consumers on the one hand and energy suppliers on the other are resolved first by the individual supplier and then before the competent court. For end users of electricity who are not household consumers, the complaint-handling procedure is provided for through out-of-court proceedings in accordance with the law governing mediation in civil and commercial matters, while for household customers, the legislation also specifically provides for out-of-court dispute resolution with energy suppliers. According to reports from suppliers, in 2025, one request for dispute resolution was submitted to an independent out-of-court dispute resolution provider by one of the electricity suppliers. Gas suppliers did not report any requests from household consumers for dispute resolution through an independent alternative dispute resolution provider in 2025.

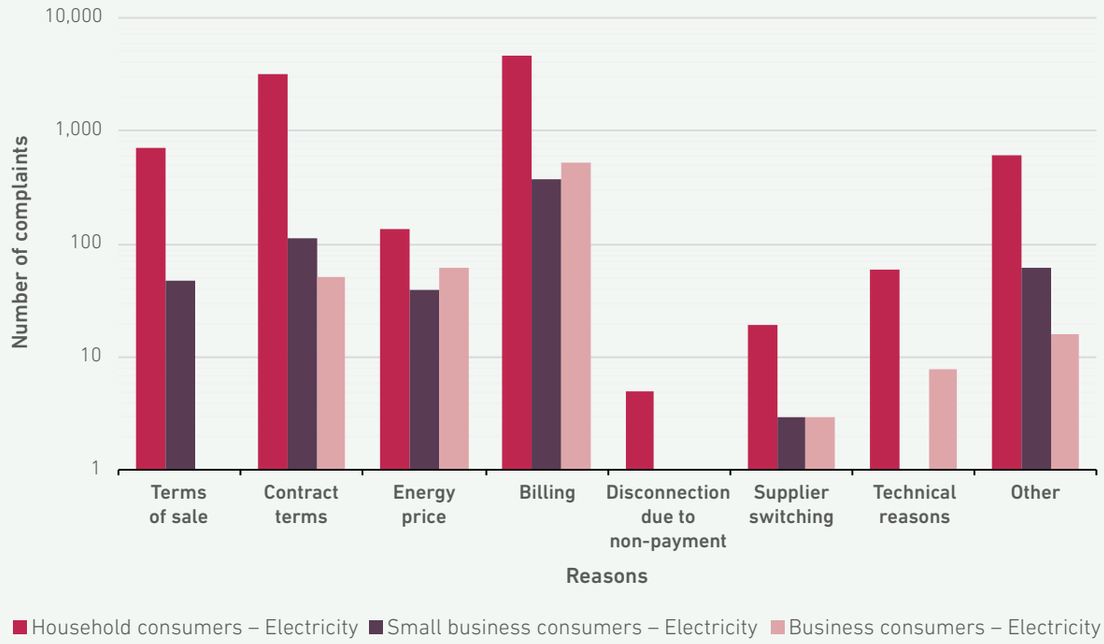
The number of complaints from household consumers of electricity and gas fell compared with the previous year: in the electricity sector by 35.6%, totalling 9,419 complaints, and in the gas sector by 18.8%, with a total of 1,133 complaints submitted.

Fewer complaints from household consumers against electricity and gas suppliers

Of all the complaints received, the majority were once again filed by household consumers; in the electricity sector, 1.07% of all household consumers filed a complaint, whilst in the gas sector, 0.94% of household consumers lodged a complaint, which is slightly less than the previous year. The majority of all complaints from final consumers related to the bills issued by energy suppliers. Of the 9,419 complaints from domestic electricity consumers, 4,642 (49.3%) related to the bill issued and 3,239 (34.4%) to the terms of the contract. Of the total of 1,133 complaints from household gas consumers, 812 (71.7%) related to bills issued.

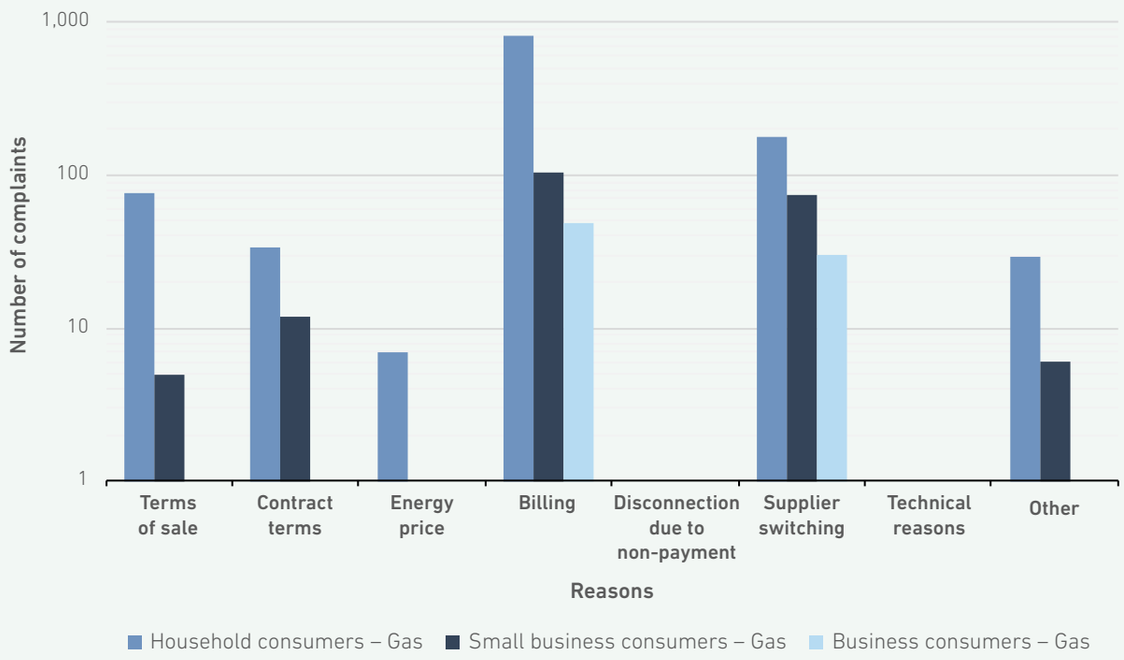
The following figures show the number of complaints from electricity and gas consumers against energy suppliers in 2025, broken down by reason.

FIGURE 258: CONSUMERS COMPLAINTS AGAINST ELECTRICITY SUPPLIERS BY REASONS



SOURCES: ENERGY AGENCY, ELECTRICITY SUPPLIERS

FIGURE 259: CONSUMER COMPLAINTS AGAINST GAS SUPPLIERS BY REASONS

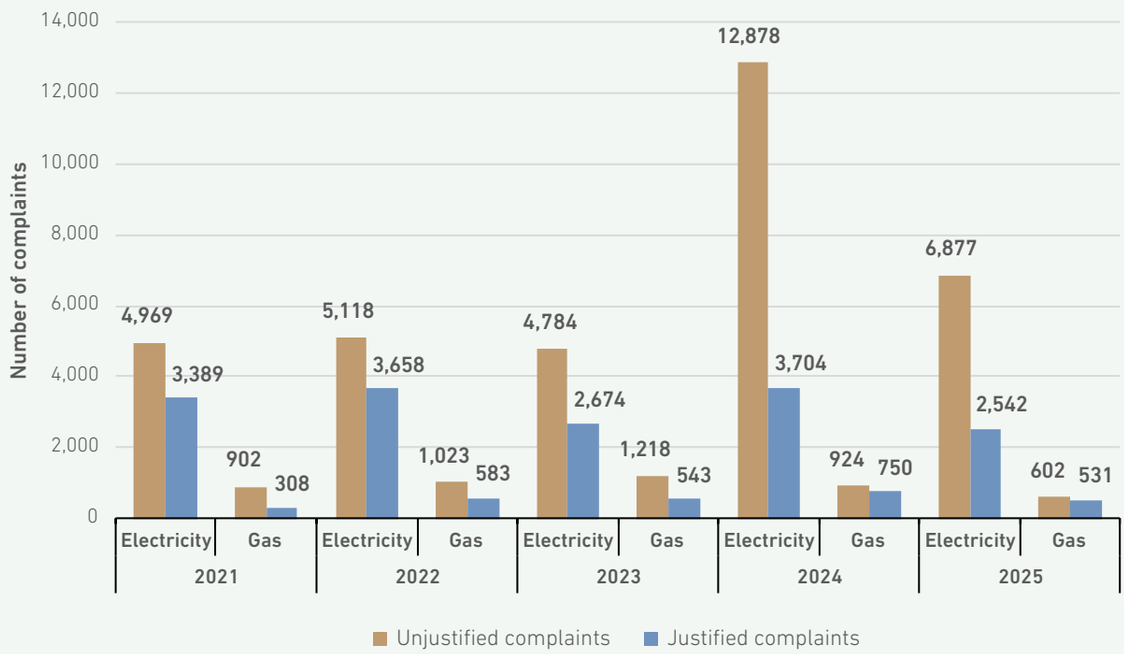


SOURCES: ENERGY AGENCY, GAS SUPPLIERS

In the electricity sector, 73% of all complaints received from household consumers were found to be unjustified, which is slightly less than the previous year; in the gas sector, 53.1% of such complaints from household consumers were found to be unjustified, which is also slightly less than the previous year. The following figure shows energy suppliers' decisions on complaints from domestic electricity and gas customers, broken down by whether the complaint was justified.

More than half of household consumers' complaints to suppliers were unjustified

FIGURE 260: SUPPLIERS' DECISIONS ON THE ELIGIBILITY OF COMPLAINTS BY HOUSEHOLD CONSUMERS IN THE 2021–2025 PERIOD



SOURCES: ENERGY AGENCY, SUPPLIERS

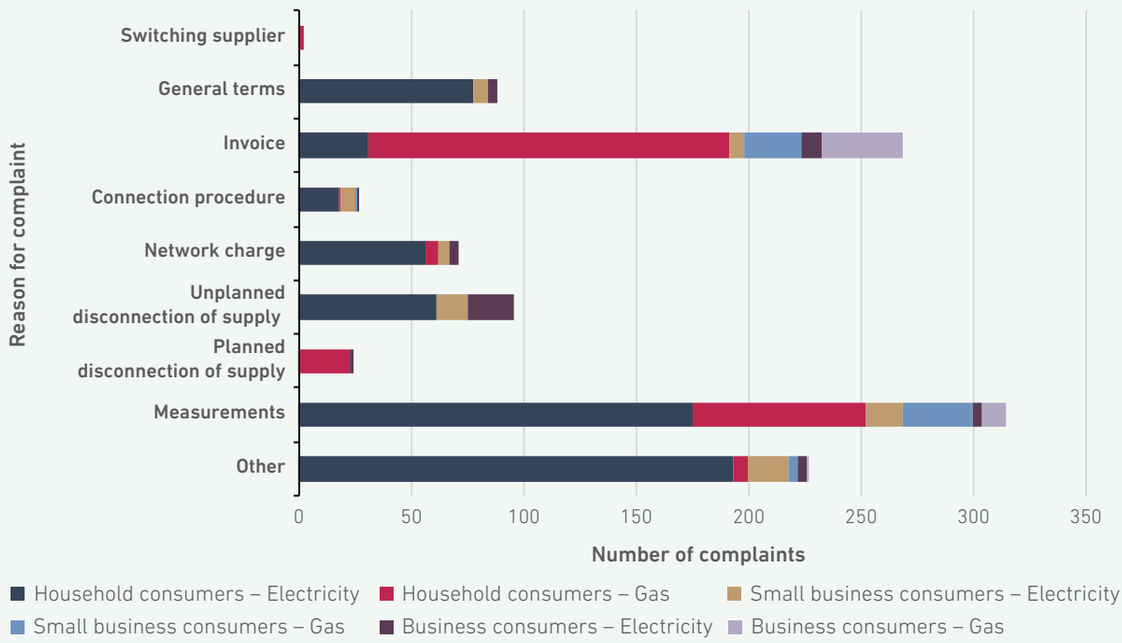
According to reports from electricity and gas suppliers, household consumers of electricity (with the exception of one complaint lodged) and gas did not pursue any complaints through the out-of-court consumer dispute resolution body in 2025 either. Although electricity and gas consumers are aware of this dispute resolution option, they do not make use of it, despite the high share of rejected claims. According to reports from providers of out-of-court consumer dispute resolution, one such provider handled nine out-of-court consumer dispute resolution proceedings in 2025, the majority of which (six disputes) concerned the termination of electricity supply contracts. Five proceedings were also concluded in 2025, two proceedings were dismissed, and the resolution of two proceedings is continuing into 2026.

Consumer Complaints to Electricity and Gas Distribution System Operators

If consumers disagree with the operator regarding billing, metering, network charges, supply interruptions, connection procedures, switching supplier, etc., they also have the right to lodge a complaint directly with the electricity or natural gas distribution system operator. If consumers fail to resolve their complaints directly with the electricity or natural gas distribution system operators, disputes are settled by the Energy Agency using the procedures described in the following chapter.

In 2025, a total of 733 complaints were submitted directly to electricity distribution system operators by electricity customers (118 more than in the previous year), and 386 complaints were submitted to gas distribution system operators (53 fewer than in the previous year). The majority of complaints addressed to electricity and gas distribution system operators came from household consumers (613 electricity consumers and 276 gas consumers), as in previous years, the majority of complaints in the electricity sector in 2025 related to meter readings, while in the gas sector they related to bills issued.

FIGURE 261: NUMBER OF CONSUMER COMPLAINTS TO OPERATORS, BY SUBJECT

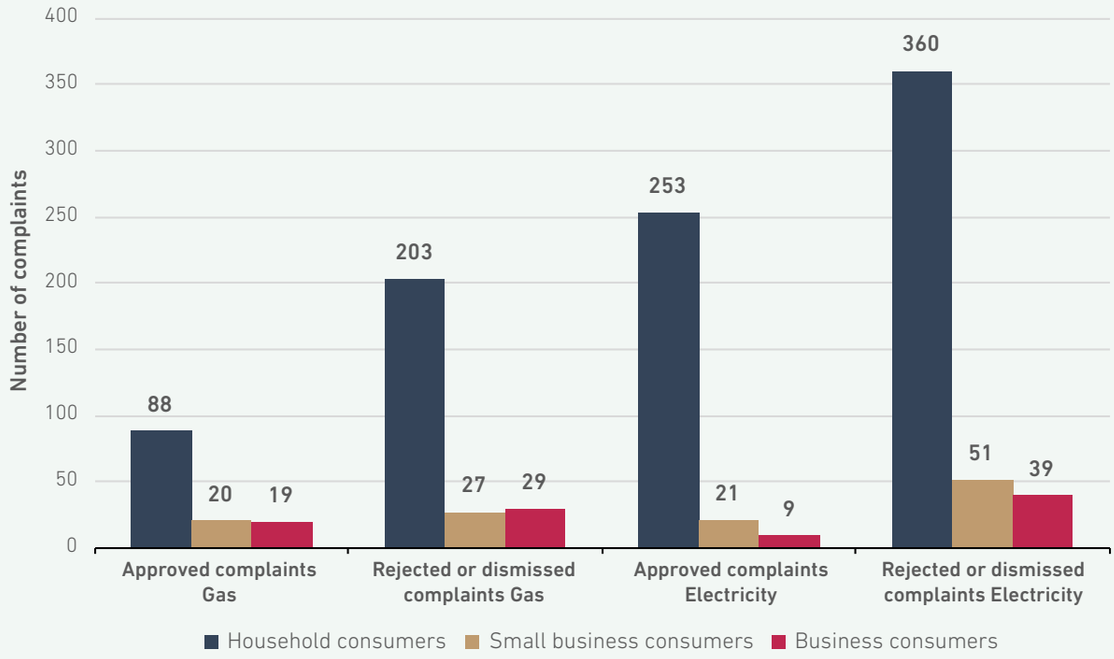


SOURCES: ENERGY AGENCY, OPERATORS

The following figure shows the number of approved and rejected complaints against electricity and gas distribution system operators. Of a total of 733 complaints submitted by all electricity consumers, only 38.61% or 283 were approved, while the rest were rejected or dismissed (450). In the gas sector, 259 complaints were rejected or dismissed; operators approved 32.9% of the complaints submitted, or 127.

More than half of final consumers' complaints were not approved

FIGURE 262: NUMBER OF COMPLAINTS HANDLED BY OPERATORS



SOURCES: ENERGY AGENCY, OPERATORS

In the field of closed electricity and gas distribution systems, operators of closed distribution systems did not receive any complaints in 2025.

The Right to the Protection of Rights in Administrative Procedures

The Energy Agency is responsible for resolving disputes between electricity system users, gas system users, members of the balancing scheme or gas suppliers, on the one hand, and electricity system operators or the electricity market operator, on the other, where the dispute relates to obligations under EU regulations, sector-specific laws or subordinate legislation. These disputes include access to the system, charges for system use, breaches of system operating instructions, identified imbalances and the costs of balancing such imbalances, as well as breaches of general acts governing imbalances and their balancing, and breaches of regulations in the field of self-supply, where so provided by the relevant law. The Agency acts as an independent administrative body which decides on these disputes and supervises the implementation of energy legislation.

A potential user wishing to gain access to the system is regarded as a system user in these disputes. The Energy Agency is autonomous and independent in the exercise of its tasks and powers, which means that it is not bound by instructions from state authorities or other entities. When deciding on disputes, the party requesting a decision from the Energy Agency must first request in writing that the opposing party comply with its request and grant the opposing party a reasonable period of time, which must not be less than 15 days. A request for a decision by the agency may be submitted within 15 days of the service of the opposing party's response or upon the expiry of the deadline for a response. The opposing party may submit a counter-claim within 15 days if it relates to the first party's claim or if the claims can be set off against one another. There is no right of appeal against the agency's decisions and rulings, which means that its decision is final in administrative proceedings, unless the law provides otherwise. Nor can they be set aside or annulled under supervisory powers.

Administrative proceedings before the Energy Agency are swift and free of charge. A decision on a request for dispute resolution is made within two to four months.

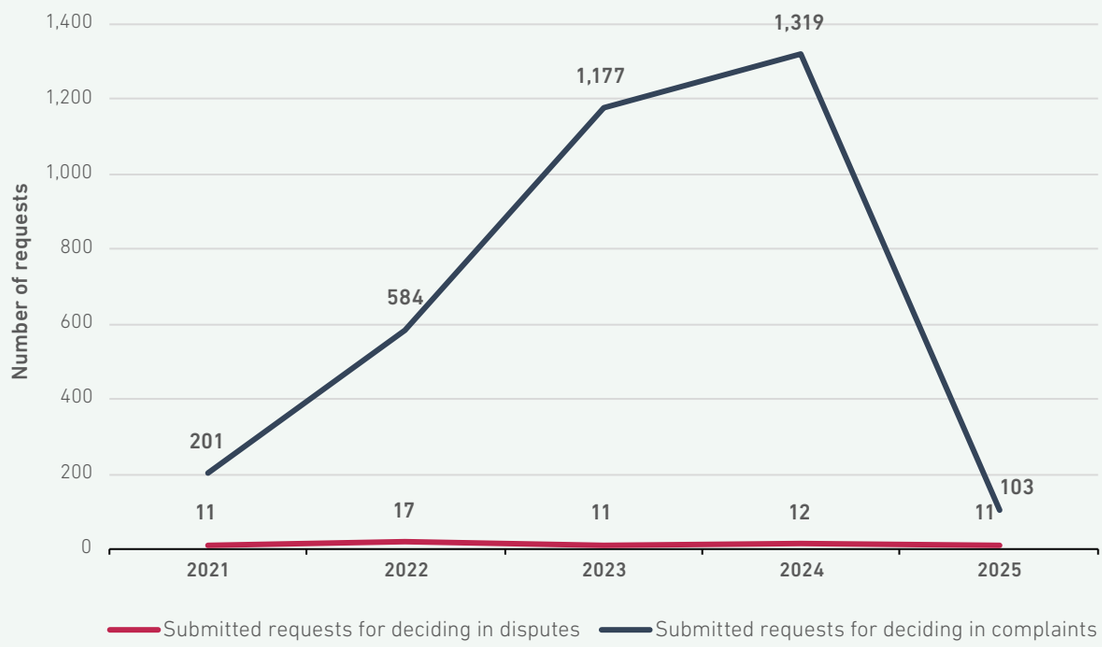
The Energy Agency decides at second-instance on appeals against the granting or refusal of authorisation for connection in the electricity and gas sectors.

In 2025, the agency dealt with 114 new individual cases, comprising 11 applications at first instance and 103 cases at second instance. It also dealt with 823 individual cases carried over from the previous period, of which six were applications at the first instance and 817 were at the second instance. In total, the Energy Agency processed 937 cases.

The number of appeals against issued consents for connection since 2021 is shown in the following figure.

The majority of appeals related to the refusal to grant consent for the connection of a self-supply installation to the electricity distribution system.

FIGURE 263: ENERGY AGENCY DECISIONS IN DISPUTES AND APPEALS IN 2021–2025 PERIOD



SOURCE: ENERGY AGENCY

While the number of complaints received had been rising significantly since 2012, the number of complaints in 2025 fell dramatically compared with 2024, as the deadline for submitting applications to connect a self-supply generation facility–which allowed for inclusion in the self-supply system–expired on 31 December 2024, the deadline for submitting applications for the connection of self-supply generation units had expired; these applications had previously enabled inclusion in the self-supply system with annual net metering. At the end of 2024, the provisions of the ZSROVE in force at the time were amended such that applications for the connection of self-supply generation facilities for inclusion in the self-supply system with annual net metering relate only to self-supply generation facilities that had already been installed. Applications for connection had to be accompanied by a photograph of the already installed facility and a declaration stating that the self-supply facility shown in the photograph relates to that application for connection.

The Right to the Safe and Reliable Operation of the System and the Quality of Supply

All consumers have the right to the safe and reliable operation of the system and to a quality supply of electricity and gas provided by the electricity and gas system operators in accordance with the system operating instructions to which the Energy Agency gives its consent.

At the system level, the quality of the supply regulation seeks to improve or maintain the level already achieved at the optimum cost. Various activities are carried out to ensure the quality of the electricity supply, such as monitoring, reporting and data analysis of the following: continuity of supply, commercial quality and voltage quality. In addition to the above, the Energy Agency regulates the quality of supply by publishing data and analyses, which are made public in the Quality of the Electricity Supply Report. For more information, see the section on voltage quality in the electricity sector.

In 2025, the gas system operators continued to ensure reliable and safe operations for a smooth and quality supply by carrying out regular and emergency maintenance.

The chapters on the quality of the electricity supply, safe and secure operation, and the quality of the gas supply provide more details.

ENERGY EFFICIENCY

A KEY PILLAR OF SUSTAINABLE DEVELOPMENT: STRENGTHENING ENERGY SECURITY, IMPROVING ECONOMIC COMPETITIVENESS, LOWERING COSTS, AND REDUCING POLLUTION

OBLIGATED PARTIES ACHIEVEI

133 GWh

IN SAVINGS

OBLIGATED PARTIES ACHIEVED THE HIGHEST SAVINGS IN THE INDUSTRIAL SECTOR

50 GWh

ENERGY SAVINGS

THE MEASURES THAT CONTRIBUTED THE LARGEST SHARE OF SAVINGS WERE

ADDING ADDITIVES TO MOTOR FUELS

31%

OF TOTAL SAVINGS

ENERGY AUDITS

22%

ENERGY SAVINGS

INSTALLATION OF SELF-SUPPLY ELECTRICITY GENERATION SYSTEMS

14%

90%

OF ALL LARGE COMPANIES COMPLY WITH THE ENERGY AUDIT REQUIREMENT

SAVINGS BY SECTOR

NEARLY HALF OF ALL SAVINGS BY OBLIGATED PARTIES IN THE INDUSTRIAL SECTOR

THE FEWEST SAVINGS IN THE PRIVATE AND PUBLIC SECTORS

ENERGY EFFICIENCY

Energy efficiency is one of the key pillars of sustainable development and an important tool for reducing greenhouse gas emissions, strengthening energy security and improving the competitiveness of the economy. Within the European Union, this area is systematically regulated by a legislative framework, the central element of which is the Energy Efficiency Directive, which sets ambitious targets for Member States and sets out specific measures to reduce energy consumption at all levels.

As a member of the European Union, Slovenia follows these guidelines and incorporates them into its national strategic documents and operational programmes. The updated Integrated National Energy and Climate Plan (NECP) forecasts that, provided the planned policies and measures are consistently implemented, final energy consumption in Slovenia will not exceed 50.2 TWh (4,320 ktoe) by 2030. This means that Slovenia is committed to ensuring that primary energy consumption remains below the 70 TWh (6,026 ktoe) threshold relative to the 2007 baseline scenario.

Energy efficiency targets in Slovenia are being achieved through measures to promote the efficient use of energy in all end-use sectors as well as in the energy generation, transmission and distribution sectors, including district heating and cooling networks.

Energy Savings Obligation Scheme and Alternative Measure

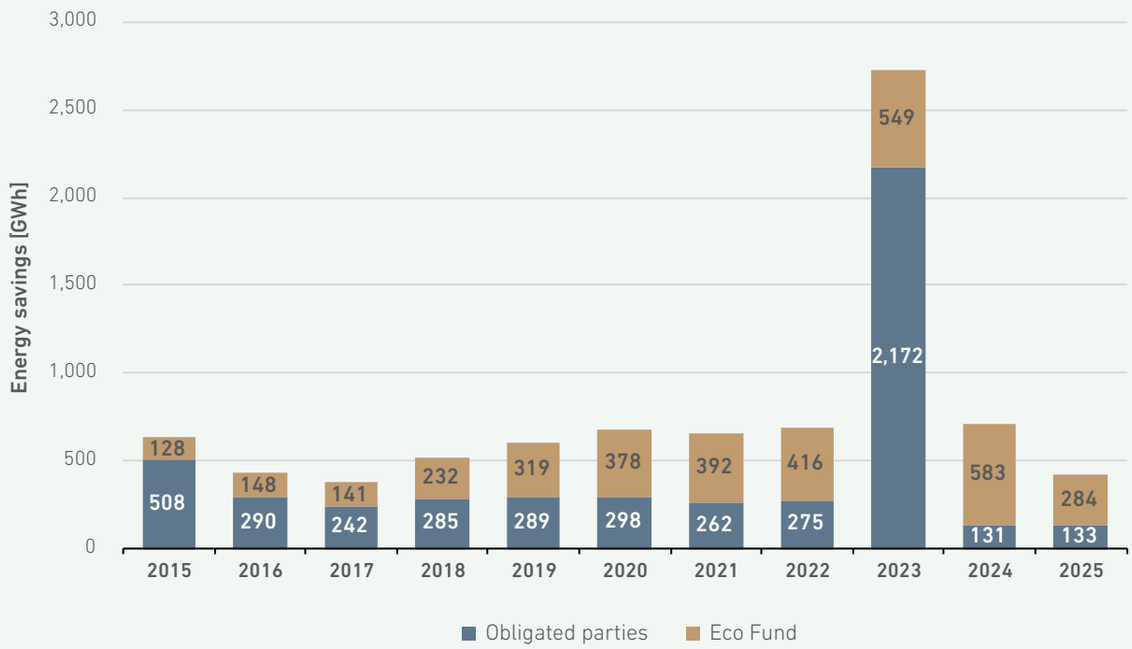
Slovenia achieves most of its energy savings towards meeting its energy efficiency targets through measures under the mandatory energy savings scheme, which obliges energy suppliers to end users to carry out various activities to achieve savings, and through an alternative programme of energy efficiency measures implemented by the Eko Fund. The alternative measures are financed from funds collected from final consumers of energy as part of the energy efficiency levy.

Through these two measures, Slovenia achieved a total of 417 GWh in savings in 2025, which is 297 GWh less than in 2024. Obligated parties achieved 133 GWh of savings, which is 2 GWh more than in the previous year, whilst 284 GWh of savings were achieved under the Eco Fund programme in 2025, which is 299 GWh less than in 2024.

In 2025, energy efficiency measures resulted in energy savings of 417 GWh

Figure 264 shows the energy savings achieved by obligated parties and the Eco Fund in the period from 2015 to 2025. In the early years of the mandatory energy savings scheme (2015–2017), obligated parties accounted for a larger share of the savings, but their role subsequently declined or stagnated, while the impact of the Eco Fund's financial incentives grew. In the last year, the energy savings achieved by the obligated parties have remained stable, while the savings achieved by the Eco Fund have been decreasing.

FIGURE 264: ENERGY SAVINGS IN THE 2015–2025[159] PERIOD



SOURCES: ENERGY AGENCY, ECO FUND

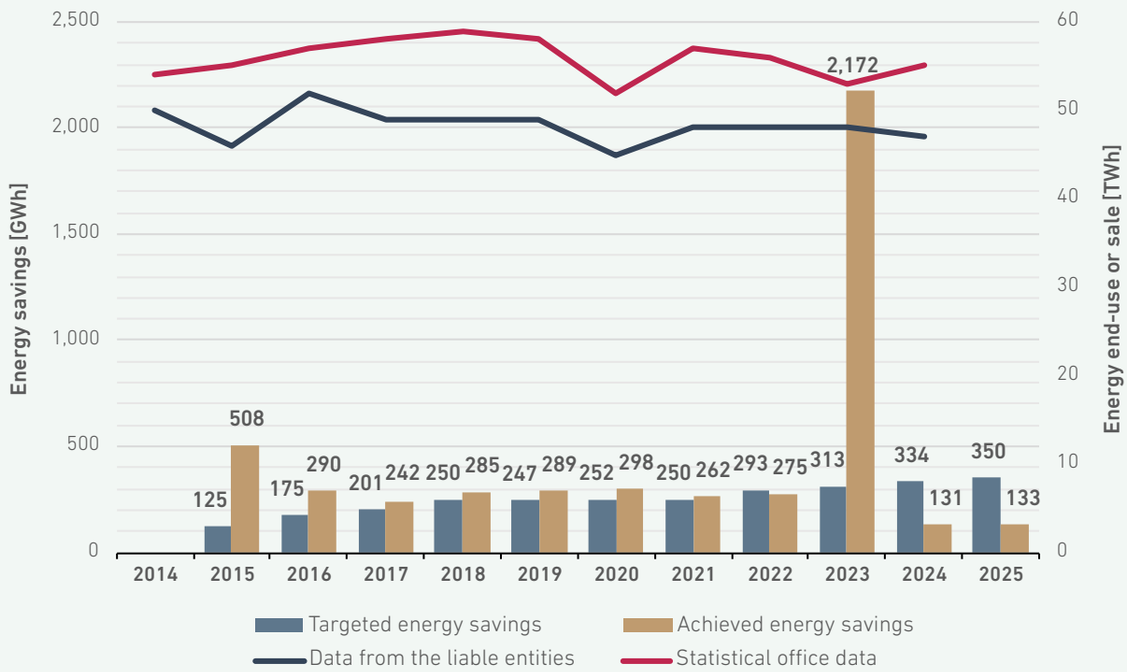
Target energy savings for obligated parties

The parties obliged to achieve these savings are suppliers of electricity, heat, gas, and liquid and solid fuels to final consumers, who were required to ensure, through their contribution to the implementation of energy efficiency measures in 2025, an annual energy saving of 0.8% of the quantities of energy sold to final consumers in 2024. Suppliers of liquid fuels are exempt from this obligation; they were required to achieve savings amounting to 0.7% of the motor petrol and diesel fuel sold in 2025. However, since 2020, suppliers of solid fuels who supply less than 100 MWh of energy to final consumers annually have been exempt from the mandatory savings scheme.

According to the reported data, in 2025 the obligated parties sold 46,649 GWh of energy to final consumers. Of this, 23,278 GWh of petrol and diesel fuel was sold. Consequently, the 0.7% target savings volume from the sale of liquid fuels for 2025 amounted to 163 GWh. The target saving of 0.8% from the sale of electricity, heat, natural gas, and liquid and solid fuels to end users in 2024 (23,370 GWh) was set at 187 GWh for 2025. The total target saving for 2025 thus amounted to 350 GWh, which is 16 GWh more than the previous year. The increase in the total target saving is due to a rise in the obligations for suppliers of petrol and diesel, where the saving requirement increased from 0.6% in 2024 to 0.7% in 2025.

159 When verifying the savings achieved in previous years by suppliers, the Energy Agency identified deviations from the reported savings figures for individual years and has included these in this report.

FIGURE 265: COMPARISON OF FINAL ENERGY CONSUMPTION OR SALES BETWEEN THE DATA REPORTED BY OBLIGATED PARTIES AND THE STATISTICAL OFFICE OF THE REPUBLIC OF SLOVENIA (SURS) FOR THE 2014–2024 PERIOD, AND OF THE TARGETED AND ACHIEVED ENERGY SAVINGS BY OBLIGATED PARTIES FOR THE 2015–2025[160] PERIOD



SOURCES: ENERGY AGENCY, SURS

Figure 265, which presents a comparison of final energy consumption or energy sales based on data provided by obligated parties and the Statistical Office of the Republic of Slovenia (SURS) for the period 2014–2024, as well as the energy savings targets and achieved savings of the obligated parties for the period 2015–2025, shows that until 2023 the obligated parties exceeded the set energy savings targets through the implementation of measures. In the last two years, however, the obligated parties' energy savings targets were not achieved through the implementation of measures, but were realised primarily through the use of surplus energy savings carried over from previous years.

Activities of Energy Suppliers in Achieving the Energy Savings Target

In 2025, energy suppliers achieved 133 GWh of energy savings through their active contribution, either by participating in the implementation of energy efficiency measures or through their own energy efficiency projects. This confirms the important role of energy suppliers as obligated parties in achieving energy efficiency targets.

Figure 266 presents a comparison between the target and actual energy savings achieved for individual energy products. The highest actual energy savings were recorded for liquid fuels, amounting to 60 GWh, while electricity suppliers achieved 29 GWh of energy savings. Gas suppliers achieved 24 GWh of energy savings, while heat suppliers achieved 16 GWh, exceeding the target by 2 GWh. For solid fuel suppliers, the energy savings achieved amounted to 4 GWh, exceeding the target by 2 GWh.

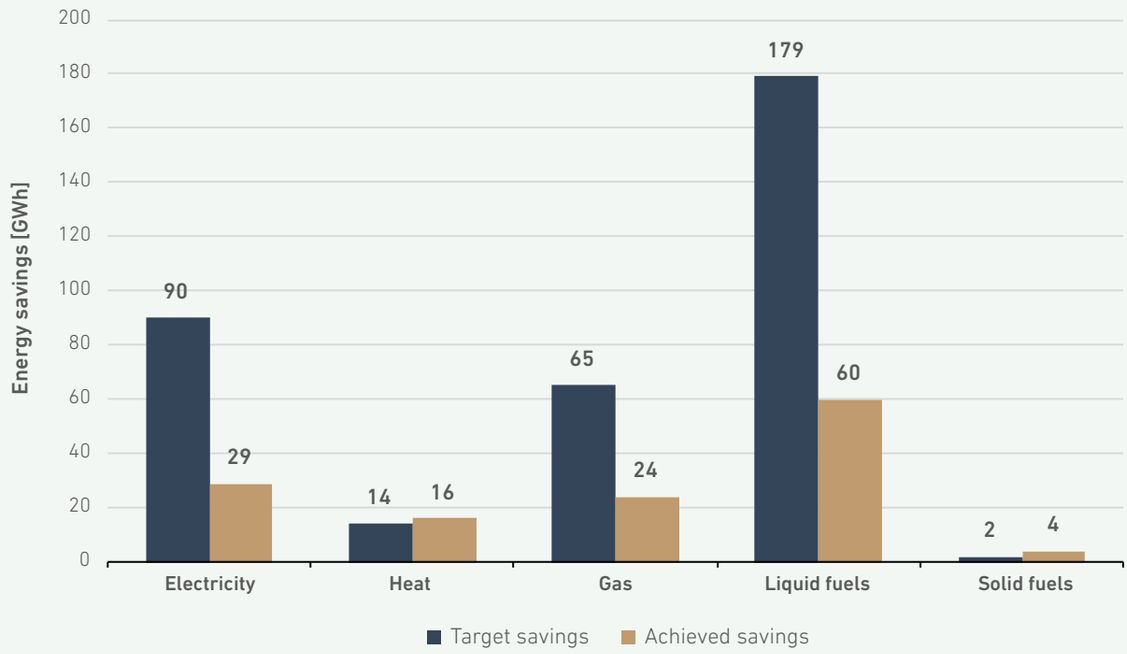
Suppliers that did not achieve their target energy savings through measures implemented in 2025 largely covered the difference between the target and the savings achieved by using surplus energy savings from the previous three years.

Suppliers that fail to achieve the prescribed energy savings targets may fulfil their obligation by paying a financial compensation to the Eco Fund for each megawatt-hour (MWh) of energy savings not achieved.[161]

160 Suppliers that did not achieve their target energy savings through measures implemented in 2025 largely covered the difference between the target and the savings achieved by using surplus energy savings from the previous three years.

161 The amount of the financial compensation is determined annually by the Eco Fund in accordance with the provisions of the Energy Efficiency Act (ZURE). In 2025, the compensation amounted to EUR 243.57/MWh.

FIGURE 266: TARGETED AND ACHIEVED ENERGY SAVINGS BY THE TYPE OF ENERGY SUPPLIER



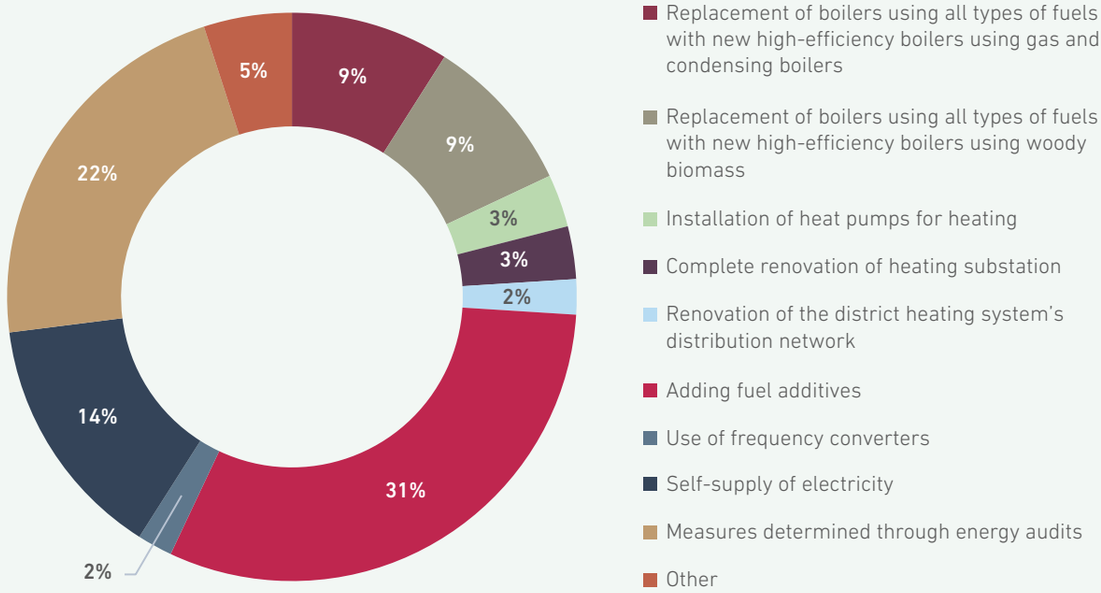
SOURCE: ENERGY AGENCY

Energy Savings Achieved through Individual Measures

Energy suppliers achieve energy savings in various ways, including through investments in energy efficiency measures, the provision of incentives, the implementation of energy services, contractual arrangements for delivering energy savings, and other measures targeting final customers in the public, services, and industrial sectors, as well as in transport. In addition, energy savings may also be achieved through additional measures in residential buildings and in the energy conversion, transmission, and distribution sectors. The method selected must demonstrate that the supplier's intervention has actually contributed to the energy savings achieved. Energy savings are calculated on the basis of the methodologies laid down in the Rules on Methods for Determining Energy Savings. Obligated parties may also achieve energy savings through measures not covered by the methodology; in such cases, however, the effects must be demonstrated by means of an energy audit.

Figure 267 shows the structure of the energy savings achieved by type of measure implemented. The largest share of savings in 2025 was achieved through the measure involving the addition of fuel additives, which accounted for 31% of total energy savings. This was followed by measures not covered by the methodology and based on targeted energy audits, which accounted for 22% of the energy savings achieved. Electricity self-consumption also accounted for a significant share (14%), while the replacement of existing boilers with gas condensing boilers and wood biomass boilers each contributed 9% of total energy savings.

FIGURE 267: SHARE OF ENERGY SAVINGS BY INDIVIDUAL MEASURES



SOURCE: ENERGY AGENCY

Table 43 presents the structure and trends in energy savings achieved through individual measures in Slovenia over the period 2015–2025. In the initial period (2015–2017), measures with relatively immediate effects, such as the addition of fuel additives, the introduction of energy management systems, and energy-efficient lighting, were particularly prominent. There was also a notable increase in energy savings resulting from the introduction of advanced metering systems in 2022 and 2023, highlighting the importance of digitalisation and improved energy-use management. Similarly, from 2019 onwards, the contribution of electricity self-consumption increased, reflecting the expansion of renewable energy sources, particularly solar power plants. Throughout the entire period, measures whose effects are demonstrated through energy audits also made a significant contribution to total energy savings.

TABLE 43: ENERGY SAVINGS BY INDIVIDUAL MEASURES IN THE 2015–2025[162] PERIOD

Measure	2015 [GWh]	2016 [GWh]	2017 [GWh]	2018 [GWh]	2019 [GWh]	2020 [GWh]	2021 [GWh]	2022 [GWh]	2023 [GWh]	2024 [GWh]	2025 [GWh]
Complete renovation of buildings	0.0	0.6	0.1	15.9	7.0	7.7	4.0	3.4	5.8	0.5	0.0
Replacement of boilers using all types of fuels with new high-efficiency boilers using gas	7.6	13.6	20.8	14.8	13.5	15.6	16.8	9.9	7.7	6.5	12.5
Replacement of boilers using all types of fuels with new high-efficiency boilers using woody biomass	1.6	2.4	0.8	1.5	2.9	20.5	5.6	6.8	1.8	2.7	11.7
Installation of advanced metering and energy billing systems in households and the service sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0	30.2	0.0	0.0
Installation of heat pumps for heating	2.7	0.3	1.7	3.5	6.1	2.8	9.7	4.1	18.0	1.7	4.5
Complete renovation of heat stations	73.6	3.1	0.8	1.7	0.5	1.9	2.7	1.8	0.4	0.4	3.5
Connecting a building to district heating	2.3	4.7	5.8	2.6	2.2	2.3	1.3	2.2	2.4	1.7	1.3
Renewal of the district heating distribution network	3.9	4.4	2.9	4.5	3.8	1.6	3.0	1.9	2.5	1.6	2.2
Systems for the recovery of waste heat in buildings	0.0	9.2	2.0	0.6	0.0	0.9	7.9	0.0	0.3	0.0	0.0
Optimisation of the technological processes, which is based on implemented energy audits in small and medium-sized enterprises	15.3	9.7	3.9	4.8	12.1	2.4	6.0	4.4	1.2	1.0	1.6
Adding fuel additives	195.6	99.2	41.2	53.4	33.3	27.8	41.9	51.4	46.4	44.7	41.1
High-efficiency cogeneration	37.7	9.8	11.9	62.2	78.9	62.2	34.0	92.0	1,937.3	17.7	1.3
Energy-efficient lighting systems in buildings	14.5	15.5	22.9	42.5	56.8	55.0	47.6	11.8	4.8	3.2	0.2
Implementation of energy management systems	98.3	92.9	93.8	9.7	29.5	3.4	5.4	2.0	2.9	0.0	0.0
Excess heat recovery in industry and the service sector	0.0	0.0	6.0	22.6	0.3	0.0	0.6	3.7	0.4	0.2	0.2
Self-supply of electricity	0.0	0.0	0.0	0.0	5.0	4.6	15.8	17.4	41.1	16.3	18.7
Measures determined through energy audits	44.9	12.3	7.5	27.1	27.6	75.4	48.7	30.5	59.3	25.7	29.3
Other	9.8	11.9	19.9	17.8	9.9	14.3	10.5	5.7	9.5	7.1	4.9

SOURCE: ENERGY AGENCY

Based on the methodologically defined calculations of CO_2 emission reductions for individual types of measures, the measures implemented under the energy efficiency obligation scheme in 2025 resulted in a reduction of 33,520 tonnes of CO_2 emissions per year.

162 When verifying the savings achieved in previous years by suppliers, the Energy Agency identified discrepancies in the reporting of energy savings by individual measures compared with the reported savings figures for each year, and has included these in this report.

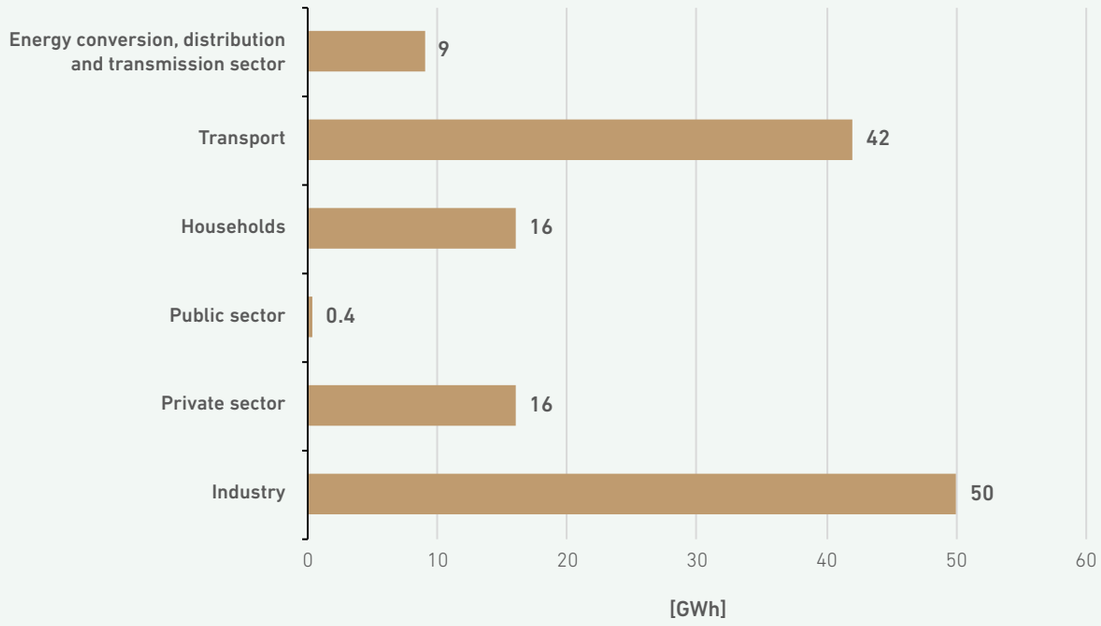
Energy Savings by Sector

In 2025, the largest shares of energy savings achieved were recorded in the industrial sector (50 GWh) and the transport sector (42 GWh). Together, these sectors accounted for 92 GWh, or approximately 70% of the total energy savings achieved by the obligated parties. This distribution confirms the key role of these two energy-intensive sectors in achieving overall energy efficiency gains.

The household and private sectors each achieved 16 GWh of energy savings in 2025. In the household sector, measures replacing hot-water boilers with more efficient systems using natural gas or wood biomass predominated, confirming the importance of modernising heating systems at the level of final consumers.

The lowest level of energy savings was achieved in the public sector, where obligated parties achieved only 0.4 GWh of savings. This indicates a relatively limited scope of measures implemented or a slower pace of their implementation.

FIGURE 268: ENERGY SAVINGS BY SECTORS IN 2025



SOURCE: ENERGY AGENCY

Alternative Measure Energy Savings

As the implementing body for the alternative measure within the combined scheme for achieving the target share of final energy savings, the Eco Fund operates through an energy efficiency improvement programme. It uses three key mechanisms, as shown in the table below: financing investments in energy efficiency measures through loans, awarding grants for the implementation of such measures, and providing energy advisory services to citizens through the Ensvet network of advisory offices.

The largest share of energy savings is achieved through measures supported by grants awarded under the Eco Fund's public calls. In 2025, these measures contributed 238 GWh of energy savings, while all Eco Fund measures combined resulted in 284 GWh of energy savings.

TABLE 44: ENERGY SAVINGS IN THE ECO FUND PROGRAMME FOR IMPROVING ENERGY EFFICIENCY IN THE 2015–2025 PERIOD

Savings	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Investment loans [GWh]	5	8	11	24	23	39	44	29	15	43	21
Non-refundable grants [GWh]	123	126	116	190	273	314	323	358	510	516	238
Energy advisory service for the public [GWh]	0	14	14	18	23	25	25	29	24	24	25

SOURCES: ECO FUNDS ANNUAL REPORTS

The Eco Fund achieves most of its energy savings through measures implemented by individuals in households and businesses, with these measures being partially financed through grants awarded under the Eco Fund's public calls. In 2025, four measures accounted for the largest share of savings, together representing 78% of total energy savings: the installation of heat pumps (86.8 GWh), facade thermal insulation (38.0 GWh), biomass boilers (31.3 GWh), and energy audits (28.8 GWh). In total, grants enabled 238 GWh of energy savings in 2025, representing as much as 84% of all energy savings achieved.

TABLE 45: ENERGY SAVINGS BY MEASURES IN THE 2018–2025 PERIOD, PARTLY FINANCED BY ECO FUND GRANTS

Measure	2018 [GWh]	2019 [GWh]	2020 [GWh]	2021 [GWh]	2022 [GWh]	2023 [GWh]	2024 [GWh]	2025 [GWh]
Biomass boilers	18.3	30.6	27.2	26.5	32.4	35.8	33	31.3
Heat pumps	63.1	102.7	103.8	99.0	126.8	214.2	218.8	86.8
Self-supply – net-metering	10.0	16.3	30.9	58.0	62.4	107.0	157.8	3.3
Installation of joinery	2.9	3.3	4.1	3.6	3.1	4.2	6.5	4.4
Facade thermal insulation	49.9	55.0	48.9	43.2	42.0	45.0	38	38.0
Roof thermal insulation	18.0	15.2	13.6	13.5	9.0	8.1	7.6	8.4
Heat recovery ventilation	0.0	2.1	4.2	4.0	4.0	6.1	6.5	7.3
Gas condensing boilers	10.9	31.7	39.4	33.2	42.5	6.4	0.3	0.3
sNES[163] Public buildings or sNES of general social importance	3.7	1.9	1.3	4.8	7.4	9.5	8.9	9.7
Energy audits	3.3	1.3	4.1	0.4	1.8	4.4	7.7	28.8
Environmentally friendly passenger cars	3.2	2.5	3.8	5.0	3.3	4.6	7.8	0.0
Replacement of lighting	0.0	1.6	4.9	8.9	4.7	4.4	5.6	5.0
Energy management in the process	0.0	0.1	3.8	2.9	0.0	11.5	0.6	3.1
Energy optimisation	0.0	2.0	11.1	8.0	1.1	23.4	1.4	2.7
Tyres	0.0	0.0	7.9	7.8	8.6	18.1	10.8	0.0
Other measures	6.8	6.1	5.0	4.2	8.9	8.0	4.7	8.9

SOURCES: ECO FUNDS ANNUAL REPORTS

163 sNES – Nearly Zero-Energy Houses

Within the alternative measure, most energy savings are achieved through measures partially financed by Eco Fund grants. Table 45 shows the trend in these savings over the period 2018–2025. In 2025, the largest amount of energy savings was achieved through the installation of heat pumps, amounting to 86.8 GWh. This was significantly lower than in 2024 (218.8 GWh) and 2023 (214.2 GWh), but still indicates continued support for the electrification of heating. A significant volume of savings was also achieved in 2025, as in previous years, through measures involving the installation of biomass boilers and facade thermal insulation.

The electricity self-consumption measure, under which investment incentives were awarded primarily for the installation of solar power plants under the net-metering scheme and which generated significant energy savings in 2024 and 2023, achieved only 3.3 GWh of savings in 2025, mainly as a result of the discontinuation of the net-metering scheme.

Energy Audits

One of the important national measures for promoting energy efficiency is the mandatory implementation of energy audits in large companies. These audits enable the identification of opportunities to improve energy efficiency, thereby reducing energy consumption and costs. In accordance with the Energy Efficiency Act (ZURE), large companies are required to carry out an energy audit every four years and report the results to the competent agency.

An energy audit is a comprehensive and systematic process involving an analysis of energy consumption across all activities of a company, from energy use in buildings, production processes and transport to employee-related activities. The purpose of an audit is to identify energy flows and opportunities for improvement. The audit must include, at a minimum, a detailed analysis of energy consumption in buildings, industrial and technological processes, and transport, together with proposals for measures to improve energy efficiency. It is essential that actual, measured and verifiable data on the consumption of all forms of energy are used.

Large companies are defined as companies that, on the last day of a financial year, exceed at least two of the following three criteria for two consecutive years:

- an average of more than 250 employees;
- total assets exceeding EUR 25 million;
- net sales revenue exceeding EUR 50 million.

In 2025, in accordance with the fifth paragraph of Article 16 of ZURE, the Energy Agency updated the register of large companies. Based on data from the Slovenian Business Register and publicly available annual reports maintained by the Agency of the Republic of Slovenia for Public Legal Records and Related Services (AJPES), 382 companies exceeding at least two of the above criteria were included in the register.

Large companies are required to carry out an energy audit every four years. Due to changes in the criteria for determining the size of companies, 26 companies were removed from the register, as they no longer qualified as large companies under the revised criteria. Seven companies were newly included in the register. According to AJPES data, the main activities of the large companies identified are as follows:

- 157 companies, or 41.10% of all companies subject to the energy audit obligation, operate in the manufacturing sector;
- 103 companies, or 26.96%, are engaged in trade;
- 19 companies, or 4.97%, have energy supply as their main activity;
- 24 companies, or 6.28%, operate in transport, storage and telecommunications;
- 11 companies operate in financial services;
- 15 companies operate in construction; and
- 9 companies operate in insurance.

The Other category, comprising 44 companies, or 11.52% of all companies subject to the energy audit obligation, includes activities such as information technology and programming, printing, waste collection and disposal, publishing, gambling, food and beverage services, accommodation services and other related activities.

A total of 345 of the 382 large companies comply with the energy audit obligation. Of those that have fulfilled the obligation, 232 have completed an energy audit, 57 have an established certified energy or environmental management system in accordance with European or international standards, and 56 companies have provided the Energy

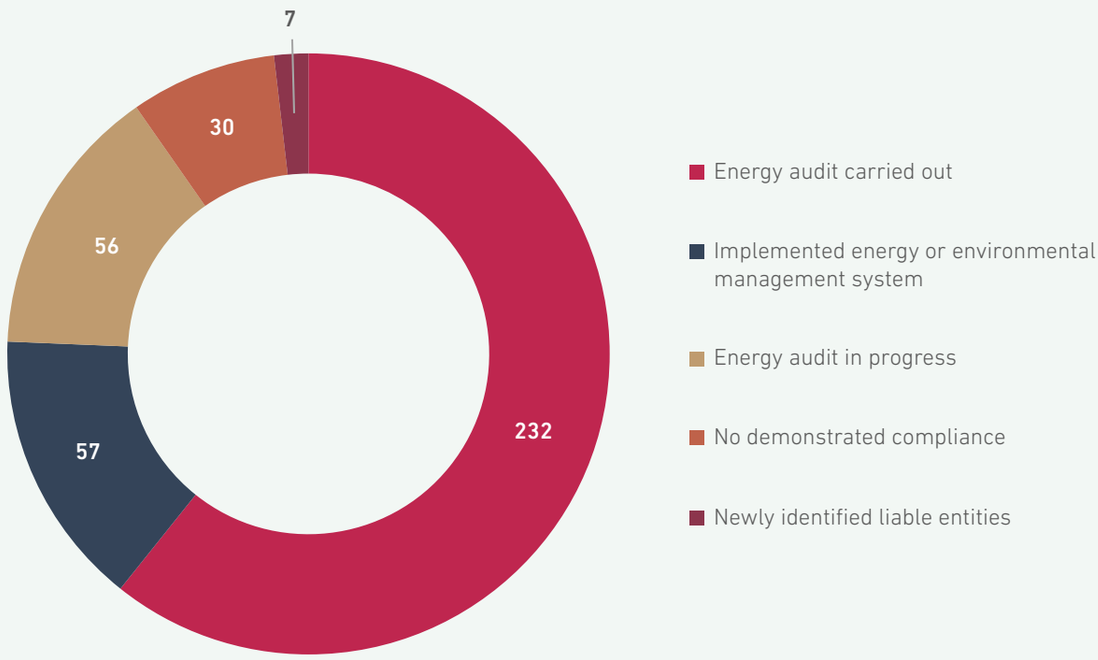
90% of all large companies comply with the energy audit obligation

Agency with evidence that they are in the process of carrying out a repeat energy audit.

At present, 30 large companies have not demonstrated that an energy audit has been carried out. In reviewing the register, the Agency found that these are predominantly companies required to carry out a repeat energy audit and therefore called on them to fulfil their obligation.

The seven newly registered companies have not yet submitted an energy audit, as the relevant rules provide that they must carry out an energy audit within one year of being classified as a large company.

FIGURE 269: ENERGY AUDITS IN LARGE COMPANIES



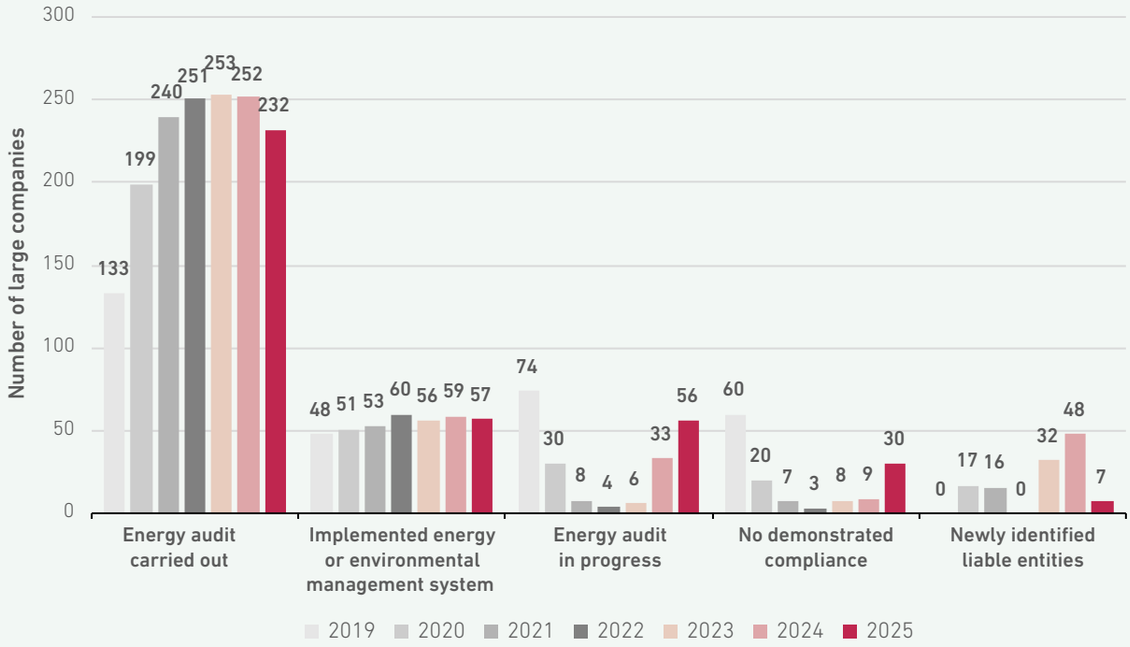
SOURCE: ENERGY AGENCY

Figure 270 shows the trend in the number of large companies by the method used to fulfil the energy audit obligation over the period 2019–2025, in accordance with Article 16 of the Energy Efficiency Act (ZURE).

During the period under review, there was a marked increase in the number of companies with a completed energy audit, rising from 133 in 2019 to a peak of 253 in 2023. This was followed by a slight decrease in 2024 and 2025, to 252 and 232 companies, respectively, mainly due to the start of a new audit cycle.

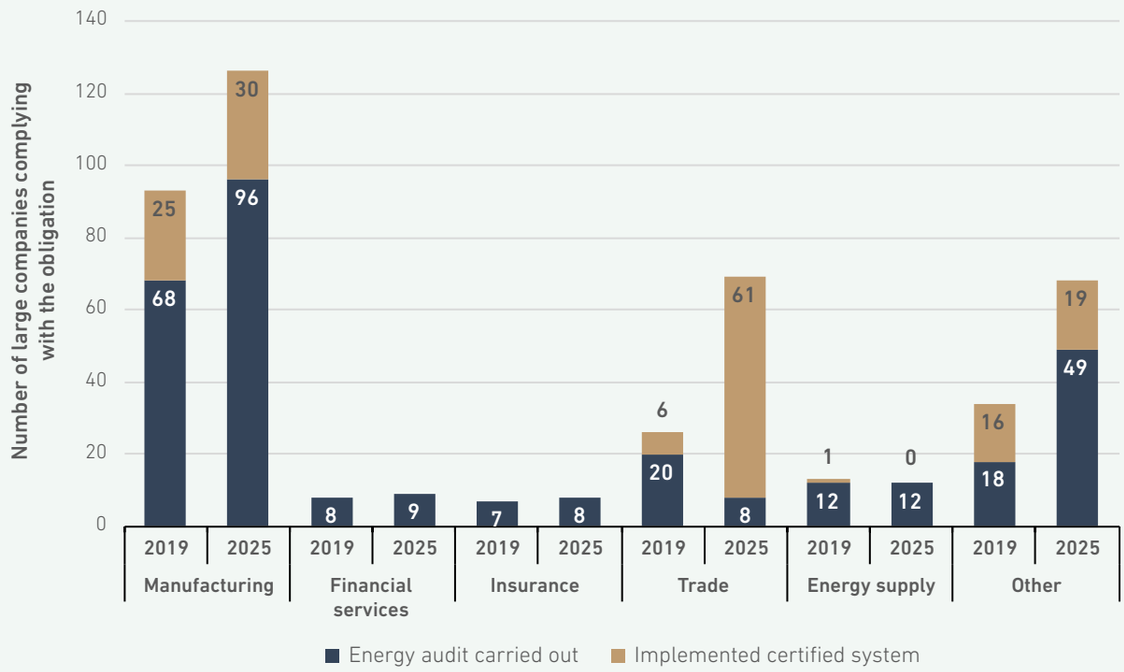
The number of companies fulfilling the obligation through an established energy or environmental management system remained relatively stable throughout the period, ranging from 48 to 60 companies per year. Overall, the trends indicate a high level of compliance with statutory requirements in previous years, accompanied by fluctuations in the most recent period resulting from changes in the population of obligated companies and the start of new cycles of mandatory energy audits.

FIGURE 270: COMPARISON OF THE FULFILMENT OF OBLIGATIONS BY LARGE COMPANIES BETWEEN 2019 AND 2025



SOURCE: ENERGY AGENCY

FIGURE 271: COMPARISON OF THE FULFILMENT OF OBLIGATIONS BY LARGE COMPANIES IN 2019 AND 2025



SOURCE: ENERGY AGENCY

Figure 271 shows that the majority of large companies operate in the manufacturing sector, which consequently also recorded the highest number of completed energy audits and the largest number of certified energy management systems. The high level of implementation in this sector is directly related to the energy intensity of its processes, as energy costs generally account for a significant share of total costs in this sector. This increases the economic justification for carrying out energy audits and implementing energy efficiency measures.

A comparison of 2019 and 2025 also reveals a clear increase in the number of energy audits in the trade sector and in the Other category. This trend is primarily attributable to changes in the structure of obligated parties, as the largest number of newly included companies subject to the statutory obligation during the period under review came from the trade sector and the Other category.

The data also show that the majority of large companies in the trade sector are significantly more likely to opt for periodic energy audits than for the implementation of certified energy or environmental management systems.

HEAT

Energy in the form of warm water, hot water, steam, or cooling

GAS REPLACED COAL
AS THE PRIMARY ENERGY SOURCE
FOR HEAT PRODUCTION

70.1% OF DISTRIBUTED HEAT IS PRODUCED THROUGH COGENERATION PROCESSES

4.7% LOWER HEAT CONSUMPTION IN 2025 THAN THE 10-YEAR AVERAGE

4.3% HIGHER HEAT CONSUMPTION THAN IN 2024

5.4 MWh AVERAGE ANNUAL CONSUMPTION PER HOUSEHOLD CONSUMER

58.0% OF DISTRIBUTION SYSTEMS ARE ENERGY EFFICIENT

3.5% LOWER AVERAGE RETAIL PRICE OF HEAT

18.9% OF HEAT GENERATED FROM RENEWABLE ENERGY SOURCES

HEAT

Supply of heat

In 2025, 119 district heating and cooling systems were registered in Slovenia, of which 10 were newly registered (five commercial and five owner-operated systems). Pursuant to the second paragraph of Article 2 of the Act on the Supply of Heat from Distribution Systems (ZOTDS), the Energy Agency excluded 13 owner-operated distribution systems from the annual reporting requirement, as the total rated capacity of the customers' connected equipment in each system was 500 kW or less. The distribution systems were operated by 51 heat distributors in 70 municipalities.

Heat distributors distributed 2,017.4 GWh of heat for space heating and cooling, domestic hot water preparation and industrial steam processes, supplying 1,662.0 GWh of heat to 159,550 customers. The difference, amounting to 355.4 GWh, represents distribution losses.

4.7% lower heat consumption in 2025 compared with the 10-year average

4.3% higher heat consumption compared with 2024

Heat consumption by customers connected to the recorded distribution systems was 4.3% higher than in the previous year[164] and 0.5% higher than in 2023. The declining trend in annual heat consumption by final customers reversed in 2025, mainly due to slightly higher annual heating degree days and a longer heating season compared with the previous two years.

General note: Due to rounding, the totals of percentages shown in figures, charts and tables may differ from 100%.

164 Due to corrections to the 2024 calendar-year data subsequently received from reporting entities, as well as the exclusion of owner-operated distribution systems where the total rated capacity of consumers' connected equipment in the system is 500 kW or less, the year-on-year comparisons with the data published last year may differ to some extent.

HEAT

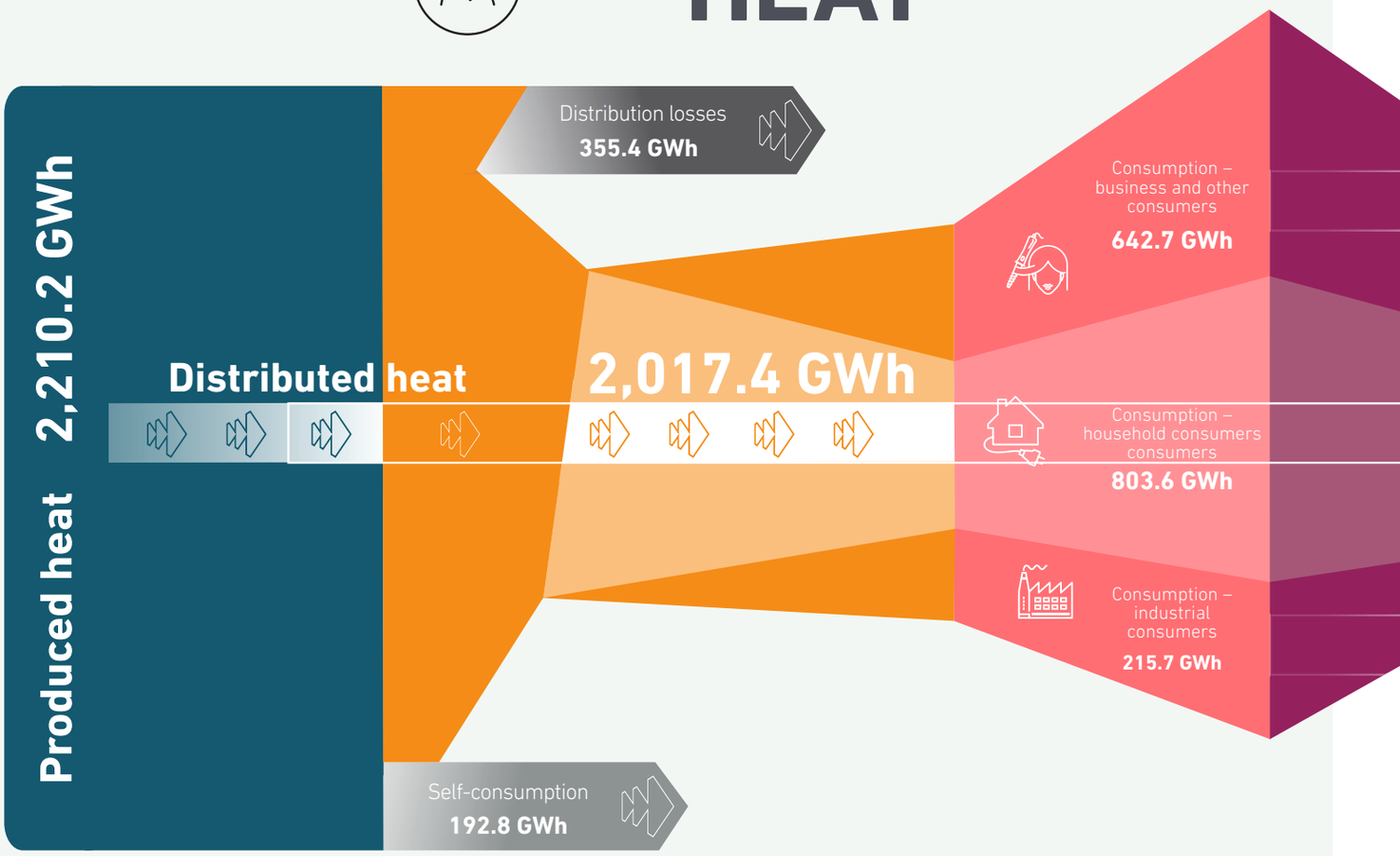


FIGURE 272: BASIC DATA ON PRODUCED AND DISTRIBUTED HEAT FOR CONSUMERS OF HEAT CONNECTED TO THE DISTRIBUTION SYSTEMS

SOURCE: ENERGY AGENCY

The number of heat consumers increased by 1.8% compared with the previous year; the number of household consumers increased by 2.0%, while the number of business and other consumers decreased by 1.2% and the number of industrial consumers by 2.9%. Over the most recent three-year period, the most notable trend has been the decline in the number of industrial consumers supplied, which fell by as much as 11.6%, while their heat consumption decreased by 6.7%.

In 2025, the Energy Agency recorded two district cooling systems with a total installed cooling capacity of 3.66 MW. Business consumers are supplied in Velenje, and industrial consumers in Kranj.

In 2025, heat distributors with own heat production and heat producers supplying distribution systems produced 2,210.2 GWh of useful heat for space heating, domestic hot water preparation, industrial processes and their own needs. In addition, 1,026.6 GWh of gross electricity was generated, corresponding to 936.8 GWh of electricity generated at the cogeneration plant terminals.

70.1%
of distributed heat produced in cogeneration processes

Heat for space heating, domestic hot water preparation and steam, produced through cogeneration processes, accounted for 68.5% of all useful heat produced (heat for own use and for supplying distribution systems). The remaining 31.5% was produced through other technological processes (wood biomass, gas and liquefied petroleum gas boiler plants, heat extraction from geothermal wells, waste heat from industrial processes, municipal waste incineration plants, etc.).

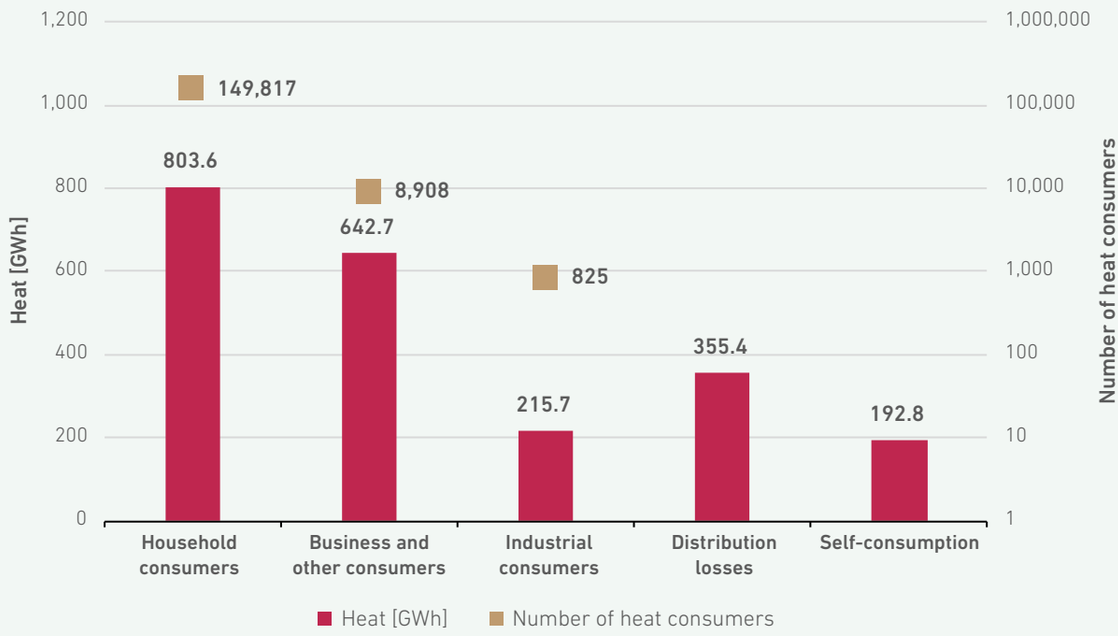
In the share of heat intended solely for supplying distribution systems (excluding district cooling systems), heat from cogeneration sources accounted for 70.1%, representing a 12.2% increase compared with the previous year. This increase is

attributable to the regular operation of a new gas-steam unit, which supplies Slovenia's largest district heating system, the Ljubljana district heating system.

The largest share, 36.4% of total useful heat produced, was used to supply 149,817 household consumers. A further 29.1% of the heat was consumed by 8,908 business consumers, while 9.8% was consumed by 825 industrial consumers. Heat producers and distributors used 8.7% for their own needs, including industrial processes, space heating and domestic hot water preparation. The remainder consisted of total distribution losses[165].

Figure 273 shows the consumption of useful heat produced by production processes supplying heat distribution systems, broken down by customer type, together with the corresponding number of consumers.

FIGURE 273: HEAT CONSUMPTION BY THE TYPE OF CONSUMER AND THEIR NUMBER



SOURCE: ENERGY AGENCY

In 2025, 14.5 PJ of primary energy was consumed in heat production. Due to increased demand for heat from end users and, above all, the greater integration of CHP generation units and, indirectly, the higher volume of gross electricity generated (an increase of 65.1% compared with 2024), consumption of primary fuels is higher than in the previous year, namely by a good 16.7%.

Due to the higher share of CHP units in heat production, gross electricity generation also increased by 65.1%

Gas took over as the primary energy source

Gas, as the main energy source for heat production, reached a record share of 57.31% in 2025, followed by coal at 21.09% and other primary energy sources at 21.60%. The share of gas increased by just over 48.33% compared with 2024. This was due to the increased operation of two new gas turbines, which form part of a new combined cycle gas turbine unit operated by Energetika Ljubljana, Slovenia's largest heat distributor.

165 Total distribution losses also include distribution losses from internal distribution systems of heat producers.

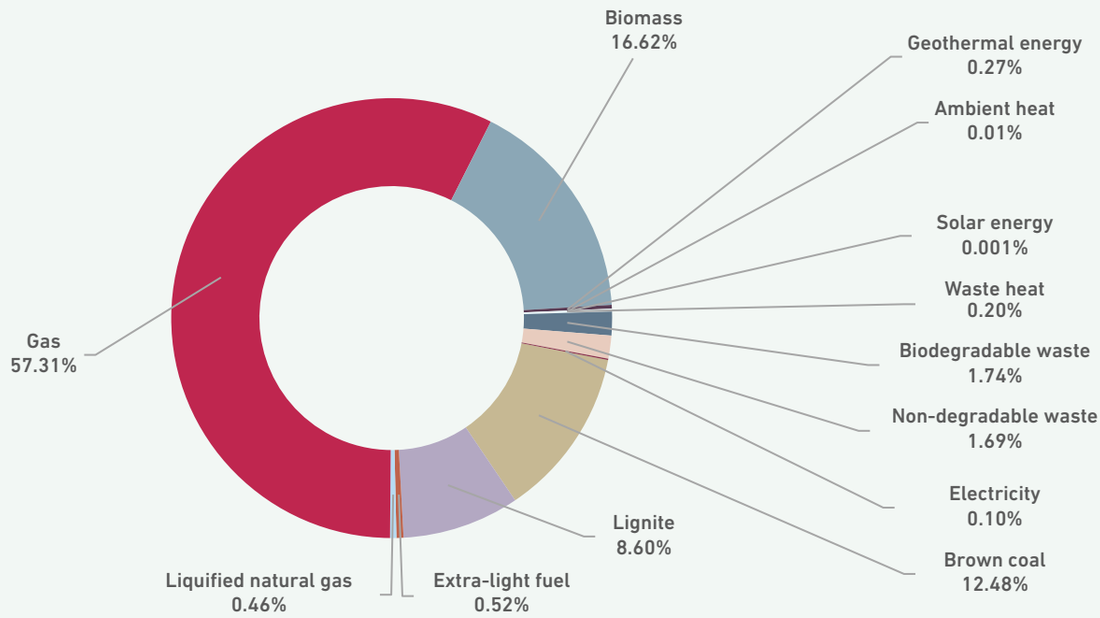
The share of oil and oil derivatives as primary energy sources in the mix stood at 0.98%, renewable sources (wood biomass, geothermal energy) 16.90%, mixed municipal waste 3.43%, industrial waste heat 0.20% and electricity 0.10%.

The heat required to supply district heating systems was generated from mixed municipal waste only at the Celje municipal waste incineration plant, while waste heat was sourced from the industrial processes of the steel company SIJ METAL RAVNE and the pharmaceutical company Novartis Ljubljana.

The use of waste heat from production processes to supply distribution systems is becoming an increasingly important factor in achieving a reliable and affordable heat supply for consumers. The increase in these energy sources compared with 2024 amounts to 33.91% for mixed municipal waste and 8.49% for waste heat.

A more detailed overview of the primary energy sources used for heat production in 2025 is shown in Figure 274.

FIGURE 274: STRUCTURE OF THE PRIMARY ENERGY PRODUCTS FOR HEAT PRODUCTION



SOURCE: ENERGY AGENCY

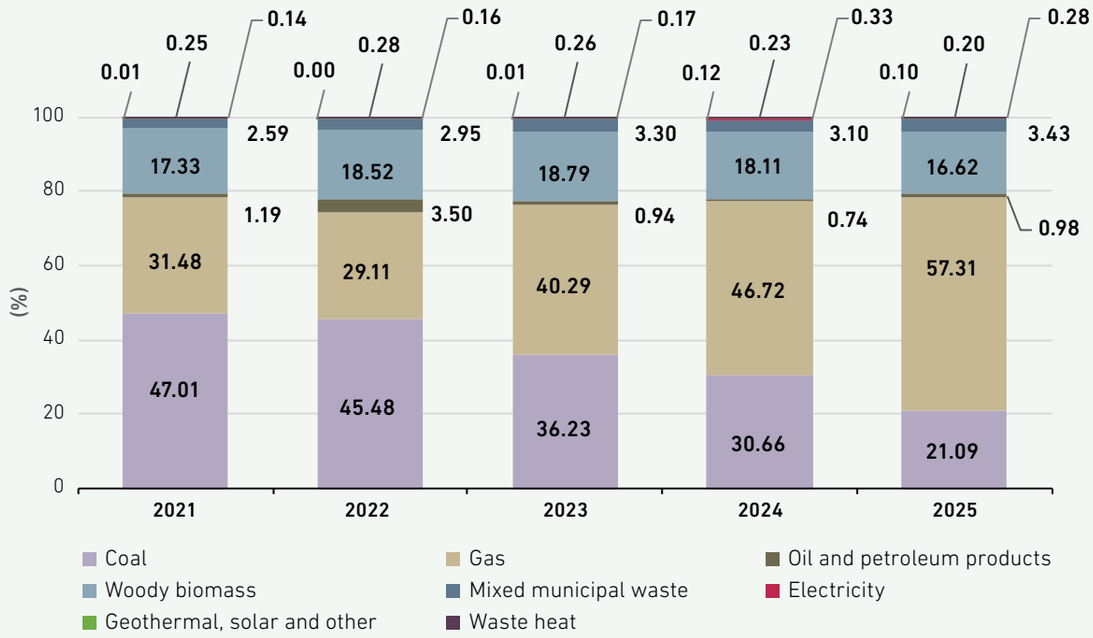
In the structure of primary energy sources, the shares of oil and oil derivatives, gas, mixed municipal waste and coal changed the most compared with the previous year (Figure 275). The lower consumption of coal, an energy-significant primary energy source (a decrease of 16.84% and 32.10% compared with 2023) is largely due to the operation of the aforementioned gas-steam unit in Ljubljana, which comprises two gas turbines and one steam turbine, with a combined rated thermal output of 148 MW.

Gas and coal, as the most important energy sources in the primary fuel mix, account for 78.39% of the total energy value of fuels consumed to supply heat distribution systems. Consumption of petroleum products, which serve as an alternative fuel to gas in certain production facilities and account for only 0.98% of the annual primary fuel mix, increased by as much as 60.69% compared with the previous year.

16.84% lower coal consumption

48.33% higher gas consumption

FIGURE 275: STRUCTURE OF THE PRIMARY ENERGY PRODUCTS IN THE 2021–2025 PERIOD

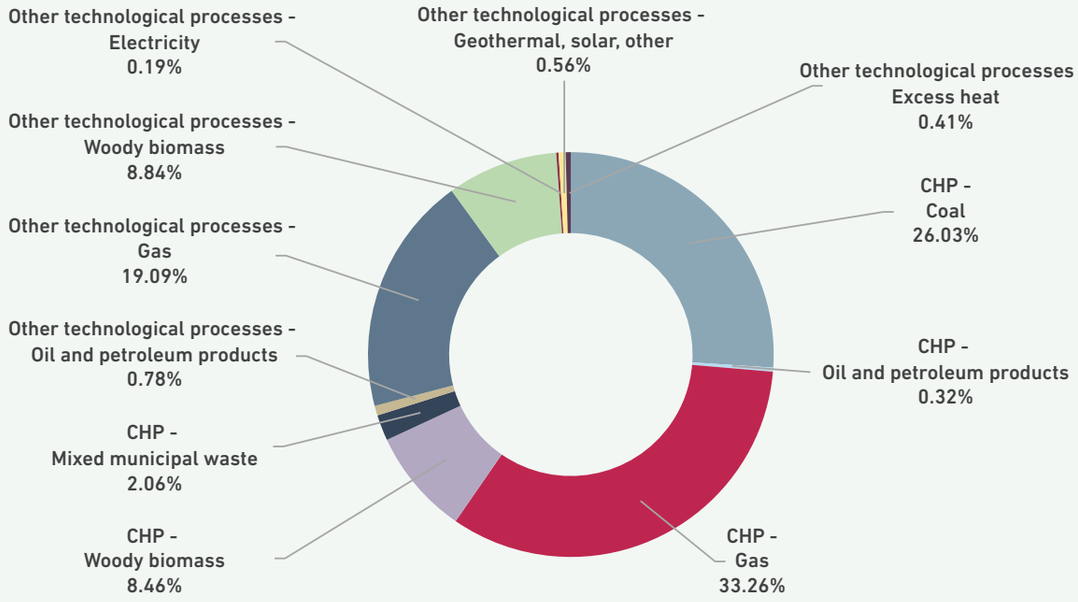


SOURCE: ENERGY AGENCY

Coal was used as a primary fuel only in combined heat and power (CHP) processes, with 201.8 GWh of gross electricity and 524.9 GWh of heat generated to supply heat distribution systems. In other combined heat and power generation and other technological processes, gas was used to a greater extent as the primary energy source (701.6 GWh of gross electricity and 1,084.4 GWh of heat were generated). A total of 111.0 GWh of gross electricity and 555.2 GWh of heat were generated from renewable sources. The structural share of primary energy sources consumed, broken down by method of heat generation for supplying distribution systems, is shown in Figure 276.

18.9% of heat generated from renewable energy sources

FIGURE 276: STRUCTURE OF THE PRIMARY ENERGY PRODUCTS FOR HEAT PRODUCTION FOR DISTRIBUTION SYSTEMS



SOURCE: ENERGY AGENCY

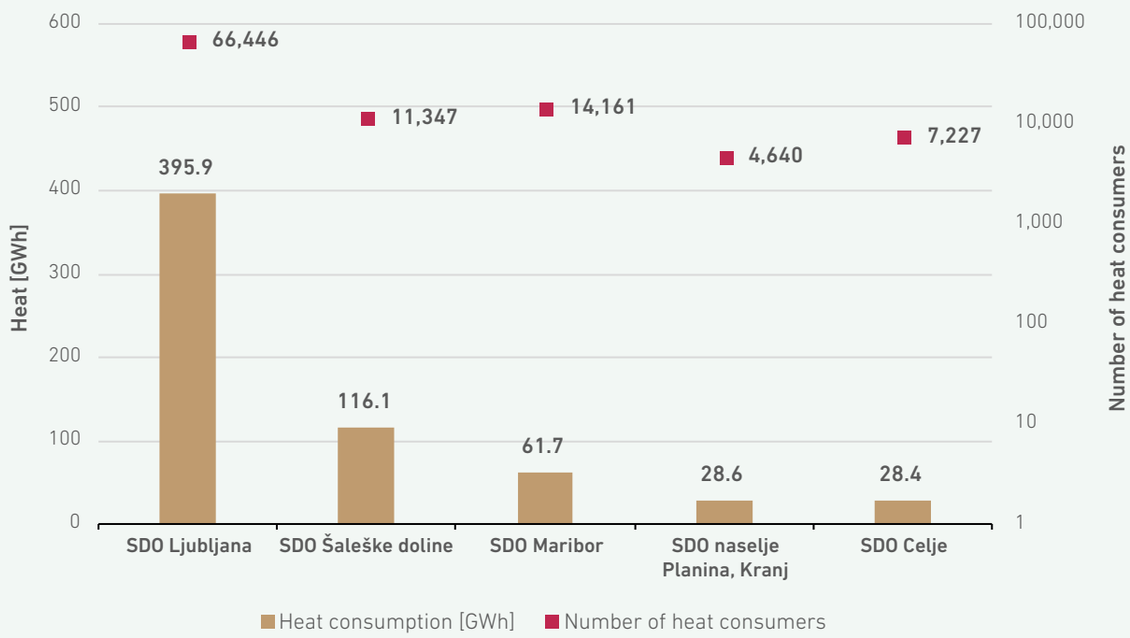
In terms of the amount of heat supplied to final consumers, the top five largest distribution systems[166] accounted for as much as 75.6% of all heat supplied from distribution systems in 2025, supplying 66.9% of all consumers connected to these systems. Heat distribution for space heating and domestic hot water was carried out via 115 distribution systems, and steam generation via two.

Household consumers were supplied by 93 distribution systems across 61 Slovenian municipalities. The average annual consumption per household consumer in 2025 was 5.4 MWh. In terms of the volume of heat supplied, the five largest distribution systems supplied 69.4% of all household consumers and provided them with 78.5% of the heat, or 53.3% of the total heat supplied by these systems. This is illustrated in Figure 277.

The average annual consumption of a household consumer is 5.4 MWh

166 Due to the intended use of steam systems (supply to industrial processes only), these are excluded from the comparison.

FIGURE 277: HEAT CONSUMPTION AND THE NUMBER OF HOUSEHOLD CONSUMERS AT THE LARGEST HEAT DISTRIBUTORS[167]

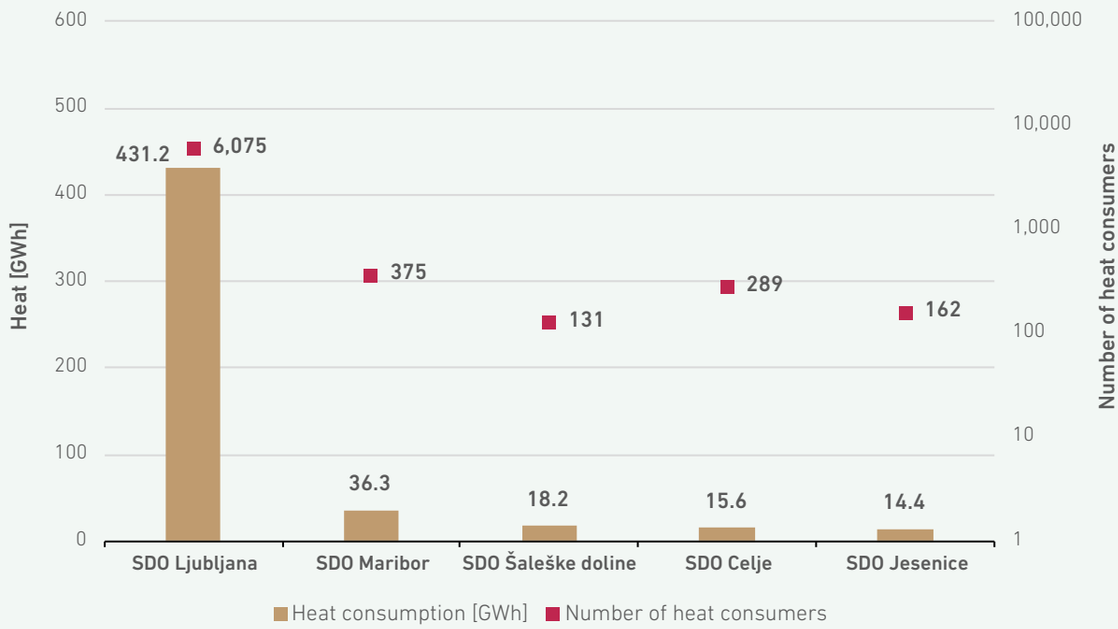


SOURCE: ENERGY AGENCY

Supply to consumers classified in the tariff group for business and other heat consumers (consumers who are neither domestic nor industrial) was provided via 83 distribution systems in 62 Slovenian municipalities. The average annual consumption of these customers in 2025 amounted to 72.6 MWh. The top five largest distribution systems, ranked by the volume of heat supplied for space heating and domestic hot water for commercial customers, served 79.5% of these consumers and supplied them with 80.3% of the heat intended for them (Figure 278) or 41.6% of all heat supplied from these systems.

167 SDO – an abbreviation used for a district heating system (DHS)

FIGURE 278: HEAT CONSUMPTION AND THE NUMBER OF BUSINESS AND OTHER CONSUMERS AT THE LARGEST HEAT DISTRIBUTORS

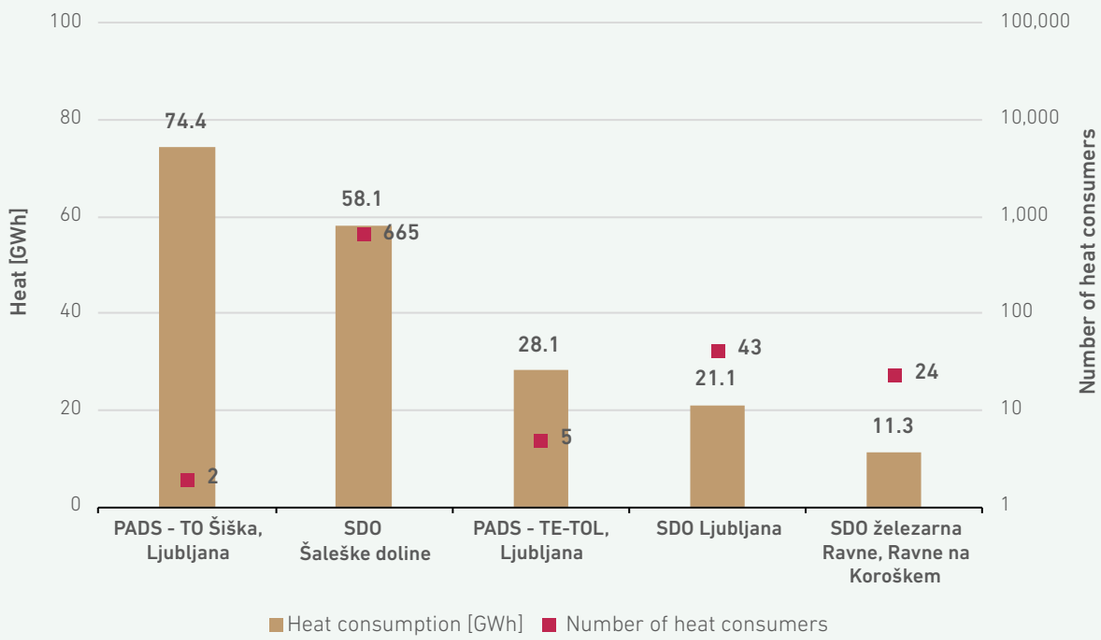


SOURCE: ENERGY AGENCY

In 2025, industrial consumers were supplied via 21 distribution systems in 19 Slovenian municipalities. Of the total heat supplied to final consumers in distribution systems that supplied heat to industry, the share accounted for by industrial consumers was 17.5%. The average annual consumption per industrial consumer reached 261.5 MWh.

The top five largest distribution systems, ranked by the volume of heat supplied for industrial processes, space heating and domestic hot water production, served 89.6% of industrial consumers and supplied them with as much as 89.5% of the heat (Figure 279).

FIGURE 279: HEAT CONSUMPTION AND THE NUMBER OF INDUSTRIAL CONSUMERS AT THE FIVE LARGEST DISTRIBUTORS[168]



SOURCE: ENERGY AGENCY

Heat Distribution Systems

According to the Energy Agency's records, heat supply from heat distribution systems[169] was provided in 2025 by 119 distribution systems (61 as public services, 23 commercial and 35 privately owned) in 70 Slovenian municipalities. The total length of the distribution system routes was 928.7 kilometres. As an optional local public service, heat supply was provided by 61 distribution systems, operated by 33 distributors in 50 Slovenian municipalities. In 17 municipalities, heat supply was provided as a market activity, and in 16 municipalities as supply from privately-owned distribution systems. Proprietary distribution systems in the municipalities of Kranj, Koper, Maribor, Novo mesto and Žalec are among the larger distribution systems supplying domestic and business customers. In these five municipalities, 14 privately-owned distribution systems supplied 12,081 consumers, of whom as many as 11,889 were households.

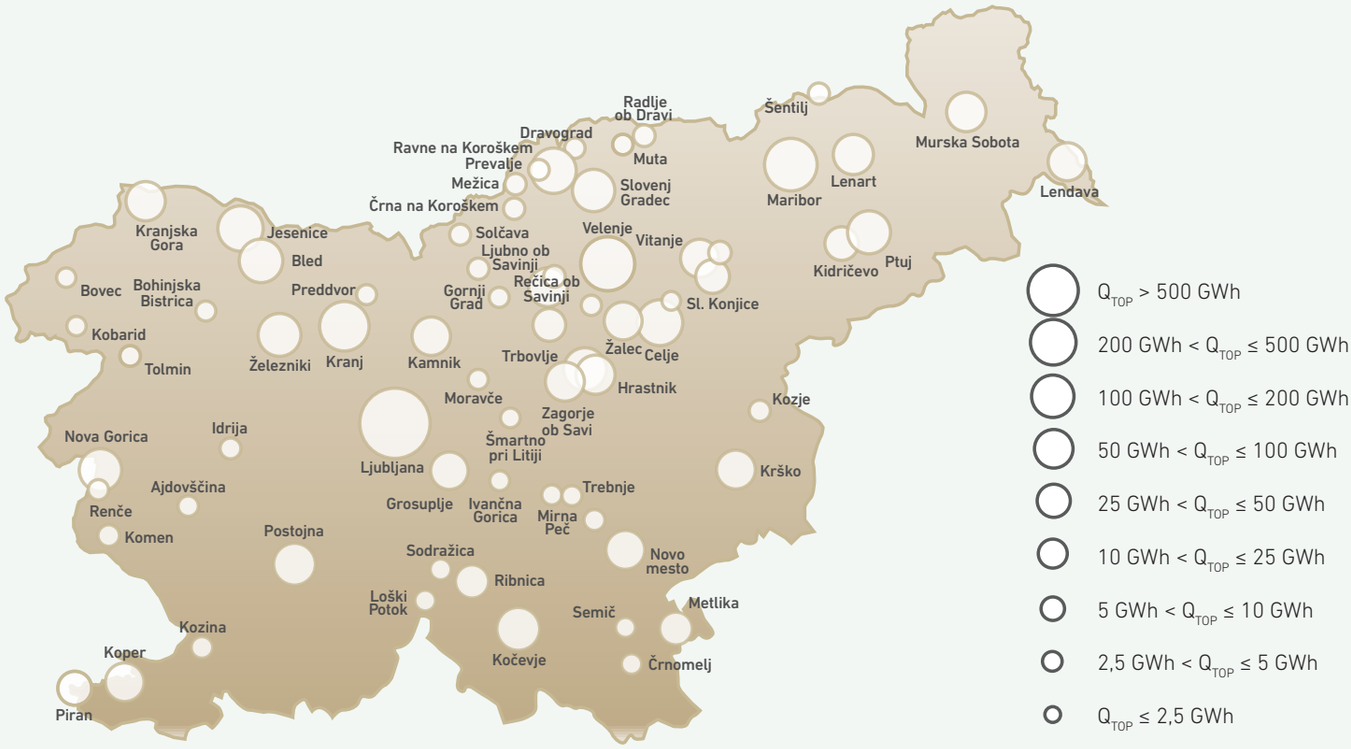
Distribution systems whose heat distribution activities were carried out as an optional local public service supplied heat to 89.4% of consumers, while the share of heat supplied by these systems accounted for 92.2% of all heat supplied by distribution systems.

The only major district cooling distribution systems remain in the municipalities of Velenje and Kranj, with a total network length of 1.6 kilometres.

Figure 280 shows the municipalities with distribution systems and the quantities of heat distributed in 2025.

168 PADS – abbreviation used for steam distribution system
169 Distribution systems do not include heat producers' internal distribution systems.

FIGURE 280: QUANTITIES OF DISTRIBUTED HEAT BY SLOVENIAN MUNICIPALITIES



SOURCE: ENERGY AGENCY

Distribution systems are classified according to their operating temperature regime into hot-water, high-temperature water and steam distribution systems, as well as cooling distribution systems. The length of hot-water and high-temperature water distribution systems accounts for 99.18% of the total length of distribution system routes, steam distribution systems account for 0.65%, while cooling distribution systems account for just under 0.17% of the total length of distribution systems.

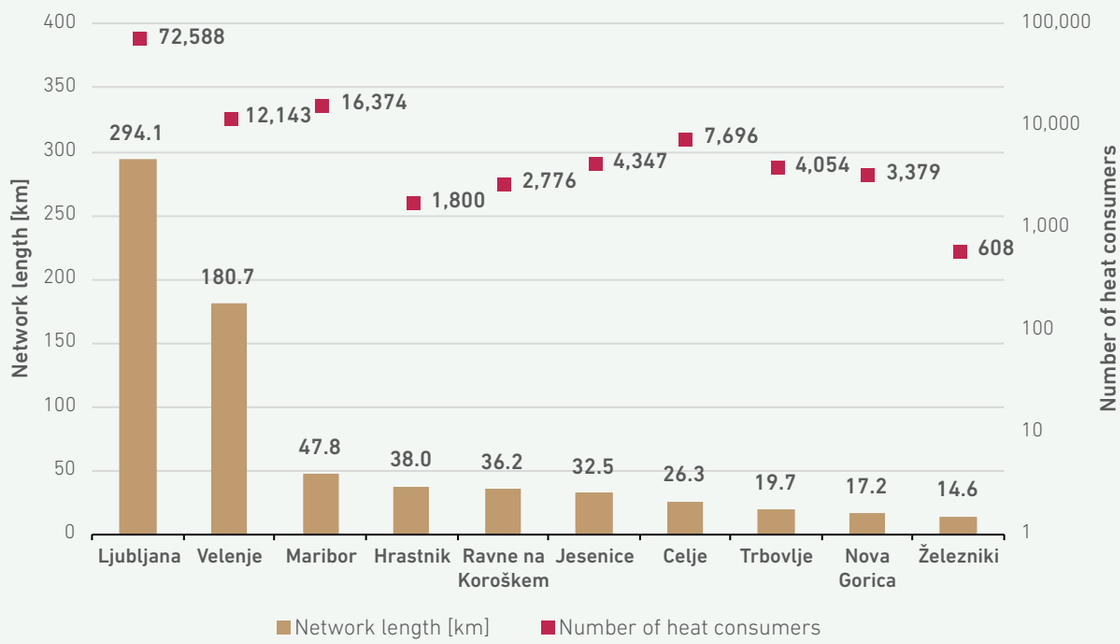
The longest heat distribution systems remain in Ljubljana, with a 288.0-kilometre-long hot-water distribution system, and in Velenje and Šoštanj, with a 180.7-kilometre-long hot-water distribution system. The average length of heat distribution systems was 7.9 kilometres. Hot-water and high-temperature water distribution systems recorded average annual heat distribution losses of 18.1% of all distributed heat. Average annual heat distribution losses in district cooling and steam distribution systems amounted to 9.1%, which can be attributed to the shorter length of these distribution systems.

FIGURE 281: LENGTH OF THE HEAT DISTRIBUTION SYSTEMS IN SLOVENIAN MUNICIPALITIES

SOURCE: ENERGY AGENCY

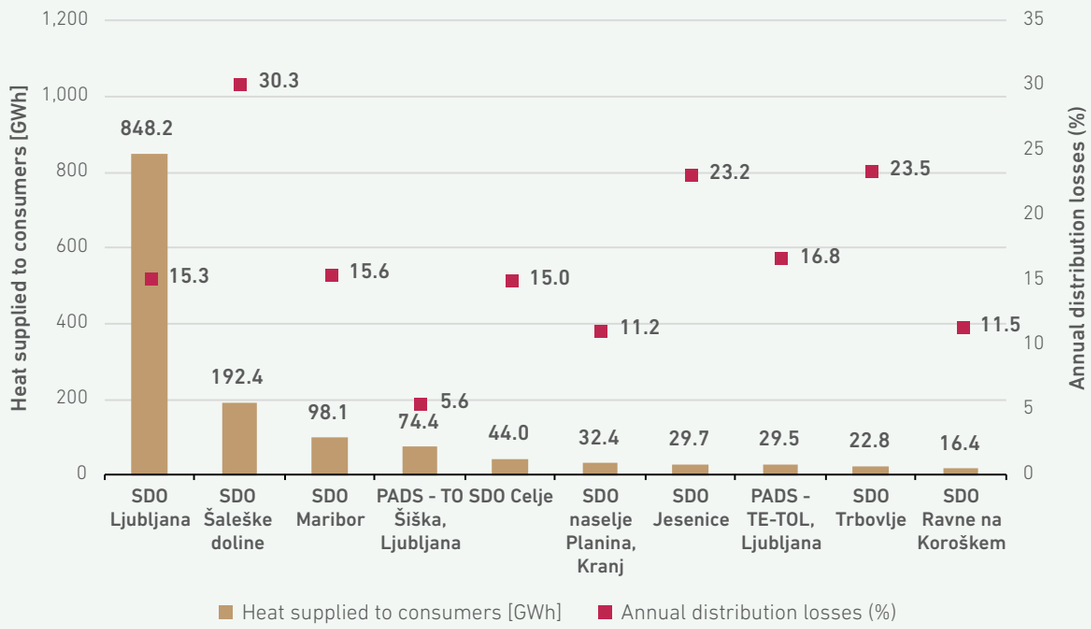
Figure 282 shows the first ten municipalities ranked by the total length of registered district heating distribution systems and the number of heat consumers in 2025.

FIGURE 282: LENGTH OF THE HEAT DISTRIBUTION SYSTEMS IN SLOVENIAN MUNICIPALITIES



SOURCE: ENERGY AGENCY

FIGURE 283: AVERAGE ANNUAL DISTRIBUTION LOSSES AND HEAT SUPPLIED TO CONSUMERS ON THE LARGEST DISTRIBUTION SYSTEMS, RANKED BY ANNUAL HEAT SUPPLY QUANTITIES

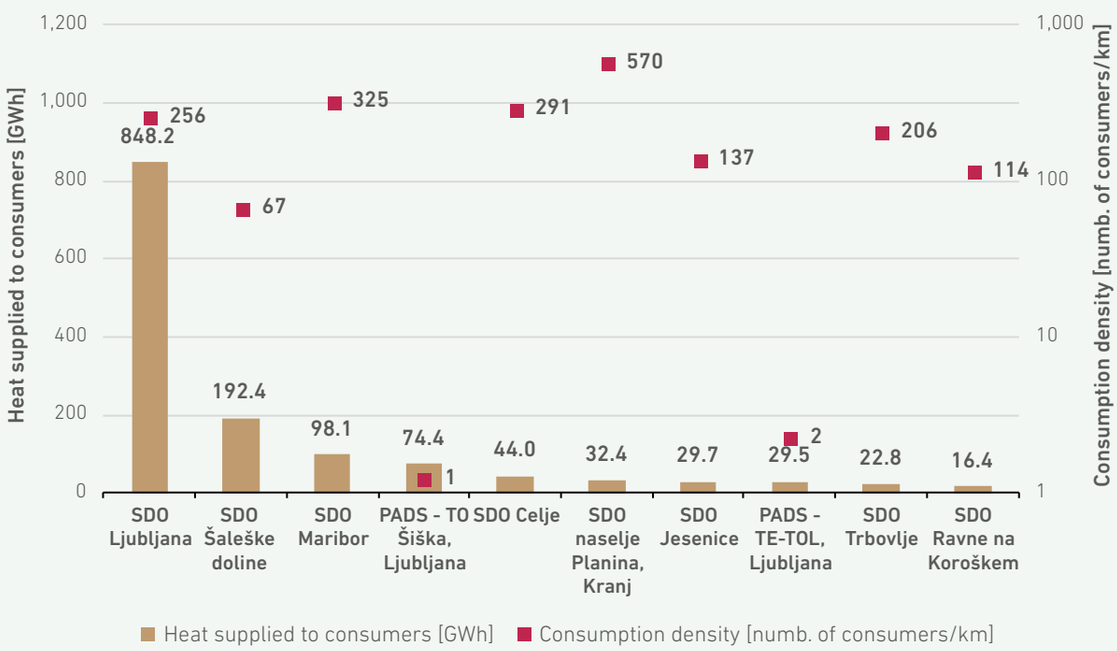


SOURCE: ENERGY AGENCY

Figure 283 shows the average annual distribution losses and the heat supplied to consumers by the ten largest distribution systems, ranked according to the quantities of heat supplied.

Average annual distribution losses depend on several factors, including heat demand density, which is shown for the aforementioned distribution systems in Figure 284.

FIGURE 284: CONSUMPTION DENSITY IN THE LARGEST DISTRIBUTION SYSTEMS, MEASURED BY ANNUAL HEAT SUPPLY QUANTITIES



SOURCE: ENERGY AGENCY

Energy-efficient Heating Systems

A district heating and cooling system is considered energy-efficient if, on an annual basis, the heat distributor supplies heat from at least one of the following sources:

- at least 50% of the heat generated directly or indirectly from renewable energy sources (RES);
- at least 50% of surplus heat;
- at least 75% of heat from combined heat and power (CHP), or
- at least 50% from a combination of heat from at least two of the sources listed in the preceding sub-paragraphs.

Each year, the Energy Agency verifies which heat distribution systems meet the criteria and publishes a list of energy-efficient heat distribution systems on its website[170].

Based on the criteria mentioned, in 2025, out of 119 registered heat distribution systems, 69 were energy-efficient (meaning that they met at least one of the criteria, and some met several). The largest number of distribution systems – 55 – met the energy efficiency criterion by ensuring that at least 50% of the distributed heat was produced, either directly or indirectly, from renewable energy sources. Six distribution systems met the energy efficiency criterion whereby at least 75% of the distributed heat was produced through cogeneration. However, no distribution system met the criterion that at least 50% of the distributed heat was produced from waste heat.

58.0% of distribution systems are energy-efficient

A heat distribution system may also be considered energy-efficient if at least 50% of the distributed heat is produced from a combination of heat from at least two of the aforementioned sources. This criterion was met by 16 distribution systems.

Price of Heat

The average retail price of heat in nine selected Slovenian municipalities with district heating systems is calculated as the average monthly retail price of heat supply for the heating of residential premises and the provision of domestic hot water, based on the publicly published price lists of heat distributors for the year 20 25 for a typical household heat consumer in a multi-dwelling building with an annual billing power of 6.54 kW and an average annual consumption of 4.31 MWh. The heated buildings, their average annual consumption and their billing power are classified in energy efficiency class D according to the energy efficiency classification of buildings.

In 2025, the distribution systems in the selected municipalities supplied 77.9% of all connected household consumers, and the quantity of heat they received accounted for 84.8% of all heat supplied to these consumers.

A 3.5% lower average retail price of heat

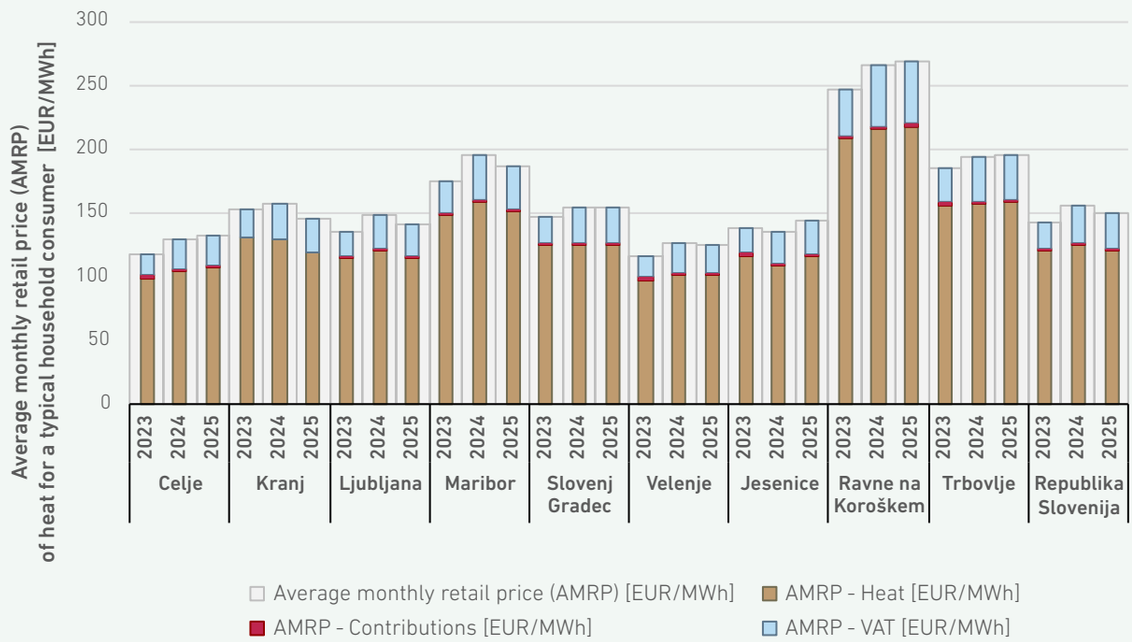
The average retail prices of heat in these municipalities[171] are shown in the following figure. They are calculated as the average of the monthly retail prices for a typical household heat consumer in a multi-dwelling building in each selected municipality; the average monthly retail price of heat for the whole of Slovenia, weighted by the number of household consumers supplied, is also shown. The average monthly retail heat price (AMRHP) for household consumers fell by an average of 3.5% in all the municipalities mentioned compared with the previous year, standing at 149.7 EUR/MWh in 2025.

170 https://www.agen-rs.si/izvajalci/toplota/ucinkoviti-distribucijski-sistemi
171 Due to changes in the consumption characteristics of a typical heat consumer, it is not possible to compare average retail prices with those published in the Agency's annual reports for previous years.

Emissions allowances also had a significant impact on retail heat prices in certain distribution systems where the primary energy sources are subject to an additional cost due to CO_2 emissions. According to data from the European Energy Exchange portal, their average monthly bid price on the exchange markets stood at 73.7 EUR/tonne of CO_2 in 2025, representing an 11.5% increase compared with the previous year. The average monthly bid prices for emission allowances in 2025 thus ranged between 62.2 EUR/tonne of CO_2 and 137.1 EUR/tonne of CO_2.

The highest AMRHP was recorded in Ravne na Koroškem, at 268.09 EUR/MWh, followed by Trbovlje at 195.68 EUR/MWh and Maribor at 187.13 EUR/MWh. The lowest AMRHP was recorded by the district heating distribution system in Velenje and Šoštanj at EUR 125.47/MWh, whilst the second-lowest price was in Celje at EUR 132.71/MWh. The largest increase in the PMMPC compared with the previous year was recorded in Jesenice (6.7%) while the greatest reductions were seen in Kranj (7.3%), Ljubljana (5.2%) and Maribor (4.2%).

FIGURE 285: CHANGES IN THE AVERAGE RETAIL PRICE OF HEAT FOR HOUSEHOLD CONSUMERS IN INDIVIDUAL SLOVENIAN MUNICIPALITIES IN THE 2023–2025 PERIOD



SOURCE: ENERGY AGENCY

Regulating the Price of Heat for District Heating

The Energy Agency regulates the price of heat for district heating based on the current Act on the Heat Supply Pricing Methodology. Entities subject to regulation are heat distributors performing an optional service of general economic interest using distribution systems to which more than 500 household consumers are connected. Heat producers supplying heat to such systems are also subject to regulation.

The regulated entities must obtain the Energy Agency's consent to the first determined heat price for a particular distribution system or heat supply and to any change in the starting heat price. However, these entities must only notify the regulatory authority about the adjustment of the individual elements of the starting heat price due to changes in eligible costs. In all cases, the starting price for heat has to be established in accordance with the criteria and references set out in the Act mentioned above.

The Energy Agency was dealing with requests for approval of the initial heat price of regulated entities, which it granted because they met the criteria for submitting a new request under the Act on the Heat Supply Pricing Methodology. These criteria relate to major technological changes, changes to the tariff system, changes to the planned quantities of heat distributed by more than 20% or changes to the planned billing power of consumers by more than 10%, a significant change or discontinuation of a specific activity of the company, and a lower realised cost price than the last valid average price.

It monitored and analysed adjustments to base heat prices due to changes in eligible costs, and also supervised the method of heat billing and the publication of heat tariff items. In 2025, it received 96 notifications of adjustments to the variable and fixed components of the base heat price. The base heat prices were adjusted mainly due to changes in the prices of energy sources for heat production.

Unbundling

Distributors performing services of general economic interest and carrying out activities other than heat distribution should keep separate accounts in accordance with the accounting standards and disclose separate accounts in the notes on the financial statements for heat distribution, heat production and other activities.

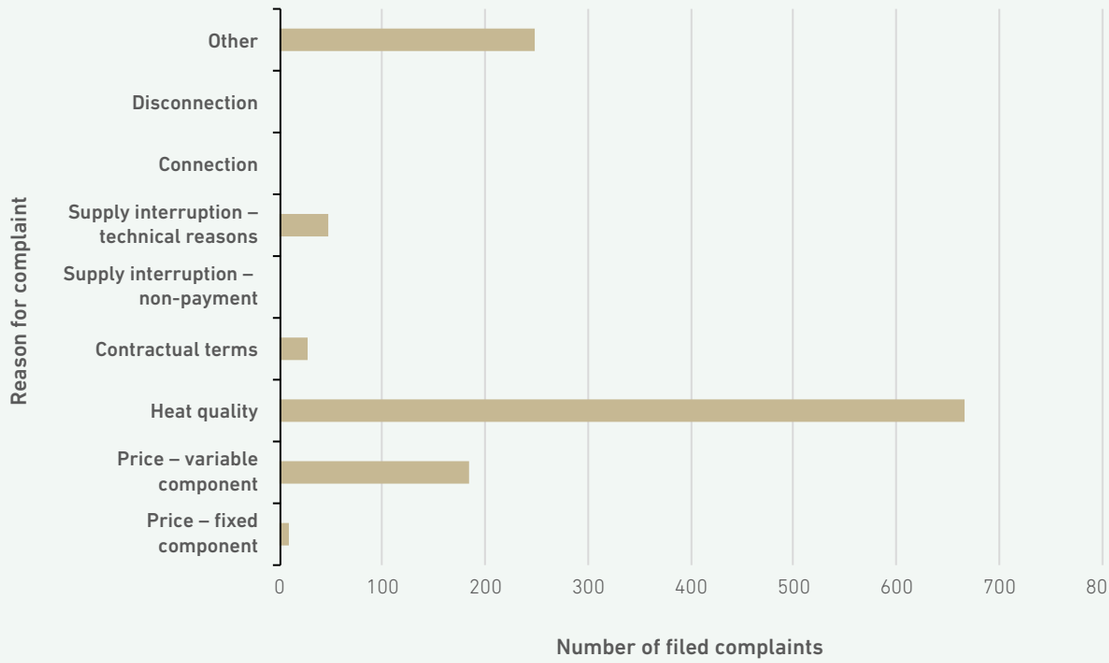
To this end, they should define in their internal acts the criteria for allocating assets and liabilities, costs and expenditures, and revenues, taking into account the management of accounts and the preparation of separate accounts. They must also be disclosed in full in the notes on the financial statements. The adequacy and correctness of the application of judgements should be audited annually by an auditor, who must produce a special report.

Complaints from Consumers to Energy Suppliers Providing Heat from District heating Distribution Systems

Heat distributors must provide heat consumers with a transparent, simple and free internal procedure for handling end-user complaints, and must provide them, in a single place, with the necessary information on their rights, the applicable regulations and the dispute resolution methods available to them in the event of a dispute with the heat distributor.

In 2025, heat distributors received a total of 1,185 complaints, which is slightly more than in the previous year (1,086 complaints). The majority of complaints were related to the quality of heat (667 complaints) and the variable component of the price (184 complaints). The following figure shows the number of complaints lodged in 2025 with energy suppliers providing heat from district heating distribution systems.

FIGURE 286: NUMBER OF COMPLAINTS FILED BY HEAT CONSUMERS



SOURCES: ENERGY AGENCY, HEAT DISTRIBUTORS

Appeals against decisions by heat distributors to grant or refuse consent for connection to the heat distribution system are decided by the mayor. Once a year, local authorities inform the Energy Agency of the number of appeals received against such decisions. In 2025, the Energy Agency did not receive any information regarding appeals lodged against decisions to grant or refuse authorisation for connection.

LIST OF ABBREVIATIONS AND ACRONYMS

AC	Alternating Current
ACER	Agency for the Cooperation of Energy Regulators
ADEX	The Alpine-Adriatic Danube Power Exchange
ADMS	Advanced Distribution Management System
AI	Artificial Intelligence
AIB	Association of Issuing Bodies
AJPES	Agency of the Republic of Slovenia for Public Legal Records and Related Services
AM	Amortization
AMI	Advanced Metering Infrastructure
AMRP	Average Monthly Retail Price
AMS	Advanced Metering System
AMR	Automatic Meter Read
API	Application Program Interface
ARIS	Slovenina Research and Innovation Agency
aRPF	Automatic Frequency Restoration Reserve
A2A	Application to Application
ATC	Available Transfer Capacities
AVK	Slovenian Competition Protection Agency
BaU	Business as Usual
BC	Business consumer
BESS	Battery Energy Storage Systems
BEV	Battery Electric Vehicle
BG	Balance Group
Borzen	Borzen, Market operator
BSP	BSP, Regional Energy Exchange, Southpool
B2B	Business to Business
B2C	Business to Consumer
B2G	Business to Government
CDS	Closed Distribution System
CEEPS	Central Electricity Portal of Slovenia
CEER	Council of European Energy Regulators

CEER CS WS	CEER Cyber Security Workstream
CEGH	Central European Gas Hub AG Vienna
CEGHIX	Central European Gas Hub AG Vienna Index
CEP	Clean Energy Package
CEREMP	Central European Registry for Energy Market Participants
CERT-PL	Computer Emergency Response Team (Poland)
CGM	Common Grid Model
CHP	Cogeneration of heat and power
CIM	Common Information Model (IEC 61970-3XX)
CMT	Case Management Tool
CROPEX	Croatian Power Exchange
CSD	Social Work Centre
CS NCA[172]	National Competent Authority for Cybersecurity
CZP	Cross-zonal Capacity
DA	Day-Ahead
DB	Database
DC	Direct Current
DDoS	Distributed Denial of Service
DS	Distribution System
DSO	Distribution System Operator
DTR	Dynamic Thermal Rating
E	Incentives
EE	Electricity
EAFO	European Alternative Fuels Observatory
ebIX	European forum for energy Business Information eXchange
EC	European Commission
ECII	Provisional Electricity Cybersecurity Impact Index
EDC	Electricity distribution company
EDI	Electronic Data Interchange
EENS	Expected energy non-served
EEX	European Energy Exchange AG, Leipzig
EFET	European Federation of Energy Traders
eIS	Electricity Information System; a business information system designed to support the business processes of electricity companies (distribution, supply, metering, billing, customer management, etc.), developed and maintained by Informatika company.
ENISA	The European Union Agency for Cybersecurity
ENTSO-E	European Network of Transmission System Operators for Electricity
EPOS	A web application for the electronic reporting of data (the revised second-generation EPOS is designated EPOS-G2) by reporting entities that are required to provide data relating to the energy sector in accordance with the Energy Act and secondary legislation.
ERAA	European Resource Adequacy Assesment
ESCO	Energy Service Company
EU	European Union
EUA	European Union Allowance

172 In the scope of Regulation NCCS

EU DSO	EU DSO Entity
EU ETS	EU Emissions Trading System
EV	Electric Vehicle
EVT / SEP	Single Entry Point
EVT/Portal CEEPS	A hub that facilitates the exchange of data between electricity distributors and suppliers, final consumers and their authorised representatives; a central data hub for the exchange of data in the electricity market
EXAA	Energy Exchange Austria
EZ-1	Energy Act, Official Gazette of the Republic of Slovenia, No. 60/19 – uradno prečiščeno besedilo, 65/20, 158/20 – ZURE, 121/21 – ZSROVE, 172/21 – ZOEE, 204/21 – ZOP, 44/22 – ZOTDS in 38/24 – EZ-2
EZ-2	Energy Act, Official Gazette of the Republic of Slovenia, No. 38/24
FB	Flow Based
FC	Final consumers
FCC	Within the G3-PLC standard, this refers to the frequency profile/band for narrowband PLC communication, which complies with the US FCC (Federal Communications Commission) regulations, typically in the range of approximately 154–487 kHz
FCR	Frequency Containment Reserve
FSkar	Acronym in the European energy sector that stands for the Financial Settlement of KΔf (Frequency Control Error), ACE (Area Control Error), and Ramping period
GDPR	General Data Protection Regulation
GJS	Service of general economic interest
GME	Gestore Mercati Energetici, Italian Exchange
GO /HC	Household consumer
HES	Head End System
HHI	Herfindahl-Hirschman Index
HPPP	Hydroelectric power plant
HOPS	Hrvatski operator prijenosnog sustava d.o.o
HSE	HOLDING SLOVENSKE ELEKTRARNE d.o.o.
HT	High tariff
HUPX	Hungarian Power Exchange
ID	Intraday
IDA	Implicity Intraday Auction
IDCC	Intraday Capacity Calculation
IGCC	International Grid Control Cooperation
IOTEE / NEMO	Nominated Electricity Market Operator
IP	Interconnection Point
IPET	Energy Market Data Exchange (IPET Section)
IT	Information Technology (Business Information)
JAO	Joint Allocation Office
KI	Key Indicator
KO /FC	Final consumer
KPI	Key Performance Indicator
LOLE	Loss of Load Expectation
LT	Low tariff
MAIFI	Momentary Average Interruption Frequency Index
MATS	Multiple Auction Trading System

MFA	Multifactor Authentication
mFRR	Manual Frequency Restoration Reserve
MID	Measuring Instruments Directive
MM / DP	Delivery Point
MMRP	Metering-Regulation Station
MNA	Multi-NEMO Arrangements
MOPE	Ministry for environment, climate and energy
MV	Middle voltage
NAREMP	National Register of Market Participants under REMIT
NCA	National Competent Authority for Cyber Security
NCCS	Network Code on Cybersecurity
NC ER	Network Code on Emergency and Restoration
NCUP	National Traffic Management Centre
NECP	National energy and climate plan
NEK / NPP	NUKLEARNA ELEKTRARNA KRŠKO d.o.o./ Nuclear Power Plant
NIS 2	Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive
NOKI	National Cyber Incident Response Plan
NOS BIH	Nezavisni operator sistema u Bosni i Hercegovini
NRA	Nacional Regulatory Authority
OBA	Operational Balancing Agreement
OPSI	Slovenia's Open Data
OT	Operational technology
P	Power
PADS	Steam Distribution Systems
PCI	Projects of Common Interest
P2P	Point-to-point
PDEU	Treaty on the Functioning of the European Union
PHEV	Plug-in hybrid electric vehicles
PLC[173]	Power Line Communication
PM /CP	Charging (recharging) point
POMP / MDPP	Measurement data processing platform
PPA	Power Purchase Agreements
PPE-TOL / TPP	Termoelektrarna Toplarna Ljubljana
PSI / BSP	Balancing Service Provider
Q	Quality of Supply
RDMF	Power and frequency control
RDS / RDA	Regulated return on assets
REMIT	Regulation (EU) No 1227/2011 of the European Parliament and of the Council on wholesale energy market integrity and transparency
REMIT II	Regulation (EU) 2024/1106 of the European Parliament and of the Council of 11 April 2024 amending Regulations (EU) No 1227/2011 and (EU) 2019/942 as regards improving the Union's protection against market manipulation on the wholesale energy market

173 In the context of communication technologies

RES	Renewable Energy Sources
mFRR	Manual Frequency Restoration Reserve
RI	Research and Innovations
RISIG	REMIT Information Security Implementation Group
RN / DP	Development Plan
RO / RF	Regulatory Framework
RPF	Frequency restoration reserve
RR	Replacement Reserve
RTP /DS	Distribution Station
S / I	Incentives
SAFA	Synchronous Area Framework Agreement for Continental Europe
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
MPO / SBC	
SCADA	Supervisory Control and Data Acquisition
SDAC	Single Day-Ahead Coupling
SDO / DHS	District heating system
SDV / OMC	Operating and maintenance costs
SPP	Solar power plant
SEEI	Costs of network losses
SEEPEX	The SEEPEX a.d. Beograd is a licensed Market operator for an organized electricity market/power exchange established in the form of partnership between A.D. EMS and EPEX SPOT as a joint stock company
SEVF	Slovenian Energy Security Forum
SHB	Slovenia, Croatia, Bosnia and Herzegovina (block SHB)
SI-CERT	Slovenian Computer Emergency Response Team
SIDC	Single IntraDay Coupling
SIPX	Slovenian Price Index
SKM / PPS	Power Purchase Standard
SO GL	System Operation Guideline
SONDSEE	System operating instructions for the electricity distribution system
SS /AS	System services / Ancillary services
SSP	Distribution operator flexibility service costs
SSSC	Static Synchronous Series Compensator
SU	System users
SUIV	Information Security Management System
SURS /STAT	Statistical Office of the Republic of Slovenia
TPP	Thermoelectric Power Plant
TEN-T	Trans-European Transport Network
TEŠ	TERMOELEKTRARNA ŠOŠTANJ d.o.o.
TE-TOL	Termoelektrarna Toplarna Ljubljana
TP	Transformation station
TSO	Transmission System Operator
URE	Efficient use of energy

URSIV	Government Information Security Office
US /SU	System user
VPN	Virtual Private Network
ZGD-1	Companies Act
ZIAG	The Act on infrastructure for alternative fuels and promotion of the transition to alternative fuels in transport
ZNUOPOVO	The Act on Emergency Measures to Mitigate the Consequences of High Network Charges for Household Customers
ZOEE	Electricity Supply Act
ZOEE-A	Act Amending the Electricity Supply Act
ZOP	Gas Supply Act
ZOTDS	Act on the Heat Supply from Distribution Systems
ZPOmK-2	Act on the Prevention of Restrictions on Competition
ZSROVE	Act on the Promotion of the Use of Renewable Energy Sources
ZSROVE-1	Act on the Promotion of the Use of Renewable Energy Sources
ZUOKPOE	Act on Measures to Manage Crisis Situations in the Field of Energy Supply
ZURE	Act on Energy Efficiency

LIST OF TABLES

TABLE 1: Electricity delivered to the transmission and distribution systems in the 2023–2025 period, in GWh ... 11

TABLE 2: Primary energy sources delivered to the transmission and distribution systems in the 2023–2025 period ... 19

TABLE 3: Installed capacities of the generation facilities and the quantity of electricity produced ... 22

TABLE 4: Primary energy sources for electricity generation in Slovenia in the 2023–2025 period ... 23

TABLE 5: Electricity consumption in the 2023–2025 period ... 25

TABLE 6: Consumption, generation and coverage of demand with domestic generation in the 2021–2025 period ... 27

TABLE 7: Number of final consumers of electricity by type of consumption in the 2023–2025 period ... 30

TABLE 8: Number of final consumers of electricity by type of connection in the 2023–2025 period 31

TABLE 9: Share of RES in gross final energy consumption ... 32

TABLE 10: Number of generation facilities in the support scheme and the dynamics of their inclusion in the 2010–2025 ... 38

TABLE 11: Share of the installed capacity and electricity generation included in the support scheme ... 40

TABLE 12: Range of the commercial quality indicators in the 2023–2025 period ... 52

TABLE 13: Number and shares of justified commercial quality complaints in the 2023–2025 period 53

TABLE 14: Investments in smart grids in the electricity distribution system ... 58

TABLE 15: Transmission and distribution electricity infrastructure in Slovenia at the end of 2025 ... 61

TABLE 16: Actual revenues in 2025 by borders ... 106

TABLE 17: Comparsion of achieved day-ahead prices (compared to share of hours) between exhanges ... 112

TABLE 18: FRR prices and share in Slovenia leased FRR in 2025 ... 116

TABLE 19: Auctions results for aFRR ... 117

TABLE 20: Auctions results for mFRR ... 118

TABLE 21: Costs of ancillary services in 2025 ... 118

TABLE 22: The aFRR capping factor, which is set according to SIPXh and is valid to 30 September 2025 ... 120

TABLE 23: The aFRR capping factor, which is set according to SIPXh and is valid from 1 October 2025 ... 121

TABLE 24: Comparison of the average selling price of electricity for which producers are eligible for support with the average annual base price of on the BSP during the 2018–2025 period ... 124

TABLE 25: Average, highest and lowest values of price deviations for C and SIPX in settlement intervals ... 143

TABLE 26: Electricity Price Regulation Measures ... 146

TABLE 27: Market shares and HHI of suppliers to all final consumers ... 179

TABLE 28: Market shares and HHI of suppliers to business consumers 180
TABLE 29: Market shares and HHI of suppliers to household consumers 182
TABLE 30: Number and percentage of consumers who did not switch supplier in the 2023–2025 period 190
TABLE 31: Selected key performance indicators related to this issue 196
TABLE 32: Changes to the generation facilities in the transmission system by 2034 218
TABLE 33: Total transferred quantities of gas and consumption by gas consumers according to the type of consumption during the 2021–2025 period 226
TABLE 34: Number of consumers according to consumption type in 2024 and 2025 226
TABLE 35: Revenues and expenses of the TSO on the Trading Platform, for the provision of the balancing services, and for the settlement of daily imbalances, average selling/purchase prices 243
TABLE 36: Connection and maintenance work parameters in the 2023–2025 period 251
TABLE 37: Number of successful firm capacity auctions in 2025 260
TABLE 38: Market shares and the HHI of the wholesale gas market 271
TABLE 39: Market shares and HHI of suppliers to all final consumers in the gas retail market in 2025 283
TABLE 40: Market shares and HHI of suppliers to business consumers in the gas retail market 285
TABLE 41: Market shares and HHI of suppliers to household consumers in the gas retail market 286
TABLE 42: Final consumers' disconnections by disconnection procedure 304
TABLE 43: Energy savings by individual measures in the 2015–2025 period 321
TABLE 44: Energy savings in the Eco Fund programme for improving energy efficiency in the 2015–2025 period 323
TABLE 45: Energy savings by measures in the 2018–2025 period, partly financed by Eco Fund grants 323

LIST OF FIGURES

FIGURE 1: The balance of electricity inputs and outputs in the transmission and distribution systems in 2025 ... 12
FIGURE 2: Monthly variation of electricity generation in large power plants connected to the transmission system ... 14
FIGURE 3: Daily variation of electricity generation and input into the transmission system ... 15
FIGURE 4: Monthly delivery of electricity from the transmission system in 2024 and 2025, also showing monthly deviations ... 15
FIGURE 5: Physical electricity flows at the borders with neighbouring countries and the net sum of physical flows ... 16
FIGURE 6: Physical electricity flows across the borders with neighbouring countries ... 17
FIGURE 7: The average daily profile of electricity generation and delivery from the transmission system in 2024 and 2025 ... 18
FIGURE 8: Electricity delivered from the generation facilities to the transmission and distribution systems in the 2021–2025 period ... 19
FIGURE 9: Electricity losses in the transmission system, distribution system, and closed distribution systems, and the estimated reduction of losses in the distribution system during the 2016–2025 period ... 20
FIGURE 10: Shares of losses for the transmission system, distribution system, and distribution companies in the 2016–2025 period ... 21
FIGURE 11: Electricity consumption in the 2021–2025 period ... 25
FIGURE 12: Electricity consumption, delivery, and average consumption of household consumers during the 2023–2025 period ... 26
FIGURE 13: Consumption, generation and coverage of demand with domestic generation in the 2021–2025 period ... 28
FIGURE 14: Number of household consumers in the 2021–2025 period ... 29
FIGURE 15: Number of business consumers in the distribution system by voltage level in the 2021–2025 period ... 29
FIGURE 16: RES shares achieved by EU countries ... 33
FIGURE 17: RES shares in the electricity sector in the 2010–2024 period, an estimate for 2025, and 2025 target from NECP ... 34
FIGURE 18: Electricity generation from RES in the 2005 base year and in the 2010–2025 ... 35
FIGURE 19: Number and nominal capacity of the projects for RES and CHP production facilities that applied and were confirmed and carried out in all the open calls ... 37
FIGURE 20: The total rated electrical capacity of the generation facilities included in the support scheme in the 2011–2025 period ... 39
FIGURE 21: Electricity generation eligible for support in the 2010–2025 period ... 40
FIGURE 22: Value of support pay-outs in the 2010–2025 period ... 41
FIGURE 23: Number and installed capacity of renewable self-consumption systems in the 2016–2025 period ... 42
FIGURE 24: Number of installations generating renewable electricity for self-consumption connected to MV/LV substations ... 43
FIGURE 25: Number of renewable self-consumption systems in the 2016–2025 period by generation sources ... 44

FIGURE 26: Estimated electricity generation from self-consumption systems in 2025 by month and technology ... 44
FIGURE 27: Reserve Activation Procedures ... 46
FIGURE 28: SAIDI for unplanned long-term interruptions, classified by causes, in the 2021–2025 period ... 48
FIGURE 29: SAIFI for unplanned long-term interruptions, classified by causes, in the 2021–2025 period ... 48
FIGURE 30: MAIFI in the 2021–2025 period ... 49
FIGURE 31: SAIDI for all long-term interruptions, classified by causes, in the 2021–2025 period ... 49
FIGURE 32: SAIFI for all long-term interruptions, classified by causes, in the 2021–2025 period ... 50
FIGURE 33: Incentive for regulation based on quality of supply in the 2021–2025 period ... 51
FIGURE 34: The overall voltage quality parameter by individual voltage level in the distribution system over the 2021–2025 period ... 54
FIGURE 35: Number of complaints regarding voltage quality by distribution companies and in Slovenia in the 2021–2025 period ... 55
FIGURE 36: Share of justified and unjustified voltage quality complaints in the 2021–2025 period ... 55
FIGURE 37: Assessment of investment plans from the development plans of electricity operators for the period 2025–2034 and comparison with the new development plan for the 2023–2032 period ... 57
FIGURE 38: Comparison of the amounts in the development and investment plans for the electricity distribution system along with the realisation ... 58
FIGURE 39: Transmission system operator and distribution system operator investments for the 2021–2025 period ... 59
FIGURE 40: Growth in the share of underground distribution lines in the 2021–2025 period and the projection for 2030 ... 60
FIGURE 41: Share of underground distribution lines in electricity distribution companies ... 60
FIGURE 42: High-level architecture of the existing AMS ... 62
FIGURE 43: Share of metering devices with remote reading capabilities and 15-minute resolution (including AMR) ... 63
FIGURE 44: Development of the use of parallel local access to near real-time metering data in 2025 64
FIGURE 45: Trend of deployment of advanced metering devices in the 2021–2025 period ... 64
FIGURE 46: Trend in the Share of Points of Delivery (PODs) with Assured 15-Minute Metering Data Quality at M-1 Level ... 65
FIGURE 47: A conceptual representation of the relationships between readiness indicators (KI_P) and key readiness indicators (KPI_P), as well as effectiveness indicators (KI_E) and key effectiveness indicators (KPI_E) ... 67
FIGURE 48: Conceptual representation of feedback control based on KPIs ... 68
FIGURE 49: Overview of KPI values achieved for TSO, DSO, and EDCs readiness by individual topic areas ... 69
FIGURE 50: Overview of the weighted KPI values achieved for the effectiveness of TSO, DSO, and EDCs by individual topic areas ... 70
FIGURE 51: Key performance indicator values by individual companies ... 71
FIGURE 52: The value of the deviation from the overarching performance indicator for investments in smart grids and the deviation in readiness from the minimum standards for ensuring the quality of data and data services ... 71
FIGURE 53: Financial incentives based on the efficiency of smart grid investments ... 72
FIGURE 54: Structure of TSO' investments in 2024 by smart grid functions ... 73

FIGURE 55: Structure of distribution investment realisation in 2024, divided by smart grid functions 74
FIGURE 56: Overview of the carrying amount of activated smart grid assets as of December 31 of each year ... 75
FIGURE 57: Overview of the number of applications for the qualification of projects under the research and innovation incentive scheme ... 76
FIGURE 58: Structure of the main topics of qualified projects under the research and innovation incentive scheme in 2025 ... 76
FIGURE 59: Utilization of the RI scheme by individual companies in relation to the planned values from the regulatory framework and the non-repayable funds obtained from other sources ... 77
FIGURE 60: Share of recognized RI costs by individual companies in the regulatory framework deviation procedure in relation to the capped value ... 78
FIGURE 61: Normalised distribution of activities and deviations in the volume of activities by public service companies by domain ... 83
FIGURE 62: The most important sub-areas of additional activities by public service companies by sub-area according to ISO 27002 ... 84
FIGURE 63: Normalised distribution and deviations in the volume of ELES activities by ISO 27002 area ... 85
FIGURE 64: Normalised distribution of EDCs aggregated activities by ISO 27002 areas ... 85
FIGURE 65: Normalised comparison of the combined volume and trends in EDCs activities ... 86
FIGURE 66: Normalised comparison of the total volume and trends of activities by the Plinovodi company ... 87
FIGURE 67: Cyber incidents in the energy sector and the short-term trend ... 88
FIGURE 68: Long-term projection (exponential – worst-case – approximation) of the growth of incidents in the sector ... 89
FIGURE 69: The structure of the eligible costs of the activities of the transmission and distribution system operator for the 2024–2028 regulatory period ... 93
FIGURE 70: The structure of the eligible costs of the activities of the transmission and distribution system operator for the individual year of the 2024–2028 regulatory period 93
FIGURE 71: The structure of the eligible costs of the activities of the transmission and distribution system operator in the 2024 regulatory period ... 94
FIGURE 72: Structure of the planned eligible costs of the activities of the transmission and distribution system operator in the 2025 regulatory period by individual company ... 95
FIGURE 73: Time blocks in 2025 ... 97
FIGURE 74: Distributions of the annual shares of reverse energy by individual HV/MV transformers for the 2021–2025 period ... 100
FIGURE 75: Annual trends in the share of reverse energy flow by electricity distribution company for the 2021–2025 period ... 100
FIGURE 76: Development of reverse energy flows from the distribution network to the transmission network over the 2021–2025 period ... 101
FIGURE 77: Geographical representation of the distribution of by MV/LV transformer substation (2024 measurements) ... 102
FIGURE 78: Development of the total network charge for the transmission and distribution systems for selected typical household consumers by regulatory periods ... 103
FIGURE 79: Development of the total network charge for the transmission and distribution systems for selected typical business consumers by regulatory periods ... 104
FIGURE 80: Trends in the average base price in the day-ahead market in Slovenia and in foreign exchanges in the 2021–2025 period ... 108

FIGURE 81: Trends in the average peak price in the day-ahead market in Slovenia and in foreign exchanges in the 2021–2025 period 108
FIGURE 82: Trends in the base price on the day-ahead market in Slovenia and on the neighbouring exchanges 109
FIGURE 83: Trends in the peak price on the day-ahead market in Slovenia and on the neighbouring exchanges 110
FIGURE 84: Analysis of negative prices on the BSP market for day-ahead (DA) 111
FIGURE 85: Number of hours with negative prices on the Slovenian and German day-ahead exchanges (DA) in the 2021–2025 period 112
FIGURE 86: Intraday trading volume and price ranges 113
FIGURE 87: Trends in hourly product prices on the BSP ID Market 114
FIGURE 88: Price trends for the 15-minute product on the BSP ID market 114
FIGURE 89: The volume of negative prices in the intraday market 115
FIGURE 90: Shares of activated FRR in 2025 116
FIGURE 91: Trading volume and price ranges on the market operator's balancing market 119
FIGURE 92: Trend in bid prices and activated energy aFRR 120
FIGURE 93: Correlation between the range of minimum prices of the realised/offered aFRR– and the maximum prices of the realised/offered aFRR+, the average price of the day-ahead trading and the range of the minimum and maximum price of the day-ahead trading 122
FIGURE 94: Price trends of activated mFRR energy 123
FIGURE 95: Price trends of allowances (EUA) in the EEX exchange for 2025 125
FIGURE 96: Registration of market participants in Slovenia in the 2021–2025 period 127
FIGURE 97: Number of violations based on the types of violations alleged against market participants in proceedings involving the Energy Agency 128
FIGURE 98: REMIT investigation status in 2025 128
FIGURE 99: Stages of active REMIT cases in 2025 129
FIGURE 100: Structure of the volume of registered closed contracts 131
FIGURE 101: Amount of electricity sold or purchased through closed contracts per month 131
FIGURE 102: Annual volume of closed contracts, operational forecasts and number of closed contracts and operating forecasts in the 2021–2025 period 132
FIGURE 103: Volume of electricity traded in 2025 133
FIGURE 104: Intraday trading volume and bids on the intraday power exchange for the 2021–2025 period 135
FIGURE 105: Trading volume of all products on market operator balancing market in the 2021–2025 period 136
FIGURE 106: Actual volumes of aFRR and mFRR 137
FIGURE 107: Activated positive and negative energy by services in the 2022–2025 period 138
FIGURE 108: Absolute values of activated balancing energy in MWh 139
FIGURE 109: Market share and number of traders in the Slovenian power exchange according to traded volume 140
FIGURE 110: Trends of the churn ratio per year in the 2021–2025 period 141
FIGURE 111: Average daily prices of C and SIPX 142
FIGURE 112: Deviations of balance groups in the 2021–2025 period 143
FIGURE 113: Daily imbalances in the Slovenian network in 2025 144

FIGURE 114: Trend in the total positive and negative imbalances in the 2021–2025 period 145
FIGURE 115: Trends in the number of suppliers in the Slovenian retail market in the 2021–2025 period 146
FIGURE 116: RPI in the 2021–2025 period 147
FIGURE 117: Price trends of offers from 100% RES, 100% nuclear energy, and other and other energy sources for a typical household consumer in the 2023–2025 period 148
FIGURE 118: Trends of the final electricity supply price in Slovenia for a typical household consumer in the 2021–2025 period 149
FIGURE 119: Trends of the final electricity supply price in Slovenia for typical business consumers in the 2021–2025 period 151
FIGURE 120: Comparison of the final electricity supply prices for a typical household consumer with an annual consumption of between 2,500 kWh and 5,000 kWh (DC) in the EU Member States and Slovenia in the second half of 2025 in EUR/MWh 152
FIGURE 121: Comparison of the final electricity supply prices for a typical business consumer with an annual consumption of between 500 MWh and 2,000 MWh (IC) in the EU Member States and Slovenia in the second half of 2025 in EUR/MWh 153
FIGURE 122: Structure of the electricity price for a typical household consumer (DC) across the EU countries (in the embedded diagram, the darker colour represents the final price) 154
FIGURE 123: Comparison of shares in the final price of the electricity supply for a typical household consumer in EU Member States 155
FIGURE 124: Inter-annual changes in the final price and electricity prices for a typical household consumer in EU countries 156
FIGURE 125: Total electricity supply price for a typical household consumer in the EU Member States according to their purchasing power standard 157
FIGURE 126: Margin and responsiveness of the energy component of retail prices 158
FIGURE 127: Number of contracts concluded based on dynamic pricing and the number of suppliers with whom customers concluded these contracts in the 2022–2025 period 160
FIGURE 128: Energy supplied to household and small business consumers in GWh during the 2022–2025 period 161
FIGURE 129: Supplied energy to business consumers in GWh during the 2022–2025 period 161
FIGURE 130: Shares of electricity sold under dynamic pricing contracts by supplier in 2025 162
FIGURE 131: Shares of electricity sold under fixed-price contracts for a specified term, by supplier, in 2025 163
FIGURE 132: Distribution of day-ahead wholesale hourly prices on the Slovenian energy exchange BSP Southpool 164
FIGURE 133: Price trends and price volatility on the Slovenian energy exchange 165
FIGURE 134: Consumption and generation profile of the selected household consumer 166
FIGURE 135: Comparison of contracted capacities including and excluding BESS 167
FIGURE 136: Comparison of annual electricity supply cost with net-metering, including and excluding BESS 168
FIGURE 137: Tariff items for the intake and delivery of electricity under the single-rate and active supply models 169
FIGURE 138: Comparison of annual electricity supply costs under different supply models, excluding and including BESS 170
FIGURE 139: Analysis of the use of cost comparator over the past two years 175
FIGURE 140: Cost comparison tool usage trends over the past two years 176

FIGURE 141: Trends in the use of the URO.si web portal over the past two years 177
FIGURE 142: Changes in the market shares of suppliers to all final consumers in 2025 compared to 2024 180
FIGURE 143: Changes in market shares of suppliers to business consumers in 2025 compared to 2024 181
FIGURE 144: Comparison of the market shares of suppliers to business consumers in the 2021–2025 period 182
FIGURE 145: Changes in markets shares of suppliers to household consumers 183
FIGURE 146: Comparison of the market shares of suppliers to household consumers in the 2021–2025 period 184
FIGURE 147: HHI evolution in retail markets in the 2021–2025 period 185
FIGURE 148: Concentration (CR3) in the retail markets and number of suppliers with over 5% of market share in the 2021–2025 period 185
FIGURE 149: Trends in the number of supplier switches in the 2021–2025 period 187
FIGURE 150: Dynamics of the number of supplier switches in 2025 by consumption type 188
FIGURE 151: Volumes of switched electricity by consumption type 189
FIGURE 152: Share of supplier switches made by household and business consumers in the areas of individual distribution companies 190
FIGURE 153: Potential annual saving by switching supplier based on the difference between the most expensive and the cheapest and between the most expensive and the average supply offer in the market 191
FIGURE 154: Trends in the number of registered metering points on the mojelektro.si portal following the implementation of the tariff reform 195
FIGURE 155: Trend in the number of active connections to real-time metering data via the local I1 interface on the metering device 196
FIGURE 156: Trends of the selected key indicators in the AMS 197
FIGURE 157: Indicative shares of different types of active consumption 200
FIGURE 158: Structure of consumers (C) in the aggregation, where storage and generation devices may also be located connected behind the delivery point of the user 202
FIGURE 159: The number of system users in portfolios designed for various needs, with each user potentially being part of multiple portfolios 202
FIGURE 160: Estimated shares of foreign sources' flexible energy by aggregators and types of system users 203
FIGURE 161: Structure of aggregated energy trading by individual markets or services and corresponding shares 204
FIGURE 162: Market shares of traded energy according to the ownership of resources 204
FIGURE 163: Structure of the sources of traded energy from aggregation in terms of the 255 GWh total 205
FIGURE 164: Market shares of traded energy according to the connection between the aggregator and the supplier 206
FIGURE 165: Traded capacity by individual market according to the aggregator's relationship with the supplier 206
FIGURE 166: Number of communities by type 207
FIGURE 167: Structure of final consumers (FC), included in communities 208
FIGURE 168: A comparison of aggregated electricity supplied to consumers in the communities, electricity purchased from communities, and electricity taken from the communities free of charge 209

FIGURE 169: Structure of system users in the exchange of electricity between active customers within the same balance group 210
FIGURE 170: Number of registered electric vehicles in Slovenia 211
FIGURE 171: Structure of the number of recharging points (RP) for electric vehicles in Slovenia by maximum charging power (P) 213
FIGURE 172: Structure of the number of recharging points for electric vehicles in various countries by maximum charging power (P) 214
FIGURE 173: Structure of electricity supply for electric mobility purposes 215
FIGURE 174: Electricity consumption and generation in the Slovenian transmission system without taking into account losses in the 2021–2025 period 217
FIGURE 175: Installed capacities of generation facilities, capacities available for the Slovenian market and peak demand, and the ratio between the available capacity and peak load in the transmission system in the 2021–2025 period 219
FIGURE 176: Unsupplied energy on the transmission system in 2025, by cause 220
FIGURE 177: Basic data on the quantities of natural gas transferred, distributed and consumed [GWh] 225
FIGURE 178: Gas transmission system and transferred quantities of gas at the entry and exit points in 2025 227
FIGURE 179: Quantities of gas transferred in the 2021–2025 period 228
FIGURE 180: Trend in gas consumption by Slovenian consumers and gas quantities transmitted to other transmission systems over the past 20 years 228
FIGURE 181: Total and average consumption per consumer's delivery point in the transmission system and numbers of final consumers', distribution system operators' and closed distribution system operators' delivery points in the natural gas transmission system in the 2016–2025 period 229
FIGURE 182: Self-consumption, calculated based on transferred gas quantities in the 2021–2025 period 230
FIGURE 183: Self-consumption ratio: compressor stations vs. metering and regulation stations during the 2022–2025 period 230
FIGURE 184: Gas distribution systems by delivered quantities 231
FIGURE 185: Consumption in the distribution system and CDSs by the type of consumers and the number of consumers in the 2021–2025 period 233
FIGURE 186: Length of the distribution networks and CDSs, and the number of active consumers in the 2021–2025 period 234
FIGURE 187: Share and number of new consumers in the distribution systems in the 2021–2025 period 235
FIGURE 188: Share of consumed natural gas from the distribution systems by household and non-household consumers in the 2021–2025 period 235
FIGURE 189: Total and average consumption of household consumers in the distribution systems in the 2016–2025 period 236
FIGURE 190: Total and average consumption by non-household consumers in the distribution systems in the 2016–2025 period 237
FIGURE 191: Distributed quantities of other energy gases by distributors and the type of gas 238
FIGURE 192: Market shares of distributors of other energy gases (energy value of volumes sold) 239
FIGURE 193: Market shares of distributors of other energy gases (number of consumers) 239
FIGURE 194: Aggregated net imbalances of the balancing group leaders in the 2021–2025 period 241
FIGURE 195: Gas purchases and sales by the TSO on the trading platform, aggregated net imbalances of balancing group leaders, and exit gas volumes in Slovenia in 2025 242

FIGURE 196: Average gas prices for imbalances in the 2020–2025 period 242
FIGURE 197: Revenues and expenses of TSOs on the balancing market in 2025 244
FIGURE 198: System differences due to metering uncertainties and their share of the quantities transmitted through the transmission system over the 2021–2025 period 244
FIGURE 199: Monthly trends in the sum of system differences (SD_L), self-consumption, and OBA billing in 2025 245
FIGURE 200: Trend in the development of the secondary transmission capacity market in the 2017–2025 period 246
FIGURE 201: Investments in the gas transmission system in the 2005–2025 period 247
FIGURE 202: Trend in the construction, renovation and decommissioning of gas distribution pipelines over the 2021–2025 period 248
FIGURE 203: Costs of investments in gas distribution pipelines in the 2021–2025 period 248
FIGURE 204: Length of the new distribution networks in the 2021–2025 period 249
FIGURE 205: Comparison of the planned eligible costs of system operators in the regulatory periods 2022–2024 and 2025–2027 253
FIGURE 206: The structure of the planned eligible costs of the system operators in the 2025–2027 period 254
FIGURE 207: The structure of the planned eligible costs of system operators for 2025 254
FIGURE 208: Movement of the network charge tariffs for the entry and exit points of the transmission system during the 2022–2026 period 255
FIGURE 209: Distribution network charge movement for small household consumers D1 (3,765 kWh) during the 2021–2025 period 257
FIGURE 210: Distribution network charge movement for medium-sized household consumers – D2 (10 MWh) during the 2021–2025 period 257
FIGURE 211: Distribution network charge movement for medium-sized household consumers – D2 (32 MWh) during the 2021–2025 period 258
FIGURE 212: Distribution network charge movement for large household consumers – D3 (215 MWh) during the 2021–2025 period 258
FIGURE 213: Distribution network charge movement for medium-sized industrial consumers – I3 (8,608 MWh) during the 2021–2025 period 259
FIGURE 214: Leased transmission capacities at auctions in 2025 260
FIGURE 215: Successful auctions of capacity during the 2021–2025 period 261
FIGURE 216: Dynamics of the daily transferred quantities of gas, technical capacity, and allocated firm and interruptible capacity at the Ceršak entry point in the 2023–2025 period 262
FIGURE 217: Dynamics of the daily transferred quantities of gas, technical capacity, and allocated firm and interruptible capacity at the Šempter entry point during the 2023–2025 period 263
FIGURE 218: Dynamics of the daily transferred quantities of gas, technical capacity, and allocated firm capacity at the Šempeter exit point during the 2023–2025 period 263
FIGURE 219: Dynamics of the daily transferred quantities of gas, technical capacity, and allocated firm and interruptible capacity at the Šempter entry point during the 2023–2025 period 264
FIGURE 220: Dynamics of the daily transferred quantities of gas, technical capacity, and allocated firm capacity at the Šempeter exit point during the 2023–2025 period 265
FIGURE 221: Maximum daily and average monthly utilisation of the capacity of the Ceršak border entry point during the 2023–2025 period 266

FIGURE 222: Maximum daily and average monthly utilisation of the capacity of the Rogatec border entry point during the 2023–2025 period 266
FIGURE 223: Maximum daily and average monthly utilisation of the capacity of the Šempeter border entry point during the 2023–2025 period 267
FIGURE 224: Average daily gas transport at entry points to Slovenia during the 2021–2025 268
FIGURE 225: Average leased capacity at relevant points during the 2021–2025 period 268
FIGURE 226: Sources of gas during the 2021–2025 period by place of purchase 269
FIGURE 227: Structure of imported gas in relation to the maturity of contracts 270
FIGURE 228: Wholesale gas market concentration 271
FIGURE 229: Trading in the virtual point (free market) in the 2021–2025 period 272
FIGURE 230: Trading in virtual point by trading products in 2025 273
FIGURE 231: Trading on a trading platform (balancing market) in the 2021–2025 period 274
FIGURE 232: Trading on trading platform in 2025 274
FIGURE 233: Weighted average price on the trading platform and values of the CEGHIX in the 2023–2025 period 275
FIGURE 234: Number of suppliers on the retail market in Slovenia during the 2021–2025 period 276
FIGURE 235: Retail price index and some typical gas prices for household consumers without the network charge, duties and VAT in the 2022–2025 period 277
FIGURE 236: Final gas prices for household consumers in Slovenia with all taxes and duties in the 2022–2025 period 278
FIGURE 237: Final prices of gas for typical D2 household consumers, including taxes and levies, in Slovenia and in neighbouring countries in the 2023–2025 period 279
FIGURE 238: Final prices of gas for business consumers in Slovenia, including taxes and levies, in the 2022–2025 period 280
FIGURE 239: Final prices of gas for typical I3 business consumer, including taxes and levies, in Slovenia and in neighbouring countries in the 2023–2025 period 280
FIGURE 240: Structure of the final gas price for household consumers in the 2023–2025 period 281
FIGURE 241: Structure of the final gas prices for business consumers in 2023–2025 period 282
FIGURE 242: Changes in shares of the final consumers market in 2025 in comparison t 2024 284
FIGURE 243: Comparison of the suppliers' market shares to business consumers in 2021 and 2025. 286
FIGURE 244: Comparison of the suppliers' market shares to household consumers in 2021 and 2025 287
FIGURE 245: HHI in the retail markets during the 2023–2025 period 288
FIGURE 246: Level of CR3 concentration and the number of suppliers with a market share above 5% during the 2023–2025 period 289
FIGURE 247: Number of supplier switches in the 2021–2025 period 290
FIGURE 248: Quantities of exchanged gas with respect to the type of consumption 291
FIGURE 249: Dynamics of the number of supplier switches depending on the type of consumption 291
FIGURE 250: Potential annual savings from switching suppliers for a typical household consumer during the 2022–2025 period 292
FIGURE 251: Last resort supply due to supplier-related reasons by month in 2025 300
FIGURE 252: Number of consumers supplied under emergency supply terms at their own request in each month of 2025 301
FIGURE 253: Comparison of requests received and granted for emergency supply 303
FIGURE 254: Comparison of the number of disconnections of final consumers 304

FIGURE 255: Comparison of individual disconnection procedures according to consumer groups for electricity and gas ... 305
FIGURE 256: Number of cancellations of electricity supply contracts by reason ... 306
FIGURE 257: Number of cancellations of gas supply contracts by reason ... 306
FIGURE 258: Consumers complaints against electricity suppliers by reasons ... 308
FIGURE 259: Consumer complaints against gas suppliers by reasons ... 308
FIGURE 260: Suppliers' decisions on the eligibility of complaints by household consumers in the 2021–2025 period ... 309
FIGURE 261: Number of consumer complaints to operators, by subject ... 310
FIGURE 262: Number of complaints handled by operators ... 311
FIGURE 263: Energy Agency decisions in disputes and appeals in 2021–2025 period ... 312
FIGURE 264: Energy savings in the 2015–2025 period ... 317
FIGURE 265: Comparison of final energy consumption or sales between the data reported by obligated parties and the Statistical Office of the Republic of Slovenia (SURS) for the 2014–2024 period, and of the targeted and achieved energy savings by obligated parties for the 2015–2025 period ... 318
FIGURE 266: Targeted and achieved energy savings by the type of energy supplier ... 319
FIGURE 267: Share of energy savings by individual measures ... 320
FIGURE 268: Energy savings by sectors in 2025 ... 322
FIGURE 269: Energy audits in large companies ... 325
FIGURE 270: Comparison of the fulfilment of obligations by large companies between 2019 and 2025 ... 326
FIGURE 271: Comparison of the fulfilment of obligations by large companies in 2019 and 2025 ... 326
FIGURE 272: Basic data on produced and distributed heat for consumers of heat connected to the distribution systems ... 331
FIGURE 273: Heat consumption by the type of consumer and their number ... 332
FIGURE 274: Structure of the primary energy products for heat production ... 333
FIGURE 275: Structure of the primary energy products in the 2021–2025 period ... 334
FIGURE 276: Structure of the primary energy products for heat production for distribution systems ... 335
FIGURE 277: Heat consumption and the number of household consumers at the largest heat distributors ... 336
FIGURE 278: Heat consumption and the number of business and other consumers at the largest heat distributors ... 337
FIGURE 279: Heat consumption and the number of industrial consumers at the five largest distributors ... 338
FIGURE 280: Quantities of distributed heat by Slovenian municipalities ... 339
FIGURE 281: Length of the heat distribution systems in Slovenian municipalities ... 340
FIGURE 282: Length of the heat distribution systems in Slovenian municipalities ... 340
FIGURE 283: Average annual distribution losses and heat supplied to consumers on the largest distribution systems, ranked by annual heat supply quantities ... 341
FIGURE 284: Consumption density in the largest distribution systems, measured by annual heat supply quantities ... 341
FIGURE 285: Changes in the average retail price of heat for household consumers in individual Slovenian municipalities in the 2023–2025 period ... 343
FIGURE 286: Number of complaints filed by heat consumers ... 345

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