



REPORT ON  
THE ENERGY SECTOR  
IN SLOVENIA FOR 2014



Agencija za energijo

1	FOREWORD BY THE DIRECTOR	4
2	DEVELOPMENT OF THE ENERGY MARKET AND THE MAIN ACTIVITIES OF THE REGULATOR	6
2.1	The basic details regarding the markets for electricity and natural gas in Slovenia	7
2.2	The development in the electricity market	8
2.3	The development in the natural gas market	9
2.4	The main areas that involved the regulator	10
3	<b>ELECTRICITY</b>	<b>12</b>
3.1	<b>General information</b>	<b>13</b>
3.2	<b>The regulation and regulated activities</b>	<b>17</b>
3.2.1	General information	17
3.2.2	The unbundling of services	18
3.2.3	The provision of technical services	18
3.2.3.1	The provision of ancillary services	18
3.2.3.2	The balancing	20
3.2.3.3	Safety and Reliability Standards and Quality of Supply	23
3.2.3.4	The long-term development plan of the electricity network	30
3.2.4	The network charges for the transmission and distribution networks	32
3.2.4.1	Setting the network charge	32
3.2.4.2	The charging for the network charge	33
3.2.5	The business operation of the regulated companies	34
3.2.5.1	The business operation of the electricity TSO	34
3.2.5.2	The business operation of the electricity DSO	35
3.2.5.3	The business operation of the electricity distribution companies	35
3.2.5.4	Business operation of the market operator	36
3.2.6	Cross-border transmission capacity	36
3.2.6.1	Access to the cross-border transmission capacity	36
3.2.6.2	Cooperation between regulators with regard to CBTC	38
3.2.7	Compliance	39
3.3	<b>Market-based activities</b>	<b>40</b>
3.3.1	Organized electricity market in Slovenia	40
3.3.2	Production and the wholesale market	40
3.3.2.1	Proizvodna podjetja	40
3.3.2.2	The degree of competitiveness of the production companies	43
3.3.2.3	The business operations of production companies	46
3.3.2.4	The prices and the extent of the trade at the electricity exchange	48
3.3.2.5	Renewable energy sources and cogeneration of useful heat and power	49
3.3.2.6	Emission allowances	54
3.3.3	Supply and the retail market	55
3.3.3.1	Electricity supply	55
3.3.3.2	The degree of competition in the retail market	59
3.3.3.3	Comparison of electricity prices for typical business consumers in the retail market	64
3.3.3.4	Comparison of electricity prices in the retail market for a typical household consumer	66
3.3.3.5	Supplier switching	68
3.3.3.6	Monitoring the level of transparency	70
3.3.4	Recommendations on supply prices	71
3.3.5	Measures taken to prevent abuses and to promote competition	71
3.4	<b>Reliability of the electricity supply</b>	<b>72</b>
3.4.1	Monitoring balance of supply and demand	72
3.4.2	Monitoring investment in production capacities in relation to the security of supply	74
3.4.3	Measures to cover peak demand and shortages of electricity	76
3.5	<b>Consumers protection</b>	<b>77</b>
3.5.1	Protection of electricity consumers	77
3.5.1.1	Supply contract and general terms and conditions	78
3.5.1.2	Disconnection of a household consumer	79
3.5.1.3	Protection of vulnerable consumers and emergency supply	81

3.5.1.4	Last resort supply	81
3.5.1.5	Consumers' complaints and dispute settlement	82
3.5.1.6	Publication of prices	83
3.5.2	Consumer protection in administrative procedures	84
3.5.3	Monitoring the electricity market	85
<b>4</b>	<b>NATURAL GAS</b>	<b>86</b>
<b>4.1</b>	<b>General information</b>	<b>87</b>
<b>4.2</b>	<b>The regulation and regulated services</b>	<b>88</b>
4.2.1	General information	88
4.2.2	Unbundling	88
4.2.3	The transmission of natural gas	89
4.2.3.1	Natural gas transmission system	90
4.2.3.2	The business operation and the ownership of the gas TSO	91
4.2.3.3	The investments in the transmission system	91
4.2.4	Distribution of natural gas	92
4.2.4.1	Consumers connected to the distribution network	93
4.2.4.2	The business operation of the gas DSOs	94
4.2.4.3	The investments in the distribution systems	95
4.2.5	The network charges for gas transmission and distribution systems	96
4.2.5.1	The network charge for the gas transmission system	96
4.2.5.2	The network charge for the natural gas distribution systems	97
4.2.5.3	The balancing	99
4.2.5.4	The secondary market for transmission capacity	101
4.2.6	Cross-border transmission capacity	103
4.2.6.1	Entry/exit points capacity	103
4.2.6.2	The methods of setting the maximum technical capacity	106
4.2.6.3	The allocation of the transmission capacity	107
4.2.7	The congestion-management mechanisms	107
<b>4.3</b>	<b>The market-based activities and competition</b>	<b>108</b>
4.3.1	The sources of natural gas and the wholesale market	108
4.3.2	The supply and the retail market	111
4.3.2.1	Monitoring the level of transparency	113
4.3.2.2	Natural gas prices in Slovenia	114
4.3.3	Ensuring compliance with legislation	116
<b>4.4</b>	<b>Security of gas supply</b>	<b>117</b>
<b>4.5</b>	<b>Consumers protection</b>	<b>118</b>
4.5.1	Protection of natural gas consumers	118
4.5.1.1	Supply contract and general terms and conditions	118
4.5.1.2	Disconnection of a household consumer	119
4.5.1.3	Protection of vulnerable consumers and emergency supply	119
4.5.1.4	Handling the complaints of household consumers	119
4.5.1.5	Publication of prices	121
4.5.2	Consumer protection in administrative procedures	122
4.5.3	Monitoring the natural gas market	123
<b>5</b>	<b>HEAT SUPPLY</b>	<b>124</b>
<b>5.1</b>	<b>Heat distribution</b>	<b>125</b>
<b>5.2</b>	<b>The distribution network</b>	<b>128</b>
<b>5.3</b>	<b>Heating price</b>	<b>129</b>
<b>5.4</b>	<b>Regulation of the price of heat for district heating</b>	<b>130</b>
<b>5.5</b>	<b>Unbundling</b>	<b>131</b>
<b>5.6</b>	<b>Notification of the activity</b>	<b>131</b>
	LIST OF FIGURES	133
	LIST OF TABLES	136
	LIST OF ABBREVIATIONS AND ACRONYMS	137

## FOREWORD BY THE DIRECTOR

The energy sector in Slovenia was in 2014 definitely marked by the adoption of the new Energy Act that came into force on 22 March. The Third Energy Package was with that transposed to the Slovenian legal system.

With respect to electricity, the glaze ice in the beginning of the year was one of the events that had a great impact on electricity consumers, system operators and entire power system, since three major power lines collapsed and left without the electricity supply more than one hundred thousand consumers. Nevertheless, the electricity supply in 2014 was never interrupted on account of lack of production sources.

In the area of electricity production, we have to mention the trial operation of Block 6 of the thermal power plant in Šoštanj while thermal power plant in Trbovlje was shut down. With its regular operation started 2X400 kV power line Beričevo-Krško, which played an important role at the time of its trial operation during the catastrophe caused by glaze ice.

Electricity prices decreased in all regions important for Slovenia, as well as on our retail market. The price for the use of the network decreased as well, but for other supplements to the price consumers did not notice this decrease in price. Unfortunately, also in 2014 no tender for the entry of new facilities to the support scheme was published because of funds shortage.

In Slovenia, 16,281 GWh of electricity were generated, 1325 GWh more than in the previous year. The structure of production is changing, the share of hydroelectric power plants is increasing, and, on the other hand, the share of thermal power plants decreased; the share of small producers is slowly growing. Domestic production sources covered 98% of consumption. In 2014, almost 42% of electricity was produced in hydroelectric power plants and plants using other renewable sources, plants using fossil fuels contributed 21%, and nuclear power plant 37% of electricity.

Despite many market activities of the suppliers, the situation in the market caused a decrease in

switchings of suppliers; in total 32,368 household and business consumers changed their supplier.

Some important changes happened to the natural gas market as well; its competitiveness strengthened, and the Energy Agency took over the responsibility for the security of supply and made some significant progress in this area. Implemented stress test in a period of great uncertainty relating to gas supply showed that Slovenia is well prepared for possible supply disruptions.

Due to different factors, the consumption of natural gas continued to decrease – in 2014 consumption once again significantly fell, for almost 9.8% in comparison with the previous year. On the other hand, a five-year downward trend of lowering the number of large business consumers stopped. At the end of 2014, there were 133,230 final consumers connected to the distribution network, or 0.4% more than in 2013; the number of household consumers decreased by almost the same percentage, which was the first decreased since 2008. The decline in distributed volumes from the distribution network in 2014 amounted to 12%. The distribution was carried out by 16 DSOs. Natural gas prices in Slovenia are decreasing and approaching the European average. Switching of supplier was done by 9,4% of business consumers and only 2.9% of household consumers.

Despite the decrease in consumption, the number of importers has grown, and the position of some of the newer market participants strengthened. After the expiry of the ten-year investment period of the transmission system by the end of 2014, bottlenecks that would cause congestions are eliminated. On the other hand, the balancing of the system in this year worsened, since volumes for balancing amounted to almost 8.6% of transmitted amount for consumers in Slovenia.

In Slovenia, in 2014 we consumed 761 million Sm<sup>3</sup> of gas. We remain completely depended on imports, but an important change was the fact that most of the gas, 61%, suppliers purchased in Austria, in gas hub Baumgarten. The original source of this gas is not known, but is most likely of Russian origin. Directly from Russia, 37% of gas was imported, around one percent from Hungary; imported volumes from Italy and Croatia did not achieve any significant value. The share of Geoplin, as the largest importer, decreased by 20%.

In the field of electricity and natural gas, the Energy Agency notices that the change, related to the comparisons of supply offers prescribed by the new Energy Act, badly affected the transparency of the market. According to new circumstances, in the Energy Agency's web application only supply offers from the so-called regular price lists are published, but these present only part of the supply offers in the market. In that way, relevant information for consumers became non-transparent and not easily accessible.

The heat distribution networks were set up in 54 out of the 212 Slovenian municipalities. In the area of supply with heat and other energy gases no significant changes happened. The price of heat for household consumers on average decreased by 1.4%. In 2014, the Energy Agency became the competent authority for regulation of heat prices; the competences were transferred from the ministry, responsible for energy. In accordance with the new legislation, the distributors, or heat producers, will have to submit an application to the Energy Agency to get approval to the starting price of heat.

The Report on the Energy Sector in Slovenia gives a comprehensive overview of the electricity and natural gas markets as well as district heating in 2014. The Energy Agency designed this report in a concise way to provide informa-

tion on key developments in the energy market. We believe that both – professional and general public will find a lot of useful information for their work, or acting in the market, for the benefit of providers of energy activities as well as consumers of electricity and natural gas.



Mag. Irena Praček,  
Director



IF YOU TRULY LOVE NATURE,  
YOU WILL FIND BEAUTY EVERYWHERE.

VINCENT VAN GOGH  
Dutch painter, 1853–1890

# 2.

DEVELOPMENT OF THE ENERGY  
MARKETS AND THE MAIN  
ACTIVITIES OF THE REGULATOR

## 2.1 THE BASIC DETAILS REGARDING THE MARKETS FOR ELECTRICITY AND NATURAL GAS IN SLOVENIA

<b>Slovenia</b>	
<b>Population (31 December 2014)</b>	<b>2,062,874</b>
Area	20,273 km <sup>2</sup>
Number of electricity consumers (31 December 2014)	936,883
Number of natural-gas consumers (31 December 2014)	133,230
Gross domestic product (GDP)	37,246 mio EUR
Increase in GDP	2.6%
Inflation	0.2%
GDP per person	18,065 EUR

Sources: Statistical office of the Republic of Slovenia, Energy Agency

<b>Electricity</b>	
<b>Installed capacity</b>	<b>4,183 MW</b>
Hydroelectric power plants	1,156 MW
Thermoelectric power plants	1,766 MW
Nuclear power plant	696 MW
Small producers	565 MW
<b>Production of electricity</b>	<b>16,281 GWh</b>
Hydroelectric power plants	5,733 GWh
Thermoelectric power plants	3,304 GWh
Nuclear power plant	6,060 GWh
Small producers	1,184 GWh
<b>Length of the transmission network</b>	<b>2,852 km</b>
– 400 kV	669 km
– 220 kV	328 km
– 110 kV	1,842 km
– cables	13 km
<b>Length of the distribution networks</b>	<b>64,546 km</b>
– 110 kV	850 km
– 35, 20 in 10 kV	17,424 km
– 0,4 kV	46,272 km

Note: Data include the entire installed capacity and the production of the Krško Nuclear Power Plant; however, in line with the international agreement, only half of the electricity produced by this power plant is available to Slovenia.

<b>Consumption of electricity</b>	<b>12,719 GWh</b>
PSPP Avče	363 GWh
Business consumers	9,231 GWh
Household consumers	3,125 GWh
<b>Annual consumption person/year</b>	<b>6,166 kWh</b>
<b>Average household consumption per year</b>	<b>3,336 kWh</b>

Sources: System operators, Energy Agency

<b>Natural gas</b>	
<b>Length of the transmission network</b>	<b>1,155 km</b>
– more than 16 bar	946 km
– less than 16 bar	209 km
<b>Length of the distribution networks (up to 16 bar)</b>	<b>4,532 km</b>
<b>Consumption of natural gas</b>	<b>761 million Sm<sup>3</sup></b>
Consumers on the distribution network	262 million Sm <sup>3</sup>
Consumers on the transmission network	499 million Sm <sup>3</sup>
<b>Annual consumption person/year</b>	<b>369 Sm<sup>3</sup></b>

Sources: Companies' data

## 2.2 THE DEVELOPMENT IN THE ELECTRICITY MARKET

The new Energy Act (from now on referred to as EA-1) in 2014 did not trigger major changes for the participants of the Slovenian electricity market, mainly due to a one-year transitional period to prepare relevant executive regulations. In Slovenia and its surroundings decrease in electricity prices in the wholesale markets continued. In the retail market, the trend of decreasing prices for business and household consumers continued as well. This was primarily because of increasing competition among the suppliers, lower prices in the wholesale markets, and an increase in the price for the use of the network. Price reductions cannot be attributed to decrease in industrial activity since the consumption of business consumers slightly increase in comparison to the previous year. But despite falling prices in the wholesale market, the retail prices did not change significantly. The result of insufficient dependency between the two markets is a lower number of supplier switchings in comparison with 2013.

The electricity supply was in 2014 affected in particular by a natural disaster, which hit Slovenia at the end of January and beginning of February. Glaze ice (sleet) most affected the areas of Notranjska and Primorska, but the damage was caused also in other parts of Slovenia. Three Slovenian major transmission lines collapsed (400-kV Beričevo–Divača, 400-kV Podlog–Beričevo in 220-kV Kleče–Divača). Even more damage occurred on the distribution networks, where almost 1600 kilometres of lines were affected. The most important part in providing the supply for affected areas was played by portable generators. For shorter or longer periods around 100,000 consumers remained without electricity.



Electricity production was influenced by two major events – the start of trial operation of Block 6 in Šoštanj TPP, and the closure of the production in coal unit in TPP Trbovlje. Phasing out the production in Trbovlje will have a negative impact on the operational reliability of the power system; this power plant had a key role to ensure safe operation of the system during the glazed frost, especially in the provision of sufficient reactive power for the needs of central Slovenia.

The overhead power line 2 X 400 kV Beričevo - Krško became operational. In the beginning of 2014, the line had been already in trial operation, and held a key role in ensuring the supply during the glaze ice in the central Slovenia, otherwise this part would be supplied only in one direction by 220 kV line.

At the EU level, last preparation for implementation of target models of electricity market took place. For this purpose, in the region Central-Eastern Europe – CEE signed the agreement on cooperation, and in the region Central-South Europe – CSE prepared the last details that in the beginning of 2015 led to the market coupling in the region.

The support scheme for electricity produced from RES and in CHP was in the six-months transitional period by 22 September 2014 carried out according to the previous legislation. The EA-1 envisages carrying out a call for new facilities that would like to enter in the support scheme. Unfortunately in 2014 there was no such tender for 2015 was published since no funds were available. On the other hand, the new method for determining the shares of individual production sources and the method for presenting them were defined. The suppliers must disclose these information on the issued bills and in their promotional materials.

## 2.3 THE DEVELOPMENT IN THE NATURAL GAS MARKET

Despite decreasing consumption of natural gas in Slovenia, positive changes happened to the gas market. The number of gas importers increased, and some new market participants strengthened their position. This changes reflected in the imported volumes of gas for the Slovenian consumers. Therefore, the natural gas market undergone some significant changes in terms of enabling more flexible and competitive behaviour of gas suppliers, and also regarding the security of supply.

The competitiveness is still improving since HHIs of this sector decreased in the wholesale and the retail market. The percentage of suppliers switchings indicates good market operation and competition. Comparison of gas prices between the EU countries shows that the prices in Slovenia are decreasing and approaching the EU average prices for a typical industrial (business) consumers and even more for typical household consumers.

The gas TSO started to allocate cross-border transmission capacity via auctions. For this purpose, it had joined the online booking platform PRISMA, which is favourable for the regional level of gas market operation and offering bundled capacity. In accordance with implemented changes, the cross-border capacity trading on the secondary market in possible in border points Ceršak, Rogatec and Šempeter.

The Energy Agency did as a competent authority for the security of supply some major changes, which significantly influenced all participants involved in the gas supply. First, by implementing two executive regulations, it imposed the provisions of the Regulation 994/2010, which requires that with planned preventive actions emergency situations try to be prevented, and that emergency plan controls crisis situations, if they occur, to the highest extent possible. At the borders points Ceršak and Rogatec the exemptions from providing a bi-directional flow of gas were approved since the analysis justified such exemptions. The most important part of the security of

supply were the stress tests incurred due to the political crisis in Ukraine, which is the key transit countries for EU gas supply from Russia. With the tests, in which the Energy Agency, all suppliers of gas and the gas TSO participated, the Energy Agency was determining the Slovenia's readiness for potential interruptions of supply to Slovenia during the heating season, when most gas is used. The tests showed that we are well prepared for potential supply disruption.

The concept of gas supply in the coming period in the wider region was affected by the suspension of the South Stream project, which was planned through Slovenia. With this Russian decision, new EU policy orientation emerged, including the accelerated integration of north-south direction.

Consumption of natural gas mainly depends on the economic situation, weather conditions and activities related to energy efficiency. In the future, we expect relatively stable consumption of natural gas, despite that energy efficiency will decrease the demand for natural gas.

Slovenian demand for natural gas will continue to be covered by the import of gas from the EU and other countries. In the coming years, we also expect domestic production of gas, which will allow a wider range of supply and stability of natural gas resources.

## 2.4 THE MAIN AREAS THAT INVOLVED THE REGULATOR

Operation of the Energy Agency, the national regulatory authority, was in 2014 marked by the adoption of the Energy Act (EA-1). The 3rd Package of the EU directives and regulations, which was implemented into the national legal system gives a significant increase in the role and independence of the regulatory authority, as well as in number of tasks and responsibilities.

New tasks are primarily implementation of measures to safeguard security of gas supply, regulation of heat and other energy gases, approving the system operators' investment plans, the control over the legality and regulatory of the work of energy services providers, monitoring of the energy market, certifications of the system operators, competences in the area of the energy efficiency, consumers protection (single point of contact) and more commitments at the EU level. Therefore, the Energy Agency gained new legal powers in relations to the provision of competitive energy markets, and also new supervisory tasks. Many new obligations are related to the preparation of the general acts for the exercise of public powers for more efficient functioning of the electricity and gas markets.

In the area of economic regulation, the Energy Agency was monitoring the execution of the regulatory framework for electricity and natural gas networks, and establishing the deviations from the regulatory framework. It continued the development of the methodologies for estimating the value of activation of investments in the distribution and transmission networks with the aim to improving the regulation. At the end of the year, the methodologies for the preparation and evaluation of investments plans for the electricity DSO and TSO were approved.

The Energy Agency, which took up the duties of the responsibility of the competent authority for the security of gas supply, dedicated a lot of activities to elaborate and implement the Preventive action plan and Emergency plan, which regulate the area of security of supply.

The Energy Agency is also responsible for monitoring the functioning of the market. In this respect, many activities were carried out for the development of a methodology for monitoring these markets, and for the development of software tools for collecting, storing and processing data. Based on this data the Energy Agency will take appropriate measures to eliminate obstacles to the efficient functioning of the market. The Energy Agency also established a national register of energy market participants and prepared the informational platform for the registration of market participants according to REMIT.

In the area of production of electricity from RES and CHP, the Energy Agency issued the declaration for the new production facilities, most of them were CHP, and declarations for the production facilities that were already in the register, but the validity of their existing declaration expired. It also issued the decisions on support for production facilities in a total amount around 43 MW. In addition, for 4.7 TWh guarantees of origin were issued, and for 10.1 GWh of green certificates – RECS.

For the protection of consumers rights, the Energy Agency was resolving the inspection procedures, disputes between the users of the networks and system operators, and dealt with complaints against the decisions on granting or refusing a connection approval. The majority of these cases were related to electricity.

The Energy Agency was also active in the international area; within its competences it represented the interests of Slovenia in the EU bodies and ACER when adopting EU legislation and development of energy markets in individual regions. Most of cooperation between the European energy regulators took place within the framework of the Agency for the Cooperation of Energy Regulators (ACER). In electricity, the regulators in individual regions worked together to establish target models for allocation of cross-border transmission capacity (CBTC) by 2014, and at the European level with regard to validation of the different network codes related to the electricity market, access to the network and operation of the network. The cooperation also took place with regard to the implementation of REMIT and development of pan-European transmission infrastructure. At the end of the year, a project of market coupling that connects the Italian neighbouring countries was completed. The project allows traders more transparent and effective allocation of CBTC and thereby helping to achieve the EU objective of establishing a single market.



3.

ELECTRICITY

WE CANNOT COMMAND NATURE  
EXCEPT BY OBEYING HER.

FRANCIS BACON

English philosopher, writer and politician, 1561–1626

## 3.1 GENERAL INFORMATION

Electricity consumption in Slovenia amounted to 12,719 GWh (excluding the losses in the distribution and transmission network). In comparison with 2013, the consumption decreased by 97 GWh, or 0.8%. The consumers, connected to the transmission network used 2033 GWh of electricity, or 1.3%, more than the previous year. The consumption on the distribution network was lower by one percent and amounted to 10,323 GWh. The hydroelectric pumped-storage power plant Avče (hereinafter referred to as PSPP Avče) used 363 GWh for the accumulation of water, a little less than in 2013. Electricity losses in the transmission and distribution networks amounted to 820 GWh of all transmitted and distributed electricity, including transit, export and import of electricity.

A total of 16,281 GWh of electricity was generated in Slovenia, which was 1325 GWh more than in 2013. The hydroelectric power plants connected to the transmission network generated 5855 GWh of electricity, which was 1265 more than in 2013. The thermoelectric power plants generated 3304 GWh of electricity, or 1077 GWh less than the previous year. The Krško Nuclear Power Plant generated 6060 GWh of electricity, which was 1037 GWh more than in the previous year. Production of electricity of small producers (with production units less than 10 MW) connected to the distribution network, was in comparison with 2013 higher by 100 GWh and amounted to 1060 GWh. The consumption, including losses in the network, and taking into account the 50-percent share of installed capacity of the Krško Nuclear Power Plant, which belongs to Slovenia was not completely covered by the production sources in Slovenia. The Slovenian consumption was covered by the domestic sources in total of 98%. Through the transmission and the distribution networks 9996 GWh of electricity was exported, and imported 7254 GWh of electricity.\*

The share of hydroelectric power plants and other production facilities on renewable energy sources (hereinafter referred to as RES) varies from year to year according to hydrological conditions the extent of investments in new facilities using RES. In 2014, this share amounted to 42% of the whole production. The power plants using fossil fuels contributed about 21% of total production and Krško Nuclear Power Plant 37%.

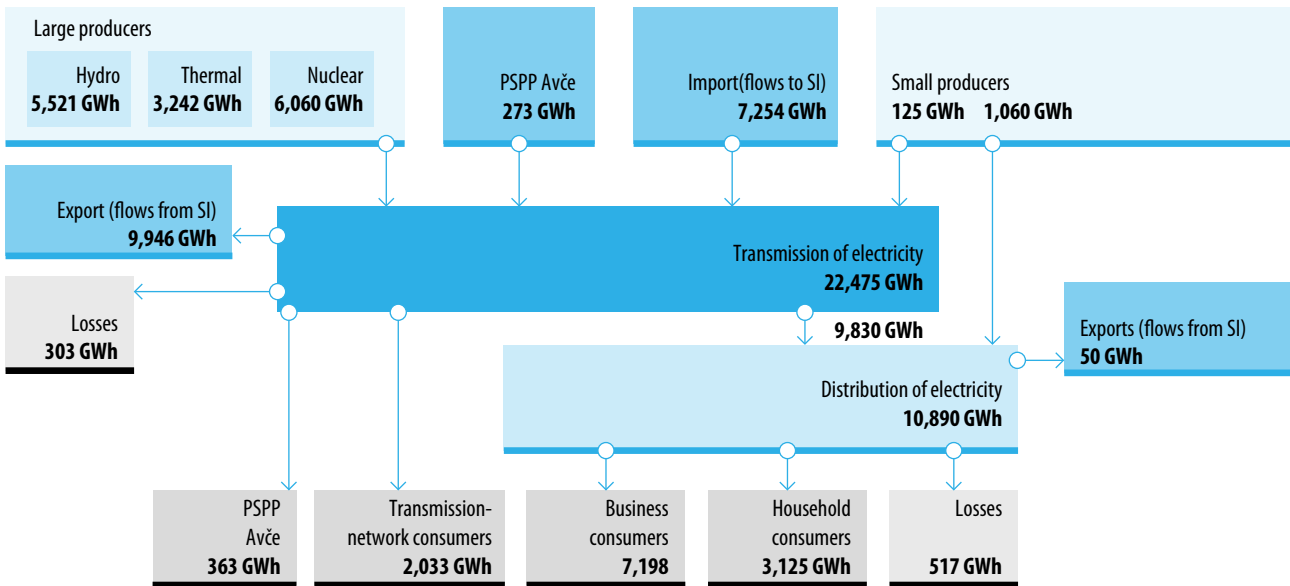
The highest hourly load amounted to 1988 MW, which was 44 MW more than in 2013.

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\* Amounts are taken from balance sheets of the transmission and distribution networks operators.

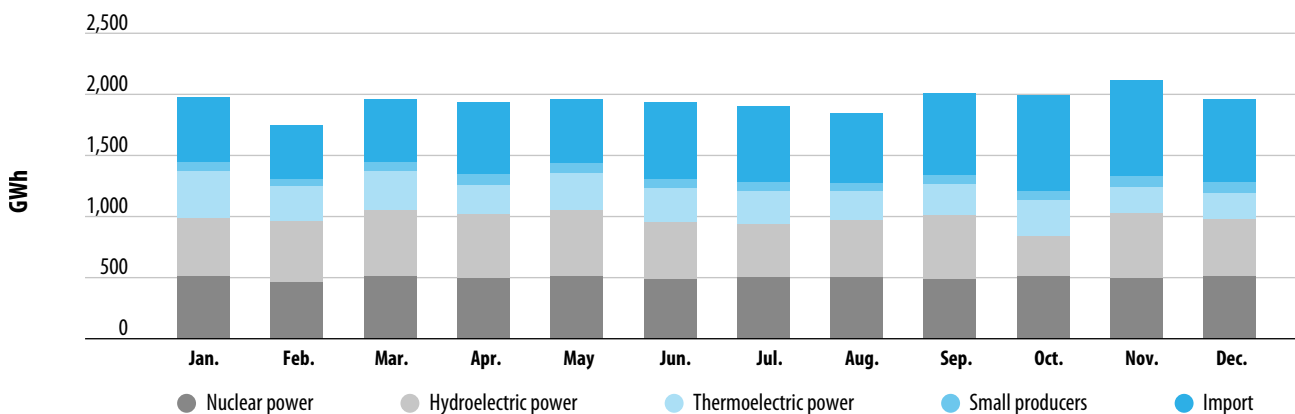


Figure 1: Balance of electricity production and consumption in 2014



Source: Energy Agency

Figure 2: Structure of monthly electricity production and import



Source: Energy Agency

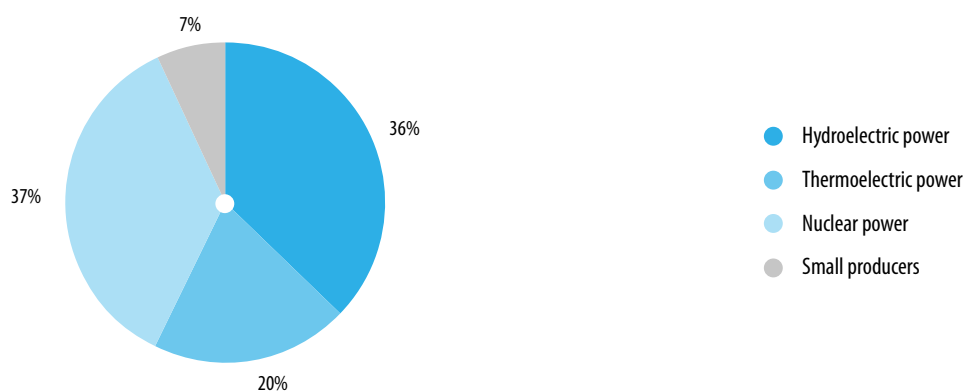
**Table 1: Electricity production and import in GWh**

	2013	2014	Index 14/13
Hydropower plants	4,590	5,733	125
Thermoelectric power plants	4,381	3,304	75
Nuclear power plant	5,023	6,060	121
Small producers*	962	1,184	123
<b>Total production in Slovenia</b>	<b>14,956</b>	<b>16,281</b>	<b>109</b>
Import	7,521	7,254	96
<b>Total</b>	<b>22.477</b>	<b>23.535</b>	<b>105</b>

\* Installed capacity of production unit is up to 10 MW, including the facilities installed at consumers.

Source: Energy Agency

The data about the production (Table 1) covers the whole of the production of the nuclear power plant, which belongs to the Republic of Croatia and is included in the data on export or energy flow from Slovenia.

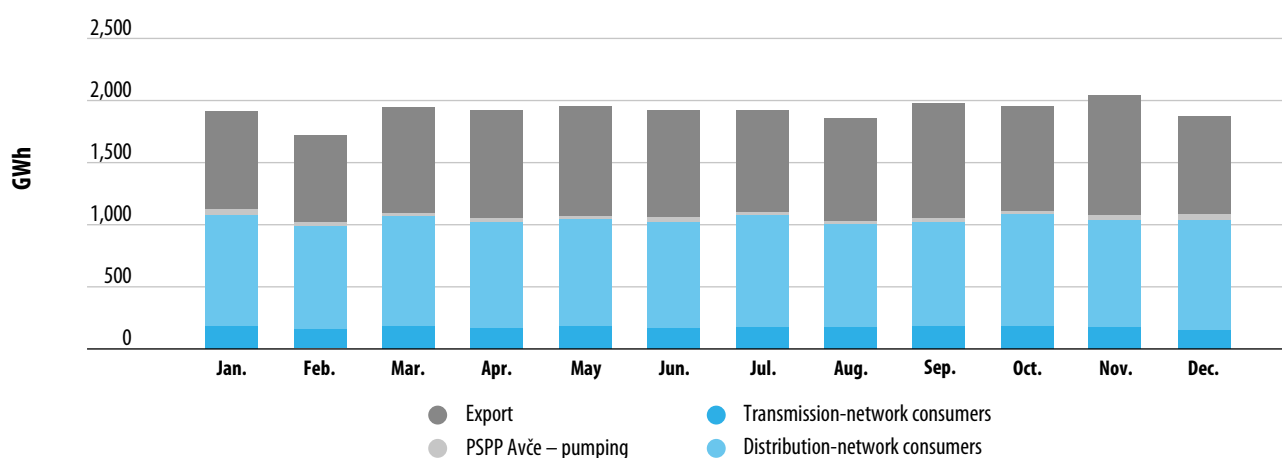
**Figure 3: Structure of the production sources for electricity in Slovenia in 2014**

Source: Energy Agency

**Table 2: Electricity consumption and export for 2013 and 2014 in GWh**

	2013	2014	Index 14/13
Business consumers on the transmission network	2,006	2,033	101
Business consumers on the distribution network	7,190	7,198	100
Household consumers	3,228	3,125	97
PSPP Avče consumption	392	363	93
Network losses	849	820	97
<b>Total consumption</b>	<b>13,665</b>	<b>13,539</b>	<b>99</b>
Export	8,812	9,996	113
<b>Total</b>	<b>22,477</b>	<b>23,535</b>	<b>105</b>

Source: Energy Agency

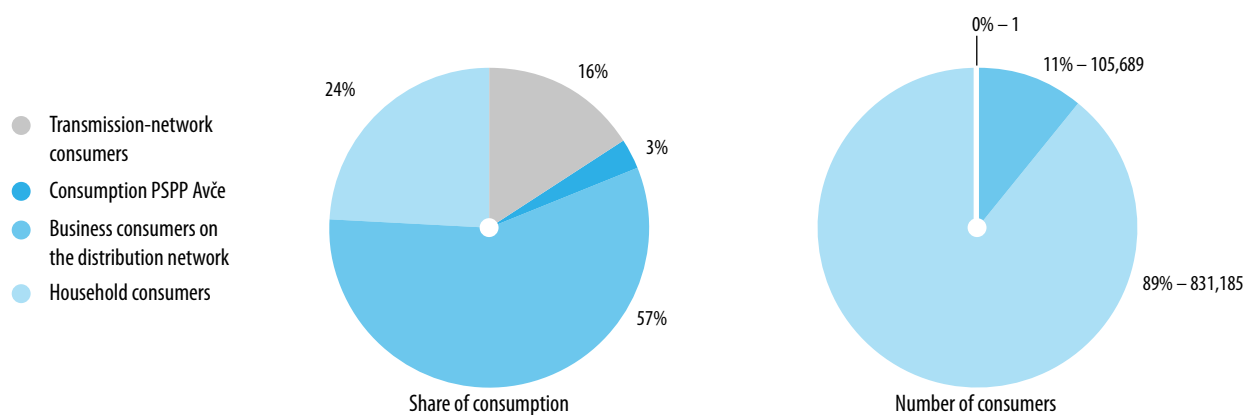
**Figure 4: Fluctuations in electricity consumption in 2014**

Source: Energy Agency

**Table 3: The share of consumption and the number of consumers by the type of consumption**

	Number	Consumption (GWh)
Consumers on the transmission network	8	2,033
PSPP Avče consumption	1	363
Business consumers on the distribution network	105,689	7,198
Household consumers	831,185	3,125
<b>All customers</b>	<b>936,883</b>	<b>12,719</b>

Sources: system operators, Energy Agency

**Figure 5: Shares of electricity consumption by consumption type**

Sources: system operators, Energy Agency

At the end of 2014, a total of 936,883 electricity consumers were connected to the electricity network in Slovenia. In comparison with 2013, the number of consumers increased by 3841. Shares of electricity consumption by consumption type remained the same.

## 3.2 THE REGULATION AND REGULATED ACTIVITIES

### 3.2.1 General information

Regulation is a process in which regulatory institutions by establishing the rules influences the regulated companies, so that they can achieve the business, technical, and other objectives set for a particular regulatory period. The process of regulation is also creating the rules under which system operators work as well as establishing market rules according to which the participants of the electricity market operate.

The regulated activities are the transmission and distribution of electricity which, at the introduction of market rules in the power sector, remain a natural monopoly.

The activities of electricity transmission and distribution are mandatory national public services carried out by the electricity system operators. The mode of carrying out a public service is determined with an ordinance issued by the government.

The company ELES, d.o.o., provides the service of general economic interest – electricity TSO as its single service, with its main office at Hajdrihova 2, Ljubljana ([www.eles.si](http://www.eles.si)) – hereinafter referred to as ELES.

SODO, d.o.o., provides the service of general economic interest – electricity DSO - on the basis of a concession, with its main office at Minařikovi ulica 5, Maribor, ([www.sodo.si](http://www.sodo.si)) - hereinafter referred to as SODO.

The transmission and distribution system operators are 100-percent owned by the state.

Equal obligations and responsibilities, as those applicable for the DSO, also apply for closed distribution system, which have to in accordance with the EA-1 get the approval by the Energy Agency. In the future, as the operator of the closed distribution system following companies will operate:

- ACRONI, d.o.o., Koroška Bela, Cesta Borisa Kidriča 44, 4270 Jesenice
- PETROL ENERGETIKA d.o.o., Koroška cesta 14, 2390 Ravne na Koroškem
- ZDS JESENICE, distribucija električne energije, d.o.o., Cesta železarjev 8, 4270 Jesenice
- Talum, Tovarna aluminija d.d. Kidričevo, Tovarniška cesta 10, 2325 Kidričevo

These companies received the status of the closed distribution system at the end of 2014 or in the beginning of 2015.

### 3.2.2 The unbundling of services

Electricity companies engaged in transmission and distribution activities have to provide for the separate management of accounts for transmission and distribution activity as if these activities would be carried out by separate companies.

If electricity companies are engaged in other energy-related activities or other activities, they have to provide for the separate management of accounts for them as well. For energy-related activities accounts have to be separated for each activity, and for activities not related to energy consolidated statements can be prepared.

The activities of services of general economic interest – electricity TSO (ELES) and the electricity DSO (SODO) in Slovenia are carried out in separate legal entities

On the basis of the relevant contracts the owners of the electricity-distribution infrastructure prepared separate accounts for the activities which are carried out for SODO.

The Energy Agency carried out the certification of the electricity TSO according to the Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC. The European Commission in 2014 examined the draft decision on certification of the electricity TSO and send its opinion to the Energy Agency, which was fully considered. The final decision was issued in the beginning of 2015.

### 3.2.3 The provision of technical services

#### 3.2.3.1 The provision of ancillary services

Ancillary services are the services provided by a system operator to safeguard the normal operation of the network. The ancillary services relating to the entire Slovenian electricity system are provided by the electricity TSO - ELES while the electricity DSO also provides these services on individual parts of the distribution network. In line with the System Operation Instructions for the Electricity Transmission Network ELES to ensure the safe operation of the electricity system uses the following ancillary services:

- the control of frequency and power (primary, secondary, and tertiary control)
- the voltage control
- the covering of the imbalances in the regulatory area
- the provision of a black start (system restart)
- the covering of the technical losses in the transmission network
- the congestion relief



This section addresses only those ancillary services that are financed from the network charge for the ancillary services. These are secondary and tertiary control of frequency and power, voltage control and the provision of a black start. Technical losses in the transmission network are covered by the network charge for the transmission system, while imbalances by imbalance settlement, and the congestion relief from the revenues of cross-border transmission capacity allocation.

For 2014, ELES planned the next scope of the ancillary services:

- the reserve for secondary control of frequency and power:  $\pm 60$  MW
- the reserve for tertiary control of frequency and power: +348 MW; – 180 MW

In comparison with the previous year, ELES for the year 2014 planned a reduction of the reserve for secondary control from the previous  $\pm 80$  MW to  $\pm 60$  MW. These new values of required reserve were calculated by ELES on the basis of performed statistical analysis of actual requirements for the engagement of reserve for the secondary control; the analysis was carried out on the basis of 15 minutes actual data measured for the period from 1 April 2012 and 1 April 2013. With regard to the reserve for tertiary control, no changes were made in 2014 compared to the previous year. Despite the beginning of the trial operation of Block 6 of the TPP Šoštanj the required positive reserve remained at the level that represents half of the capacity of the nuclear power plant Krško, and the required negative reserve at the level of the potential system failure of PSPP Avče in the pumping regime. The reason that the required positive reserve for tertiary control in 2014 did not need to be increased to 546 MW, which is the power of Block 6 of the TPP Šoštanj, was due to the fact that ELES did not conclude an appropriate agreement with TSOs of Croatia and Bosnia and Herzegovina, according to which all three TSOs that operate within the regulation block of these three countries participate with its own share in joint provision of the required reserve for the tertiary control.

To lease the ancillary services for 2014, ELES used two types of procedures. The tenders for the provision of the reserve tertiary control were selected on auctions, and the providers of other three ancillary services through direct negotiations with potential bidders.

For the selection of providers of tertiary reserve, ELES foresaw four different products in relation to its quality, the duration of supply and energy source. The first product was a long-term product, covering the period from 2014 to 2018. The next two (A + B) were intended to cover the needs for tertiary control only in 2014, but they differed in terms of the required quality of ensuring the ancillary service. The fourth product was also intended only for 2014; its special feature was the fact that it must be provided by dispersed production sources, and consumers who can provide demand response. Characteristics of individual products of the tertiary reserve are shown in Table 4; the long-term product is shown as a Product 14–18, and the product with dispersed production sources and demand response as the Product DSM.

**Table 4: Products for the tertiary reserve in 2014**

	Product 14-18	Product A	Product B	Produkt DSM
Quantity (MW)	144	92	100	12
Source of the reserve	Slovenia	Slovenia	Slovenia	Slovenia
Activation time	$\leq 5$ min	$\leq 15$ min	$\leq 15$ min	$\leq 15$ min
Time to announce changes of activation	$\leq 15$ min	$\leq 15$ min	$\leq 15$ min	$\leq 15$ min
Number of activations	unlimited	unlimited	unlimited	more than 2 times per day
Time of unavailability after activation	0 min	up to 30 min	up to 30 min	up to 10 hours
Duration of one activation	$\leq 6$ h	$\leq 6$ h	$\leq 4$ h	$\leq 2$ h

Source: ELES

For leasing products for tertiary reserve for 2014 to 2018, the auction was carried out by ELES on 18 November 2013; and for other three products a day later, on 19 November 2013. The outcome of these auctions are presented in Table 5.

**Table 5: Auction results for the lease of tertiary reserve for 2014**

Product	Leased capacity (MW)	Lease price (EUR/MW)	Energy price (EUR/MWh)
<b>Product 14-18</b>			
Bidder 1	10	55,000.00	200.00
Bidder 2	134	68,300.00	270.00
<b>Product A</b>			
Bidder 1	58	24,325.00	287.00
Bidder 2	34	28,855.00	266.00
<b>Product B</b>			
Bidder 1	<b>100</b>	<b>18,998.00</b>	<b>267.00</b>
<b>PRODUCT DSM</b>			
Bidder 1	12	37,000.00	210.00

Source: ELES

The providers of other ancillary services were chosen by ELES on the basis of direct negotiations with potential providers of these services. Due to the nature of remaining ancillary services only providers with production resources located within Slovenia could be selected.

### 3.2.3.2 The balancing

In the area of imbalance settlement compared to previous year there were no substantive changes since the Rules of the Operation of the Electricity Market are still in force. At the level of balance groups, the balance-responsible parties are obliged to maintain the operation schedules of their balance groups within the frameworks of the forecasted values while ELES is responsible for balancing the Slovenia power system. ELES purchases the required energy for balancing in the balancing electricity market; in exceptional circumstances, the missing energy can be obtained by the engagement of the provisions of leased ancillary services.

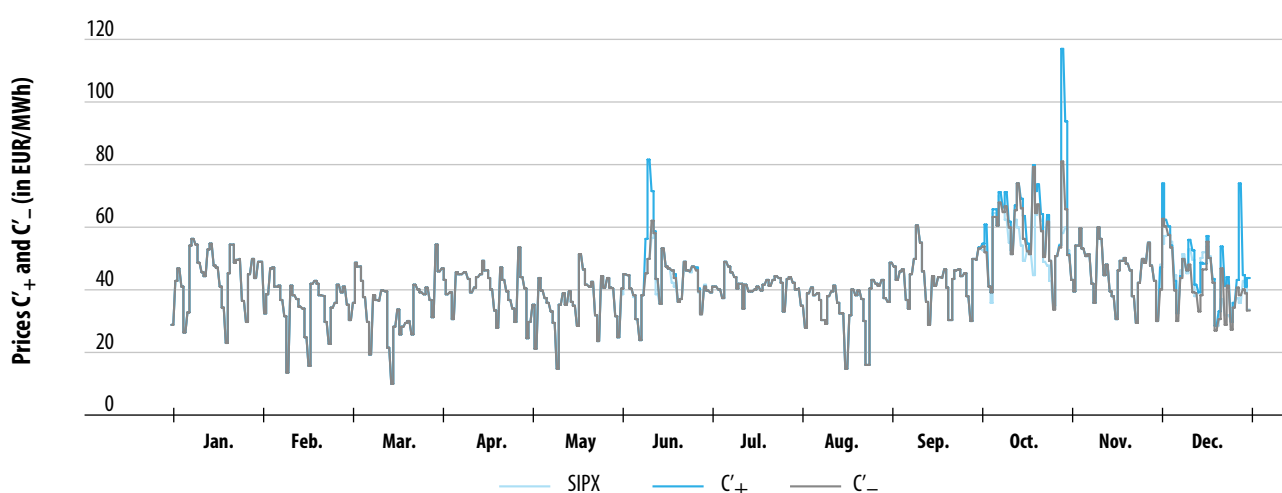
The balancing market is organized by the company Borzen, the electricity-market operator, d.o.o. (hereinafter referred to as Borzen). This market allows the system operator to purchase the required, or sell excesses energy for balancing the system in a transparent manner. Trading on this balancing market is carried out 24 hours a day, seven days a week, and at most one day in advance. Trading with Hourly, 15 minutes, Base and Peak products is possible. In 2014, 954 deals were closed, for a total amount of 78,975 MWh of electricity. Of these, 40.745 MWh ELES, and 38.230 MWh of electricity sold. On 31 December 2014, the balancing market consisted of 40 members, two more than at the end of 2013.

Borzen is responsible for imbalance settlement. The market operator determines the total amount of imbalances for each balance group and for each accounting interval (1 hour). Later it prepares financial value of these imbalances, taking into account the actual costs for imbalances incurred by ELES, and hourly index of electricity on the Slovenian power exchange. In that way, basic prices of

imbalances,  $C'_+$  and  $C'_-$  are determined.  $C'_+$  refers to positive deviations (realisation of the balance group is lower than planned value), and  $C'_-$  refers to negative imbalances. The market operator every month carries out a financial settlement of imbalances.

Figure 6 shows the movements of imbalances prices  $C'_+$  in  $C'_-$ , and price index in the Slovenian electricity exchange SIPX in 2014.

**Figure 6: Average daily values of basic prices of imbalances  $C'_+$  and  $C'_-$  and index SIPX in 2014**



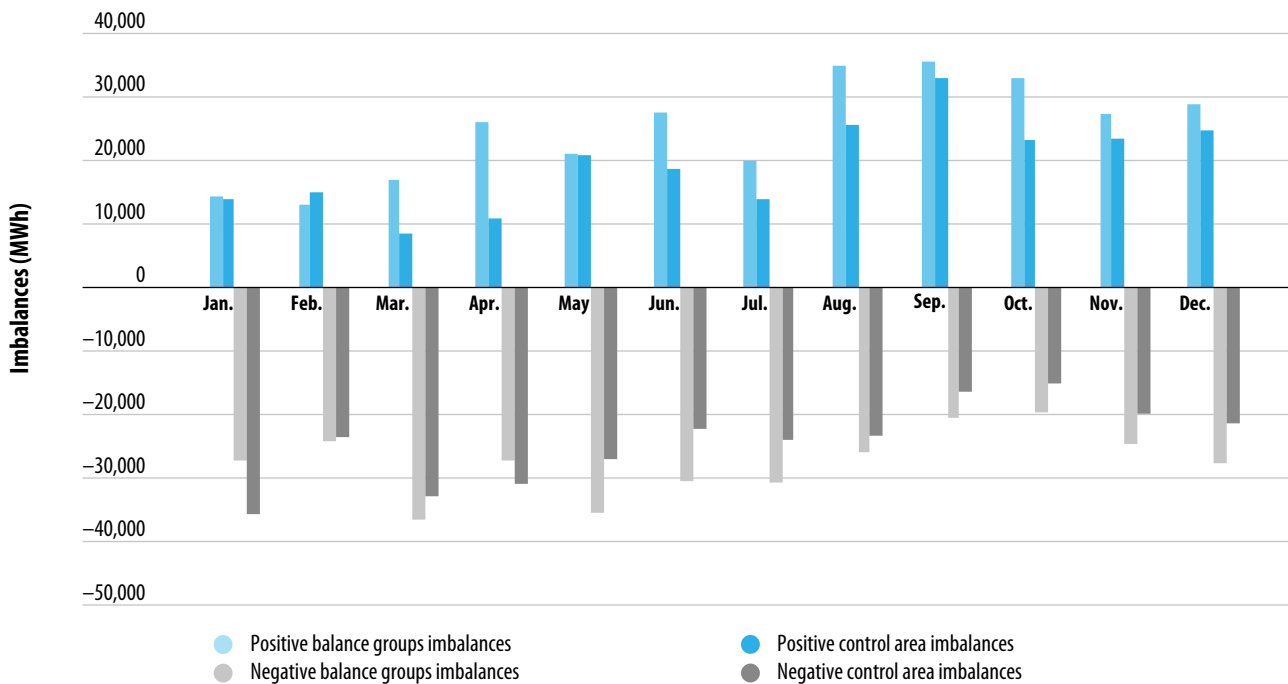
Source: Borzen

According to the amended rules for the calculation basic prices of imbalances  $C'_+$  and  $C'_-$ , and consequently for the calculation of derived prices of imbalances,  $C'_+$  and  $C'_-$ , Slovenian Stock Exchange Index SIPX is used. The average value of SIPX amounted to 40.43 EUR/MWh. The maximum value of SIPX occurred on 10 November in the 18th hour, 145.03 EUR/MWh, and the lowest on 17 August in the 17th hour, when was 0.10 EUR/MWh.

From January to December 2014 the prices for imbalances were gradually increasing in accordance with the value of the index SIPX; the highest values were reached in October. The prices in reached in the first part of the year the value of the index due to the implementation of INC. With that, to a large extent the mechanism of separate prices for positive and negative imbalances was cancelled out since the purpose of the various prices for positive and negative imbalances is to encouraged traders to more accurate forecasting. During this period, the average price for positive imbalances was 41.63 EUR/MWh, while the value of  $C'_-$  on average 40.71 EUR/MWh. The value of  $C'_+$  was on average by 1.2 EUR/MWh, and for  $C'_-$  by 0.28 EUR/MWh higher than the index SIPX. The highest value of  $C'_+$  was 381.71 EUR/MWh, and the lowest -38.78 EUR/MWh. Due to the impact of INC also the highest and the lowest price  $C'_-$  were equal. The highest prices for both imbalances were reached on 14 October in the 15th hour, and the lowest on 23 December in the 5th hour. In comparison with 2013, in 2014 the price  $C'_+$  decreased by 15%, and  $C'_-$  by 5%. In the same period, the value of SIPX decreased by 6.4%.

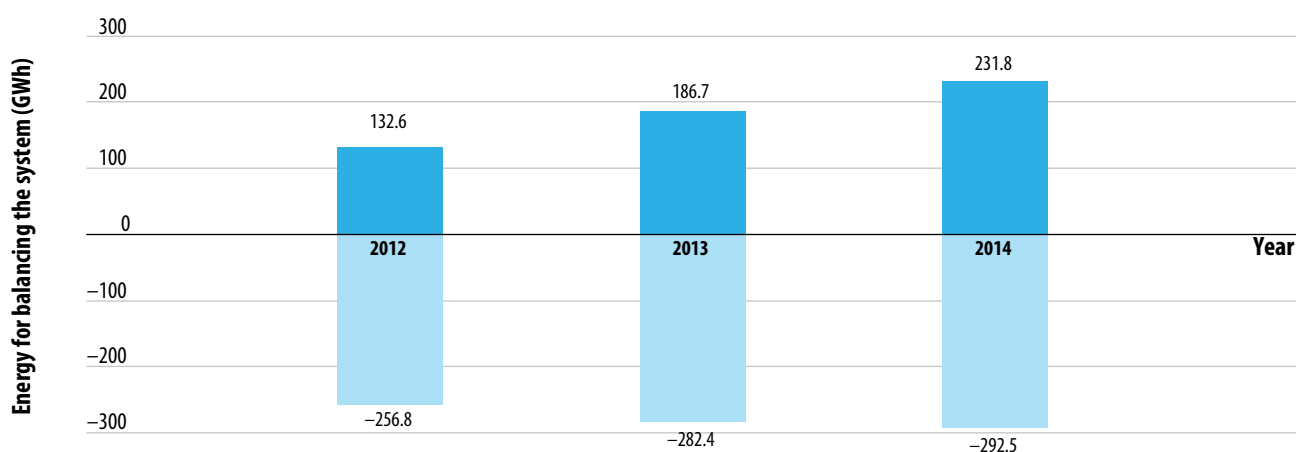
Figure 7 shows the total amounts of positive and negative imbalances of all balancing groups in Slovenia and total of positive and negative imbalances of the Slovenian regulated area.

Figure 7: All imbalances of the Slovenian electricity network in 2014



Sources: Borzen, ELES

Due to undoing of positive and negative imbalances of the balance groups, the imbalances of the whole system are lower than the sum of imbalances of all the balance groups. Nevertheless, imbalances of the regulated area follow the imbalances of all the balance groups by size, therefore, the maximum and minimum values for both categories were detected in the same months. Thus, the maximum positive imbalances were observed in September, and the maximum negative in October. The total annual positive value of imbalances of the regulated area amounted to 232,311 MWh, and negative 292,514 MWh. At the same time, the total annual positive imbalances of all balance groups amounted to 299,692 MWh, and negative 330,305 MWh. In comparison with previous years, it is interesting that the needs for the balancing the system are gradually rising while the total amount of imbalances of balance groups is decreasing. Thus, in 2014 according to 2012, the positive imbalances of the system increased by good 75%, and negative by 15%, which is shown in Figure 8. As in this period mainly the share of the production of electricity in units for which the production cannot be accurately foreseen or regulated increased, this increased can be mainly attributed to the increased share of such production units.

**Figure 8: Positive and negative imbalances of the Slovenian electricity network for 2012–2014**

Source: ELES

The year 2014 was quite dynamic with respect to new inclusions and exclusions of the Slovenian Balance Scheme members. There were 11 new members registered, of which four domestic and seven foreign companies. In the same period, eight members left the Balance Scheme, of which one was a domestic company. Apart from entries and exits, three transitions between the balance groups or subgroups were carried out. At the beginning of the year, the Balance Scheme had 54 groups, (17 domestic and 37 foreign companies), and 20 subgroups, (15 domestic and five foreign companies), and at the end of the year 2014, 57 balance groups were included, (20 domestic and 37 foreign companies), and 20 subgroups, (15 domestic and five foreign companies).

### 3.2.3.3 Safety and Reliability Standards and Quality of Supply

Network security is the ability of the system to withstand disturbances such as outages of elements, failures, such as short circuits. In order to ensure the network security, in Slovenia the n-1 criterion is used for the transmission network, and for higher levels of the distribution networks. By using n-1 criterion, it is guaranteed that in case of a failure of any component of the system, overloading, limits exceeding, or supply interruptions are avoided. The same criterion is used for planning and operation of MV distribution network. The difference with regard to the transmission network is only in operation since the failure of the element in the distribution network can cause a shorter interruption needed for manual switch and setting up the power supply from the other side of the network.

Due to reducing the costs of system operators and distribution companies the quality of electricity supply can worsen, especially if in the system an appropriate level of regulation based on quality of supply is not established. Quality of supply is monitored by the Energy Agency by taking into account the minimum supply standards. When considering the quality of supply, various activities are present, such as monitoring, reporting, analysis, and assessment of the data of the following observed levels: continuity of supply, commercial quality and voltage quality.



### 3.2.3.3.1 Continuity of supply

The data on the continuity of supply are collected, reported, and analysed by the uniform methodology, in accordance with the Act Concerning the Submission of Data about the Quality of the Electricity Supply. In this way, the mutual comparability of data on quality of supply among distribution companies is ensured, and also international comparability of achieved parameters of continuity of supply on the EU level.

In Table 6 are gathered indicators SAIDI and SAIFI for the unplanned interruption, caused internally, by individual distribution companies, for the period from 2012 to 2014.

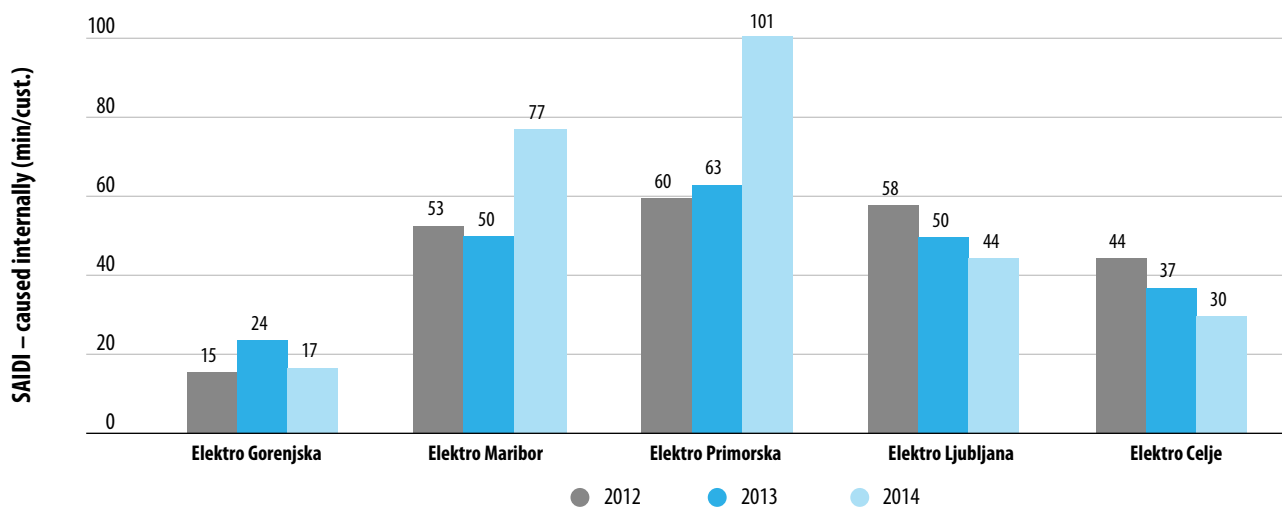
**Table 6: SAIDI and SAIFI by companies for the period 2012–2014 for unplanned interruptions (caused internally)**

		SAIDI – unplanned, long interruptions [min/cons.] (internal)		
Company/year	2012	2013	2014	
Elektro Gorenjska	15	24	17	
Elektro Maribor	53	50	77	
Elektro Primorska	60	63	101	
Elektro Ljubljana	58	50	44	
Elektro Celje	44	37	30	
		SAIFI – unplanned, long interruptions [min/cons.] (internal)		
Company/year	2012	2013	2014	
Elektro Gorenjska	0.6	0.9	0.5	
Elektro Maribor	2.1	1.7	2.6	
Elektro Primorska	1.4	1.3	2.4	
Elektro Ljubljana	1.3	0.9	0.9	
Elektro Celje	1.1	0.9	0.8	

Sources: Companies' data

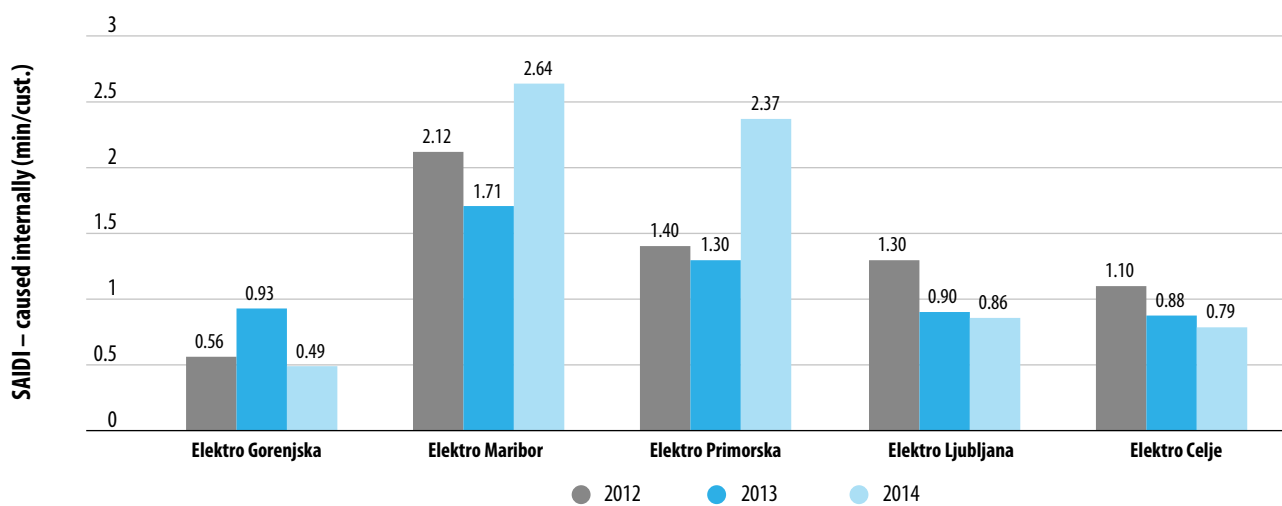
Figure 9 and Figure 10 shows SAIDI in SAIFI between 2012 and 2014 for unplanned long-term interruptions (internal).

Figure 9: SAIDI for long-term unplanned interruptions for 2012–2014 (caused internally)



Sources: Companies' data

Figure 10: SAIFI for unplanned long-term interruptions for 2012–2014 (caused internally)



Sources: Companies' data

On the basis of the SAIDI and SAIFI relating to individual network owners, the Energy Agency calculated the aggregate value of SAIDI and SAIFI indicators on the basis of the number of all consumers in Slovenia. In Table 7 and Table 8 are shown the SAIDI and SAIFI indicators that relates to all interruptions that namely affect a consumer are shown. At calculating these indicators, as, in addition to internal interruptions, the external interruptions due to force-majeure are also covered; planned interruptions are shown separately.

**Table 7: SAIDI and SAIFI at the national level for 2012–2014 (unplanned interruptions)**

Indicator /causes	Unplanned interruptions					
	2012		2013		2014	
	Internal causes	All causes	Internal causes	All causes	Internal causes	All causes
SAIFI – national level [interr./cons.]	1.40	2.99	1.44	2.20	1.43	4.31
SAIDI – national level [min./cons.]	50	169	47	109	55	908

Sources: Companies' data

**Table 8: SAIDI in SAIFI at national level from 2012–2014 (planned interruptions and all interruptions)**

Indicator	Unplanned interruptions			All interruptions		
	2012	2013	2014	2012	2013	2014
SAIFI – national level [interr./cons.]	0.88	0.89	0.86	3.86	3.08	5.17
SAIDI – national level [min./cons.]	117	115	119	286	224	1027

Sources: Companies' data

Glaze ice that hit Slovenia at the beginning of the year caused considerable damage to the power system. During this period, a very high number of supply interruptions was recorded, which can be seen from the SAIDI of unplanned interruptions. The value of SAIDI at the national level in 2014 was 908 minutes per user, which was more than 70% increase in the indicator of 2013.

### 3.2.3.3.2 Commercial quality

The monitoring of commercial quality indicators continued. The collected indicators are merged into the following groups:

1. Connection
2. Customer care
3. Technical service
4. Metering and Billing

Table 9 shows average values of some commercial quality indicators relating to connecting to a network and technical services of fuse, or electricity meter.

Table 9: Some commercial quality indicators in 2014

Commercial Quality Indicator	Elektro Celje	Elektro Gorenjska	Elektro Ljubljana	Elektro Maribor	Elektro Primorska
<b>CONNECTION</b>					
Average time needed for issuing the approval for connection (days)	6.93	12.00	17.00	9.80	22.80
Average time needed for issuing the contract for connection to the LV network (days)	3.66	2.00	8.00	7.50	3.16
Average time needed for activating the connection to the network (days)	2.09	2.20	3.30	4.60	3.91
<b>TECHNICAL SERVICES – ELIMINATION OF FAILURES</b>					
Average time needed to start of restoration of supply following failure of fuse (06.00 – 22.00) [h]	1.48	1.90	1.00	1.40	2.08
Average time needed to start of restoration of supply following failure of fuse (22.00 – 06.00) [h]	1.60	2.40	1.05	–	3.59
Average time needed to repair meter failure [days]	5.12	6.30	2.80	2.90	6.11

Sources: Companies' data

A unified procedure for collecting complaints relating to commercial quality is in force. Classification of complaints is consistent with ERGEG recommendations, Ref, E10- CEM-33-05 (June 2010). Data on commercial complaints for 2014 are summarized in Table 10.

Table 10: Number and shares of justifiable complaints relating to commercial quality for 2014

Reason for a complain	Number of all complaints	Number of justifiable complaints	Share of justifiable complaints [%]
<b>Activation of a connection to the network</b>			
Exceeding the time to activate a connection to the system	2	0	0
Incorrect disconnections due to mistakes of maintenance personnel	0	0	–
Exceeding the time for restoration of power supply following failure of fuse	2	0	0
<b>Supply quality</b>			
Exceeding the time for response to complaint in relation to voltage quality	16	9	56.25
Exceeding the maximum time for elimination of deviations of supply voltage	3	3	100.00
Exceeding the maximum time of duration and number of unplanned long-term interruptions (apply only to consumers on MV system)	0	0	–
Exceeding the time of duration of an individual unplanned long-term interruption	12	0	0
<b>Metering</b>			
The delay in removing the meter failure	493	224	45.44
Missing of yearly number of meter readings by the designated company	8	1	12.50

Reason for a complain	Number of all complaints	Number of justifiable complaints	Share of justifiable complaints [%]
<b>Metering, billing, and recovery of costs</b>			
The delay in time for response to written questions, complaints and other consumers' claims	67	30	44.78
<b>Disconnections due to non-payment, or late payment</b>			
Exceeding the time needed for restoration of power supply following disconnection due to non-payment	3	0	0
<b>Connection</b>			
Delay in issuing cost estimation for simple works	1	1	100.00
Delay in issuing the contract for connecting to the LV network	0	0	–
Delay in issuing a consent for connection	6	2	33.33
<b>Customer care</b>			
Punctuality of pre-arranged appointments	0	0	–
Untimely informing about planned interruptions	15	3	20.00

Sources: Companies' data

From the data on commercial complaints is evident that most of the complaints were related to the delay in repairing the meter failure.

The level of commercial quality is determined by the system standards and the guaranteed standards for the commercial quality. If the guaranteed standards for the commercial quality are not met, an individual service provider may have to face financial consequences, i.e., the compensations paid out to the customer concerned. A consumer can expect a certain quality on the basis of the system standards, as they indicate the average level of the service quality in the system, or the share of the customers provided with a particular service.

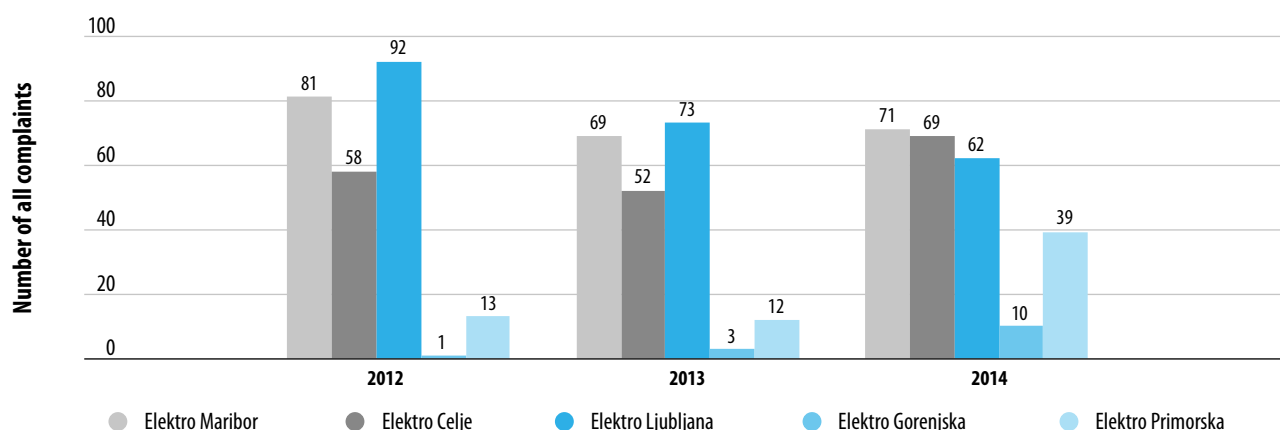
### 3.2.3.3 Voltage quality

In accordance with the legislation, system operators and distribution companies must carry out regular monitoring at the border of transmission and distribution network at delivery points of all large users (producers and consumers). Occasional monitoring is carried out according to the predetermined plan. In dealing with a consumer's complaint the monitoring of voltage quality is performed, which lasts at least a week. The monitoring of voltage quality is carried out in the procedure for connection approval when the issuer of the approval in this way checks the voltage quality conditions.

In Figure 11 the number of complaints related to voltage quality is shown. The total number of received complaints has increased in comparison to the previous year while the share of justified complaints slightly decreased.



Figure 11: Number of complaints relating to voltage quality by distribution companies for 2012–2014



Sources: Companies' data

Table 11: Number and shares of justifiable complaints to voltage quality for 2012–2014 by companies

Distribution company	2012			2013			2014		
	All complaints	Number of justifiable complaints	Share of justifiable complaints	All complaints	Number of justifiable complaints	Share of justifiable complaints	All complaints	Number of justifiable complaints	Share of justifiable complaints (%)
Elektro Maribor	81	57	70.4%	69	48	69.6%	71	51	71.8%
Elektro Celje	58	37	63.8%	52	39	75.0%	69	44	63.8%
Elektro Ljubljana	92	47	51.1%	73	30	41.1%	62	29	46.8%
Elektro Gorenjska	1	1	100.0%	3	3	100.0%	10	3	30.0%
Elektro Primorska	13	10	76.9%	12	8	66.7%	39	25	64.1%
<b>Total</b>	<b>245</b>	<b>152</b>	<b>62.0%</b>	<b>209</b>	<b>128</b>	<b>61.2%</b>	<b>251</b>	<b>152</b>	<b>60.6%</b>

Sources: Companies' data

The electricity TSO (ELES) is obliged to carry out all the tasks necessary for safeguarding the service quality of the transmission system operator. ELES carried out permanent monitoring of voltage quality of the high-voltage network 187 connection points (between distribution, production, and direct consumers). The monitoring of voltage quality will continue at the remaining connection points between the transmission network and its users, where permanent monitoring is not yet established, as well as at the connection points with transmission networks of Croatia, Austria and Italy. In addition to the indicators used for the control of the supply continuity on the distribution network (SAIDI, SAIFI, MAIFI); other indicators based on the amount of unsupplied energy are also monitored on the transmission network (ESN).

### 3.2.3.4 The long-term development plan of the electricity network

Every two years the transmission and distribution system operators prepare development plans for a period of ten years; plans are evaluated and approved by the ministry responsible for energy. These plans consider the strategic national energy policies and are harmonised with each other. When preparing these plans the system operators used a uniform methodology considering long-term consumption expectations, the analyses of the expected operational conditions, the level of supply reliability, and economic analyses. They also consider possible locations for new large production sources. In the development plans the physical and financial extent of investments in new facilities are determined, as well as investments in a renovation of existing facilities of electricity infrastructure on transmission and distribution network.

Last development plans of both system operators were prepared for the period 2013–2022. The expected investments in the electricity infrastructure for the transmission and distribution amount to €2207 million, of which €579 million are allocated for the transmission network, and €1628 million are allocated for the distribution network.

In comparison with the development plans for 2011–2020, some major changes occurred, as well as delays. The investments of the electricity DSO will reach their peak in 2021 instead of 2015. On the transmission network, the scale of investments will begin to decrease after 2016.

Among the most important development planning in the next decade, the electricity DSO lays special emphasis on investing in the systems for meshing of MV network, automation and control of operation of the network, neutral point connection and cabling of the network. Cabling of the MV network became even more important after the catastrophic conditions caused by ice in January and February 2014. The impact of environment on cables is, comparing to overhead lines, smaller. In that way the quality of electricity supply improves, and spatial planning is much easier.

In addition to cabling the network, the electricity DSO will improve the quality supply and reduce number of short-term and long-term interruptions with investments in automation and control of operation of the network, as well as with smart grids and smart metering.

The introduction of smart grids in the distribution and transmission has a goal to enable the deployment of smart grids technologies adopted in the EU for effective pooling of behaviour and actions of all consumers connected to the power grid. It is important in particular because of the production of large amounts of electricity from RES and distributed production sources and consumers' response. The implementation of smart grids is currently in a phase of pilot projects, or demonstration projects.

Advanced metering infrastructure (AMI) are not necessarily required for the development of smart grids since it is technically possible to develop smart grids and AMI independently of each other. However, it is essential that system operators exploit any possible synergy between both development areas. Pilot projects and the results of the cost-benefit analyses have shown that it is wisely to introduce new technologies to all consumers.

In development plans up to 2022 the transmission system operator takes into consideration the basic guidelines covering the construction of 400 kV inner-loop network, new connections to the neighbouring network systems, the control of unwanted energy flows and adequate voltage conditions, as well as a reliable and safe operation in accordance with the recommendation and set criteria by ENTSO-E.

In July 2012, the European Network of Transmission System Operators for Electricity – ENTSO-E published a Ten-Year Network Development Plan (TYNDP) for the period 2012–2022, in which an energy makeover by 2020 is indicated; this makeover is characterised by rapid integration of RES. A new TYNDP, published in 2014, elaborates these guidelines in four different scenarios by 2030. More or less, in all these scenarios the development of the production of electricity from RES plays

the important role; due to remote location of these sources from consumption points such production will dictate the development and transformation of the transmission network. Total value of planned investments of pan-European interest by 2030 is around €150 billion, of which €50 billion are planned for submarine cables.

In the TYNDP from 2014 the following investments are related to the Slovenian transmission network:

- TL 2 × 400 kV Cirkovce–Pince
- TL 2 × 400 kV Okroglo–Videm
- TL 2 × 400 kV Divača–Cirkovce, transition from 220 kV to 400 kV
- a new HVDC between Italy and Slovenia

All these projects are also included in the current development plan of the Slovenian transmission network for 2013–2022. Transmission lines 2 × 400 kV Cirkovce–Pince and associated DTS 400/110 kV in Cirkovce are in the phase of planning and obtaining approvals; other investments are in this development plan marked as long-term. The project of HVDC between Slovenia and Italy is still in phase of examination.

In 2014, the regular operation of the transmission lines 2 × 400 kV Beričevo–Krško started. By 2022, larger investments in the internal transmission network are foreseen, transition of transmission lines Divača–Kleče–Podlog–Cirkovce from 220 kV to 400 kV, and investments in two international lines with Italy (2 × 400 kV Okroglo–Videm (Udine)), and with Hungary (2 × 400 kV Cirkovce–Pince transmission lines). For all these investments, especially for the 400-kV lines, is typical that the period of construction extends with every ten-year development plan in particular due to the difficulties associated with the placing of the line facilities in the environment. Together with Cirkovce–Pince transmission line the new 400 kV DTS will be built in Cirkovce.

#### **3.2.3.4.1 Control over the development plans of the electricity TSO**

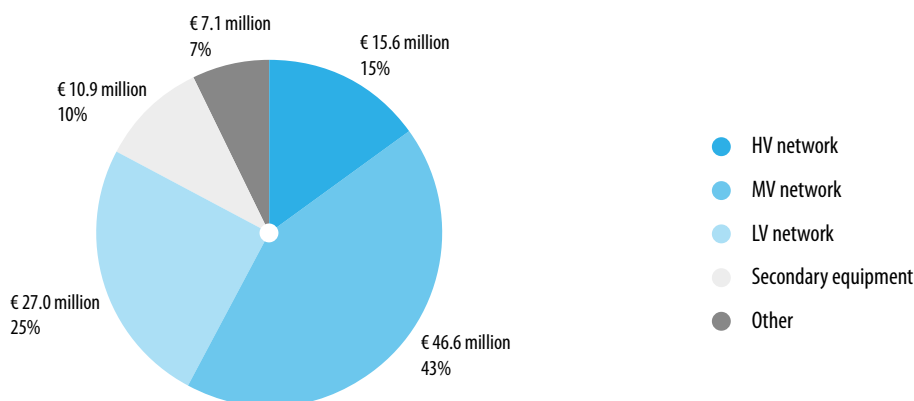
ELES in 2014 allocated €37.9 million for investment, which was 49% less than planned €74.4 million from the development plan, and 18% less in comparison with the realization in 2013. Lower realization is mainly the result of legislation, coordination with local communities, inaccurate land register, and the difficulties in the execution of public tenders. No major new investment was concluded, most of the funds, namely €8.8 million, were spent to eliminate the terrible consequences of natural disaster at the beginning of the year. Among new investments, the funds were mainly spent for obtaining easement rights for transmission lines 2 × 400 kV Cirkovce–Pince in the amount of €4.79 million, and €1.6 million for buying the land and preparation of project documentation for DTS 400/110 kV in Cirkovce.

#### **3.2.3.4.2 Control over the development plans of electricity DSO**

According to unaudited data, the electricity DSO and the owners of the distribution network for the investments in electricity infrastructure allocated €107.2 million, of which €49.1 million, or 45.8% of all funds were dedicated for new electricity facilities; €51.1 million, or 47.7% for renovation and modernisation of existing facilities. For the remaining necessary business investment €7 million, or 6.5%, of total invested funds were allocated. In comparison with 2013, the investments in the electricity infrastructure increased by €13.1 million, or 13.9%, mainly due to increased scope of reconstruction after the natural disaster at the beginning of the year.

The largest share of investments was carried out on MV and LW network, which suffered most of the consequences caused by ice. The smaller scope of investments was carried out on HV network and secondary equipment and other investments.

Figure 12: Investments in the distribution network in 2014



Sources: SODO, distribution companies

### 3.2.4 The network charges for the transmission and distribution networks

The Energy Agency determines the methodology for setting the network charge and the criteria for establishing eligible costs for electricity networks and the methodology for charging for the network charge. On the basis of the methodology for setting the network charge and the criteria for establishing eligible costs for electricity networks, the Energy Agency sets the network charges for the use of electricity networks, for the distribution networks, and for the ancillary services. On the basis of determined network charges and the methodology for charging for the network charge, the Energy Agency determines the tariffs for transmission and distribution networks, ancillary services, specialised ancillary services and for the connected load.

#### 3.2.4.1 Setting the network charge

The year 2014 was the second year of the fourth regulatory period, which last from January 2013 to 31 December 2015. The regulation during this period is carried out in line with Act Determining the Methodology for Charging for the Network Charge and the Methodology for Setting the Network Charge and the Criteria for Establishing Eligible Costs for Electricity Networks.

The methodology for setting the network charge is based on the method of regulated network charge, which is implemented in a way that by establishing network charge and other revenues and by taking into account surpluses of the previous years, the eligible costs and deficits from the previous regulatory years of the system operator are covered.

Before the start of the fourth regulatory period, the Energy Agency determined the system operators a regulatory framework. The regulatory framework is an estimation of eligible costs and resources for covering eligible costs and deficits or surpluses of the previous years of the regulatory period of the system operator.

The eligible costs of the system operator are:

- the costs of operation and network maintenance
- the costs for electricity losses in the network
- the costs of ancillary services
- depreciation costs
- regulated return on assets

Other sources to cover the eligible costs of the system operator apart from the network charge and surpluses from the previous years are:

- revenues relating to billing
- revenues from the telecommunication services
- revenues from compensations between transmission system operators
- revenues from congestions
- revenues from charging for the average costs for a connection and the network charge for connection load, free-of-charge received assets, co-investments and funds relating to revenues from congestions
- revaluated operating incomes related to claims due to bankruptcies and compulsory settlement
- compensation from insurance companies for damages caused by nature
- other revenues arising from the provision of a regulated activity

Revenues associated with the average cost for making a connection and connection load, free-of-charge received assets, co-investments and funds relating to revenues from congestions are annually recognized in the amount of depreciation.

The regulated network charge is also incentive based. Incentives depend on achieving lower costs than eligible, the achieved level of the quality of supply, and investments in smart grids.

If the costs of the system operator are lower than actual eligible costs, it may keep the difference.

The incentives for achieved level of the quality of supply are determined according to the deviations of the achieved level of the continuity of supply from the reference level, and it results in reducing or increasing the eligible costs.

If the system operator realizes investments in smart grids set by the methodology, a single grant (stimulation) in the amount of 2% of the current value of the asset is recognized.

After every regulatory year the system operator is obliged to determine the derogations from the regulatory framework, which are determined as the difference between planned and actual eligible costs of the system operator and difference between planned and actual financing sources for covering eligible costs. By the methodology of regulated network charge, the system operator is obliged to consider the surplus of the network charge as dedicated revenue for covering a deficit of the previous years or eligible costs of the following years. At the same time, the system operator has the right to enforce the network charge deficit in establishing the network charge in coming years.

The Energy Agency monitors the implementation of the regulatory framework during the regulatory period by monitoring the monthly realization of the network charge, analysis the specific eligibility criteria and reviews the calculated derogations from the regulatory framework.

The regulatory framework can be modified during the regulatory period if the Energy Agency establishes that significant changes within the operation of the system operator occur.

The Energy Agency must issue a separate decision if it concludes that derogations were not calculated in accordance with the methodology.

### 3.2.4.2 The charging for the network charge

To determine the charging for the network charge, the Energy Agency uses a non-transaction postage-stamp method, which means that, with respect to charging for the network charge, the tariffs and average costs for making a connection are uniform for the whole territory of Slovenia within the framework of individual consumer groups. To divide the costs across different voltage levels the gross approach with respect to calculating the network charges for the transmission and distribution networks. The calculation method did not change during the regulatory period to

maintain predictability at the consumers. The calculation method for setting the binomial tariff – the operator by measuring establishes achieved maximum power and the volume of consumed electricity, pursues the possibility of demand response during the peak demand. Consumers can by lowering the maximum power significantly impact the level of the network charge, and thereby, contribute to the security of supply.

## 3.2.5 The business operation of the regulated companies

### 3.2.5.1 The business operation of the electricity TSO

According to audited financial statement ELES ended the financial year 2014 with a net profit of €11.23 million, which was €2.79 million, or 32.90% more than in 2013.

In 2014 the transmission system operator generated revenues from the network charge for the transmission network, the network charge for the ancillary services, and from other services.

**Table 12: Transmission system operator's network charge**

	Regulatory frame- work	Realization	In million euros
			Index Real./reg. framework
Network charge for the transmission network	63.58	58.68	92.29
Network charge for the ancillary services	36.03	35.26	97.86
<b>Total network charge</b>	<b>99.61</b>	<b>93.94</b>	<b>94.31</b>

Source: ELES

In 2014, ELES realized for 7.71% less profit from the network charge than expected by the Energy Agency in the regulatory framework. The revenues from ancillary services were realized for 2.14% less than expected by the regulatory period, which is shown in Table 12. In 2014, ELES also realized the network charge for connection load in the amount of €7 million, which is a source of already implemented extent of the network and planned development of it.

Within other revenues ELES, realized the revenues from the auctions for allocating congested cross-border transmission capacities, and revenues from the ITC mechanism, amounted to €54.86 million, which was 4.81% more than in 2013.

In 2014, ELES excluded the surpluses of the network charge from its annual financial statements. At the same time, in accordance with Regulation on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 (hereinafter referred to as Regulation (EC) 714/2009) reduced or separated the part of the revenues from the auctions for allocating congested cross-border transmission capacities. ELES separated the part of revenues from the auctions for allocating congested cross-border transmission capacities that were allocated for the maintenance or increasing of interconnection capacities through the investments in the network in 2014.

ELES owns the transmission system network and provides the service of general economic interest of the transmission system operator. In 2014, the total length of transmission lines was 2852 kilometres. At the end of 2014, ELES had 532 employees, 6, or 1.12% less than the year before.



### 3.2.5.2 The business operation of the electricity DSO

SODO ended the financial year 2014 with a net profit of €3.20 million (according to audited financial results), which was €0.05 million less than in 2013. The distribution system operator generated revenues from the network charge for the distribution network, the network charge for a connection load, and from other services.

In the regulatory framework for 2014 the Energy Agency planned €264.39 million revenues from the network charge for the distribution network. Due to lower consumption than expected, the revenues amounted to €250.34 million, which was 5.31% less than planned. At the end of 2014 the company had 36 employees, three more than in 2013.

SODO provides the service of general economic interest of the electricity DSO on the distribution network; the total length of the distribution network was 65,809 kilometres, which also include street lighting. Of these, SODO owns 55 kilometres of the network, 712 kilometres are owned by the customers. The rest of the network is leased by SODO, the owners and lengths of leased network are listed below:

- 17,501 kilometres of Elektro Celje
- 5,459 kilometres of Elektro Gorenjska
- 17,301 kilometres of Elektro Ljubljana
- 16,233 kilometres of Elektro Maribor
- 8,548 kilometres of Elektro Primorska

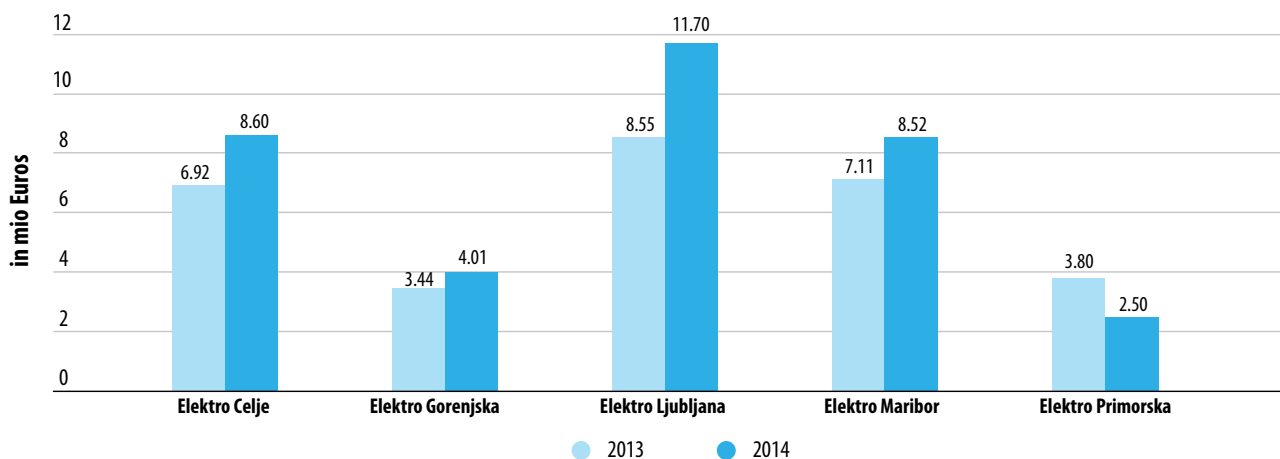
SODO has a signed Contract for Leasing the Infrastructure for Electricity Distribution and the Provision of the Service of the Distribution System Operation with the owners of the electricity-distribution infrastructure. The contract regulates all the issues relating to the extent and purpose of using the distribution infrastructure: the leasing fee, the terms and conditions, the maintenance of the distribution infrastructure, and other issues associated with the concerned infrastructure and the provision of other services allowing the distribution system operator to efficiently carry out its tasks.

### 3.2.5.3 The business operation of the electricity distribution companies

Electricity distribution companies generated revenues from leasing out the distribution network to the system operator, providing the services for the distribution system operator and from other services in the market.

According to audited financial statements, the distribution companies generated €37.06 million of net profit. With leasing of the distribution infrastructure and provision of services for the system operator (rent and services) they generated €35.33 million of net profit, which was 18.48% more than in 2013 (audited financial statements). The financial performances of the companies for 2013 and 2014 are shown in Figure 13.

Figure 13: Profit from leasing and service activities for SODO in million euros



Sources: Companies' data

At the end of 2014, distribution companies employed a total of 3008 employees, five more than the year before. Leasing and the services had 2365 employees, which was 2.75% decrease in comparison with the previous year.

### 3.2.5.4 Business operation of the market operator

The company Borzen, the electricity-market operator, d.o.o., is a company that is 100-percent owned by the Republic of Slovenia.

Borzen performs the public service of market operator, which includes activities of the Centre of Support (Centre for RES/CHP support), and in addition, it performs a commercial activity – the provision of services for the company BSP Regional Energy Exchange, d.o.o.

Energy Act determines the activity of the electricity market operator, and the Centre of Support as one service of general economic interest, but it also determines the separate management of accounts for the Centre for Support. For providing the separate management of accounts, the electricity market operator and the Centre for Support are treated as two separate financial entities. Borzen provides the separate accounts for each public service and separately for the market activity.

In 2014, the company as a whole generated €3.54 million, which was 1.3% more than the previous year. The expenditure amounted to €2.54 million, or 2% more than the previous year before. The net profit of the market operator was €0.84 million, or 2% less than the previous year. On market activity the company generated €1.22 million, and the Centre of Support had an operating deficit of €0.38 million. At the end of the year 2014, the company had 29 employees.

## 3.2.6 Cross-border transmission capacity

### 3.2.6.1 Access to the cross-border transmission capacity

The allocation and the use of the cross-border transmission capacities (hereinafter referred to as CBTCs) in the EU were in 2013 regulated by Regulation 714/2009, which was adopted within the 3rd Package. Under the provision of this regulation, the system operators in individual countries are responsible in this area. With appropriately defined CBTCs and procedures for allocation of the rights to use CBTCs we ensure that the flows across the cross-border transmission lines and

in all parts of the internal transmission network within limits, which still allow safe and reliable operation of all interconnected power systems. Regulations, among other things, require the mandatory use of the market-based method for allocating the rights to use available CBTCs, among which in Europe currently explicit and implicit auctions are used. Despite the fact that in 2014 at the EU level the target model for allocation of CBTCs should have been established, which foresees the use of implicit auctions in the form of regional market coupling, only at the borders with Italy CBTCs were allocated through the implicit auctions within the framework of bilateral market coupling between Slovenia and Italy.

The allocations of CBTCs on the monthly and yearly level were conducted on all three Slovenian electricity borders (with Austria, Italy and Croatia) by explicit auctions. On the borders with Austria and Croatia on daily level explicit auctions were held, while on the border with Italy implicit auctions were used within market coupling between Slovenia, and Italy. Intraday allocations were performed on the borders with Austria and Croatia within continuous trading, while on the border with Italy two explicit auctions were held every day; the first auction was for allocations of CBTCs for each hour of the day, and was held in the afternoon, while the second one was intended for allocation of CBTCs for the last eight hours of the day. All explicit auctions on the border with Italy were conducted by the auction house CASC EU with its headquarters in Luxembourg, and all explicit auction on the Austrian and Croatian border by the auction house CAO based in Germany.

Table 13 shows a review of the allocated CBTCs by an individual border, the total revenues from the auctions and the price for allocated megawatt hour.

**Table 13: Review of the allocated CBTCs and the revenues from the auctions by the border**

Border	Allocated (MWh)	Revenue (EUR)	Price for allocated CBTCs (EUR/MWh)
SI-IT	3,748,676	43,158,144	11.51
IT-SI	1,716,026	267,340	0.16
SI-AT	8,469,120	753,271	0.09
AT-SI	3,499,349	21,071,359	6.02
SI-CRO	9,756,684	3,367,702	0.35
CRO-SI	10,762,463	1,349,859	0.13

Source: ELES

It should be noted that the amounts of allocated CBTCs presented in Table 13 stand for the amounts on the specific border and in a given direction, when they were allocated in case when the demand exceeded the supply and users of the CBTCs had to pay for them the market price. The table shows that also in 2014, the highest prices for CBTCs were in the direction from Slovenia to Italy, even if the prices decreased by 5.10 EUR/MWh in comparison with 2013. At the same time, the price of CBTC in the direction from Austria to Slovenia increased by 2.31 EUR/MWh. Because traders in the Slovenian market to a large extent operate only with a view to transfer the energy from the German-Austrian market to the Italian market, the difference between the prices should be looked at in these two markets and compare it with the sum of the prices of CBTCs at the Austrian-Slovenian and Slovenian-Italian borders. The sum of CBTCs prices at the both borders reached 17.53 EUR/MWh while the average difference in the stock prices of Germany and Italy amounted to 17.58 EUR/MWh. Compared to 2013, the difference between average stock prices slightly decreased; this difference was reflected in the slightly lower sum of prices of CBTCs at the Austrian-Slovenian and Slovenian-Italian borders.

The access to cross border network capacities consists of two phases. The first phase is allocation of the right of their use while the second is the nomination of the actual use. In the case of

explicit auctions, these are to separate procedures, while in the case of implicit auction (market coupling) obtaining of capacity automatically brings its nomination for both central counterparties. Contrary to this, a network user who obtained a cross border capacity in an explicit auction needs to nominate it to the TSO within the specified deadline. The network user can decide to use the whole cross-border capacity, part of it or not to use it at all. In the latter case, the rule “use-it-or-sell-it” applies for the capacities obtained in yearly and monthly auctions, which means that the network user sells unused capacity back to the TSO who sells it in an auction for the shorter period. The network user gets this capacity paid by the TSO at the price achieved in this auction. For the capacities obtained in explicit auctions for the day-ahead timeframe the rule “use-it-or-lose-it” applies, which means that the market participant pays the whole capacity obtained in the auction at the achieved price, irrespective of whether this capacity is used or not.

Due to market coupling, in 2014 the largest share of CBTCs utilization rate was at the border from Slovenia to Italy, which was at average 91%. The use of CBTCs for all borders is shown in Table 14.

**Table 14: Utilization rate of CBTCs in 2014**

Border	Utilization rate of CBTCs (%)
SI-IT	91.34
IT-SI	8.77
SI-AT	16.41
AT-SI	91.54
SI-CRO	58.13
CRO-SI	33.20

Source: ELES

In 2014, The Energy Agency together with the Italian regulator AEEGI decided on and harmonised the conditions for the potential construction of two cross-border transmission lines, which will enable the investors that do not carry out the activity of the electricity TSO to build the power line between Italy and Slovenia and offer the market additional CBTCs. The decision of both NRAs presents an exemption allowed by the Regulation (EC) 714/2009 and was also approved by the European Commission.

### 3.2.6.2 Cooperation between regulators with regard to CBTC

The Slovenian electricity market is situated between three different regional markets with very different energy prices. These are the market of Central-Eastern Europe (Germany, Austria, Poland, Czech Republic, Slovakia and Hungary), the Italian market, and the market of South-East Europe. In all three markets regional initiatives are being carried out under the guidance of ACER and national regulators.

In the area of development of regional electricity markets, the regulators of all European regions cooperate to establish electricity market target models, especially with an aim to implement harmonised rules on determining and allocating CBTCs.

In 2014, under the leadership of the regulators of the CEE region and ACER the Memorandum of Understanding was signed, related with market coupling. The memorandum of understanding was signed by all regulators, TSOs and power exchanges of the CEE region, and ACER. The agreement envisages the cooperation with two other European regions. Another important work for the regulators and other stakeholders in the CEE region were the preparation of harmonised auc-

tion rules for the entire European common market. The rules should be prepared in 2015. Such rules are required by the network codes on allocating long-term capacity; network codes were not yet converted into a binding European regulation, but following ACER's recommendation the regulators decided to prepare such document before it become binding. The harmonised auction rules will replace the existing rules for the allocation CBTCs, which are now in force in individual European regions.

In the region Central-South Europe (CSE) in 2014, the majority of activities was dedicated to establishing regional market coupling. Unlike CEE region, stakeholders of CSE region decided to use already tested method for determination and allocation of CBTCs, namely the ATC/NTC method. One of the reason for this decision is the fact that networks in this region are not as meshed as in CEE region, which is mainly due to the position of Italy on the peninsula, and the existence of only one cross-border connection outside the land borders with France, Switzerland, Austria and Slovenia. At the end of 2014, the TSOs and electricity power exchanges informed the regulators that the regional market coupling will be possible at the beginning of 2015, which was supported by the NRA. As in the CEE, in the region CSE were dealing with the preparation of pan-European harmonised auction rules, and also with the amendments of the existing Intraday CBTCs allocation since the current method with two auctions is not harmonised with the European Target Model, which envisages continuous trading.

Given the anticipated delay in establishing the regional market coupling in the CEE region and the planned introduction of the regional market coupling the CSE region, the Slovenian and Austrian regulator at the end of 2014 agreed to launch an initiative on the temporary association of the Slovenian-Austrian border to the market coupling of the CSE region. Such association would not be technically demanding since due to the borders with Italy Slovenia and Austria would be from the beginning of 2015 a part of market coupling. The temporary inclusion of common border, at which a Day-ahead capacity is allocated through the explicit auctions, to the market coupling of the CSE region, would bring great benefits to all stakeholders in both countries. That would lead to an increase in trading on power exchanges in both countries, a better utilization of the available CBTCs and lower risks for traders, since the implicit allocation of CBTCs would enable to purchase energy at the same time.

### 3.2.7 Compliance

The Energy Agency was monitoring the exercising the implementation of EU regulations concerning the internal electricity market, as well as whether the electricity companies fulfil the obligations arising from European legislation. No breaches of the legislation were found.

In accordance with the Directive 2009/72/EC the Energy Agency has to provide for the implementation of binding decisions of ACER and the European Commission, and in decision-making processes ensure the compliance with the provisions of Regulation (EC) 714/2009.

At the end of the 2014, the European Commission gave consent to the Energy Agency's decisions issued in accordance with Article 17 of Regulation (EC) 714/2009 concerning the exemption from the provision governing the third party access for the two new 110-kV connections Dekani-Žavljje and Vrtojba-Sredipolje between Slovenia and Italy.

In the process of issuing approval to the rules of allocation and use of interconnections the Energy Agency control the compliance with the provision from Annex 1 to Regulation (EC) 714/2009 and in 2014 issued to the electricity TSO an approval Rules on Intraday Capacity Allocation through explicit auctions Version 2.0 on the Northern Italian borders, and to the Rules on Capacity Allocation through explicit auctions Version 2.0 in the regions CWE, CSE, France-Spain and Switzerland.

The Energy Agency also monitored the allocation of the revenues from the auctions for CBTCs and did not identify any irregularities.

## 3.3 MARKET-BASED ACTIVITIES

### 3.3.1 Organized electricity market in Slovenia

Participants of the electricity wholesale market are producers, traders and suppliers of electricity. They trade on the basis of closed contracts, in which the quantity and the time profile of supply of contractual volumes of electricity are set in advance, so that the prices do not depend on the actual realization of the contracts. Any difference between the volumes of the closed contracts and actual realization of the volumes is subject to imbalance settlement. The wholesale market participants conclude their business by the bilateral transactions or at the exchanges in Slovenia and abroad. Power exchanges provide their market participants with Day-ahead and Intraday trading, for the purpose of balancing of the system or with forward trading, which usually cover longer periods of time than one day. In the retail market, the suppliers and consumers enter into open contracts, in which the quantities of energy supplied and the time profile of supply of contractual volumes are not set in advance. Consumers pay the energy supplied according to the actual amount of electricity consumed, as measured by the installed meters.

Borzen, d. o. o., the organizer of the Slovenian electricity market, is, according with the EA, mandated to record all the closed contracts on a regulated market. Thus, Borzen supervises the agreed contractual obligations in which electricity is bought or sold in Slovenia or is transferred across the regulated area. This includes the recording of all contracts between members of the balance scheme; all export and import closed contracts and closed business transactions on the exchange. In addition, the organizer of the market in the form of operational schedules of production and consumption keeps records of the contracts between the suppliers, the consumers and electricity producers.

In 2014, a total of 112,012 closed contracts and a total of 82,480,280 MWh of operational forecasts included in the open contracts were registered. In comparison with 2013, the number of recorded closed contracts and operational forecasts increased by 5.1%, and the total amount of electricity from recorded closed contracts and operational forecasts increased by 2.7%.

### 3.3.2 Production and the wholesale market

#### 3.3.2.1 Proizvodna podjetja

In 2014, the following nine companies operating large facilities with a capacity of over 10 MW:

- Dravske elektrarne Maribor (DEM)
- Soške elektrarne Nova Gorica (SENG)
- Savske elektrarne Ljubljana (SEL)
- Hidroelektrarne na spodnji Savi (HESS)
- Termoelektrarna Šoštanj (TEŠ)
- Termoelektrarna Trbovlje (TET)
- Termoelektrarna Brestanica (TEB)
- Javno podjetje Energetika Ljubljana (JPEL)
- Nuklearna elektrarna Krško (NEK)

The companies DEM, SEL, HESS and SENG generate electricity in hydroelectric power plants (HPP), NEK in a nuclear power plant (NPP), TEŠ and TET in thermoelectric power plants (TPP) running on coal, TEB produces electricity from liquid and gaseous fuels, and the JPEL Ljubljana cogenerates heat and electricity in a cogeneration process using coal. In 2014, change happened

in comparison to the previous year, since on January 2014 by entering in the register of company the company Termoelektrarna Toplarna Ljubljana d.o.o. merged with the company Javno podjetje Energetika Ljubljana d.o.o.

Within the company Holding Slovenske elektrarne (the HSE) in 2104 the companies DEM, SENG, HESS, TEŠ and TET were operating. The HSE represented the first energy pillar in the Slovenian wholesale market. The second energy pillar of the wholesale market was formed by the group of GEN energija, in which companies SEL, TEB and NEK were included.

**Table 15: Installed capacities in the production facilities in Slovenia**

Producer	Installed capacity (MW)	Share – all producers in SI	Share on the transmission network
<b>HSE</b>	<b>2,388</b>	<b>62.3%</b>	<b>72.2%</b>
HPP	1,037		
TPP	1,351		
<b>GEN energija</b>	<b>764</b>	<b>19.9%</b>	<b>23.1%</b>
HPP	119		
TPP	297		
NPP*	348		
<b>JP Energetika Ljubljana</b>	<b>118</b>	<b>3.1%</b>	<b>3.6%</b>
<b>Other small producers (on the transmission network)</b>	<b>37.6</b>	<b>1.0%</b>	<b>1.1%</b>
Small HPP	18.4		
Solar power plants	2.8		
CHP	16.4		
<b>Other small producers (on the distribution network)</b>	<b>527.41</b>	<b>13.8%</b>	<b>–</b>
Small HPP	102.59		
Solar power plants	259.55		
Wind-powered plants	3.40		
Facilities using biomass	2.20		
Geothermal power plants	0.00		
Facilities using landfill gas	7.06		
Facilities using gas from purification plants	1.09		
Facilities using biogas	28.51		
CHP facilities using wood biomass	13.79		
CHP using fossil fuels	109.22		
<b>Total in SI</b>	<b>3,834</b>	<b>100%</b>	<b>–</b>
<b>- on the transmission network</b>	<b>3,307</b>	<b>–</b>	<b>100%</b>

\* the 50-% of the installed capacity of Krško NPP is taken into account

Sources: Companies' data



In addition to the production in large power plants connected to the transmission network, the Slovenian electricity system also includes dispersed production facilities connected to the distribution network. In Slovenia, with respect to dispersed sources are important the production in small hydroelectric power plants, solar power plants and the production in industrial facilities for the cogeneration of heat and electricity (CHP). Due to financial difficulties in implementing the support scheme the number of new solar power plants significantly decreased in comparison with the previous year.

In September, the HSE as the owner of TPP Trbovlje decided that after the burning of the last stocks of coal stops the production of electricity in Trbovlje, which was certainly one of the most important event in the area of the electricity production in 2014.

According to the bilateral agreement between Slovenia and Croatia, half of the production from the Krško NPP belongs to Croatia, which reduces the share of the Krško NPP in the Slovenian production of electricity. Thus, in 2014 the Slovenian power plants produced a total of 16,628 GWh of electricity, but the actual Slovenian production was smaller, amounting to 13,598 GWh. In 2014, the largest share of electricity production in Slovenia that actually belongs to Slovenia (including a half of the Krško NPP's production) was contributed by the hydroelectric power plants, in which was generated 43.6% of all electricity for the Slovenian market. This share is followed by the share of thermoelectric power plants (24.5%), and by 22.3% of the nuclear power plant. Table 16 presents the data on production by sources. It should be noted that the values in this table differ slightly from the values in the table in section 2.1. The difference happened due to different ways of reporting of the system operators and production companies. The system operators subtracted the consumption in time when the plant was not operating, and the production companies reported on the actual delivery of energy to the grid. For this reason, the values in Table 16 are slightly higher than those in the table in Section 2.1.

**Table 16: Shares of different types of electricity production in Slovenia**

Type of production	Production (GWh)	Share	Production – 50% NPP (GWh)	Share
NPP	6,060	36.4%	3,030	22.3%
TPP	3,328	20.0%	3,328	24.5%
HPP	5,923	35.6%	5,923	43.6%
Other small producers (on the transmission network)	138	0.8%	138	1.0%
Other small producers (on the distribution network)	1,178	7.1%	1,178	8.7%
<b>Total</b>	<b>16,628</b>	<b>100.0%</b>	<b>13,597</b>	<b>100.0%</b>

Sources: Companies' data

The Block 6 of the TPP Šoštanj began with its trial operation. Its power, 546 MW, is by far the largest production unit connected to the Slovenian power grid in this year. An important share of newly connected production facilities presents the CHP facilities using fossil fuels, their total added power amounted to almost 25 MW. As we already mentioned, the share of new solar power plants decreased. In 2013, their contribution was 15 MW, and 2014 only 1.8 MW. Among the units that stopped their production is far most important the third block of the TPP in Šoštanj; its power was at the end of its lifetime 25 MW. The table 18 shows the overview of all new connections and shutdowns.

**Table 17: Connections and shutdowns of production facilities in 2014**

Type of production	Installed new net capacity in 2014 (MW)	Disconnected power plants in 2014 (MW)
Thermoelectric power plants using coal	546.00	25.00
HPP	0.42	0.52
Solar power plants	1.80	0.16
Wind-powered plants	0.96	0.00
CHP facilities using wood biomass	2.16	0.00
CHP using fossil fuels	25.12	1.11
<b>Total</b>	<b>576.46</b>	<b>26.79</b>

Sources: System operators

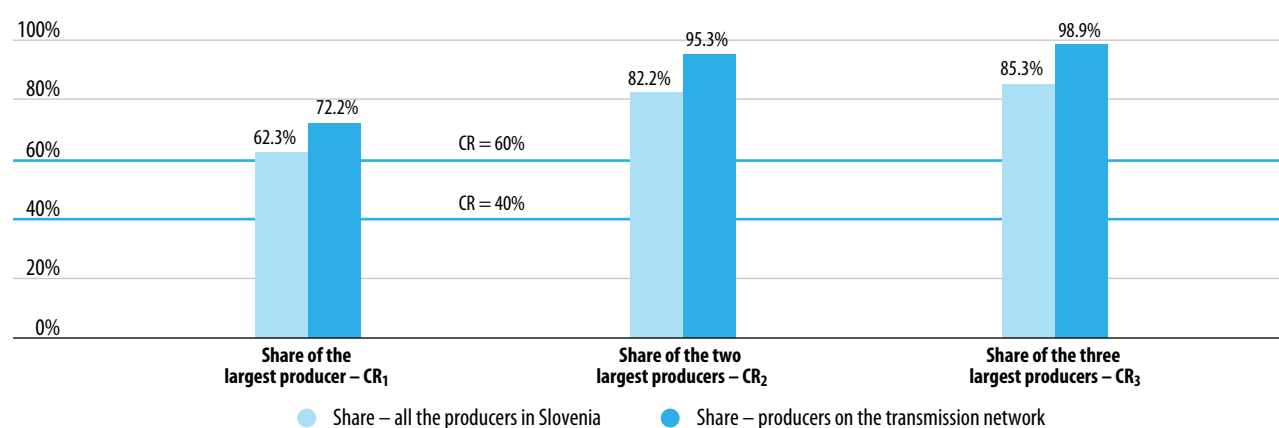
### 3.3.2.2 The degree of competitiveness of the production companies

With a concentration rate, we express the total market share of the largest companies in the area, and measure the level of market dominance, or oligopoly. The concentration rate is mainly affected by two factors: the number of companies in the market and their relative sizes. As the concentration rate is the sum of the shares of a selected number (n) of the largest companies in the market, it does not entirely explain the distribution of the market power. The concentration rate relating to a selected number of the largest companies is marked as  $CR_n$ .

In Slovenia, a market participant has a dominant position in the market if its market share exceeds 40%. It also applies that two or more companies have a dominant position if their share exceeds 60%. In the electricity market, the concentration of the production is of utmost importance.

In the figures below three different indicators of concentration rate, i.e., the market share of the largest producer ( $CR_1$ ), the market share of the two largest producers ( $CR_2$ ), and the market share of the three largest market producers ( $CR_3$ ) in Slovenia.

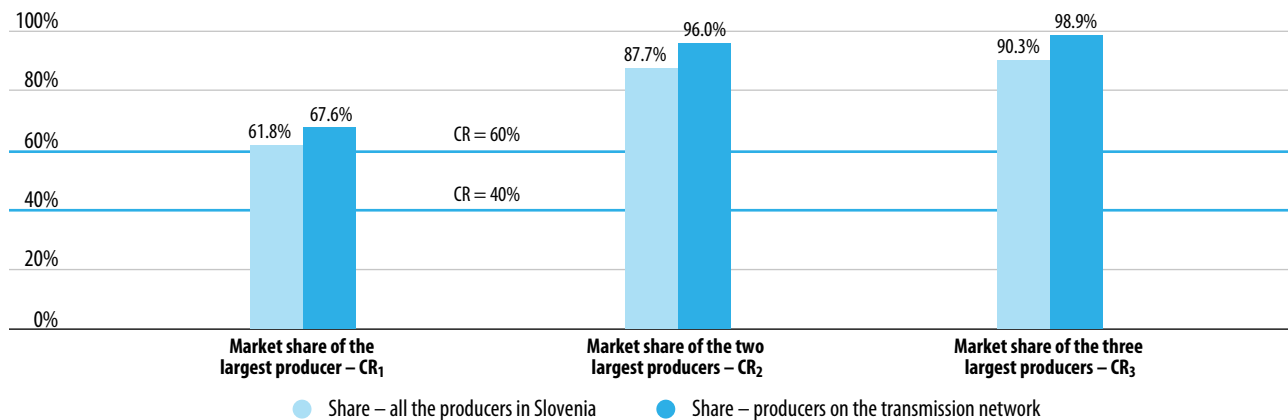
Figure 14 shows the CR indicators with respect to the installed capacity, separately for all the producers in Slovenia, and for the producers on the transmission network (50 per cent of the capacity installed at the Krško NPP is taken into account).

**Figure 14: Cumulative share of the one ( $CR_1$ ), two ( $CR_2$ ) and three ( $CR_3$ ) largest producers with respect to the installed capacity (50% of Krško NPP)**

Sources: Companies' data

Next figure shows the  $CR_n$  indicators with respect to electricity production (50% of Krško NPP is taken into account).

**Figure 15: Cumulative share of the one ( $CR_1$ ), two ( $CR_2$ ) and three ( $CR_3$ ) largest producers with respect to electricity production (50% of Krško NPP)**



Sources: Companies' data

In 2014, no significant changes happened in the market structure of the production companies. Two energy pillars in the wholesale market are formed; HSE and Gen energija remained the dominant company. The share of HSE exceeded 40% ( $CR_1$ ), thus, it remained the largest company. The share of other two largest electricity producers on the transmission network managed more than 95% ( $CR_2$ ), and the three largest electricity producers on the transmission network managed more than 99% ( $CR_3$ ). In the wholesale market, very tight oligopoly is created, caused by the fact that there are only two energy pillars.

The Herfindahl-Hirschman index (HHI) takes into account the total number of companies in the market, and their relative sizes. Companies with smaller market share have less weight. An HHI up to 1000 indicates a low concentration; between 1000 and 1800 indicates a medium concentration, and above 1800 indicates a high market concentration. A high concentration means a small number of market participants with large market shares.

The HHIs have been calculated on the basis of the total installed capacity, the installed capacity on the transmission network, and on the basis of the produced electricity, taking into account 50% of the production from the Krško NPP. The situation is shown in Table 18 and Table 19.

Table 18: HHI with respect to the installed capacity

Producer	Market share with respect to the installed capacity – Total SI	Market share with respect to the installed capacity – on the transmission network	HHI with respect to the installed capacity – Total SI	HHI with respect to the installed capacity – on the transmission network
HSE	62.3%	72.2%	3,878	5,213
GEN energija	19.9%	23.1%	397	533
JPEL	3.1%	3.6%	9	13
Other small producers (on the transmission network)	1.0%	1.1%	1	1
Other small producers (on the distribution network)	13.8%	–	189	–
<b>Total in SI</b>	<b>100.0%</b>	<b>–</b>	<b>4,474</b>	<b>–</b>
<b>- on the transmission network</b>	<b>–</b>	<b>100.0%</b>	<b>–</b>	<b>5,760</b>

Sources: Companies' data

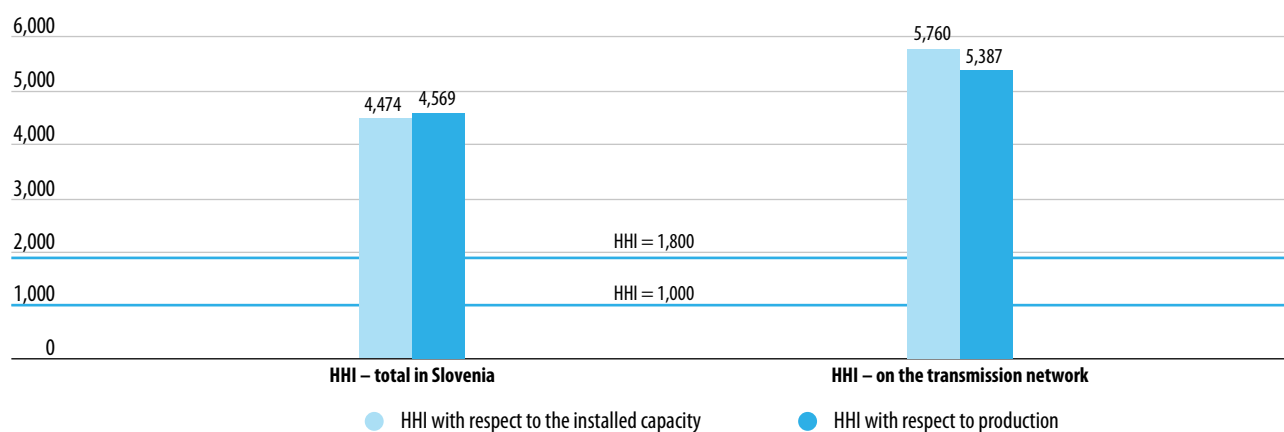
Table 19: HHI with respect to production

Producer	Market shares with respect to production – total in SI	Market shares with respect to production – on the transmission network	HHI with respect to production – total SI	HHI with respect to production – on the transmission network
HSE	61.8%	67.6%	3,816	4,574
GEN energija	25.9%	28.4%	671	804
Energetika Ljubljana	2.7%	2.9%	7	8
Other small producers (on the transmission network)	1.0%	1.1%	1	1
Other small producers (on the distribution network)	8.7%	–	75	–
<b>Total in SI</b>	<b>100%</b>	<b>–</b>	<b>4,569</b>	<b>–</b>
<b>- on the transmission network</b>	<b>–</b>	<b>100.0%</b>	<b>–</b>	<b>5,387</b>

Sources: Companies' data

In 2014, were HHIs still very high and significantly exceeded the upper limit of the medium concentration (HHI = 1800), showing the dominant position of the producers DEM, SENG, TEŠ, TET and HESS, joined in the HSE with respect to the production of electricity as well as the provision of ancillary services. Gen energija consists of SEL, TEB and Krško NPP. The third largest producer is JPEL. Other small producers connected to the transmission and distribution network contribute as well to the total production of electricity in Slovenia.

Figure 16: HHIs of the production companies



Sources: Companies' data

### 3.3.2.3 The business operations of production companies

According to the unaudited financial statements, the companies for electricity production finished 2014 with a net loss of €22.77 million. The best financial result was achieved by Dravske elektrarne Maribor, d.o.o., and the biggest increase in income in comparison with the previous year was achieved by Nuclear Power Plant Krško.

Table 20: Net profits of the companies for electricity production

	In million of euros		
	2013	2014	Index 14/13
Dravske elektrarne Maribor	12.11	8.52	70.4
Savske elektrarne Ljubljana	0.51	2.11	413.7
Soške elektrarne Nova Gorica	8.41	7.43	88.3
Hidroelektrarne na spodnji Savi	2.20	3.05	138.6
Termoelektrarna Brestanica	1.20	2.64	220.0
Termoelektrarna Šoštanj	2.05	-27.53	-1342.9
Termoelektrarna Trbovlje	-12.48	-21.12	169.2
Energetika Ljubljana	4.24	-0.47	-11.1
Nuklearna elektrarna Krško	0.27	2.60	963.0
<b>Total</b>	<b>18.51</b>	<b>-22,77</b>	<b>-123.0</b>

Sources: Companies' data

At the end of 2014, the companies for electricity production had 2492 employees, of which the hydroelectric power plants had 556 employees, the thermoelectric power plants 1290, and the Krško Nuclear Power Plant had 646 staff members. In comparison with 2013, the number of

employees in the hydroelectric power plants decreased by 12, or 2.1%.the number of employees in the thermoelectric power plants decreased by 39 employees, or 2.9%, and the number of employees in the Krško Nuclear Power Plant increased by 10 employees, or 1.6%.

**Table 21: Number of employees in the companies for electricity production**

	2013	2014	Index 14/13
Dravske elektrarne Maribor	288	276	95.8
Savske elektrarne Ljubljana	111	108	97.3
Soške elektrarne Nova Gorica	132	132	100.0
Hidroelektrarne na spodnji Savi	37	40	108.1
Termoelektrarna Brestanica	113	105	92.9
Termoelektrarna Šoštanj	450	439	97.6
Termoelektrarna Trbovlje	178	152	85.4
Energetika Ljubljana	588	594	101.0
Nuklearna elektrarna Krško	636	646	101.6
<b>Total</b>	<b>2,533</b>	<b>2,492</b>	<b>98.4</b>

Sources: Companies' data

The state is, directly or indirectly (through the ownership of the HSE and GEN energija), the majority owner of all the companies for electricity production, except for the Krško Nuclear Power Plant, where it holds a 50% share, and JP Energetika Ljubljana where the 100% owner is Javni holding Ljubljana.

**Table 22: Ownership structure of the companies for electricity production**

	HSE	GEN energija	Dravske elektrarne	Savske elektrarne	Javni holding Ljubljana	Hrvatska elektroprivreda	Other shareholders
Dravske elektrarne Maribor	100.0%						
Savske elektrarne Ljubljana		100.0%					
Soške elektrarne Nova Gorica	100.0%						
Srednjesavske elektrarne	60.0%	10.0%		30.0%			
Hidroelektrarne na spodnji Savi	15.4%	33.5%	30.8%	14.7%			5.6%
Termoelektrarna Brestanica		100.0%					
Termoelektrarna Šoštanj	100.0%						
Termoelektrarna Trbovlje	81.3%						18.7%
Energetika Ljubljana					100.0%		
Nuklearna elektrarna Krško		50.0%				50.0%	

Sources: Companies' data

### 3.3.2.4 The prices and the extent of the trade at the electricity exchange

The activity of the electricity exchange in the Republic of Slovenia is being carried out by BSP, Regional Energy Exchange, d.o.o. In 2014 the company BSP performed the following services for traders of electricity:

- Day-ahead market which includes also market coupling with Italy
- Intraday market, which includes trading on balancing market, jointly operated by BSP, Eles and Borzen
- Submission for Clearing (OTC), the process of registration in the system of accounting and financial settlement for bilateral agreements concluded outside the exchange

In Day-ahead market the favourable conditions continued, which have been going on since 2011 when market coupling between Slovenia and Italy was introduced. Sufficient trading volume also in 2014 enabled the Slovenian Power Exchange to have a real-time hourly pricing. For Day-ahead trading, the Slovenian Stock Exchange uses only hourly products, which means that traders could bid (for buying and selling) only for an individual hour. The total amount of traded energy on Day-ahead amounted to 6,248,399,014 MWh, which was 8.6% more than in 2013; for 20.8 TWh tenders were registered, out of that 10.5 TWh for buying and 10.3 TWh for selling. The increase in trading in comparison with the previous year is mainly due to the behaviour of traders; they normally returned the CBTC, which they obtained at the Slovenian-Italian border via annual and monthly explicit auctions, to the system operator on the principle "use it or sell it". Allocation of these capacities through implicit auctions in the context of market coupling increases the volume of trading on the power exchange for Day-ahead.

The average annual Base price in 2014 was 40.43 EUR/MWh, and 45.79 EUR/MWh for Peak. In comparison with 2013, the Base price decreased by 6.4%, and for Peak 8%; this indicates that the trend of falling prices in the wholesale electricity market continues, although slowly stabilising. The lowest price was recorded in March due to higher production from RES and warm weather, which resulted in lower consumption of electricity for heating. The highest price was recorded in October when the price of CBTCs from Austria to Slovenia reached the highest level in 2014. Highest price was mainly due to increased demand for imports from Austria, to which increased demand for energy in South-Eastern Europe contributed. The highest trading volume was reached in November and the lowest in June.

Electricity prices on the Slovenian Power Exchange mainly followed prices on neighbouring exchanges. In Table 23 the comparison of average Base and Peak for the Slovenian and neighbouring stock exchanges is shown.

**Table 23: Average prices for Base and Peak on the Slovenian and neighbouring power exchanges 2014**

Power Exchange	Base (EUR/MWh)	Peak (EUR/MWh)
Slovenia (BSP)	40.43	45.79
Austria (EXAA)	32.88	36.99
Germany (EPEX)	32.76	36.80
Hungary (HUPX)	40.50	50.53
Italy (GME – Nord)	50.35	54.31

Sources: Websites of power exchanges

The data in Table 23 show that the prices on the BSP varied between the prices on the power exchanges in the German-Austrian market and Italian market. Prices in Hungary were very similar to the Slovenian prices while Peak prices were significantly higher. This is mainly due to the circumstances in December when the prices on this power exchange reached the value up to 280 EUR/MWh.

In comparison with 2013, the prices on all neighbouring power exchanges were falling. The biggest fall was recorded on the Italian exchange, where the Base prices decreased by 18.2%, and Peak prices by 16.7%; the lowest fall was recorded on Hungarian exchange, where Base price dropped by 5%, and Peak price by 0.7%.

Intraday trading unlike the trading on Day-ahead market is conducted in a manner of continuous trading; the participants can submit and withdraw their bids as long as there are overlaps of supply and demand. In 2014, 1206 contracts on Intraday trading were concluded, in a total amount of 127,765,5 MWh, which was for 52.1% more than in 2013. The share of transaction for energy needed for balancing was a little more than 60%. The total volume of bids for this period amounted to 1,686,159 MWh.

In the context of OTC clearing, six transactions were transmitted to the trading platform in the total amount of 1300 MWh. All six transactions were concluded in the area of Intraday trading.

### 3.3.2.5 Renewable energy sources and cogeneration of useful heat and power

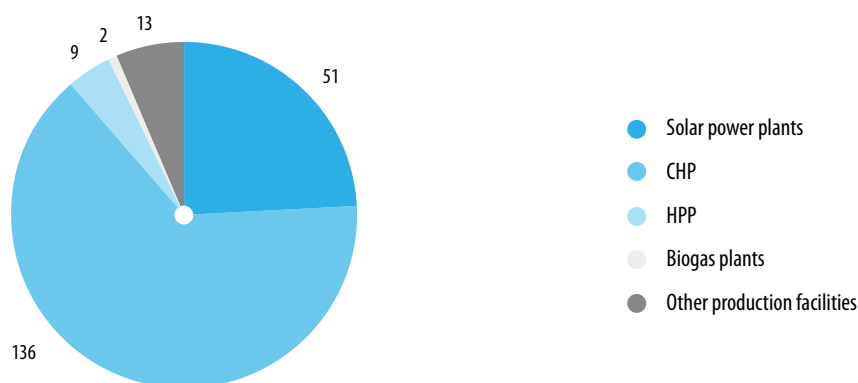
#### 3.3.2.5.1 Declarations for a production facility and decisions on granting support

In 2014, the Energy Agency issued 810 declarations for production facilities using RES or for cogeneration facilities that enter the Register of Declarations (hereinafter referred to as register), which is managed by the Energy Agency.

Among the facilities, which were for the first time registered, prevailed the production facilities for CHP. As a production source 112 of them use natural gas, their total nominal electrical output exceeds half of all production facilities that entered the register for the first time.

In the group of biogas plants are in addition to those using biogas produced from biomass also included those who use biogas produced from biodegradable waste, gas from purification plants, wastewater, and landfill gas.

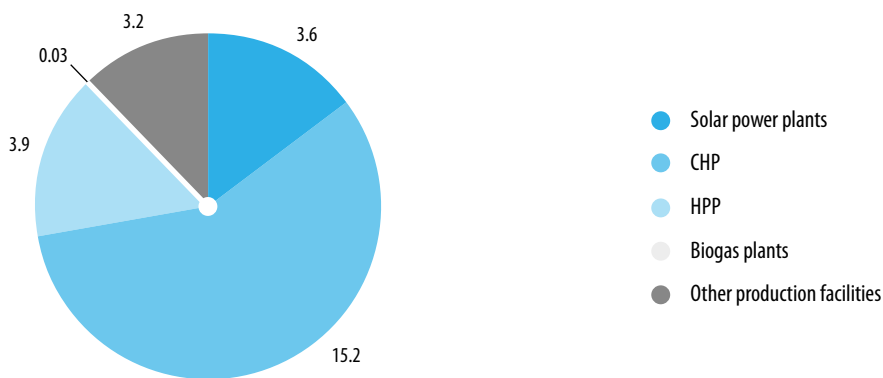
**Figure 17: Number of the issued declarations for production facilities entering the register for the first time in 2014**



Source: Energy Agency



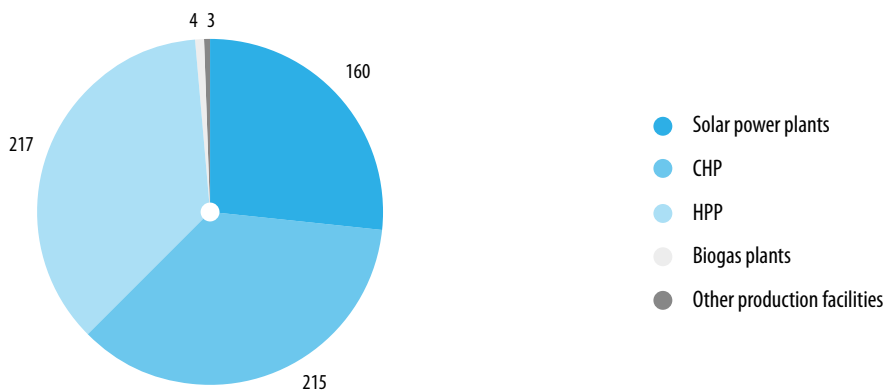
Figure 18: Net capacity in MW of production facilities with issued declarations entering the register for the first time



Source: Energy Agency

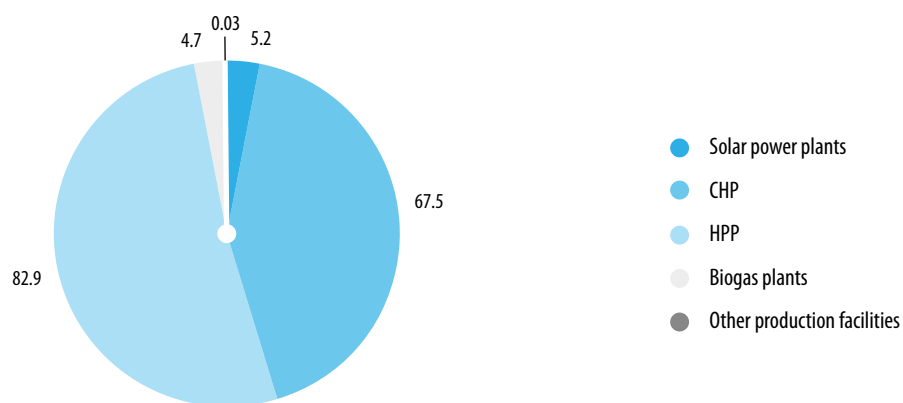
For the production facilities, which were already in the register and the validity of existing declaration expired, most of declaration were issued for hydropower plants, CHP and solar power plants.

Figure 19: Number of the issued declarations for production facilities, which were already in the register



Source: Energy Agency

**Figure 20: Net capacity in MW of production facilities with issued declarations in 2014, which were already in the register**

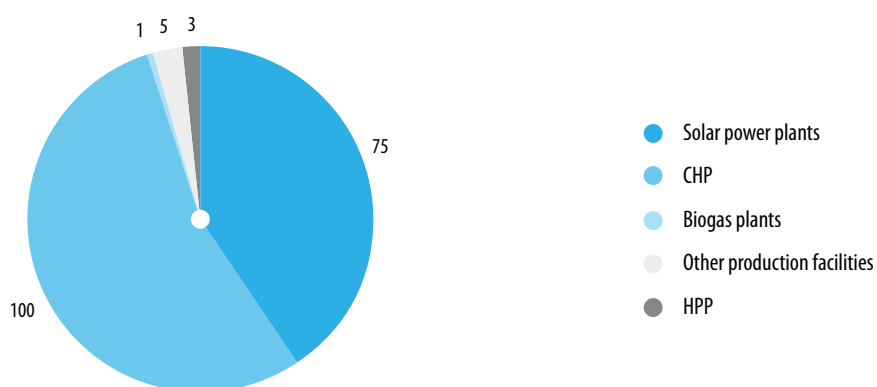


Source: Energy Agency

The Energy Agency issued 328 decisions on granting support for the produced electricity. Most of them were assigned to receive the support for electricity produced in solar power plants.

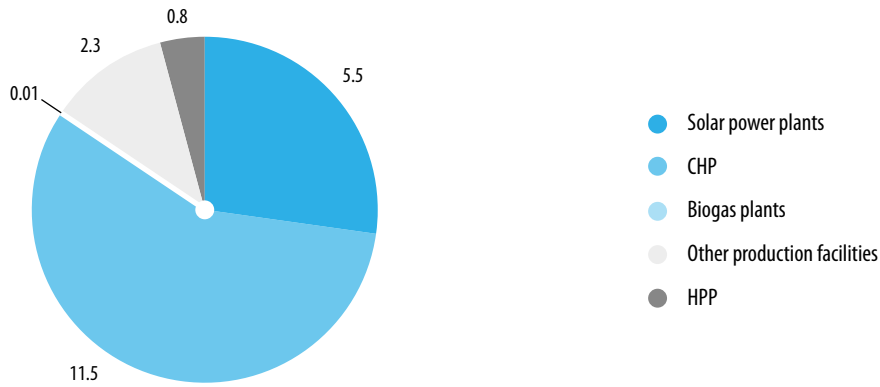
For new production facilities 184 decision were issued. Most of them were for the production facilities for CHP.

**Figure 21: Number of issued decisions on granting support for new production facilities**



Source: Energy Agency

**Figure 22: Net capacity of the production facilities in MW that received decisions on granting support**

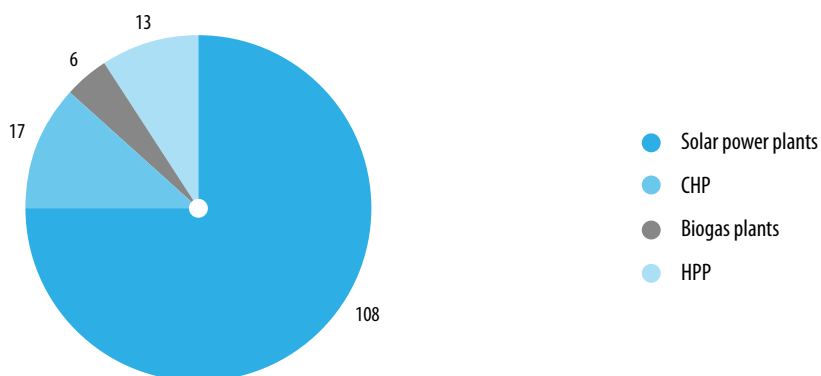


Source: Energy Agency

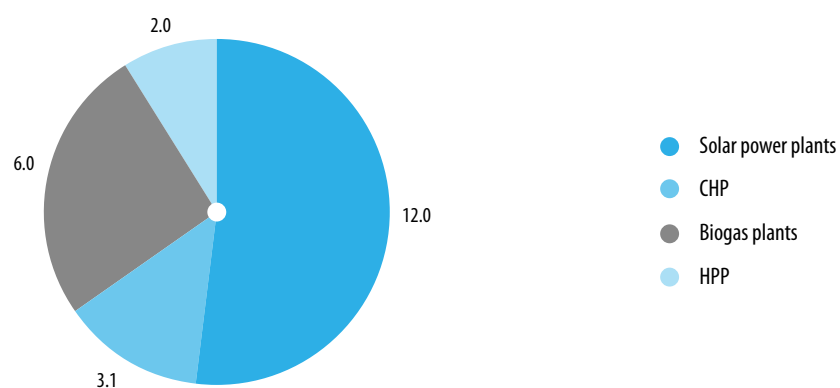
Other production facilities are the plants using landfill gas, gas from purification plants and wind-powered plants.

For renewed production facilities and facilities whose recipient of the support or the mode of support changed, 144 decisions were issued (Figures 23 and 24).

**Figure 23: Number of issued decisions on granting support for other production facilities**



Source: Energy Agency

**Figure 24: Net capacity of other production facilities in MW that received decisions on granting support**

Source: Energy Agency

Production facilities included in the support scheme produced 906 GWh of electricity. The paid support in total amounted to €130.9 million.

**Table 24: Production of units included in the support scheme and paid support**

Type of facility	Electricity produced (GWh)	Paid support (in million EUR)
HPP	156.7	9.4
Solar power plants	244.6	62.6
Wind-powered plants	4.2	0.3
Biogas plants	125.6	15.9
Facilities using wood biomass	100.0	14.0
CHP facilities using fossil fuels	270.9	27.7
Others	3.9	1.0
<b>Total</b>	<b>905.9</b>	<b>130.9</b>

Sources: Energy Agency, Borzen

### 3.3.2.5.2 Guarantees of origin and RECS certificates

The Energy Agency issued guarantees of the origin of electricity for a total of 5,442.2 GWh and for a total of 10.1 GWh RECS certificates (Renewable Energy Certification System).

### 3.3.2.6 Emission allowances

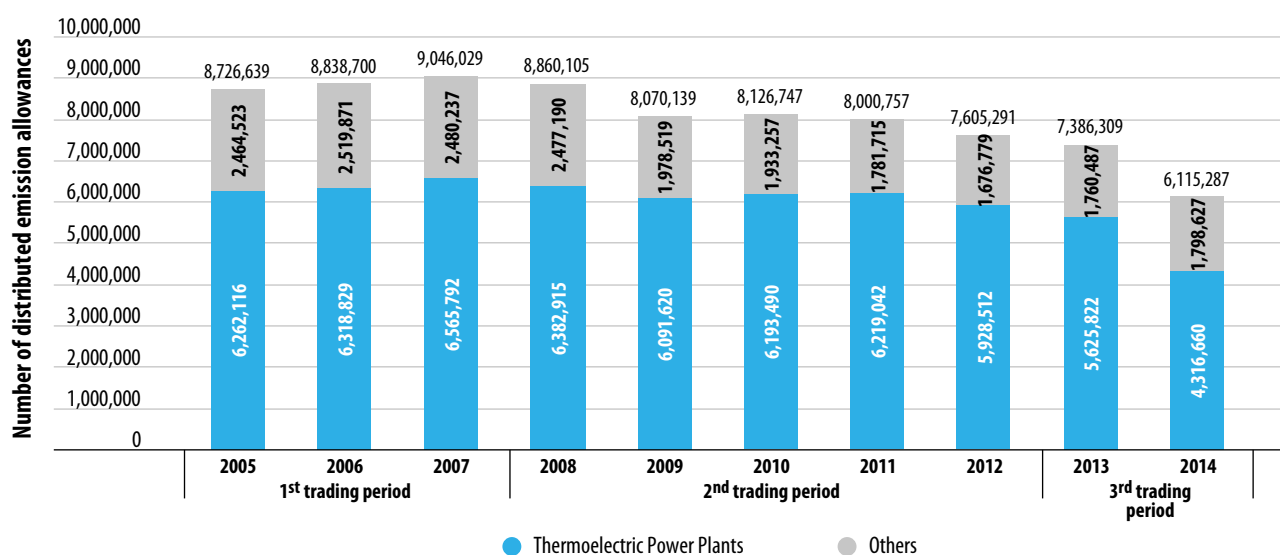
The system of trading with emission allowances includes the facilities with an input heat power of 20 MW, and, with respect to the energy sector, also the facilities with an input heat power of 15–20 MW. One emission allowance represents a tonne of CO<sub>2</sub>. For each current year, the companies, i.e., the operators of the facilities have to register the number of emission allowances that matches their CO<sub>2</sub> emissions. If their emissions exceed the number of distributed emission allowances, the operators have to buy the remaining emission allowances in the market. If, on the other hand, the operators have a surplus of emission allowances because they produce small amounts of emissions, they can sell them.

In accordance with the Environmental Protection Act from 2013, the operators of electricity production facilities, and carbon capture and storage facilities must from 2013 onwards buy all emission allowances. The government has adopted an Ordinance on the list of operators of installations emitting greenhouse gases, for the period 2013–2020. The ordinance contains the list of facilities operators:

- which are during this period entitled to free emission allowances;
- which are not entitled any more to free emission allowances (TPP Brestanica in TPP Trbovlje);
- which are excluded from the emission allowances system trading since they will carry out equal measures.

In 2014, thermal power plants in the third trading period handed over for 4,316,660 of emission allowances, which was 71% of all emission allowances distributed in Slovenia. In the Figure 25 numbers of distributed emission allowances for all three trading periods between 2005–2014 are introduced.

Figure 25: Number of distributed emission allowances from 2005 to 2014

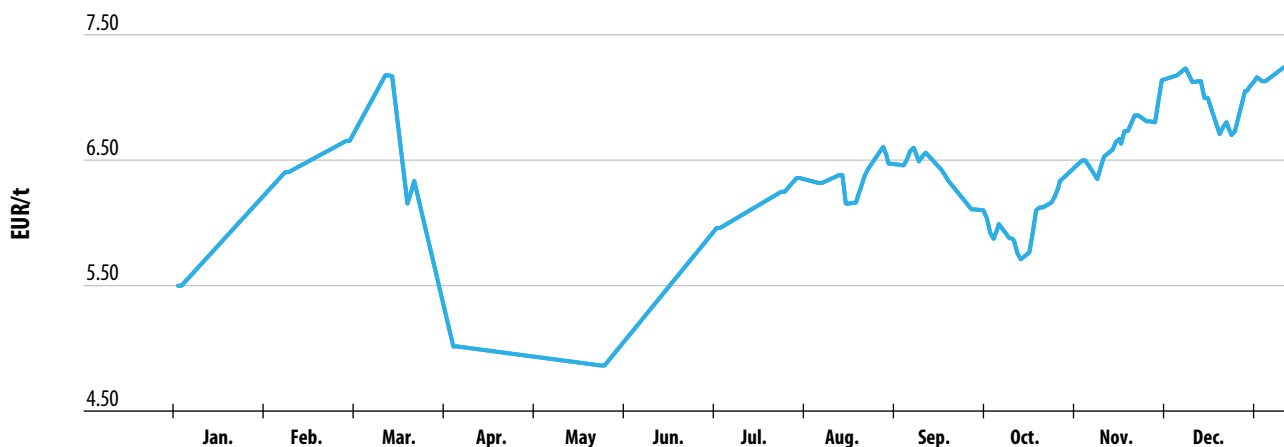


Source: Environmental Agency of the RS

Figure 26 shows the price of emission allowances on the EEX (purchase in 2014 for 2015). The price varied between 4.50 and 7.5 euros per tonne of CO<sub>2</sub>.

In accordance with Decree on environmental tax on carbon dioxide emissions the environmental tax is paid for air pollution with CO<sub>2</sub> from fuel combustion. This levy is a revenue budget of Slovenia.

**Figure 26: Trends of the price for emission allowances on the power exchange in the third trading period in 2014**



Source: EEX

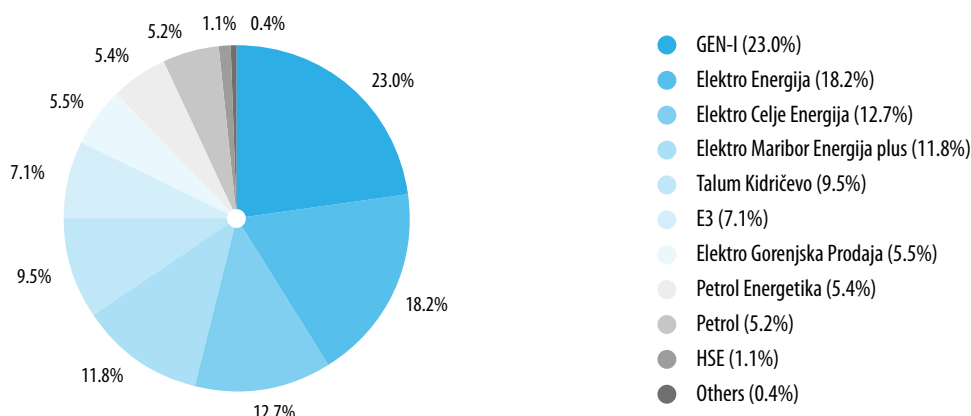
### 3.3.3 Supply and the retail market

#### 3.3.3.1 Electricity supply

##### 3.3.3.1.1 Electricity supply to all end consumers

In the retail market, 13 suppliers were active in the Slovenian retail market, delivering electricity to eight large consumers connected to the transmission network, and 936,874 business and household consumers connected to the distribution network.

**Figure 27: Market shares of the electricity suppliers to all end consumers at the end of 2014**



Sources: Companies' data

To all consumers in Slovenia was delivered 12.6 TWh of electricity. The largest market share had the company GEN-I with 23%, and the second largest Elektro Energija, reaching 18.2%.

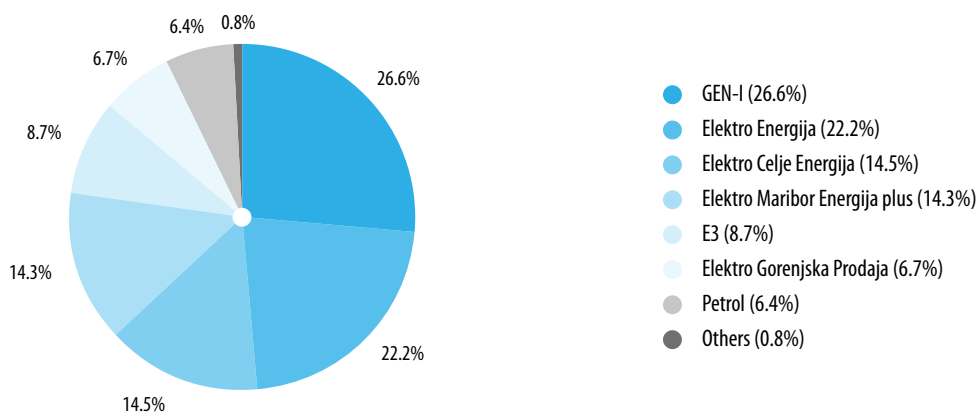
All suppliers of electricity to final customers have to disclose to their consumers the contribution of different energy sources to the portfolio of the supplier in the preceding year; this information are disclosed on bills and in promotional material.

In 2014, the Energy Agency in accordance with the Act on the determination of the shares of individual electricity production sources and on the method of their presentation for the first time calculated the remaining structure of production sources for Slovenia; the structure was by the end of May published on its website. On 1 July 2014, the suppliers started to inform their consumers regarding the origin of the electricity they consumed 2013. With this the Slovenian consumers received credible information on production sources of electricity, which they consumed in the previous year. Unlike the old methodology on the determination of the shares of individual electricity production sources, the new one prevents double counting. The new methodology was prepared on the basis of the recommendations of the European project RE-DISS, which aims at improving significantly the reliability and accuracy of the information given to consumers of electricity in Europe regarding the origin of the electricity they are consuming. Due to a large number of Guarantees of Origin, which the Slovenian traders sold to the foreign markets and were cancelled for the needs of local suppliers and large electricity consumers, in the rest of the structure of production sources for 2013 the share of RES is relatively low and amounts to only 9%.

### 3.3.3.1.2 Supply to the consumers on the distribution network

GEN-I had the biggest market share of 26.6% in supply of electricity to the consumers on the distribution network; the second place held Elektro Energija with 22.2%.

Figure 28: Market shares of the suppliers to the consumers on the distribution network at the end of 2014



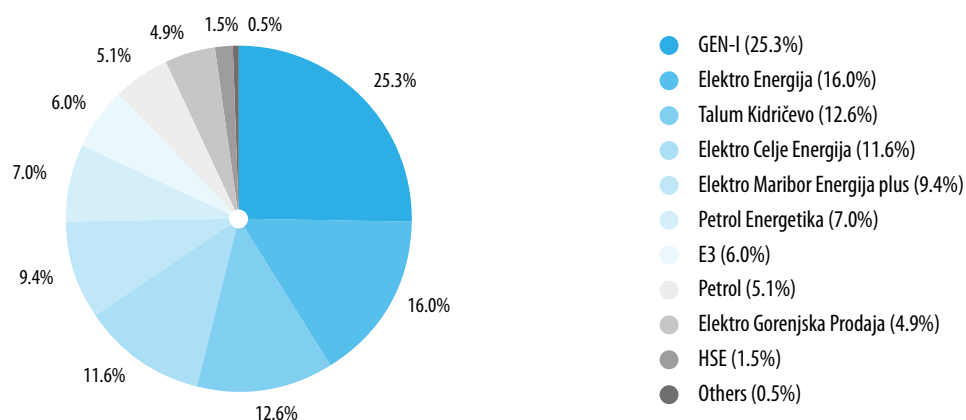
Sources: Companies' data



### 3.3.3.1.3 Supply to all business consumers

GEN-I had the biggest market share in supply to business consumers; it delivered electricity to 25.3% of all business consumers. Elektro Energija supplied electricity to 16% of all business consumers, and Talum Kidričevo 12.6%.

**Figure 29: Market shares of the suppliers to all business consumers at the end of 2014**



Sources: Companies' data

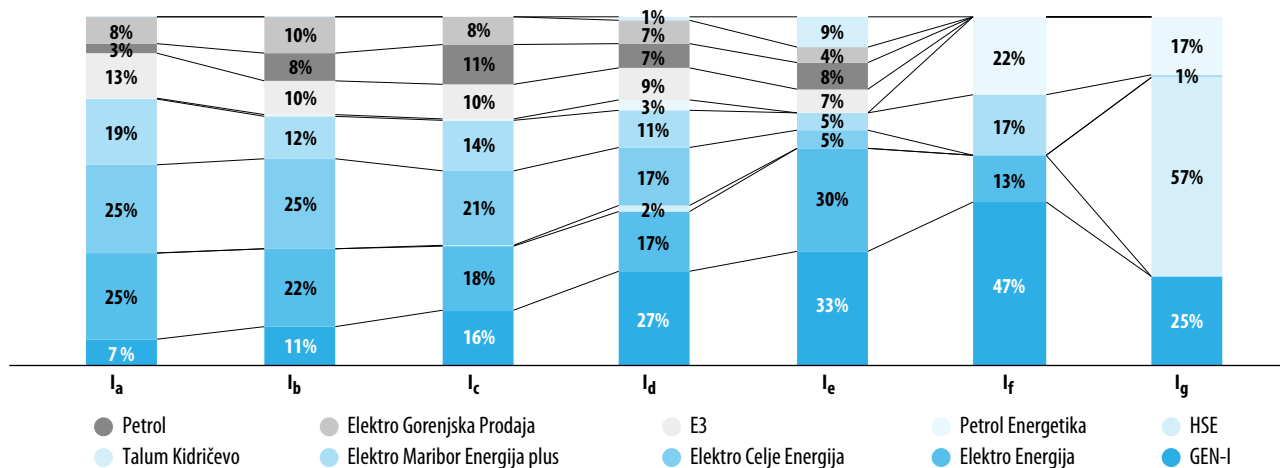
In Figure 30 are shown market shares of suppliers to business consumers in 2014 with respect to the standard consumption group according to the Eurostat methodology. These groups are determined on the basis of the annual consumption of electricity in volumes given in Table 25.

**Table 25: Standard groups of business consumers according to Eurostat**

Consumption group	Volume (MWh)
I <sub>a</sub>	<20
I <sub>b</sub>	20–500
I <sub>c</sub>	500–2.000
I <sub>d</sub>	2.000–20.000
I <sub>e</sub>	20.000–70.000
I <sub>f</sub>	70.000–150.000
I <sub>g</sub>	>150.000

Source: Eurostat

Figure 30: Market shares of suppliers to the business consumer with respect to the consumption group at the end of 2014



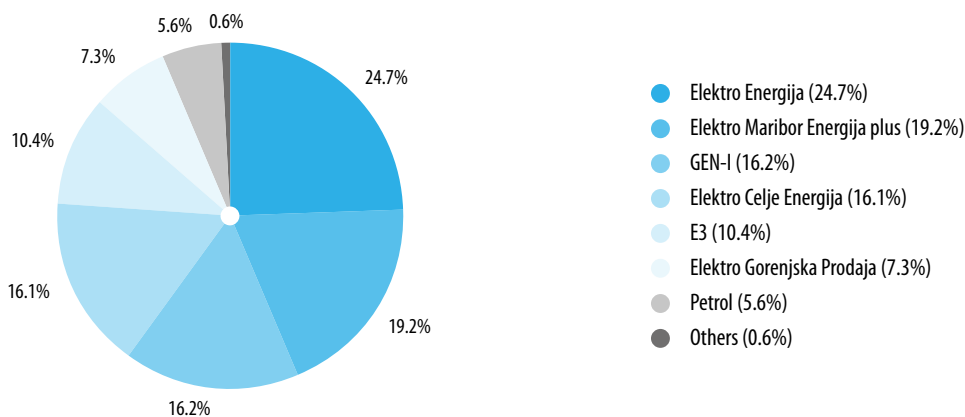
Source: Companies' data

From Figure 30 is evident that with increasing in annual consumption as a rule the number of supplier is decreasing; to the group with the highest annual consumption (group I<sub>g</sub>) the electricity was supplied by only four suppliers - GEN-I, TALUM Kidričevo, Elektro Maribor Energija Plus in Petrol Energetika. TALUM Kidričevo had also the largest market share, 57%.

### 3.3.3.1.4 Supply to the household consumers

The largest market share between the suppliers to the household consumers belonged to Elektro Energija, which supplied electricity to almost one quarter of all households in Slovenia. Other suppliers, which were before the unbundling part of the DSOs, had their market shares at it is shown in Figure 31. The market share GEN-I and Petrol, which entered to the retail market at later stage, was almost 22%.

Figure 31: Market shares of the suppliers to the household consumers at the end 2014



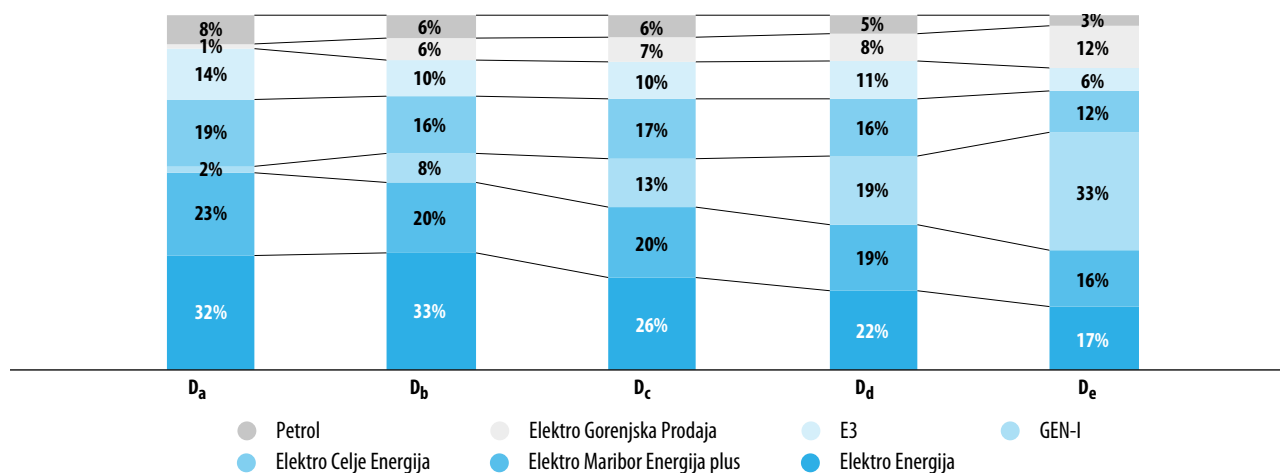
Sources: Companies' data

Figure 32 shows the dispersion of market shares of the suppliers to household consumers, which are according to the annual electricity consumption divided into the following groups:

- $D_a$ : annual consumption under 1,000 kWh
- $D_b$ : annual consumption from 1,000 kWh to 2,500 kWh
- $D_c$ : annual consumption from 2,500 kWh to 5,000 kWh
- $D_d$ : annual consumption from 5,000 kWh to 15,000 kWh
- $D_e$ : annual consumption from 15,000 kWh

The largest market share in the supply of household consumers with the highest consumption ( $D_e$ ) had GEN-I. Elektro Energija supplied almost one third of consumers with the lower annual consumption (group  $D_a$ ).

**Figure 32: Market shares of the suppliers to the household consumers with respect to the consumption group and at the end of 2014**



Sources: Companies' data

### 3.3.3.2 The degree of competition in the retail market

#### 3.3.3.2.1 The degree of competition in the retail market – supply to all end consumers

Table 26 presents the entire retail market, which also includes large end consumers connected to the transmission network.

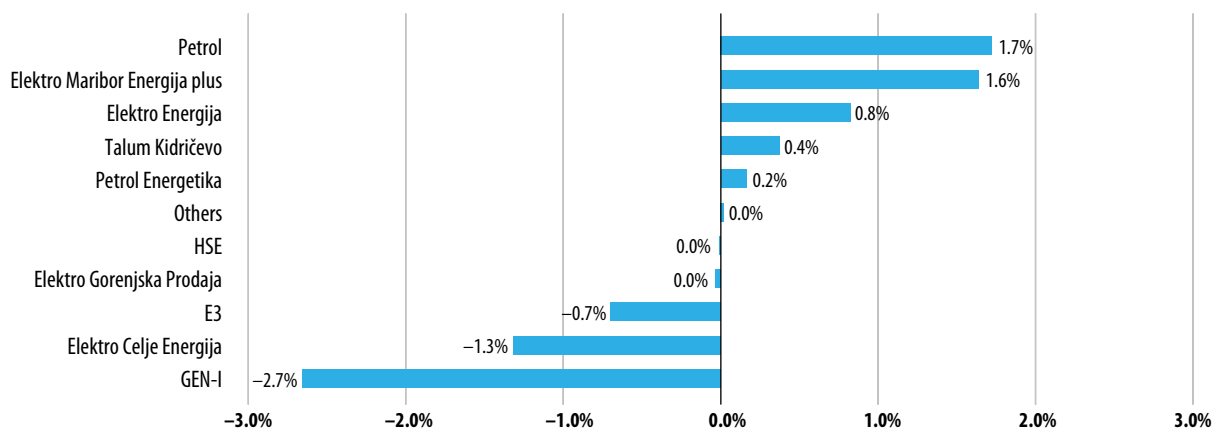
**Table 26: Market shares and HHIs of the suppliers to all end consumers in Slovenia in 2014**

Supplier	Supplied electricity (GWh)	Market share
GEN-I	2,902	23.0%
Elektro Energija	2,291	18.2%
Elektro Celje Energija	1,601	12.7%
Elektro Maribor Energija plus	1,492	11.8%
TALUM Kidričevo	1,199	9.5%
E3	897	7.1%
Elektro Gorenjska prodaja	693	5.5%
Petrol Energetika	675	5.4%
Petrol	658	5.2%
HSE	139	1.1%
Others	51	0.4%
<b>Total</b>	<b>12,598</b>	<b>100.0%</b>
<b>HHI of suppliers to all end consumers</b>		<b>1,392</b>

Sources: Companies' data

Look at the entire market segment, which includes consumers on the transmission network, shows medium market concentration, since HHI was below the upper limit of 1800.

Figure 33 shows that market shares of Petrol and Elektro Maribor Energija plus compared to the previous year increased the most. GEN-I in 2014 compared to the previous year lost the largest market share in the amount of 2.7%.

**Figure 33: Changes to the market shares of the suppliers to all consumers**

Source: Energy Agency

### 3.3.3.2.2 The degree of competition in supply to the consumers on the distribution network

Market shares of the suppliers in the retail market to supply consumers on the distribution network are shown in Table 27.

**Table 27: Market shares and HHIs of the suppliers to all consumers on the distribution network in 2014**

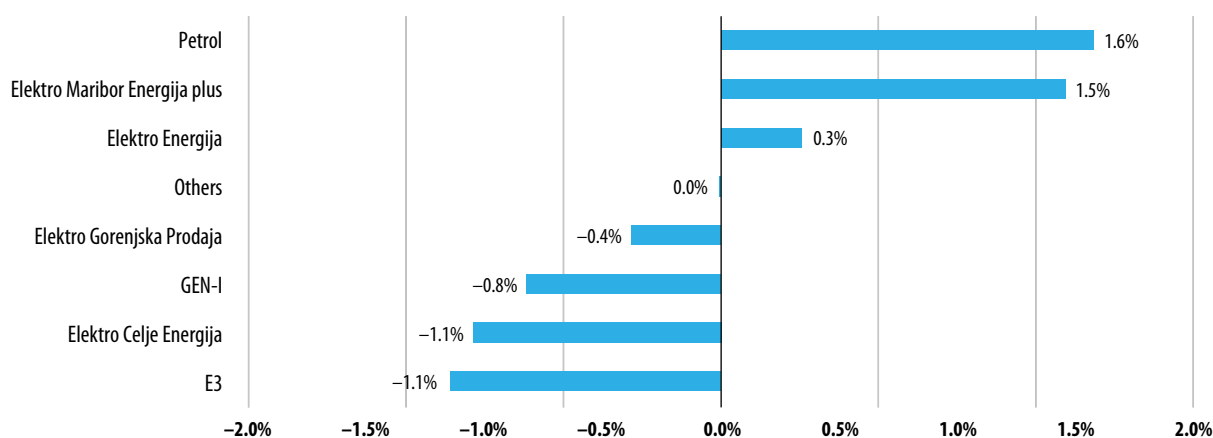
Supplier	Supplied electricity (GWh)	Market share
GEN-I	2,743	26.6%
Elektro Energija	2,291	22.2%
Elektro Celje Energija	1,493	14.5%
Elektro Maribor Energija plus	1,477	14.3%
E3	898	8.7%
Elektro Gorenjska Prodaja	687	6.7%
Petrol	656	6.4%
Others	79	0.8%
<b>Total</b>	<b>10,323</b>	<b>100.0%</b>
<b>HHI of the suppliers to all consumers on the distribution network</b>	<b>1,773</b>	<b>1.773</b>

Sources: Companies' data

Also in 2014, none of the electricity supply companies had a dominant position, since market shares did not exceed 40%. Despite the dispersion of supply, the concentration was still high, the value of HHI was 1773, just below the maximum level.

In 2014, Petrol and Elektro Maribor Energija plus increased their market share the most. Companies E3, Elektro Celje Energija in GEN-I in this market segment decreased their market shares.

**Figure 34: Changes to the market shares of the suppliers to consumers on the distribution network in 2014 with respect to 2013**



Source: Energy Agency

### 3.3.3.2.3 The degree of competition in supply to all business consumers

Market shares of the suppliers to business consumers in 2014 are shown in Table 28.

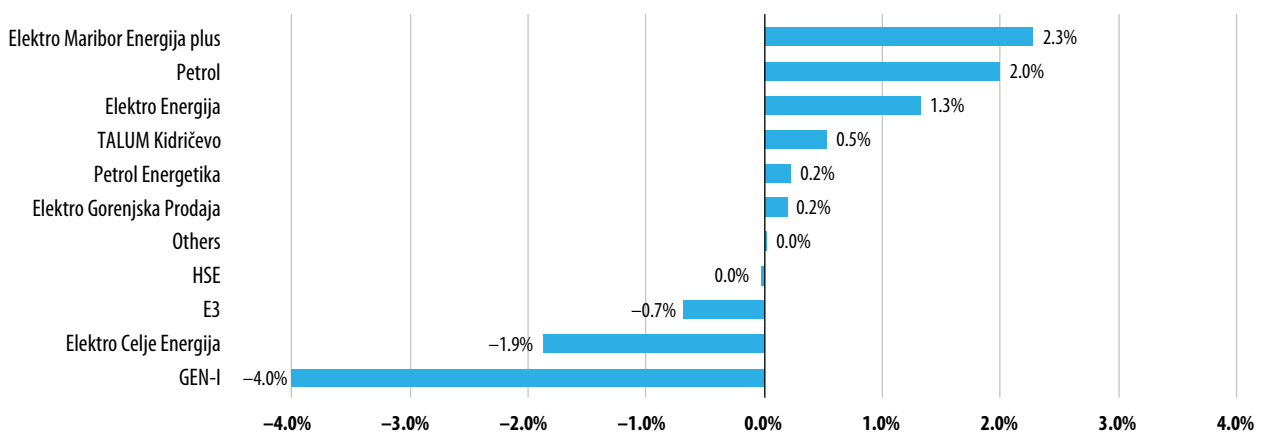
**Table 28: Market shares of and HHIs the suppliers with respect to supply to business consumers in 2014**

Supplier	Supplied electricity (GWh)	Market shares
GEN-I	2,398	25.3%
Elektro Energija	1,520	16.0%
TALUM Kidričevo	1,199	12.6%
Elektro Celje Energija	1,100	11.6%
Elektro Maribor Energija plus	893	9.4%
Petrol Energetika	660	7.0%
E3	573	6.0%
Petrol	484	5.1%
Elektro Gorenjska prodaja	465	4.9%
HSE	139	1.5%
Others	49	0.5%
<b>Total</b>	<b>9,480</b>	<b>100.0%</b>
<b>HHI of the suppliers to all business consumers</b>		<b>1,418</b>

Sources: Companies' data

In 2014, the medium concentration continued in this part of the market, since HHI value was under 1800. The biggest change in market share happened to Elektro Maribor Energija plus and Petrol. GEN-I lost 4 percentage points in comparison with the previous year. Changes in market shares with respect to the previous year are shown in Table 35.

**Figure 35: Changes to market shares of the suppliers to all business consumers**



Source: Energy Agency

### 3.3.3.2.4 The degree of competition in supply to the household consumers

Market shares of electricity suppliers to household consumers in 2014 are shown in Table 29.

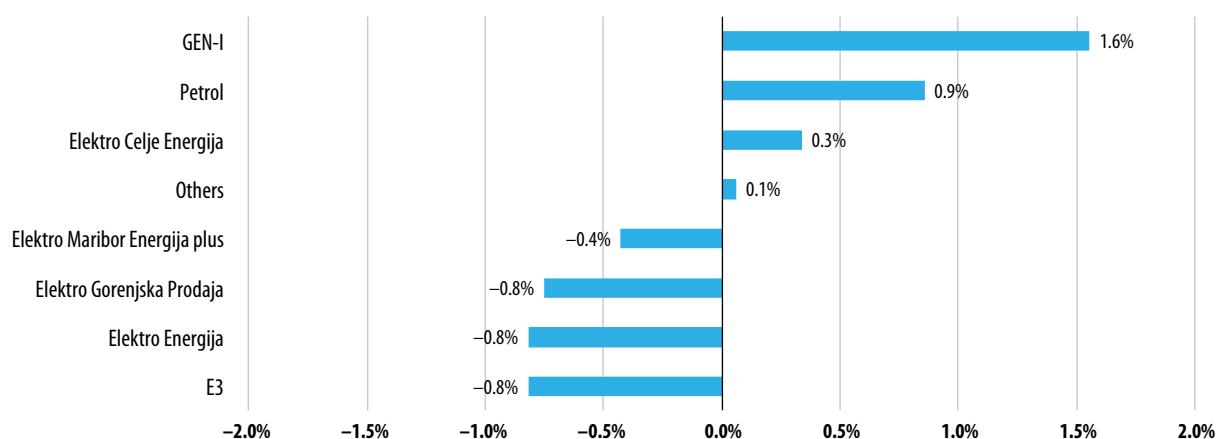
**Table 29: Market shares and HHIs of the suppliers to the household consumers in 2014**

Supplier	Supplied electricity (GWh)	Market share
Elektro Energija	771	24.7%
Elektro Maribor Energija plus	599	19.2%
GEN-I	504	16.2%
Elektro Celje Energija	501	16.1%
E3	324	10.4%
Elektro Gorenjska Prodaja	228	7.3%
Petrol	174	5.6%
Others	18	0.6%
<b>Total</b>	<b>3,118</b>	<b>100.0%</b>
<b>HHIs of the suppliers to the household consumers</b>		<b>1,692</b>

Sources: Companies' data

In the segment of household consumption, the medium market concentration is established with the value of HHI around 1692. Elektro Energija had the largest share, supplying 24.7% of all household consumers, and the second was Elektro Maribor Energija plus with almost 20%. Together two suppliers supplied more than half of the household consumers.

**Figure 36: Changes to the market shares of the suppliers to the household consumers in 2014 with respect to 2013**



Source: Energy Agency

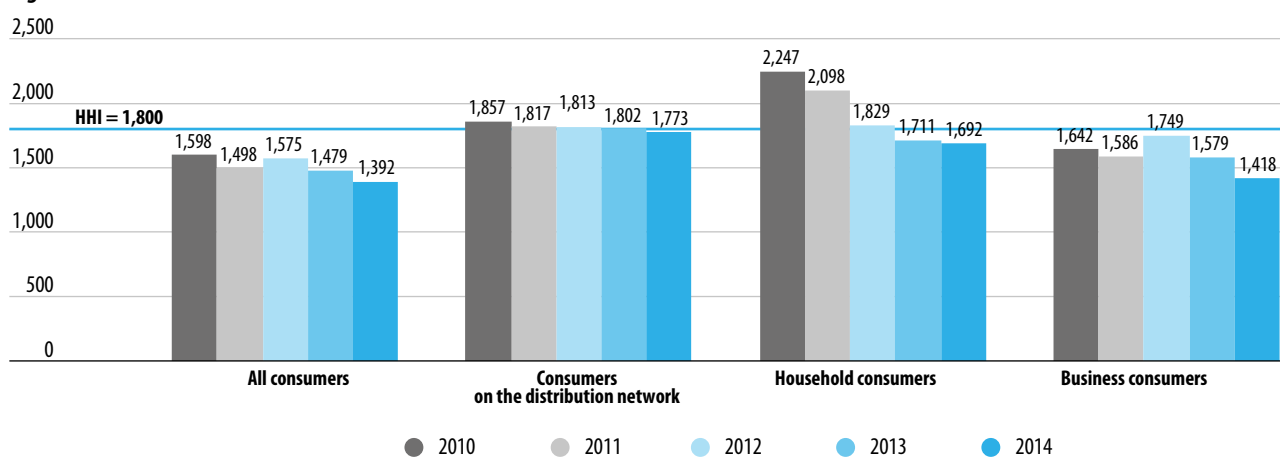


Figure 36 shows that GEN-I again strengthened its market share according to data from 2013 by 1.6%. The company Petrol strengthened its market share for almost one percent. Market share of Elektro Gorenjska Prodaja, Elektro Energija in E3 lowered by 0.8 percentage point.

### 3.3.3.2.5 Trends of the HHIs in the retail market for 2010–2014

Trends of HHIs in the all retail markets during the last four years were negative, which reflect the strengthening of competition between the suppliers. The competition strengthen the most in the supply of business consumers. The electricity retail markets in Slovenia in 2014 reflected the medium concentration as the values of HHI ranged below 1800.

Figure 37: Trends of the HHIs in the retail market from 2010–2014



### 3.3.3.3 Comparison of electricity prices for typical business consumers in the retail market

The price of electricity supplied includes:

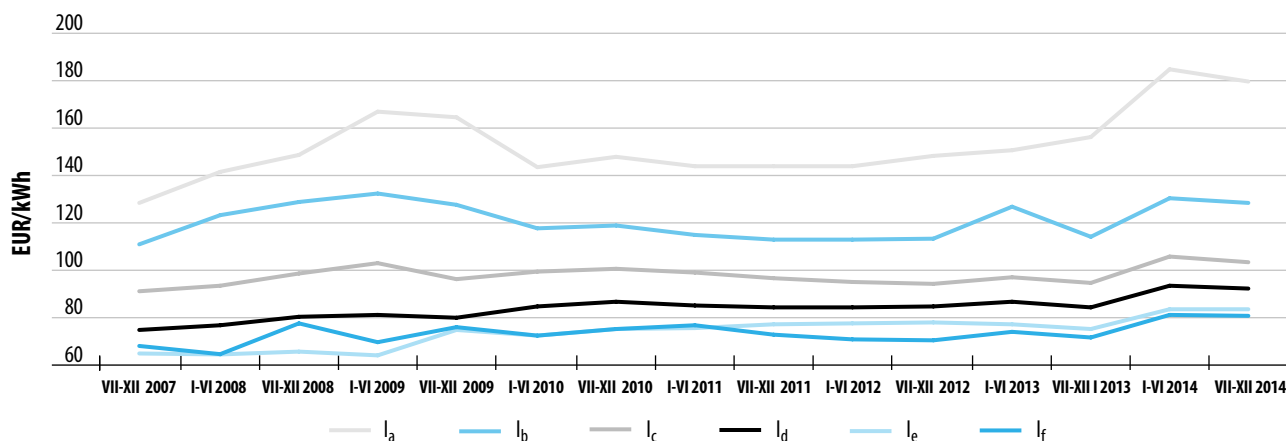
- the energy price
- the network charge for the transmission and distribution network and ancillary services
- supplement to the network charge for covering the costs of recording the contracts on a regulated market and for the operation of the Energy Agency
- the contribution to supporting electricity production from RES and CHP
- the contribution to supporting energy efficiency programmes
- the excise duty
- the value added tax

#### Electricity prices for business consumers

The average electricity price for business consumers, without VAT, in the second half of 2014 in Slovenia amounted to 89 EUR/MWh.

Figure 38 shows the trends of the electricity prices for typical business consumers in Slovenia from 2007 to 2013. Standards consumers groups according to the new Eurostat methodology, which are listed in Table 25 (Section 3.3.3.1.3.) are used.

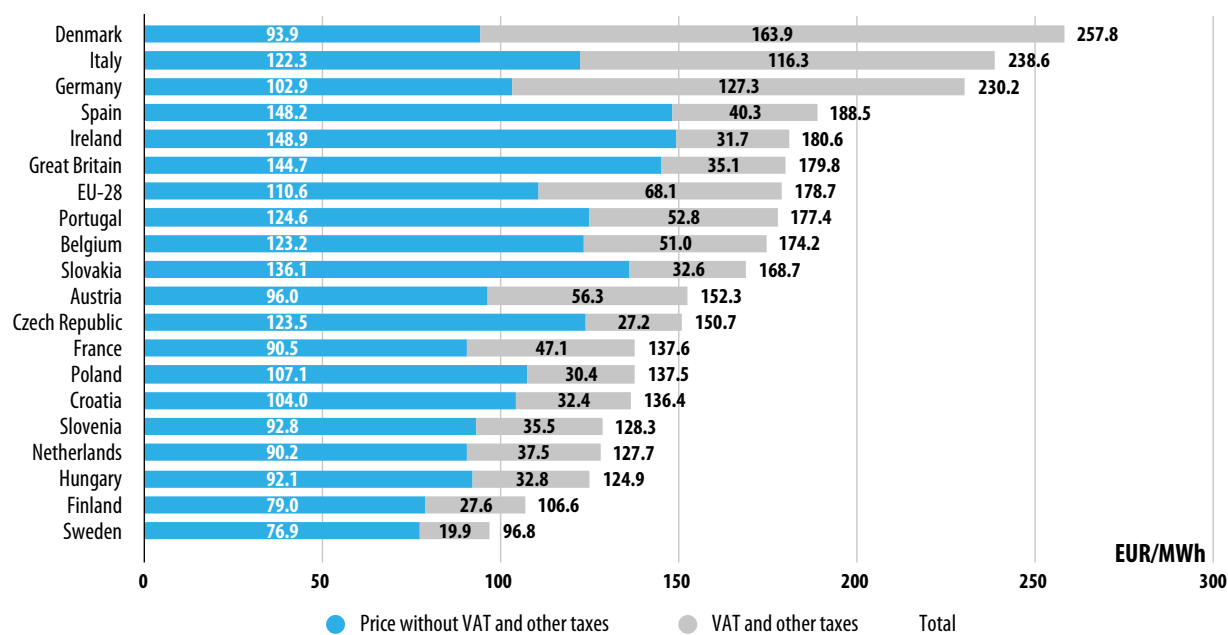
**Figure 38: Semi-annual movements of electricity prices for typical business consumers in Slovenia from 2007–2014**



Source: Statistical office of the Republic of Slovenia

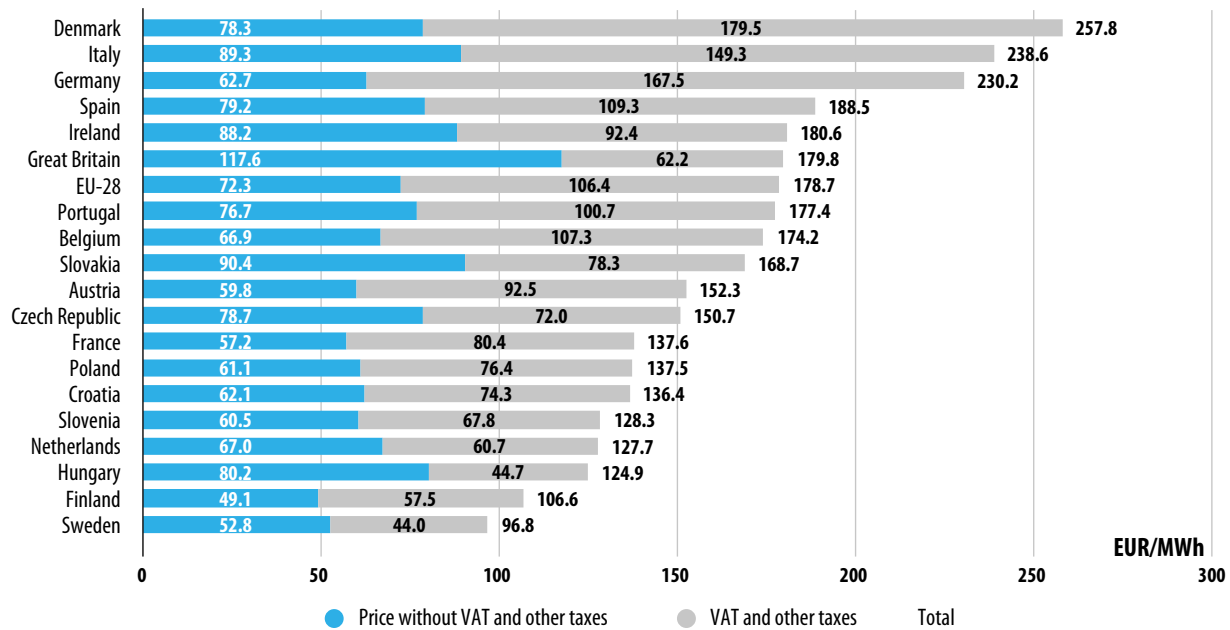
In the figures that follow the comparison of electricity prices in some EU countries for 2014 for two typical business consumers selected in line with the new methodology Eurostat are presented. Final prices are shown, in which for Slovenia the price for energy, the use-of-network price, excise duties, contributions and VAT are included.

**Figure 39: Comparison of electricity prices for a typical business consumer with an annual consumption of 20 to 500 MWh in the EU countries and in Slovenia for 2014**



Source: Eurostat

**Figure 40: Comparison of electricity prices for a typical business consumer with an annual consumption of 20 to 70 GWh in the EU and Slovenia for 2014**

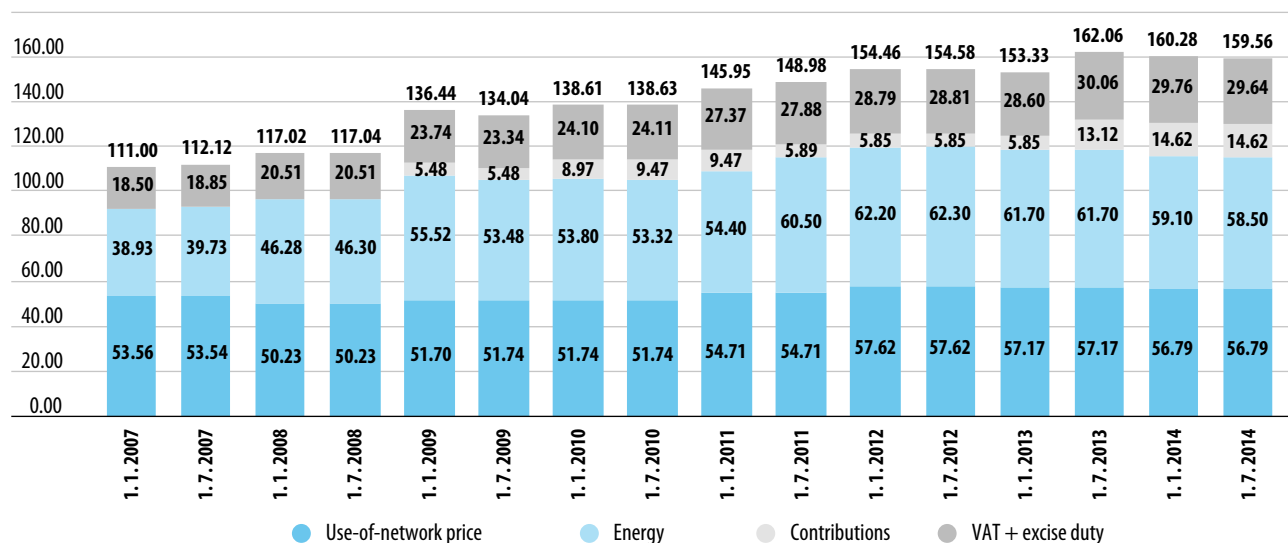


Source: Eurostat

### 3.3.3.4 Comparison of electricity prices in the retail market for a typical household consumer

Electricity suppliers offer different packages that take into account the amount of electricity consumption and the ways of electricity use, and also whether the electricity is produced from RES.

**Figure 41: Trend of the final electricity price for a typical household consumer (Dc – 3500 kWh per year) in EUR/MWh**



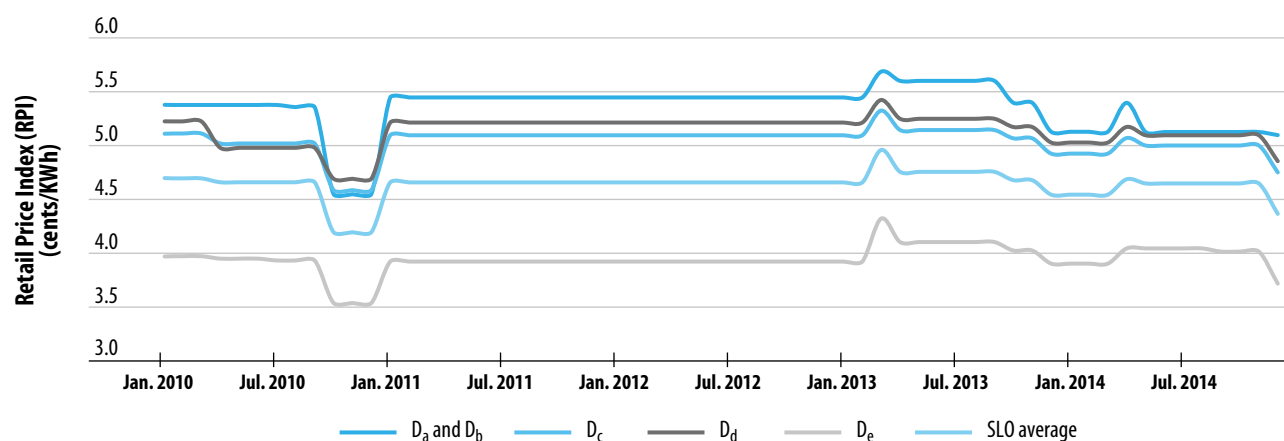
Source: Eurostat

In 2013, electricity price for household consumers largely increased due to higher contributions for RES and CHP. On the other hand, in 2014 the price slightly decreased because of lower price for the use of the network and lower energy prices.

From the collected data (see Section 3.3.3.6) the Energy Agency monitors the indicators of the electricity retail market for household consumers, including the retail price index (RPI). This index is based on the lowest offer on the retail market, accessible to all households and not restricted to the possibility of switching supplier.

Figure 42 shows the movements of the retail price index for standard consumers groups D<sub>a</sub>, D<sub>b</sub>, D<sub>c</sub>, D<sub>d</sub> and D<sub>e</sub>, and for an average consumption of a household consumer in Slovenia from 2007 to 2014. After negative trends in 2010 in early 2011 indices strengthen again; in 2013, after a short rebound started to fall again. In April 2014, we could recorded a slight rebound mainly in groups D<sub>a</sub> and D<sub>b</sub>, but and the end of 2014 the RPI fell again mainly due to new supply offers and suppliers' activities.

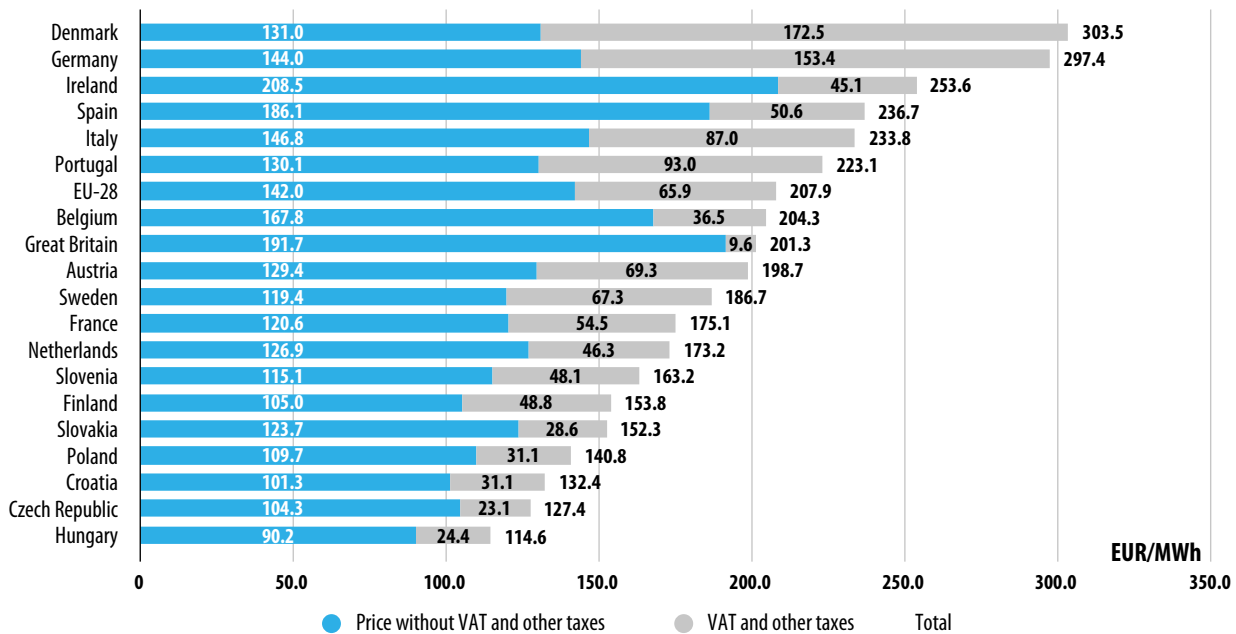
**Figure 42: Retail market indices for standard consumers groups D<sub>a</sub>, D<sub>b</sub>, D<sub>c</sub>, D<sub>d</sub> and D<sub>e</sub> and for an average consumption of a household consumer in Slovenia from 2010–2014**



Source: Energy Agency

The comparison of electricity prices in some of the EU countries for 2014 for a typical household consumer selected according to the Eurostat methodology is shown in the continuation of the report. Final prices, which include the price of energy, the use-of-network price, excise duties, contributions and VAT are presented.

**Figure 43: Comparison of the final electricity prices for a typical household consumer with an annual consumption of 2500 to 5000 kWh in EU and Slovenia for 2014**



Source: Eurostat

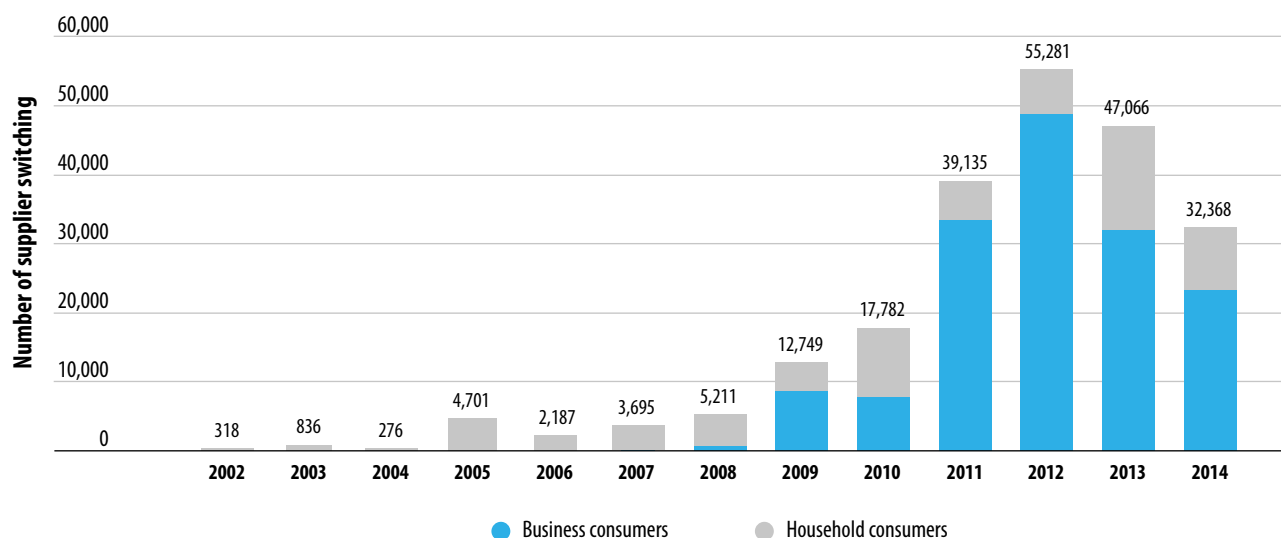
The average retail electricity price for households in Slovenia in 2014 amounted to 158.0 EUR/MWh.

The final price of electricity for households with an annual consumption of 2500 to 5000 kWh ( $D_c$ ) amounted to 80%, and the final price of electricity for business consumers (group Ic, without VAT) 70% of the EU-28 average (Statistical Office of the Republic of Slovenia, 4Q of 2014).

### 3.3.3.5 Supplier switching

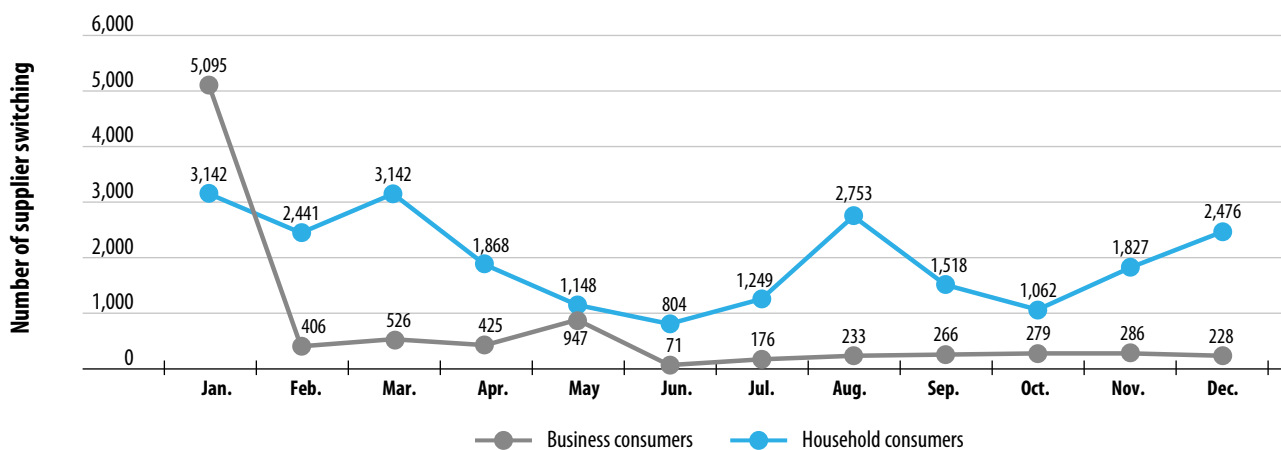
In 2014, 32,368 consumers switched their supplier, of which the vast majority (23,430) were the households, and 8938 business consumers. As we can see from the Figure 44, again a decrease in the number of supplier switching is recorded from increasing trend in the period 2006–2012.

Figure 44: Number of supplier switching from 2002 to 2014



Source: SODO

Figure 45: Trend of supplier switching in 2014 with respect to the type of consumption

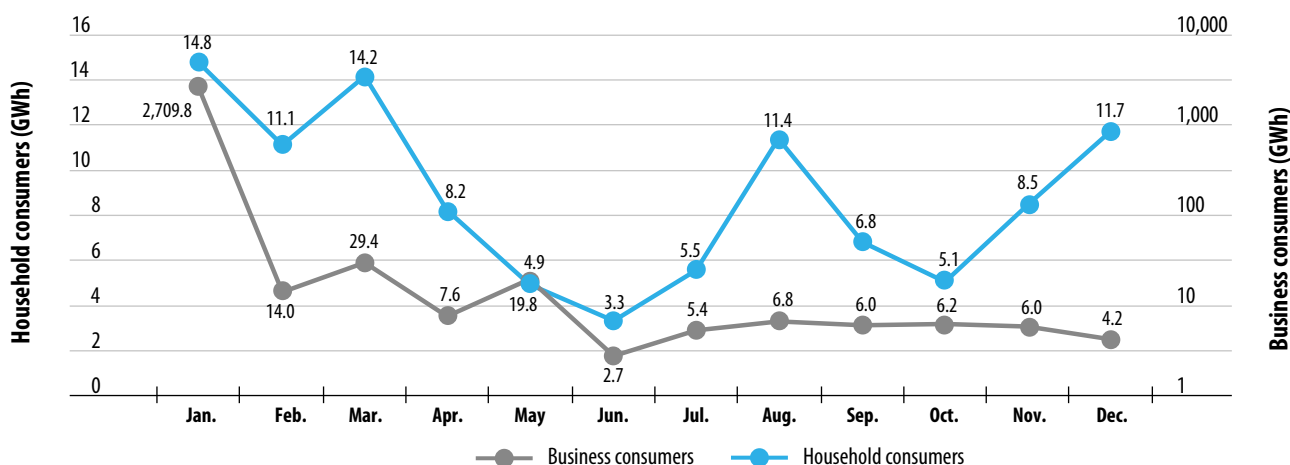


Source: SODO

Most of the business consumers decided to switch supplier at the beginning of the year when the contracts usually expire. Household consumers switched supplier mostly in March and August.

Figure 46 shows dynamics of supplier switching with respect to the amount of the supplied energy. There is a close correlation between the amount of energy and number of switches. At business consumption, the volume of energy switched (in January 2014) presented almost all annual volume, amounted to 96%.

Figure 46: Supplier switching with respect to the amount of electricity in 2014



Source: SODO

### 3.3.3.6 Monitoring the level of transparency

The Energy Agency has established a legal basis for monitoring of the electricity retail market with the emphasis on the households and small business consumers. The Energy Agency carries out the monitoring also on the basis of the number and characteristics of publicly announced tenders. The information on current tenders and any modification of their characteristics are by liable entities every month send to the Energy Agency, which in the single point of contact uses this information to inform all stakeholders.

In order to ensure transparency of the electricity retail market, the e-services are available on the Energy Agency's websites, among which is a web application for comparison the electricity supply offers. The application allows the calculation and comparison of the costs for the electricity supply for individual type of consumption according to price lists entered into the application by suppliers.

The web application for comparison of electricity supply also includes the service "Check the bill", which allows a consumer to check the accuracy of a bill for the supplied electricity, according to the supply and consumption profile. Billing on a monthly basis is shown separately in line with legal components and is available for all products on the market, not only for those based on the regular price lists.

The web application for comparison of electricity supply enables monthly and annual calculation and display of individual elements of the bill, which together form a final amount to be paid:

- the amount for delivered electricity
- the amount for the network charge with supplements
- contributions charged in accordance with the Energy Act-1
- excise duty
- VAT

A comparison of the costs is in the publicly available part of the comparative services from the implementation of the Energy Act-1 onward restricted to regular price lists. This means that consumers no longer have the single access to all price lists and offers and that they have to search for this information at individual supplier.

Until March 2014, a consumer had the access to 96 supply offers. A comparison of the costs for an average Slovenian household consumer (annual consumption 1996 kWh (HT) and 2100 kWh (LT), together 4096 kWh) was then possible to carry out among 52 supply offers of eight electricity suppliers. In December 2014, such comparison was possible among seven supply offers. At the same time, the number of all supply offers in the electricity market for the household consumers increased by 250 supply offers, which was more than 165 percent increase.

### 3.3.4 Recommendations on supply prices

The electricity market is fully opened; therefore the price of electricity supply is market-based.

With implementing the new Energy Act, the concept of the regular price list was defined. Regular price list means a price list for a particular type of consumer (a household, business or small business group consumer), which applies to all consumers that conclude a supply contract with the supplier for a particular type of consumer, with the exception of action or package price lists, and includes at least 50 per cent of consumers and at least 1000 consumers with each supplier. Suppliers may charge household consumers for operating costs on a flat-rate basis, regardless of how these costs are designated in the offered promotional and package price lists. Household consumers shall not be charged for flat-rate operating costs on the basis of a regular price list. On the basis of notifications of irregularities with respect to the EA-1, the Energy Agency carried out supervision procedures at all electricity suppliers and established that most of the suppliers after the implementation of the EA-1 fragmented their supply offers. These activities increase the non-transparency of the market and enable consumers to compare electricity prices easily. At the same time, the Energy Agency determined that the deviations are the result of the unclear definition of the regular price list, which suppliers interpret in their own way and accordingly develop their portfolio of supply offers. The conclusion is that the implementation of the EA-1 caused transformation of the supply offers on the market, which negatively affects the transparency of the retail market for the household consumers.

The price for universal service carried out by the DSO as a supplier of last resort is regulated and made public. The price must be higher than the market price of the supply to a comparable consumer but must not exceed the price by more than 25%. The electricity price for last resort is set by the electricity DSO at a level that covers the long-term electricity purchase price and additional costs of supplying and providing last resort supply. Control over the price of last resort supply is carried out by the Energy Agency in the context of comparative services. In 2014, the Energy Agency did not find any irregularities on the basis of which measures should be taken.

### 3.3.5 Measures taken to prevent abuses and to promote competition

In the wholesale market the same rules apply to electricity as to other commodities, mainly with respect to preventing the restriction of competition and any abuse of a dominant position. The market transparency is provided for by publishing the relevant information, which is mostly available on the websites of individual market participants. The companies providing a public service also have to observe the prescribed mode of publishing this information, as required by the current general acts. Most of the information relating to the wholesale market is maintained and disclosed by ELES, Borzen and BSP Southpool.

To ensure the transparency and, indirectly, competition in the retail market the Energy Agency provided high availability of e-services for comparison of suppliers (after the implementation of the EA-1 offers on the basis of regular price lists), and to check the electricity supply account. Moreover, it provided e-services for monitoring individual supply offers by sending automatic



messages when a supply offer change. Due to the introduction of regular price lists and restrictions on the publications of benchmarking, and mostly because of the unclear definitions of the regular price list, in April the Energy Agency was forced to withdraw the publication of regular comparative reports on current prices in the retail market.

In accordance with the provisions with of the Third Energy Package the Energy Agency actively contributed to the unification of data exchange for the most important market activities. It had been active in the section IPET (at Chambers of Commerce and Industry of Slovenia), where we actively work on solving the problems of current projects on information exchange in the electricity market. These activities were carried out with the aim of reducing barriers to entry new participants to the electricity market and gradual establishment of a single regional and EU market.

In 2014, the Slovenian Competition Protection Agency did not adopt any decision.

## 3.4 RELIABILITY OF THE ELECTRICITY SUPPLY

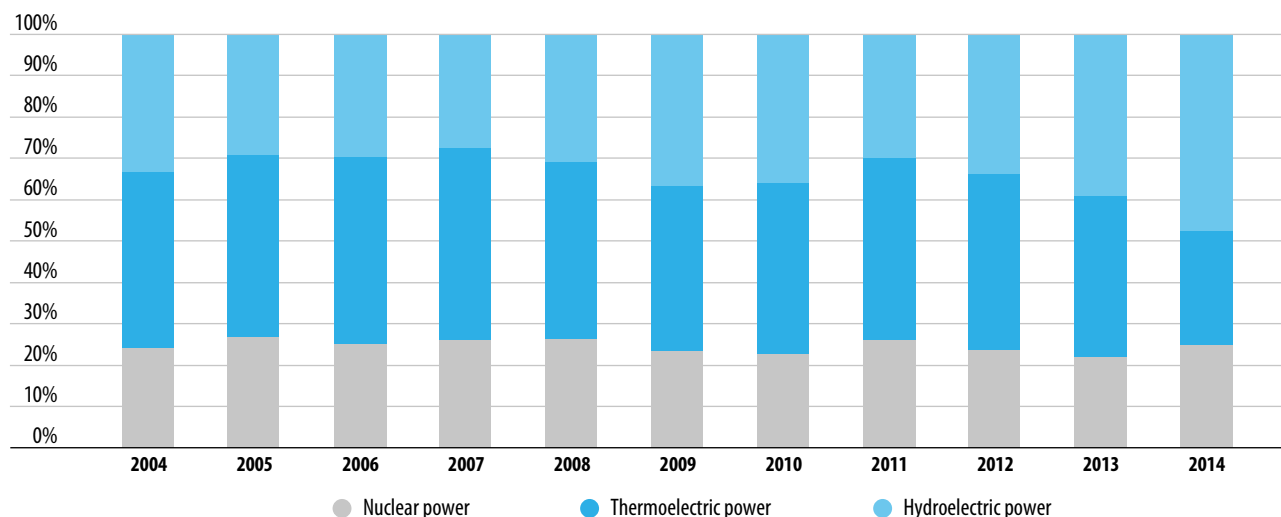
The reliability of the electricity supply to the consumers depends on the capacity of the power system and the sufficiency of production sources and energy. We can speak of the two functional aspects of the security of supply - sufficiency of production sources and the security of the network. The sufficiency describes the ability of all the available production sources to meet the demand for electricity anytime, taking into account planned stops and unplanned outages of the system. In a broader sense, the sufficiency means a sufficient reserve of affordable raw materials and resources for the production of electricity.

Network security is the ability of the system to withstand disturbances such as outages of elements, failures, such as short circuits. In order to ensure the network security, in Slovenia the n-1 criterion is used for the transmission network, and for higher levels of the distribution networks. By using n-1 criterium, it is guaranteed that in case of a failure of any component of the system, overloading, limits exceeding or supply interruptions are avoided.

### 3.4.1 Monitoring balance of supply and demand

The amount of electricity, delivered to the transmission network, increased by 6.2% in comparison with the previous year, taking into account half of the production of the Krško NPP. Due to favourable hydrological conditions HPP delivered 29% more electricity to the transmission system than in 2013, and nuclear power plant 20% more, mainly due to the fact that the plant in 2014 was not in overhaul. There was a significant decrease in the delivering of electricity from TPP; in comparison with the previous year, the volumes were lowered by a quarter.

The structure of the delivered electricity to the transmission network has been slowly changing over the years, in a favour of the production in HPP as a result of favourable hydrological conditions and new production facilities on the river Sava (lower part). HPPs delivered 42% TPPs 21% and NPP 37% of electricity. Considering the fact that only half of the production on NPP belongs to Slovenia the structure of the production on the transmission network is shown in Figure 47, and consists of 47.5% of the production in HPP, 27.5% in TPPs, and 25% in NPP. The decline in electricity from TPPs is partly related to the shutdown of TPP Trbovlje.

**Figure 47: Structure of electricity production on the transmission network in Slovenia from 2004 to 2014**

Source: ELES

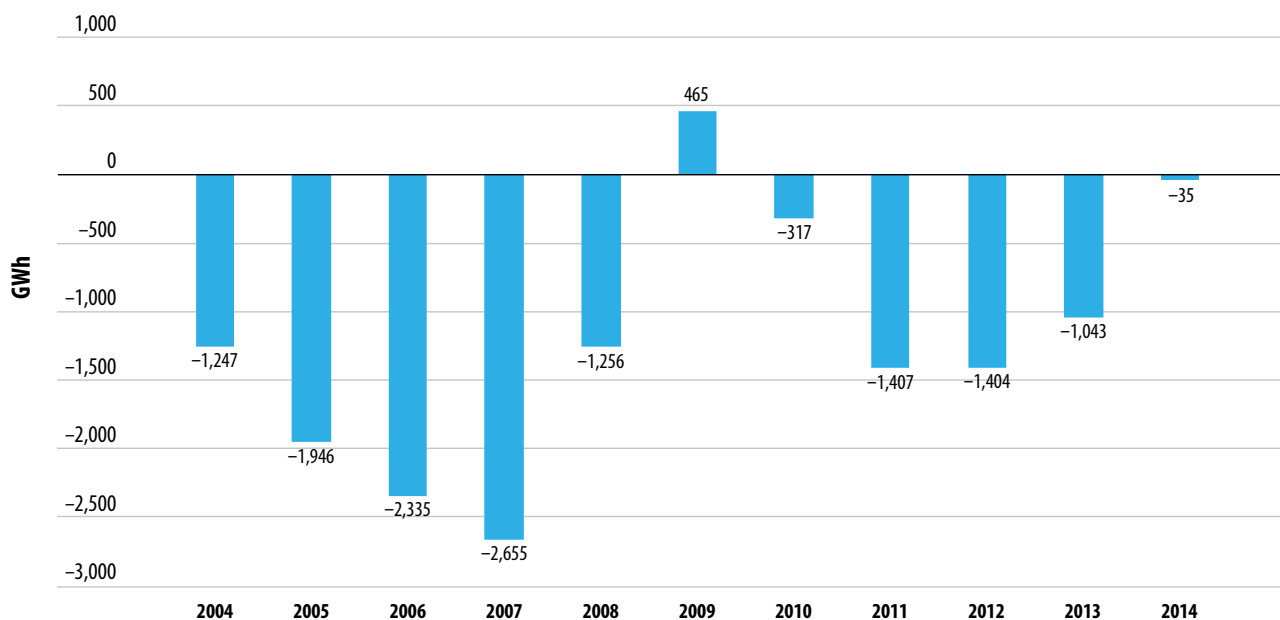
In comparison with 2013, the consumption from the transmission network decreased by around 2%, amounted to 12,226 GWh. The consumption of direct consumers was 2083 GWh, or 2.3% less than the previous year, and the distributions took over 9780 GWh of electricity, or 2.2% less. The PSPP Avče consumed 7.3% less electricity for pumping than in 2013, or 363 GWh.

**Figure 48: Production and consumption of electricity on the transmission network in Slovenia from 2004 to 2014**

Source: ELES

Compliance between production and consumption of electricity between 2004 and 2014 is shown in Figures 48 and 49. Stagnation in consumption and slightly higher electricity production resulted in better compliance between production and consumption in comparison with the previous years.

Figure 49: Surpluses and deficits of electricity on the transmission network in Slovenia from 2004 to 2014



Source: ELES

### 3.4.2 Monitoring investment in production capacities in relation to the security of supply

The TSO for the electricity network prepared a TYNDP for the transmission network in Slovenia from 2013 to 2022. This plan includes expected trends of final electricity consumption, consumption from the transmission network, and peak consumption for the next decade. Final electricity consumption is estimated based on various assumed rates of economic growth, demographic trends and energy policy. On the basis of planning of final consumption, estimation on the consumption of electricity from the transmission network was prepared. Peak power consumption of the transmission network was determined as a function of final consumption and consumption on the transmission network. The plan also includes scenarios for covering consumption with production facilities and the expected changes in production facilities connected to the transmission network.

Table 30 shows changes to be made by the Slovenian electricity producers as expected in the development plan for the transmission network. The positive power values in the second column indicate new production facilities or a renovation of the existing facility, where an increase in the capacity is planned. The negative values indicate shutdowns of the concerned units.

Table 30: Changes to the production facilities on the transmission network

	Installed capacity(MW)	Expected year of change
<b>Hydroelectric power plants</b>		
<b>HPPs on the river Drava</b>		
PSPP Kozjak	403	2018
<b>HPPs on the river Mura</b>		
Hrastje Mota	20	2019
<b>HPPs on the river Sava</b>		
Brežice	56	2016
Mokrice	32	2017
Moste 2, 3	48	2017
Suhadol	41	2018
Trbovlje	33	2020
<b>HPPs on the river Soča</b>		
Učja	34	2018
<b>Thermal power plants</b>		
<b>TPP Šoštanj</b>		
TPP Šoštanj block VI	545	2015
<b>TPP Trbovlje</b>		
TPP Trbovlje block II	-110	2015*
TPP Trbovlje PB I+II	-58	2015*
<b>TPP Brestanica</b>		
TPP Brestanica PB 1-3	-63	2016
TPP Brestanica PE VI-IX	80	2015
<b>TE-TOL Ljubljana</b>		
TE-TOL block I	-39	2020
TE-TOL block II	-29	2016
TE-TOL block 4 PPE1	117	2016
<b>NPP Krško</b>		
JEK 2**	1100	2022

\* From November 2014, the TPP Trbovlje is in the process of liquidation. The TSO still keeps the unit as a producer of electricity, connected to the transmission network, although, according to the latest information on this location there are no intentions to resume the production of base-load electricity.

\*\* The decision on construction is not yet adopted.

Source: ELES

The implementation of electricity producers' development plans to a large extent depends on the market situation and siting of facilities in the environment. Due to that, delays in construction of individual facilities constantly occur.

### 3.4.3 Measures to cover peak demand and shortages of electricity

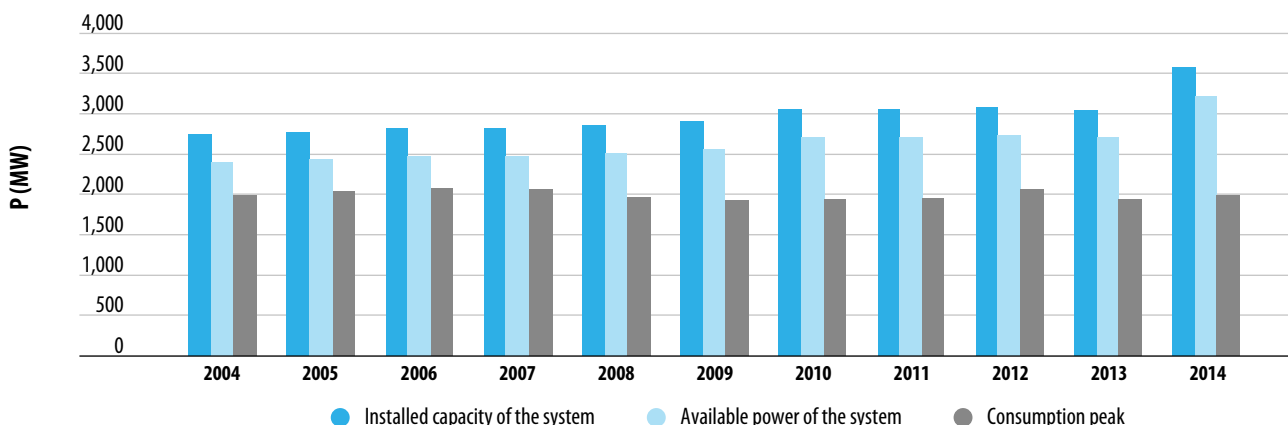
Peak load, the maximum hourly average load in the year, in 2014 increased by almost 2% and reached 1988 MW. The maximum hourly value of demand was recorded on 12 December at 18:00. Peak loads are occurring in winter months; for the period after 1997 is typical that peak demand moved from the afternoon into the evening hours.

Figure 50 shows the peak consumption, the installed capacity of the production facilities and available capacity for the Slovenian market for the period from 2003 to 2013. In last ten years, peak load did not change a lot, apart from considering small fluctuations that reflect among other things fluctuations in economic activity. In 2014, peak demand was almost the same as in 2004 when it was 1991 MW.

The difference between the installed capacity of the production facilities and actual available power represents one half of the power from the Krško NPP, which belongs to Croatia, in line with Article 6 of the Agreement between the Government of the Republic of Slovenia and the Government of the Republic of Croatia Regarding the Status and Other Legal Issues Relating to the Investments in the Krško Nuclear Power Plant, its Exploitation and its Disassembly.

Block 6 of the TPP Šoštanj started with its trial operation. With that, the installed capacity increased by 546 MW. At the same time, block 3 of TPP Šoštanj, which from 2013 operated at a reduced power of 25 MW, was shut down. Installed and available capacity also include the production units in TPP Trbovlje, which is in the process of liquidation and does not operate. Without these production units the installed, and available capacity are decreased by 168 MW, but according to the achieved peak load the Slovenian production system still meets the need for capacity.

**Figure 50: Installed capacity of production facilities, the power available for the Slovenian market, and the peak consumption from 2004 to 2014**



Source: ELES

The volume of undelivered energy in 2014 amounted to 52,400.7 MWh, primarily due to environmental disaster, which hit the transmission network. More than 99% of undelivered electricity was the result of the damage caused to the network in the area of DTSs in Postojna, Cerknica and Logatec. The volumes of undelivered electricity are calculated in accordance with Act concerning the reporting of data on quality of electricity supply, that way it should be mentioned that the actual volumes of undelivered electricity were lower than already mentioned, since a significant share of consumers in the affected area was supplied by the MV network.

Other causes for undelivered electricity were falling trees (115.4 MWh), lightning (51.7 MWh), switching manipulation (3.2 MWh), storms (1.8 MWh), and other.

Domestic sources for electricity production were almost sufficient to cover the demand for electricity; the deficit amounted only 35 GWh. The supply was never interrupted as a result of a shortage of production sources.

## 3.5 CONSUMERS PROTECTION

### 3.5.1 Protection of electricity consumers

The household consumer means a customer purchasing electricity for his own household consumption, excluding consumption for performing commercial or professional activities. His rights are protected with the regulations regulating the energy market and also with Consumer Protection Act, which as a fundamental legal act regulates the rights of consumers in relation to companies, and against unfair commercial practices and the scopes of fair business of companies in relation to consumers.

The companies and other organizations providing public service and commodities to the customers in Slovenia are obliged to ensure a regular and high-quality provision of services and strive to appropriately develop and improve the service quality.

In 2014, the Energy Agency on its website provide for household consumers a single point of access to information on their rights, valid regulations and general acts for the exercise of public authority and the methods for handling complaints in the event of a dispute with a supplier or electricity DSO.

Prior to connection to the system, the electricity DSO must inform the consumer of his rights and obligations in connection with the choice of supplier and in connection with the last resort or emergency supply, and provide him with the list of suppliers to final consumers. DSO must also enable a consumer free access his consumption data; and on the basis of his power of attorney also to other legal or natural persons that enclose with a request for access to data on a consumer's consumption.

DSO is responsible for the quality of supply. If the DSO breaches the standards of quality guaranteed to a consumer, a consumer has a right to conclude the contract on a non-standard quality. Terms and the content of the contract are determined by the Rules on the System Operation of Electricity Distribution Network and General Conditions for the Connection to the Electricity Distribution Network; the validity of both documents expired from the day of the implementation of the EA-1, but their application is extended until the entry into force of the new general acts for the exercising of public authority.

### 3.5.1.1 Supply contract and general terms and conditions

A household consumer has the right to choose freely a supplier of electricity and conclude a supply contract. A supplier has to provide for household consumers on its website information on applicable prices and tariffs, and on standard terms and conditions on supply. An integral part of the supply contract are the contractual terms; a supplier has to inform a household customer, prior to signing a supply contract, about the general terms and conditions. Supply contract must include information on consumer's rights, including on handling the complaints relating to gas supply, and the system of reimbursement and compensation, if the level of quality of services under the contract is not achieved.

A supplier must provide free and periodic information to household consumer on actual electricity consumption and the characteristics of such consumption with sufficient frequency to enable them to regulate their own electricity consumption.

On the electricity bills electricity suppliers must indicate the shares of individual energy production sources in the whole structure of the electricity of individual supplier in the preceding year as well as information on the environmental impact in terms of CO<sub>2</sub> emissions and the quantity of radioactive waste resulting from the electricity generated by the overall structure of electricity production sources used by the supplier over the preceding year. In that way, a reasonable comparison of different suppliers at the national level is possible. A supplier must also indicate information concerning the rights of consumers as regards the means of dispute settlement available to them in the event of a dispute.

A supplier must inform a household consumer at least one month prior to their taking effect, about any intended changes to the contractual terms and conditions. At the same time, due to a modification of the standard terms and conditions, a consumer has to be informed about the right to withdraw from a gas supply contract within one month following the entry into force of modified general terms and conditions without notice and without being subject to a penalty payment.

Suppliers must offer household consumers a choice of payment methods, including prepayment systems. Household consumers may not be charged for flat-rate operating costs on the basis of a regular price list; they may be charged for in action or bundled offers.

A household consumer may withdraw from a supply contract without paying a penalty, damages, compensation or any other form of payment for reasons of withdrawal from the contract prior to the expiry of the set time limit, provided that such withdrawal takes effect at least one year following the conclusion of the contract

A household consumer has a right to choose and switch an electricity supplier. An operator that receives a request to switch supplier has to do everything necessary to enable a consumer to begin implementing the electricity supply contract with the new supplier within 21 days of a completed request being submitted. A consumer may not be charged for changing supplier. If a consumer withdraws from a supply contract prior to one year following the conclusion of the contract, may be obliged to bear the consequences of early withdrawal laid down in the supply contract.

### 3.5.1.2 Disconnection of a household consumer

The electricity DSO may disconnect a household consumer at individual delivery point upon prior notice if the system user fails to comply with its obligations within the time limit specified in the notice. A household consumer must be informed at least 15 days in advance. The electricity DSO may not disconnect a vulnerable consumer if he is eligible for an emergency supply. If the disconnection exceeds a period of three years, the system user, prior to the reconnection, must obtain a new approval for connection to the system, and conclude a new contract for connection without paying the charge for the connected load.

In 2014, the electricity DSO disconnected 7926 household consumers. This is 0.12 percentage point more than the year before when 6877 were disconnected. The number of disconnections for non-payment in 2014 is by 0.02 percentage point lower than in 2011 when 8037 household consumers were disconnected.

Table 31 and Figures 51 and 52 show the number of household consumers due to non-payment in the period from 2011 to 2014.

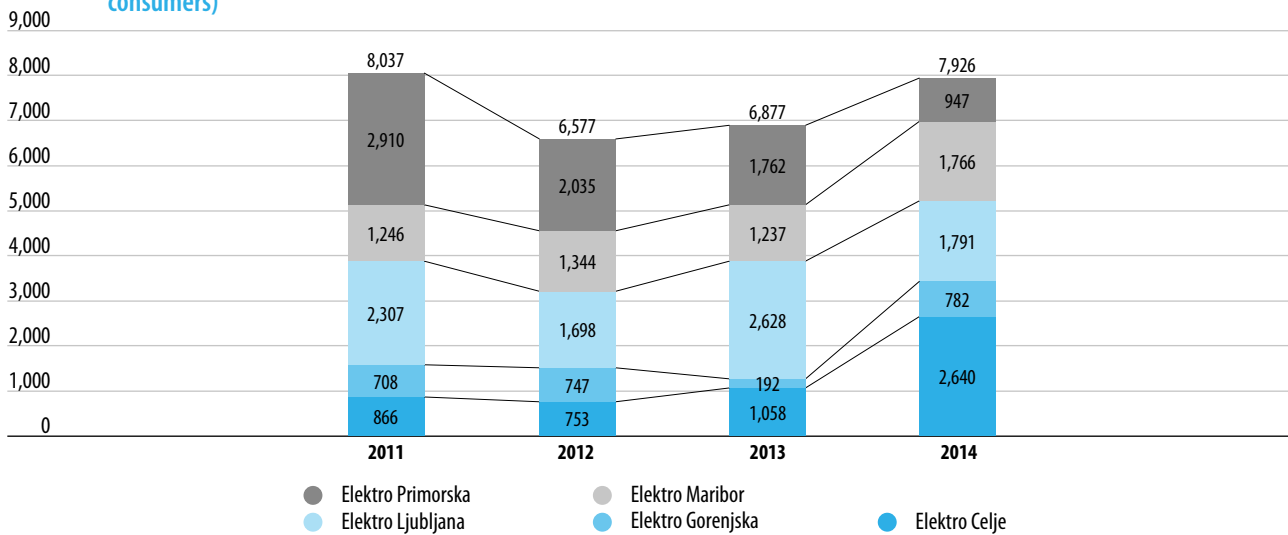
**Table 31: The review of disconnections of electricity supply due to non-payment of electricity bills of household consumers from 2011 to 2014**

DSO	2011	2012	2013	2014
Elektro Celje	866	753	1,058	2,640
Elektro Gorenjska	708	747	192	782
Elektro Ljubljana	2,307	1,698	2,628	1,791
Elektro Maribor	1,246	1,344	1,237	1,766
Elektro Primorska	2,910	2,035	1,762	947
<b>Total</b>	<b>8,037</b>	<b>6,577</b>	<b>6,877</b>	<b>7,926</b>
Number of all household consumers	821,328	825,198	827,902	831,185
Shares of disconnections for non-payment	<b>0.98%</b>	<b>0.80%</b>	<b>0.83%</b>	<b>0.95%</b>

Sources: Electricity suppliers, SODO

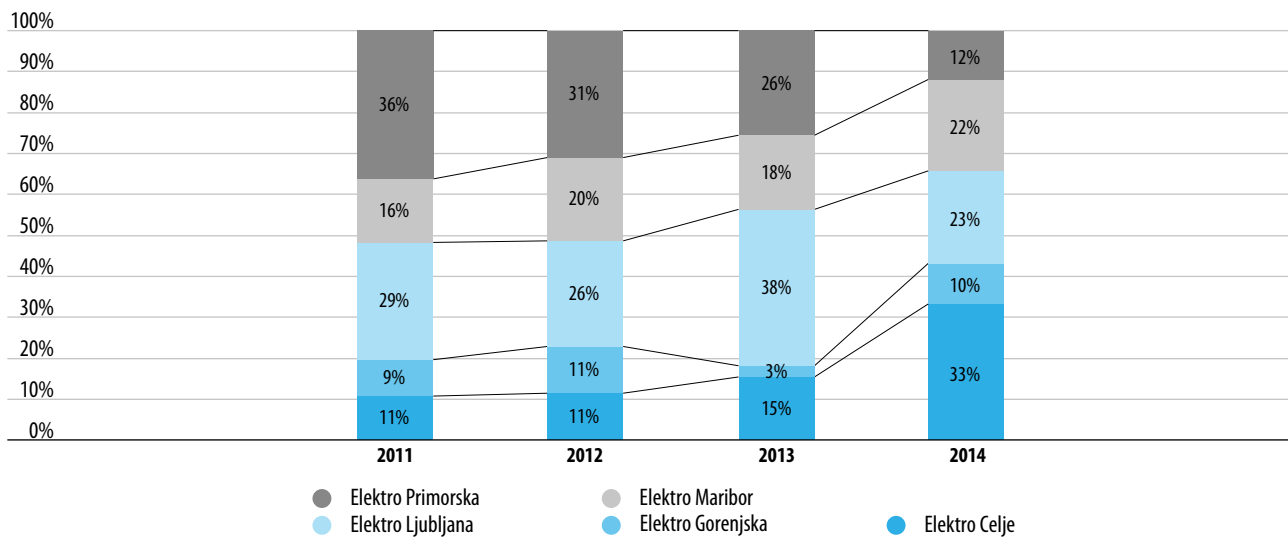


**Figure 51: Number of disconnections of electricity supply due to non-payment of electricity bills from 2011 to 2014 (household consumers)**



Sources: Electricity suppliers

**Figure 52: Shares of disconnections of electricity for non-payment from 2011 to 2014 (household consumers)**



Sources: Electricity suppliers

### 3.5.1.3 Protection of vulnerable consumers and emergency supply

Protection of vulnerable consumers is one of the most important forms of consumers protection.

A vulnerable consumer is a household consumer who, due to his financial circumstances, income and other social circumstances and living conditions, is unable to obtain an alternative source of energy for household use that would incur the same or smaller costs for essential household use. An electricity DSO may not disconnect a vulnerable consumer from the electricity supply or restrict his consumption of electricity before it reaches a quantity that is absolutely necessary in view of the circumstances (season, temperatures, place of residence, health condition and other similar circumstances) in order not to jeopardise life and health of the customer and persons living in his household. All the supplier's costs arising from such a situation are covered by eligible the revenues of the DSO.

Prior to disconnection, the electricity DSO must inform the consumer of the possibilities of emergency supply and of the evidence to be provided by the consumer in order to be approved for emergency supply by the operator. The eligibility for the supply of vulnerable customers is assessed by DSO, on the basis of evidences submitted (a decision of the competent social service on the financial situation of the household, and medical examination that the person living with the customer uses medical devices, which for its functioning need electricity and disconnection of electricity would threatened the person's life. All the supplier's costs arising from such a situation are covered by eligible the revenues of the DSO.

In 2014, no consumer was provided by the emergency supply, which was the same as the year before.

### 3.5.1.4 Last resort supply

In accordance with the legislation governing the operation of the electricity market the electricity DSO automatically and without time limits ensure supply to final consumers connected to its system if the contract for supply is terminated because of measures resulting from the insolvency or illiquidity of a supplier. The electricity DSO must immediately inform the consumer of the termination of the contract for the supply and of the beginning of the provision of last resort supply. At the request of a consumer, the electricity DSO must provide a supply to each household consumer. The electricity DSO must inform consumers of the possibilities and conditions of last resort supply. In line with the provisions of General Conditions for the Connection to the Electricity Distribution Network last resort supply is time-limited to a maximum of 60 days, but may be extended at the request of a consumer. The price of last resort supply is set by the electricity DSO and is made public. The price must be higher than the market price of the supply to a comparable consumer but must not exceed the price by more than 25%.

The electricity DSO was publishing the conditions and prices for last resort supply. Under the terms of last resort supply, 21 consumers were served while in 2013 none of the consumers need this service.

### 3.5.1.5 Consumers' complaints and dispute settlement

One of the key elements of the supply contract concluded with a household consumer is an agreement on how to handle the complaints relating to gas supply. Household consumers have the right to transparent, simple and inexpensive procedures for dealing with complaints on gas supply. For this purpose, the supplier alone or with other suppliers within the Association shall appoint an independent and impartial person or several persons responsible for the treatment of complaints and to whom household customers shall address their complaints in relation to alleged violations of the supplier in implementing a natural gas supply contract.

A supplier must provide the household consumer with the following information, in writing or any other suitable form:

- a precise description of the types of complaint to be decided upon by the person appointed, as well as any existing restrictions and the value of the disputed claim;
- the rules governing the referral of the matter to the person appointed, including any requirements that the household consumer may have to meet, as well as other procedural rules, notably those concerning the written or oral nature of the procedure, attendance in person and the languages of the procedure;
- the rules serving as the basis for decisions;
- the types of a decision to be taken in the procedure

The person appointed must decide on complaints within two months following their receipt. The decision must be binding on the supplier if the consumer confirms it using a written statement within eight days of its receipt. If the consumer disagrees with the decision, he may bring an action before the court.

More detailed rules on the appointment of persons for handling complaints, information to household consumers on complaint handling, the system of reimbursement and compensation and the procedure for complaint handling must be disclosed by the supplier or association of suppliers and published on its website.

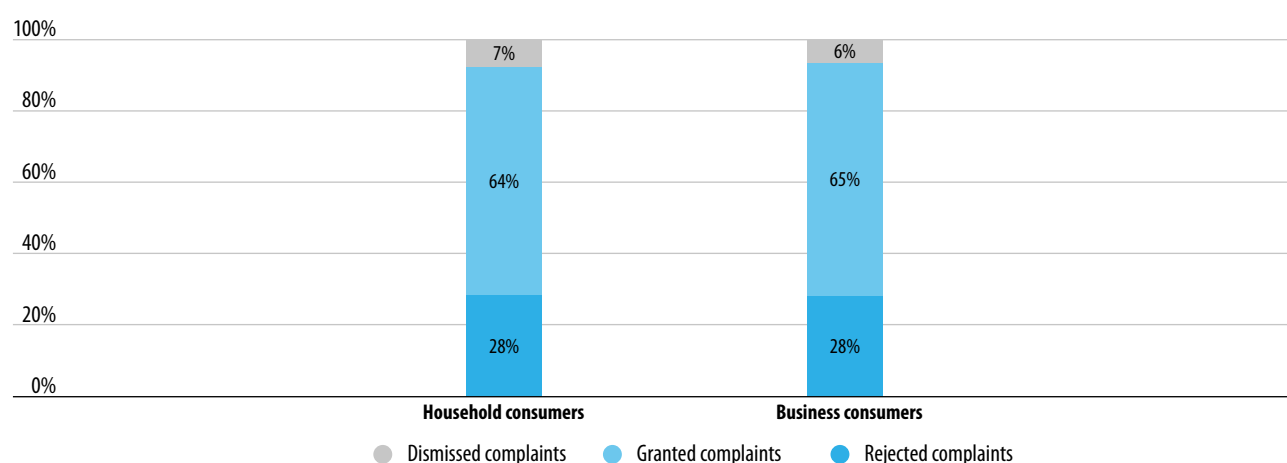
The supplier or association may determine a system of reimbursement and compensation for consumers which must apply to individual breaches of their obligations relating to supply, provided this is justifiable given the amount of damage, gravity of the breach and level of responsibility.

Of all 831,185 household consumers of electricity, suppliers received 6410 complaints, disagreements and arguments, which is around 0.77% of complaints of all household consumers (in 2013 this percentage was 0.95). Of all the complaints received, 480 were dismissed since they did not meet the conditions for examination; 4110 of them were eligible and were granted, and 1820 complaints were rejected. Table 32 presents the information on complaints, and in Figure 53 shares of dismissed, rejected and granted complaints.

**Table 32: Electricity consumers' complaints to suppliers in 2014**

	Household consumption	Business consumption
Number of all complaints	6,410	1,127
Number of dismissed complaints	480	72
<b>Number of accepted complaints</b>	<b>5,930</b>	<b>1,055</b>
- granted	4,110	735
- rejected	<b>1,820</b>	<b>320</b>

Sources: Electricity suppliers

**Figure 53: Share of dismissed, rejected and granted complaints in 2014**

Sources: Electricity suppliers

In 2014, the person appointed received one complaint, which was rejected, and the customer did not go to the court, the same as in the previous year.

In Slovenia any breaches of the general rules relating to consumer protection are addressed and also appropriately sanctioned by the Market Inspectorate.

### 3.5.1.6 Publication of prices

Household consumers have the right to be informed of electricity prices in a comprehensible manner, and to have possibility to compare these prices. All the suppliers of electricity were publishing electricity prices for household and small business consumers on their websites. Households could also use the Energy Agency's web application for comparison of electricity supply costs, which are based on regular price lists and enable the comparison and calculation of the costs of supply on a monthly or annual level.

### 3.5.2 Consumer protection in administrative procedures

With the implementation of the EA-1, the Energy Agency was given increased responsibility and powers to impose sanctions related to the supervision of functioning of energy markets and the protection of the consumers' rights or users of the network.

The Energy Agency, acting under public authorisation, decides on disputes between the electricity and gas system users, operators or the electricity market operator in the following cases:

- access to the system;
- amount charged for the use of the system;
- violations of the system operating instructions;
- establishing imbalances and amounts for covering the costs of imbalance settlement and violations of general acts governing imbalances and their settlement;
- other issues where stipulated by the EA-1.

In resolution of disputes an additional criteria is taken into account, namely that contested subject of these disputes relates to the rights and obligations arising from directly applicable regulation of the European Union, EA-1 or executive regulations issued on its basis or the act on exercise of public authority.

The Energy Agency resolves disputes by administrative procedure, and issues individual acts with which decides on the rights, obligations and legal benefits of individuals; EA-1 provides also some special features.

When a party requests that the Energy Agency decides on a dispute with another party, such a request is allowed only if the first party provides evidence that it has requested in writing from the party against which it is filing a request that said party accede to its request that is the subject of the dispute and has set an appropriate time limit for the opposing party to respond to the request. This time limit may not be shorter than 15 days.

The Energy Agency has in relation to the final decision in the decision-making process on a dispute between the parties extensive powers since it can:

- decide on a request of a party
- order the party to carry out an action or prohibit to carry out an action
- repeal, partially or in full, a contract or any other act
- decide on a claim concerning an overpaid or under paid network charge or price for the operator service
- decide on other matter if so provided by the legislation

Against a decision of the Energy Agency only judicial protection in front of the Administrative Court is possible.

The Energy Agency in an administrative procedure decides in the second instance on an appeal against a system operator's decision on issuing or rejecting a connection approval.

Procedures related to consumer protection conducted by the Energy Agency are free of charge since no administrative fees are charged for final decisions; all these procedures are short due to tight legal framework. The Energy Agency must decide on appeal within two months of receiving a full application; this deadline may be extended only with the consent of the applicant.

In comparison with 2013, when 21 requests were filed, in 2014 the number of requests to decide in the administrative procedure significantly increased. The Energy Agency received 53 appeals for decisions; 21 appeals for decision at first instance, and 32 at second instance; that is to say appeals against the decision on granting or rejecting a connection approval. From the previous year, the Energy Agency decided on two disputes. Most of the disputes were related to electricity, only one to gas. During this period, three administrative disputes were filed to the Administrative Court.

At the end of the reporting period, 50 applications were resolved, and five cases were still opened.

As in the last five years, in 2014 the most of the decisions were made with respect to the appeals against the issued connection approvals. Consumers made complaints due to disagreement of the owners of properties or facilities with respect to the connection to the distribution network, charging disproportionate fees, and incorrect classification to the consumer groups. In the dispute settlement proceedings dominated decisions related to improper functioning of measuring or control devices.

### 3.5.3 Monitoring the electricity market

As already mentioned, with the implementation of EA-1 the Energy Agency was given extensive powers to supervise the implementation of the provisions of EU regulations and the provisions of the EA-1 concerning electricity and gas markets and regulations and general acts issued pursuant to EA-1. The Energy Agency controls and imposes the control measures by official duty or in connection with the notification of the alleged infringement. If the violation is established, the Energy Agency is in accordance with EA-1 obliged to:

- carry out preventive measures and issue a warning;
- carry out measures to protect the rights of other persons;
- propose that another competent authority adopt measures;
- order other measures for which the Energy Agency is authorised by this Act or any other regulation.

The supervision is concluded by way of an administrative decision and imposing measures. If the established violation also has signs of minor offence, the authorised Energy Agency's employee proceeds the minor offence procedure, and fine is imposed on responsible persons; the purpose of the fine is to ensure the consistent implementation of the rules or to discourage from repeating these violations.

In 2014, the Energy Agency conducted supervisory procedures in 19 cases, one of them was transferred to the competent inspectorate. Out of these, 12 supervisions were related to electricity; four of them were resolved by the end of the year. Most of the violations were connected to the implementation of the supply contract, not providing data to the DSO, and publishing the information on applicable prices and tariffs for small business consumers. The Energy Agency achieved that violations were eliminated during the procedures; thus, only warning were issued with a reference to comply with applicable law.

Procedures, which were not concluded in 2014, relate to the charging of flat-rate costs of dealing with regular price list, obtaining measurement data and publication of shares of individual production sources in the promotion materials.



IN ALL THINGS OF NATURE THERE IS  
SOMETHING OF THE MARVELOUS.

ARISTOTLE  
Ancient Greek philosopher, 384–322 BC

4.

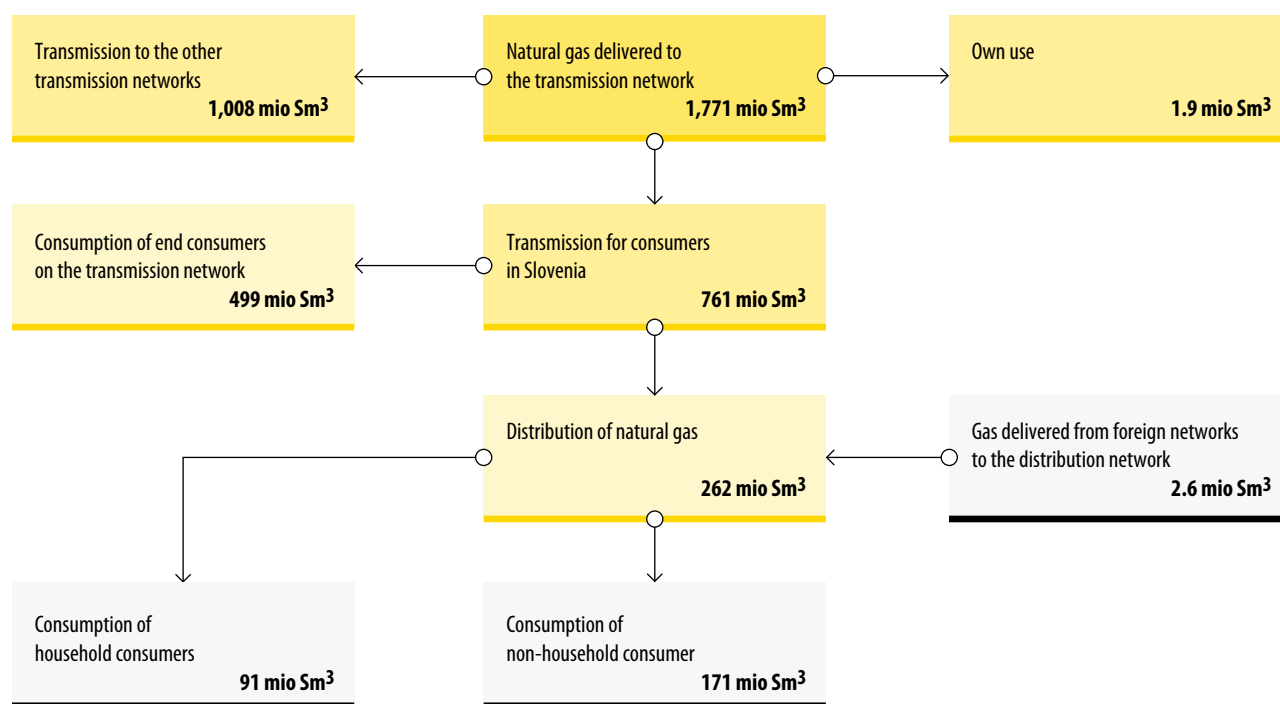
NATURAL GAS

## 4.1 GENERAL INFORMATION

Despite the decrease in consumption of natural gas, the development and functioning of the gas market continued to be positive. On the supply side new participants appeared, importing natural gas and offer it to consumers. In particular, new suppliers, who in addition to electricity also sell natural gas, were noticed. Again, HHIs of the wholesale and retail market decreased, which indicate a positive effects of competition and more favourable allocation of market shares between individual suppliers.

Even the percentage of supplier switching, which was lower compared to the previous two years, is for the size of the market, such as Slovenian, good. Supplier switching among households took place mostly in the first half of the heating season. This reflects the fact that the Slovenian consumers are better informed, and they make decisions according to their needs, ability to pay, and suppliers' offers.

**Figure 54: Basic information about the transmitted and consumed amounts of natural gas**



Source: Energy Agency

Natural gas consumption in the Slovenian market, again, greatly decreased. Less gas was consumed by large consumers, connected directly to the transmission network, and also by consumers supplied through distribution networks. Unlike the previous year, when we recorded higher consumption on the distribution networks, business and household consumers used less gas. The downward trend in gas consumption has been monitored since 2010. Business consumption decreased with the beginning of the economic crisis. The recession affected people's lives, their perception of the costs for gas changed, and consequently the consumption lowered.



Lower consumption of gas by household consumers was likely the result of higher outside temperatures during the heating season, and the impact of the implementing energy savings measures in buildings, which have been carried out for several years, and reflected in the significantly lower consumption of energy for heating the buildings.

## 4.2 THE REGULATION AND REGULATED SERVICES

### 4.2.1 General information

Regulated energy activities carried out by the natural gas companies are:

- service of natural gas transmission system operator (gas TSO)
- service of natural gas distribution system operators (gas DSO)

Energy activities carried out by the natural gas companies concerning the production and supply of natural gas are not regulated.

The activity of operating the natural-gas transmission network is carried out as a service of general economic interest; the provider of this service was the company Plinovodi d.o.o.; an optional local service of general economic interest of the gas distribution operator was performed by 16 companies.

As an optional local services of general economic interest may also be organised the activities of the storage system operators, the LNG system operator and natural gas market operator, however, in 2014 there was no need for their implementation.

The Energy Agency's activities related to regulated services include network charges for natural gas, access to the network, congestion management, balancing, certification, and others.

By consolidating the status of closed distribution systems, the operators of these systems are going to acquire the same rights and obligations as the natural gas distribution system operators.

### 4.2.2 Unbundling

The gas TSO performs its activity as an independent legal person, and it is 100% owned by a domestic legal person. It owns the assets with which it carries out its functions.

For 16 gas DSOs, legal separation of activities is not required since the number of connected consumers does not exceed 100,000. The ownership structure of the gas DSOs is shown in Table 35. All operators of distribution systems were also engaged in other energy and market activities and, therefore, prepared separate accounting statements. Gas DSOs must keep separate accounting records, and in the explanatory notes to the accounting statements disclose separate accounts for other non-gas activities, as they would be required of them if these activities would be carried out in a separate legal person.

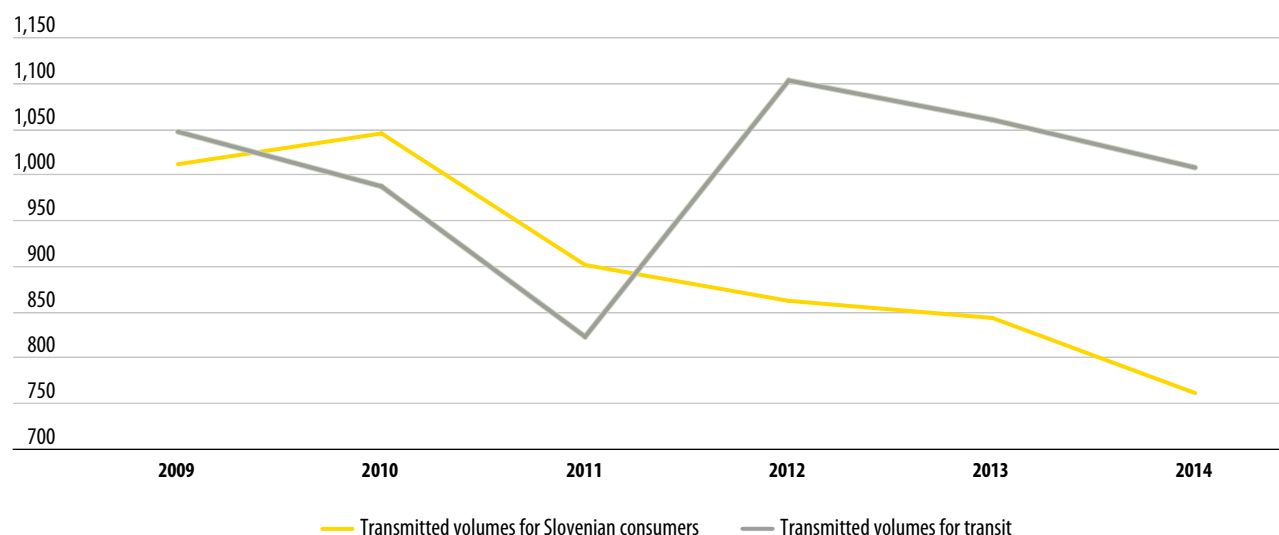
In the notes to the audited financial statements, the DSOs must disclose the criteria for the allocation of the activities identified by the internal company's acts and that were used in the preparation of separate financial statements. Audited annual reports have to include the rules used for the production of separate accounts by energy-related activity. The use of the listed rules for producing separate accounts has to be examined by an auditor.

Natural gas companies are required to prepare annual financial statements according to the Companies Act and submit to audit and make public.

### 4.2.3 The transmission of natural gas

Again, less gas was transported through the transmission network for consumers in Slovenia. There were 761.2 million Sm<sup>3</sup> of the gas transmitted, which was 9.8% less than the previous year. The trend of decreasing gas consumption of the Slovenian users of the transmission system continues; in comparison with the period before the recession, the consumption decreased by more than 30%. 5% less than the previous year were also transmitted the volumes of delivered gas to the gas networks of neighbouring countries. Figure 55 shows the transported natural gas volumes.

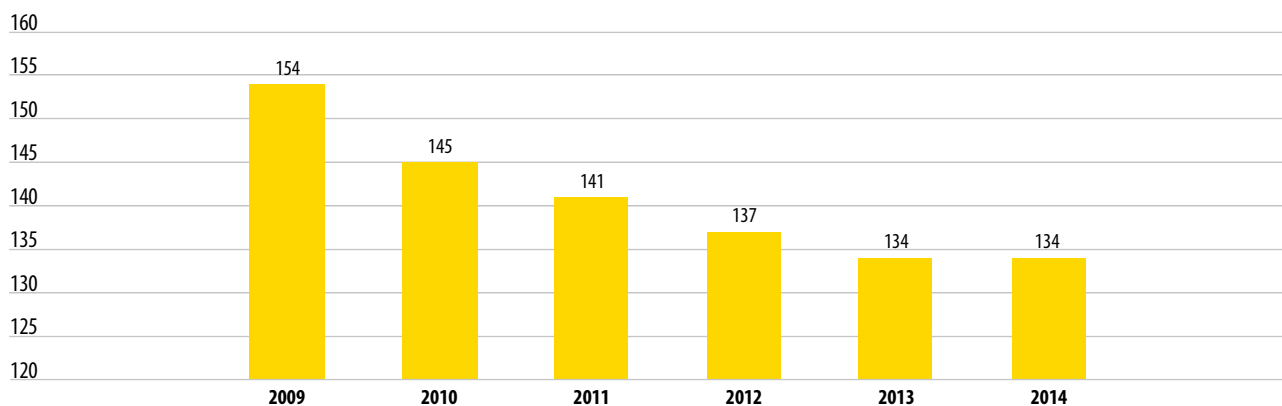
**Figure 55: Transported natural gas volumes in million Sm<sup>3</sup>**



Source: Energy Agency

The number of end consumers connected directly to the transmission system did not change in comparison with the previous year; this means that, at least temporarily, the five-year trend of reducing the number of large business consumers of gas stopped. At the end of 2014, eight balancing groups were active. Six balancing groups leaders supplied gas to the Slovenian users. The gas TSO carried out the transmission of gas through high-pressure gas networks; it operated, planned, built and maintained the system for transmission of gas to 15 DSOs and 134 end consumers connected directly to the transmission system.

Figure 56: Number of end consumers on the transmission network

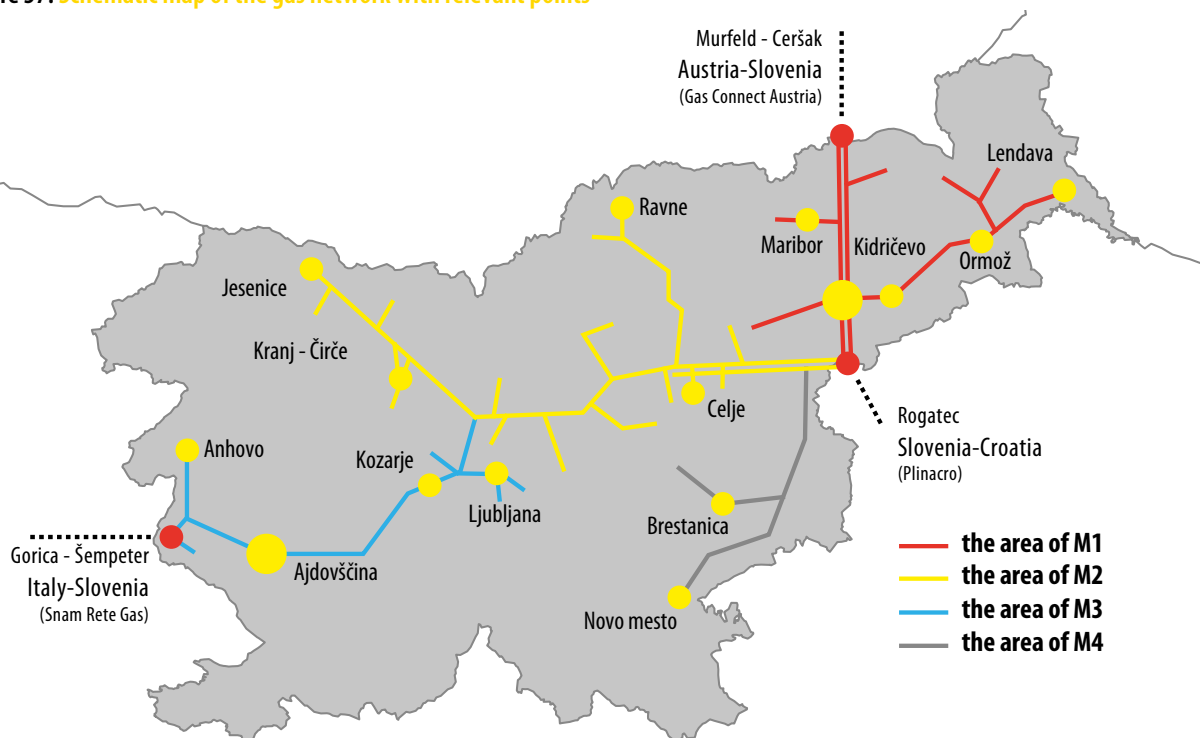


Source: Energy Agency

### 4.2.3.1 Natural gas transmission system

In 2014, the gas TSO built 34 kilometres of new pipelines with a nominal pressure of more than 16 bars. Thus, the length of pipelines is currently 946 kilometres. The length of pipelines with a nominal pressure less than 16 bars remained unchanged – 209 kilometres. The transmission system also consists of 199 metering-regulation stations, 41 metering stations, five reducing stations, and compressor stations in Kidričevo and Ajdovščina. Figure 57 shows a map of the Slovenian natural gas transmission system.

Figure 57: Schematic map of the gas network with relevant points



Source: Plinovodi

The Slovenian gas transmission network is connected with the gas transmission networks of Austria (the Ceršak MRS), Italy (the Šempeter MRS) and Croatia (the Rogatec MRS). The transmission network is owned and operated by the TSO, the company Plinovodi.

The maximum daily peak load was 3,826,130 Sm<sup>3</sup> of gas, which was 6% less than the previous year. The transmission was carried out in accordance with plans and without any operational disruptions.

Like the previous year, the direction M1-Rogatec towards Croatia was the most heavily used transmission path. In the exit point Rogatec the contractual congestion emerged. In this point, the highest daily technical utilisation of capacity was measured, reaching 90.5%, which was for 3.2% less than in the previous year. The highest monthly technical utilisation of capacity, 71.6%, occurred in the exit point Rogatec, and was 2.6% lower than the year before. Average annual utilisation of transmission capacities was the highest in the direction to Croatia, amounted to 54.7%.

The gas TSO carried out 12 pre-planned works on the transmission system. In one case, the delivery had to be suspended. The interruption lasted 11 hours. There were no unplanned interruptions of supply.

#### **4.2.3.2 The business operation and the ownership of the gas TSO**

The gas TSO finished its financial year 2014 with a net profit of € 8.2 million, which was 17% more than the previous year. At the end of the year the company had 159 employees, or three more than in 2013. The gas TSO is 100% owned by the company Geoplin, d.o.o, which is a supplier of natural gas.

#### **4.2.3.3 The investments in the transmission system**

In 2014, the gas TSO completed a ten-year investment cycle, with which an additional connection of central Slovenia with the Austrian transmission system was enabled, a non-interruptible supply of gas irrespective of the pressure conditions of the neighbouring systems, and bi-directional flow of gas in the cross-border point Šempeter. For building and reconstruction, it allocated € 30.4 million, which was 42% less than the previous year. Depreciation funds presented 18% of the required funds, almost 11% or € 3.3 million came from other own resources, and € 21.6 million were other foreign funds.

The last two investments within the ten-year investment cycle were the construction of the transmission pipeline M2/1 in the section Trojane-Vodice and installation of the 3rd unit of the compressor station in Kidričevo. The new pipeline, which runs from the Austrian border to the central Slovenia, together with upgraded compressor station increases available capacity in the commercially most attractive transmission direction from Austria to Slovenia through the cross-border point Ceršak; from 1 January 2015 this pipeline will enable physical transportation of natural gas through the cross-border point Šempeter also in direction from Slovenia to Italy.

The regulations on the national spatial planning for the projects related to constructions of new transmission pipelines. For the projects, which are co-financed with non-refundable funds from the programme TEN-E 2010, all the studies within the preliminary work were finished. The gas TSO expanded the transmission system with connections for some municipalities and adapted existing pipeline facilities to changing demand characteristics that will arise if users' needs change. In the development phase, the gas TSO was preparing the documentation for the execution of the loops and relocation of the network due to settlement adjustment and demands, geological conditions in order to avoid landslides, the elimination of bottlenecks and expansion of capacity, connections of new regions, and improving the security of supply.

The Energy Agency issued an approval to the Ten-Year Network Development Plan of the gas transmission network for the period 2015–2024). This development plan is in compliance with the Ten-Year Network Development Plan by ENTSOG. Table 33 shows the investment activities in 2014.

**Table 33: Investment activities in 2014**

Facility	Activities in 2014
M2/1c Trojane–Vodice	End of construction, length of pipeline 34 km, obtaining an operating license
Compressor station in Kidričevo, 1 <sup>st</sup> phase of extension	Completion of the installation of the 3 <sup>rd</sup> compressor unit
R51a Jarše–Sneberje and Slovenske Konjice 2 <sup>nd</sup> phase	Two regulations on the national spatial plan adopted
MRS Šempeter, MRS Rogatec	Alteration of the border MRSs

Sources: Plinovodi, Energy Agency

#### 4.2.4 Distribution of natural gas

The distribution of natural gas was carried out by 16 gas DSOs in 77 municipalities. In 61 municipalities was this service organised with a concession act between the concessionaire and local community, in 15 municipalities was performed by public companies, and in one municipality as an investment of public capital into the activity of private law. In the local community of Šenčur, service of general economic interest was provided by two system operators in three areas. In additional nine local communities the concessions for the provision of the service of the gas DSO were awarded; however, the gas distribution was not carried out, as the distribution networks were not yet ready for use.

The tasks of the gas DSO mainly include the following:

- the distribution of natural gas
- the operation, maintenance and development of a distribution network
- the provision of the long-term network capacity

All companies that are in Slovenia engaged in the distribution of natural gas are at the same time also the suppliers of natural gas. For the distribution system operators that have fewer than 100,000 customers connected to distribution network the legal unbundling of services is not required. In Slovenia, all distribution system operators fulfil this condition, in that way they do not need legal separation of distribution and supply, and only the unbundling of accounts for individual energy-related activities is sufficient. This means that the distribution companies have to manage separate accounts for each energy-related activity.

In 2014, there was a total of 4532 kilometres of gas distribution pipelines with different pressure levels, which was 1.9% more than the previous year. Almost 65% of them operates at a pressure between 22 millibars and 1 bar, 34% between 1 bar and 4 bar, and only one percent of the distribution pipelines operates between 4 and 16 bars. The length of the pipelines and the pressure are shown in Table 34. The distribution pipelines, together with the corresponding facilities, are mainly owned by the system operators.

**Table 34: Distribution lines, metering and metering-regulation stations**

Length of the network with pressure level between 4 and 16 bar	47 km
Length of the network with pressure level between 1 and 4 bar	1,566 km
Length of the network with pressure level up to 1 bar	2,918 km
Number of metering stations	22
Number of metering-regulation stations	184

Source: Energy Agency

Gas DSOs provide routine and extraordinary maintenance to ensure reliable and safe operation of the networks. In 2014, the gas DSOs carried out more than 4500 different works, which last almost 118,000 hours. In comparison with the previous year, the number of planned work, which were carried out, increased by 12%, and the time was reduced by almost 5%.

Planned works resulted in 1764 hours of gas supply interruptions to consumers; seven operators did not have any interruptions, and six operators had less than 20 hours of disruptions. The recorded time of individual interruption was at least one hour and not more than 72 hours.

There were 476 unplanned interventions, or almost 5% less than the previous year. The average duration of interruptions ranged from less than two and up to nine hours. Interventions on the network as a result of force majeure or third-parties caused 94 gas supply interruptions of 11 operators, in a total duration of 372 hours. The duration of such interruptions decreased by 19% compared to the previous year. According to the collected data, five operators did not have such interruptions.

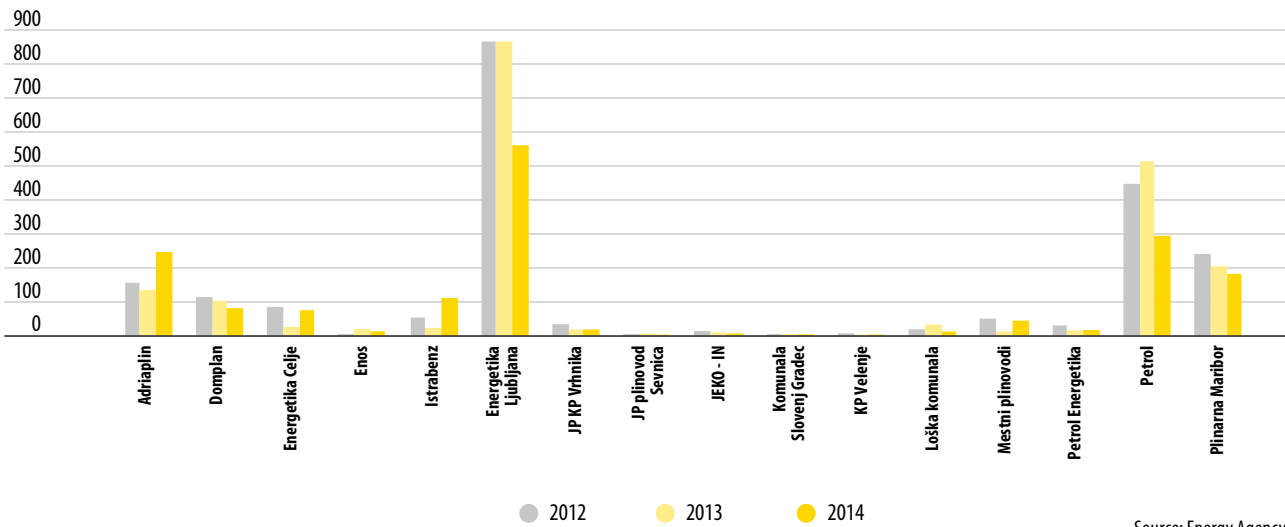
#### 4.2.4.1 Consumers connected to the distribution network

At the end of the year, 133,230 end consumers were connected to the distribution networks in 77 local communities, which was almost 0.4% more than in 2013. A number of consumers on the distribution networks has been rising since 2008, but yearly increment decreases. In 2014, the increment was for 60% lower than in 2013, and more than 70% lower than the average annual increment over the period 2009–2013. The number of household consumers was 119,025, and compared to 2013 decreased by almost 0.4%. This was the first fall since 2008. There were 14,205 business consumers, which is about 5.5% more than the previous year.

Gas DSOs distributed almost 262 million Sm<sup>3</sup> of gas, which is the smallest amount of gas distributed after 2004; at the end of 2004 the number of end consumers was in comparison with 2014 lower for almost 21%, or 27,658 consumers. In comparison with 2013, there was a decrease in distributed volumes for about 12%. Household consumers used almost 21% less gas, and business consumers 5.5%. This data relate to the gas charged to consumers since DSOs for the temperature dependent consumption points of households and small business consumption mostly determine the distributed volumes on the basis of load profiles. Distributed volumes of gas were lower for almost 6%.

The gas DSOs connected 1653 new consumers, 16% less than in 2013. Numbers of new consumers in years from 2012 to 2014 is shown in Figure 58.

Figure 58: Number of new consumers on the distribution networks for 2012–2014



Source: Energy Agency

The connecting procedure for new consumers lasted on average 28 days after submission of the application for connection. The DSO that needed the longest time to connect consumers the whole procedure took on average 60 days. The physical connection to the network was made on average within seven working days.

Household consumers were using gas mainly for cooking, sanitary hot water and heating. 96.5% of all consumers used less than 4500 Sm<sup>3</sup> and 90% less than 2500 Sm<sup>3</sup> of gas. 3.5% of consumers with annual consumption more than 4500 Sm<sup>3</sup> used 67% of the total annual consumption of gas of consumers connected to the distribution networks.

Consumers connected to the gas distribution systems were paying for the regulated network charge that was based on eligible costs of the gas DSOs.

#### 4.2.4.2 The business operation of the gas DSOs

11 gas DSOs finished their financial year with a positive net profit in the total amount of €4.6 million while the remaining five with negative net result of €0.2 million.

At the end of the year, seven gas DSOs were in majority ownership of one or more municipalities, and seven gas DSOs in majority ownership of domestic or foreign legal entities. The ownership of four gas DSOs is dispersed since they do not have a majority owner. The ownership structure is shown in Table 35.

**Table 35: Ownership structure of the companies for gas distribution**

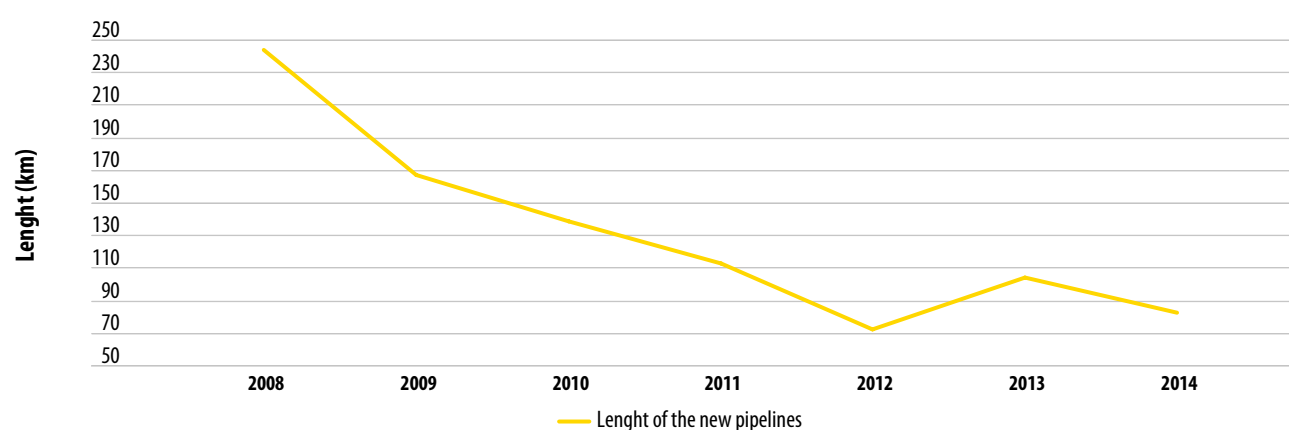
Ownership structure of the gas DSOs	Number of companies
Majority ownership of one or more municipalities	7
Majority ownership of a domestic legal entity	5
Majority ownership of a foreign legal entity	2
No majority owners	2
<b>Total</b>	<b>16</b>

Source: Energy Agency

Ten gas DSOs owned the distribution network entirely while the remaining six gas DSOs does not own networks, so they lease the networks. If the gas DSO does not own the network or its part, it has to conclude an agreement that settle all issues relating to the use of the network. A contract has to regulate in particular the scope and purpose of the use of the network, rental charge or other payments, conditions and procedures of current and investment maintenance of the network, and other issues needed for carrying out tasks of the system operator. The content of the contract and its implementation is supervised by the Energy Agency.

#### 4.2.4.3 The investments in the distribution systems

The gas DSOs built 83 kilometres of new distribution pipelines, which was 20% less than the previous year; 1.7 kilometres of pipelines were reconstructed. The total value of investments in distribution infrastructure was € 7.4 million, of which investments in the reconstruction of distribution systems amounted to almost 10%.

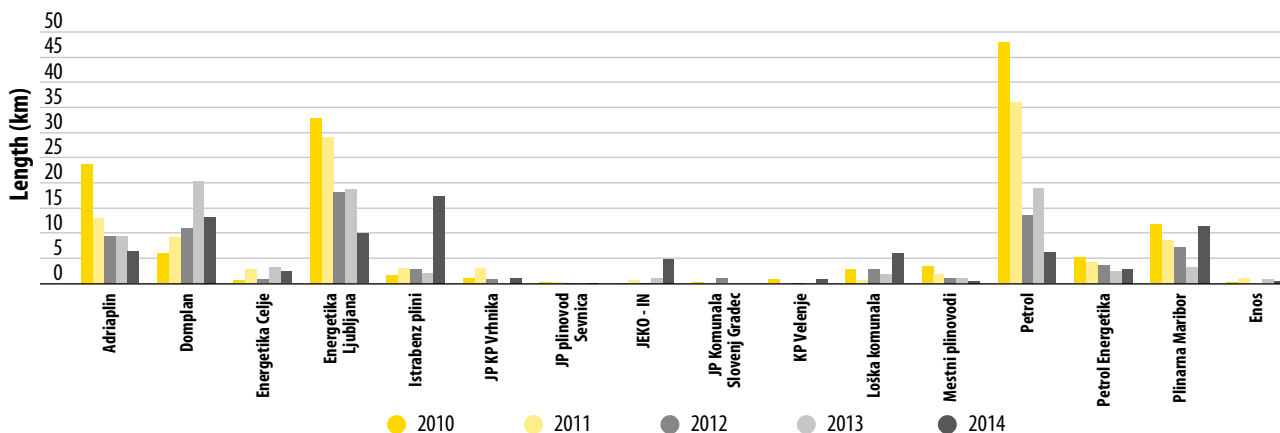
**Figure 59: The trend of building new distributions systems**

Source: Energy Agency

Figure 60 shows the intensity of the construction of new pipelines by individual DSO. On average, each DSO in 2014 built 5.2 kilometres of new pipelines.



Figure 60: Length of new distribution systems in 2010–2014



Source: Energy Agency

## 4.2.5 The network charges for gas transmission and distribution systems

Until the expiry of the regulatory period, which was at the implementation of Energy Act-1 in March 2014 already underway, and for which an individual system operator had determined the regulatory framework, a gas consumer was paying the price for the use of the network, which consists of the network charge and the supplements. The Energy Agency regulates the network charge with methodologies that determine the method and accounting of the network charge. The supplements, which are an integral part of the use-of-the network charge, are determined by the Government of the Republic of Slovenia. The network charge is used for financing the costs of the gas DSO services of general economic interest. The network charges for the transmission and distribution networks are set by the system operators, with an approval from the Energy Agency.

### 4.2.5.1 The network charge for the gas transmission system

The foundations for setting the network charge are provided by the Act Determining the Methodology for Setting the Network Charge and the Criteria for Establishing Eligible Costs for the Gas Transmission Network, and the Act Determining the Methodology for Charging for the Network Charge for the Gas Transmission System. The method of price capping is used when setting the network charge. The documents were prepared and adopted by the Energy Agency.

The methodology for setting the network charge determines the mode, conditions and method of setting the network charge, and the criteria for establishing the eligible costs of the system operator, which include also incentives for more efficient operation of the system operator. The network charge depends on the leased contractual transmission capacity, the transported volumes of natural gas, the type of metering device used, and taking into account other parameters of the methodology for charging the network charge.

The network charge for a three-year period is set by the gas transmission system operator by the public authority with the Act Setting the Network Charge for the Gas Transmission Network. The system operator publishes this Act in the Official Gazette of the Republic in Slovenia after obtaining approval from the Energy Agency.

Since 1 January 2013, for charging the network charge for the gas transmission network the method of entry-exit points is used, which means a system of uniform tariffs for individual consumers

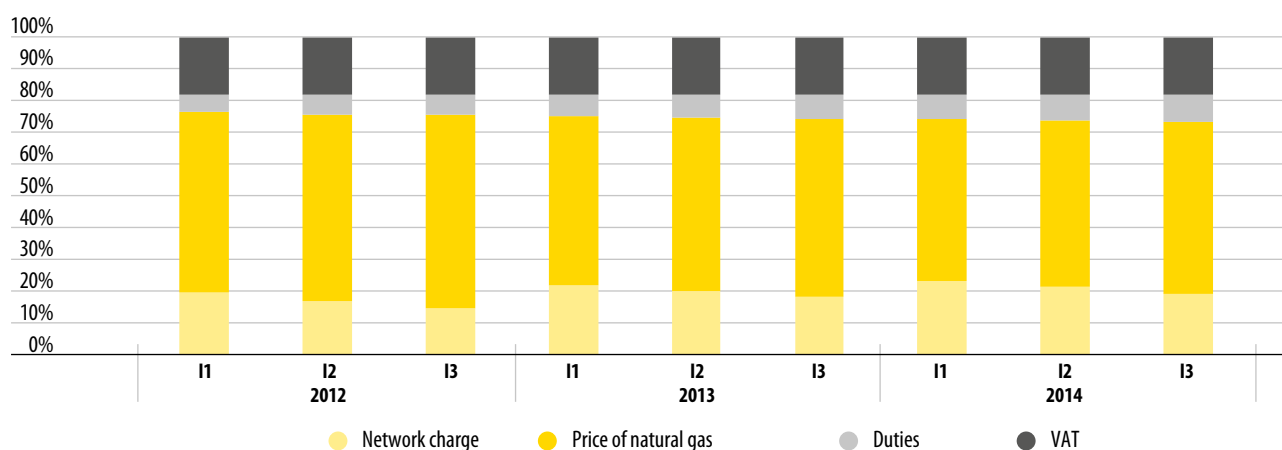
groups throughout the Slovenian territory. Thus, from 1 January 2013, the users are charged for the following:

- network charge for entry points
- network charge for exit points
- network charge for own use
- network charge for measurements

Tariffs reflect eligible costs of the transmission system operator. For consumers, connected to the gas transmission system, the network charge is disclosed separately on the bill.

The final gas price consists of the price for the use of the network, supplied gas and taxes. Taxes consist of CO<sub>2</sub> taxes, excise duty, supplement for energy efficiency improvement, and the contributions for ensuring support for the production of electricity from RES and CHP. Taxes without VAT accounted from 8 to 9% of the final price of gas. The price of gas as a commodity for business consumers represents from 51 to 54% of the final price, and the network charge from 19 to 23% of the final price. Figure 61 shows the structure of price for business consumers.

**Figure 61: Structure of the final gas price for business consumers**



Sources: Statistical Office, Energy Agency

#### 4.2.5.2 The network charge for the natural gas distribution systems

The network charge is determined in accordance with the Act Determining the Methodology for Setting the Network Charge and the Criteria for Establishing Eligible Costs for a Gas Distribution Network, and the Act Determining the Methodology for Charging for the Network Charge for a Gas Distribution Network. These acts were established and adopted by the Energy Agency. The network charges for the distribution networks also include the costs related to the use of the transmission network at the exit point within Slovenia.

When setting the network charge the method of regulated network charge is used, which determines a causal relationship between the eligible costs and the revenues of the system operator. Network charge as a part of the price for the use of distribution network is an annual revenue of the system operator, used for covering the eligible costs of a system operator.

Tariffs for the distribution networks are unified for individual consumers groups for individual geographical areas. Prices for all typical customers in different areas are not the same as the prices reflect different costs of distribution system operators in the individual geographical area. Individual

consumers groups are defined in line with the methodology for charging for the network charge.

DSOs determined the tariffs in acts setting the network charge tariffs for the gas distribution network relating to an individual geographical areas; acts were published in the Official Gazette of the Republic of Slovenia, after prior consent of the Energy Agency.

In 2014, a total of 24 acts setting the network charges for the gas distribution networks were implemented in 77 local communities.

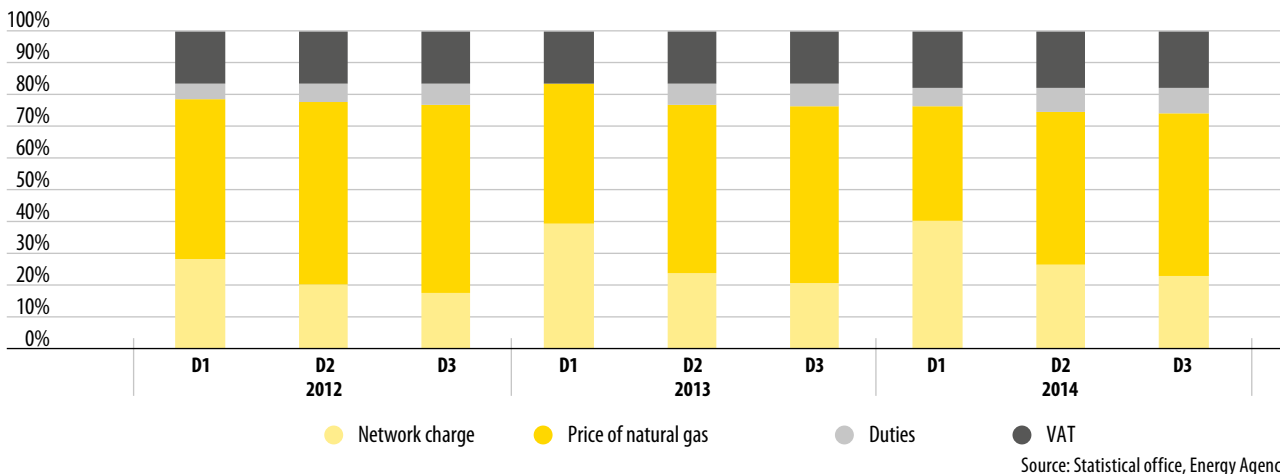
DSOs charged for the network charge by disclosing separately:

- the amount of natural gas distribution
- the amount of measurements, which were carried out

In 2014, all gas DSOs provided a separate disclosure of the use-of-network price on the bills issued to their consumers.

The final price for natural gas consists of the use-of-network price, the price for natural gas, and taxes. Taxes consist of taxes for CO<sub>2</sub>, excise duty, supplement for energy efficiency improvement, and the contributions for ensuring support for the production of electricity from RES and CHP. In the price structure, taxes accounted between 5 and 8% of the final price. The price of gas as a commodity for household consumers ranged between 36 to 52% of the final price, and the network charge around 22 to 40%. Figure 62 shows the structure of the final gas price for households. This structure has changed a lot in recent years due to falling prices of supplied gas.

Figure 62: Structure of the final price of natural gas for household consumers



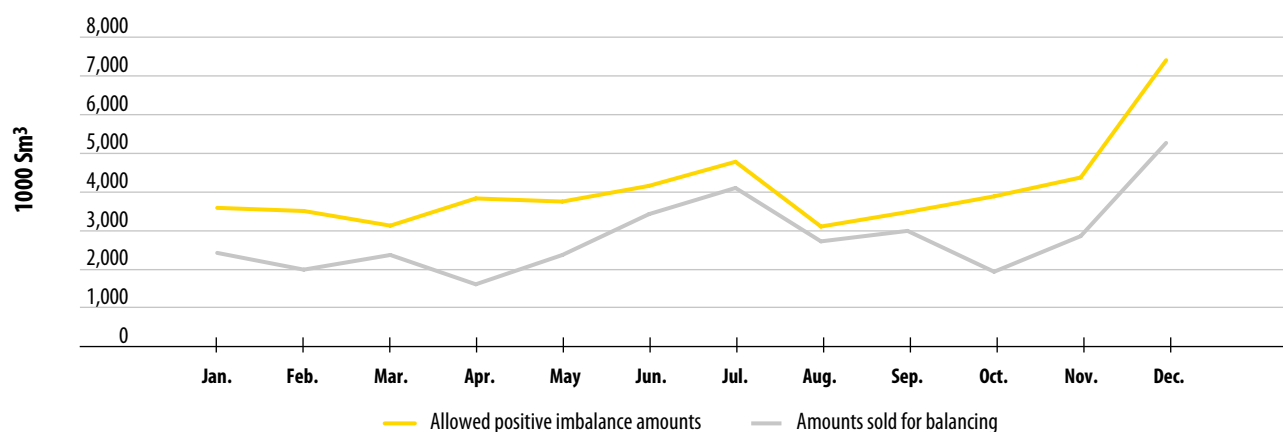
Natural gas suppliers allowed household consumers to pay the consumed gas and the network charge by one bill or universal payment order even if the suppliers and system operator are not the same legal entity (single account).

### 4.2.5.3 The balancing

In 2014, eight leaders of the balancing groups were active, two less than the previous year. Their imbalances were split between positive/negative imbalances, or non-allowed daily imbalances and cumulative monthly imbalances. For allowed imbalances, there are three limit zones that depend on the month of the year. The gas TSO charged for imbalance amounts and took care for balancing of the system by buying and selling natural gas.

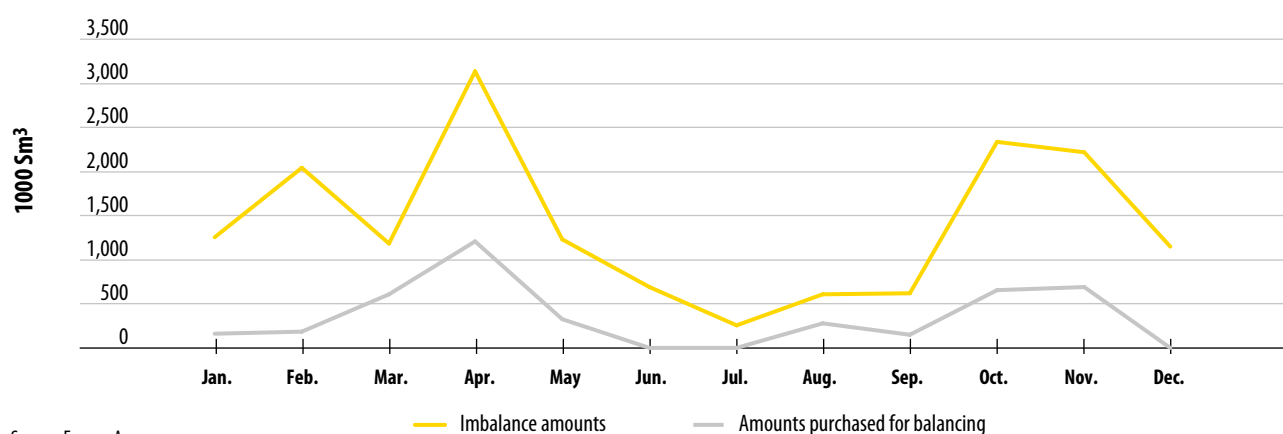
The leaders of balancing groups supplied more gas to the transmission system than their consumers used. The volumes of positive imbalances were, thus, three times larger from negative imbalances, which worsened the ratio of positive and negative imbalances from a year earlier for a quarter. The largest imbalances were carried out in December when they were nearly twice the average of other months in 2014.

**Figure 63: Amounts of positive imbalances and amounts purchased for balancing**



Source: Energy Agency

**Figure 64: Amounts of negative imbalances and amounts purchased for balancing**

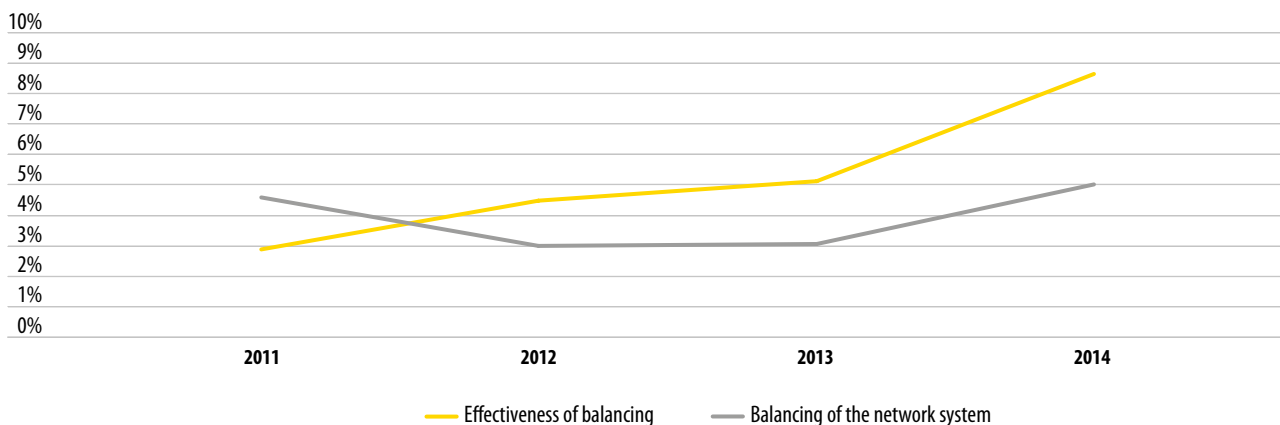


Source: Energy Agency

The gas TSO was carrying out the balancing of the transmission system by buying and selling the amounts in accordance with the three-year contract. The effectiveness of balancing, shown in Figure 64, was in 2014 deteriorated due to negative imbalances, which were almost five times higher than positive imbalances while non-allowed negative imbalances were for 73% higher than allowed negative imbalances. Thus, the amounts for balancing daily imbalances in 2014 amounted to 8.6% of all transferred gas volumes for consumers in Slovenia, which was 68% less than the previous year. Consequently, the gas TSO had to intensively implement the measures for balancing

the system, for which 49% more gas was used than the year before. These volumes represent 5% of the volumes consumed by the Slovenian consumers, which, in according to lower consumption in general, means as much as 60% higher values than the previous year.

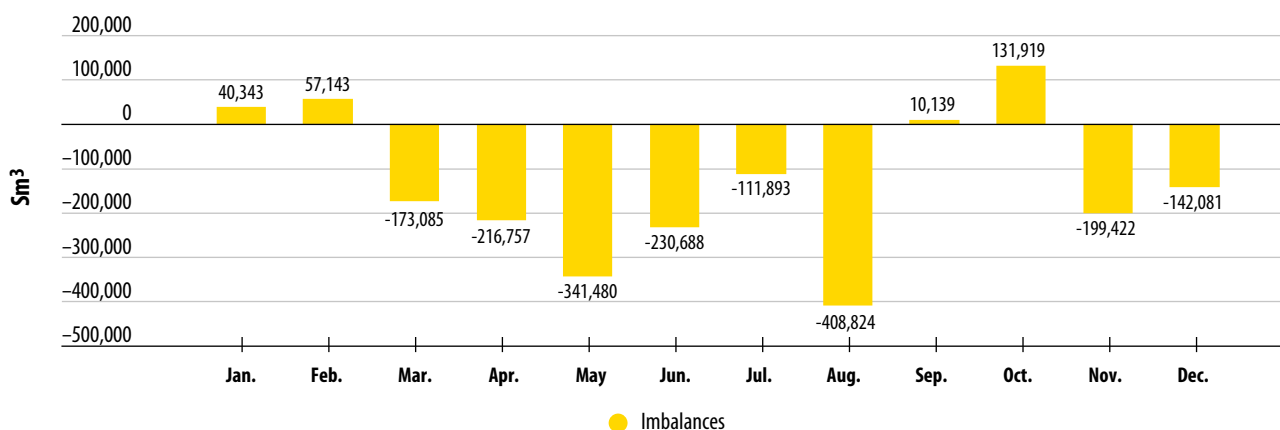
Figure 65: Effectiveness of balancing the transmission system



Source: Energy Agency

Imbalances amounted to 2.1 million Sm<sup>3</sup> of natural gas, which was 75% more gas compared to the previous year. These quantities represent 0.27% of the transferred gas for the needs of the Slovenian consumers. Considering lower consumption this relative value was more than twice as high than the one in the previous year.

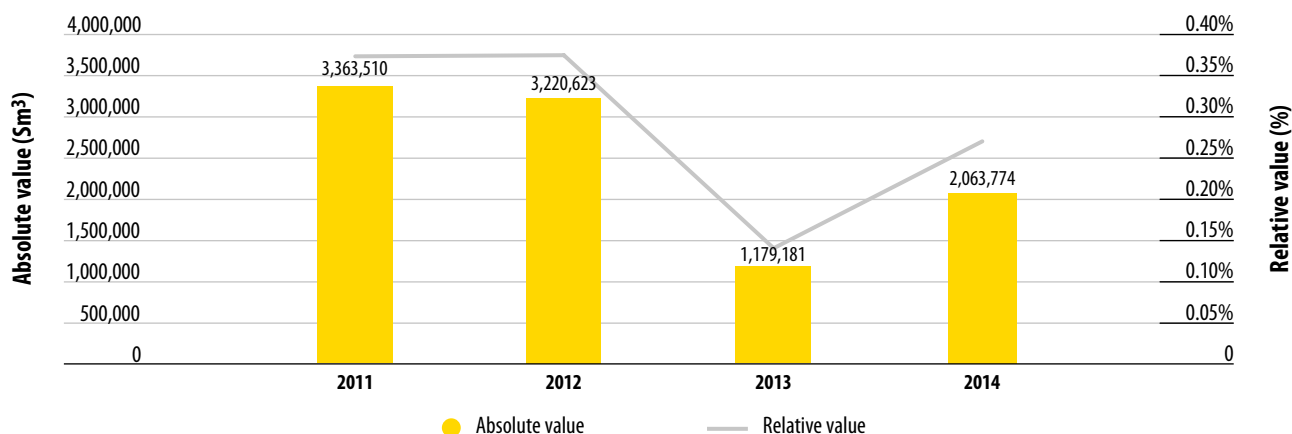
Figure 66: Imbalances in 2014 by months



Source: Energy Agency

In two-thirds of the year, the imbalances were negative. Deficit of volumes in the transmission system has to be financially covered by the leaders of the balancing groups.

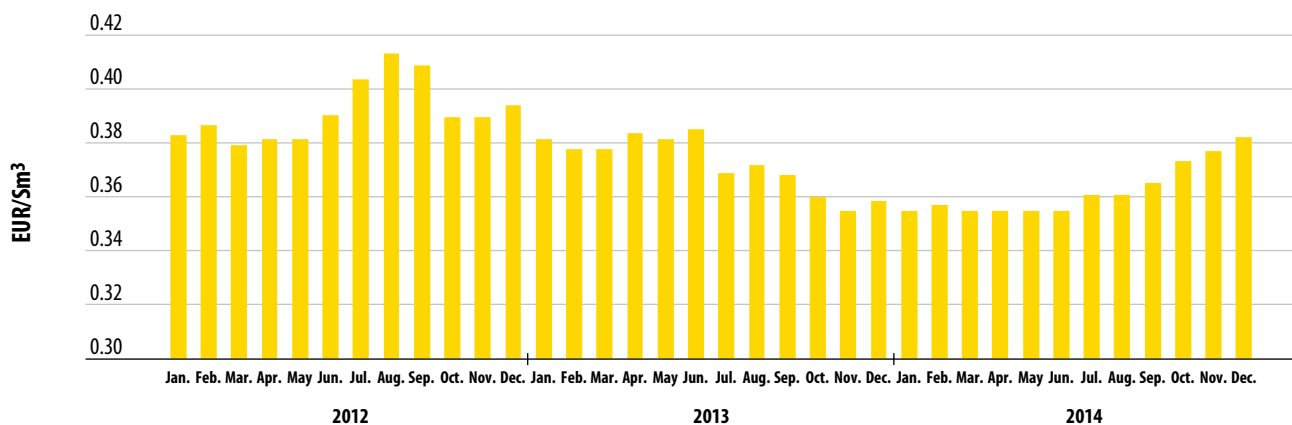
Figure 67: Fluctuation of imbalances from 2011 to 2014



Source: Energy Agency

The grounds for settlement of imbalances, the differences and own use is the basic price of natural gas CB, which was on average 0.3628 EUR/Sm<sup>3</sup>, which is about 3% less than the previous year.

Figure 68: Basic price (CB) movements from 2012 to 2014



Source: Energy Agency

#### 4.2.5.4 The secondary market for transmission capacity

The secondary market of transmission capacity witnessed changes since at the end of the year the rules that allow trading in the secondary market only at the individual relevant points altered. The points, in which trading in the secondary market is possible, are in accordance with the new rules for enter-exit point to Slovenia. Nevertheless, the major changes due to the new rules in 2014 did not happen.

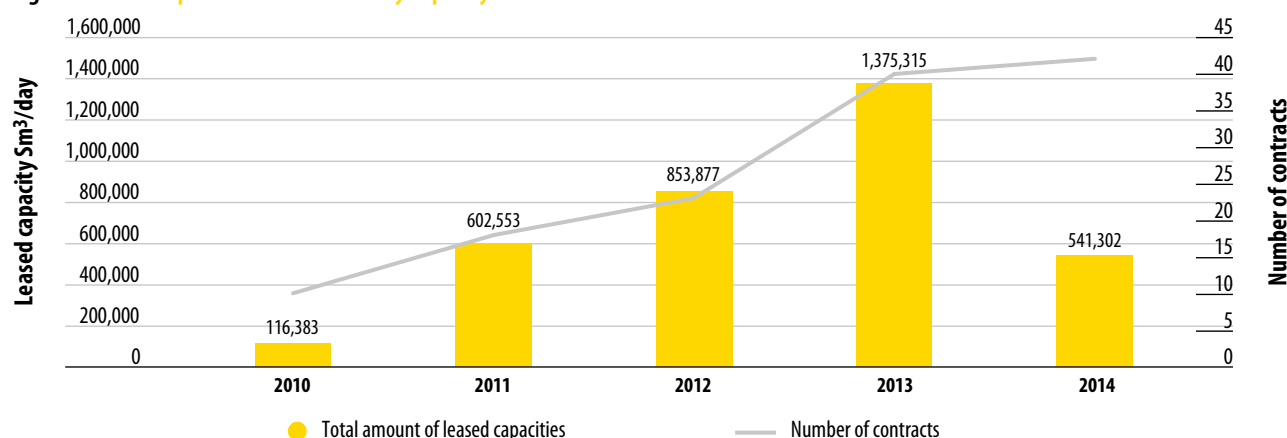
**Table 36: Trading of transmission capacities in the secondary market**

	Border entry points	Border exit points	Exit points in Slovenia
Number of transmission capacity providers	26	0	10
Number of bids	36	0	15
Total amount of offered capacity in v Sm <sup>3</sup> /day	559,360	0	134,748
Number of enquirers for capacity	14	0	10
Number of enquires	30	0	13
Total amount of enquired capacity in Sm <sup>3</sup> /day	448,554	0	554,302
Number of providers who sold transmission capacity	24	0	10
Number of enquirers who leased capacity	14	0	7
Number of contract for sublease	30	0	12
Total amount of subleased capacity in Sm <sup>3</sup> /day	448,554	0	92,748
Number of refused sublease	0	0	7

Sources: Plinovodi, Energy Agency

Unlike the previous year, in the secondary market at the exit points within Slovenia no capacity lease or sale contract was concluded. 42 contract for sublease were concluded, two more than the year before. The amount of subleased capacity decreased by almost 60% in comparison with the previous year, and the number of subleases refused by the TSO increased from one to seven.

**Figure 69: Development of the secondary capacity market from 2010 to 2014**



Sources: Plinovodi, Energy Agency

## 4.2.6 Cross-border transmission capacity

### 4.2.6.1 Entry/exit points capacity

The cross-border transmission capacity is used for the provision the transit of natural gas to the neighbouring networks and for a reliable supply with natural gas in Slovenia.

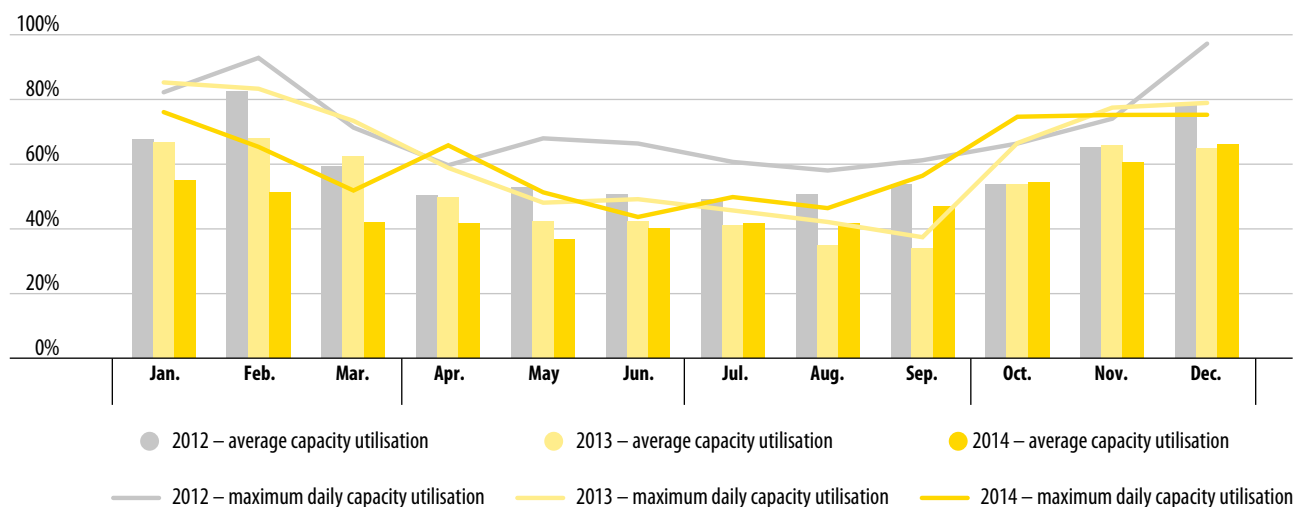
In accordance with Regulation No 984/2013 establishing a Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems, the gas TSO introduced allocation of transmission capacities through auctions. It prepared the Rules on terms and conditions for capacity allocation mechanisms at interconnection points of the transmission system through auctions. In November 2014, capacities had been for the first time allocated by using the online booking platform PRISMA. This platform is designed to handle harmonised capacity products regarding firm and interruptible capacity; the Transport contract for auctioned transmission capacities is possible to conclude for firm and interruptible transmission capacities for different periods as yearly, quarterly, monthly and daily standard capacity products.

Through the greater part of the year, the lower average monthly utilisation in two out of three border entry points of the transmission system was detected. In the border entry point Ceršak, again a decline in utilisation of transmission capacity was recorded for about 3.9%, and decline in leasing of provided transmission capacity by 8.2%. The average monthly and the highest daily utilisation of the contractual capacity of the most important border entry point in Ceršak amounted to 41.5% outside the heating season, and in heating season 54.8%.

The average annual utilisation of the technical capacity of the most important entry point of the transmission system was 48%, and the average annual utilisation of the border exit point Rogatec decreased by almost 2.7% and reached 54.8% of average utilisation. The average annual utilisation of the technical capacity of entry point Šempeter remained very low and was reaching 7.2%.

Movements of average annual and daily capacity utilisation in individual months in border points (MRSs) is shown in the figures below. The dynamics of daily transferred volumes of gas, technical and contractual firm and interruptible capacity are presented in Figures 73 to 75.

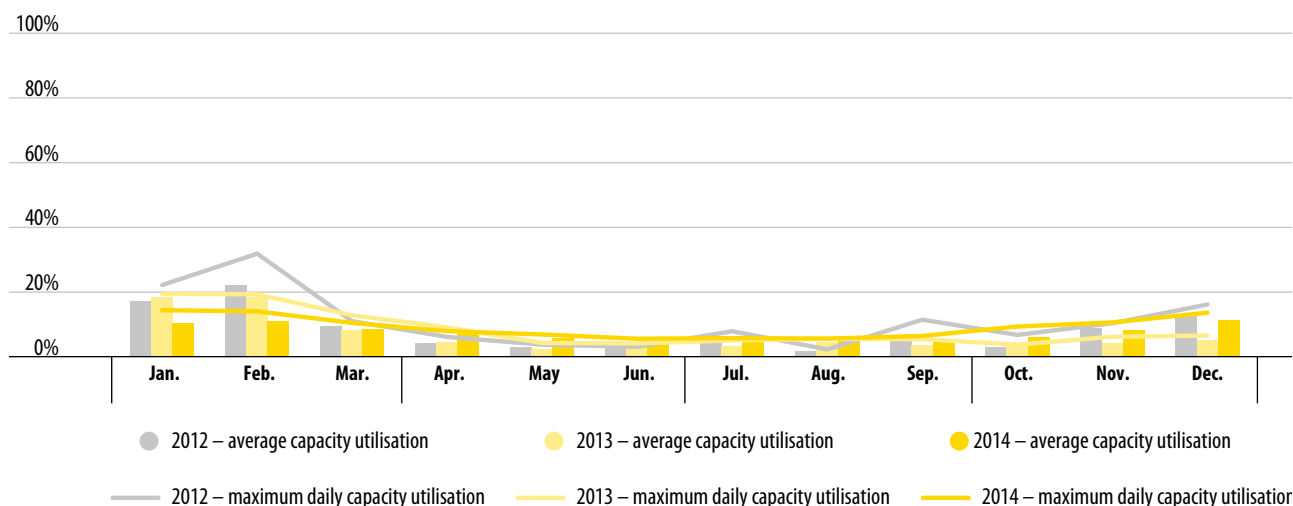
**Figure 70: Maximum daily and average monthly capacity utilisation of the border-entry point Ceršak**



Source: Plinovodi

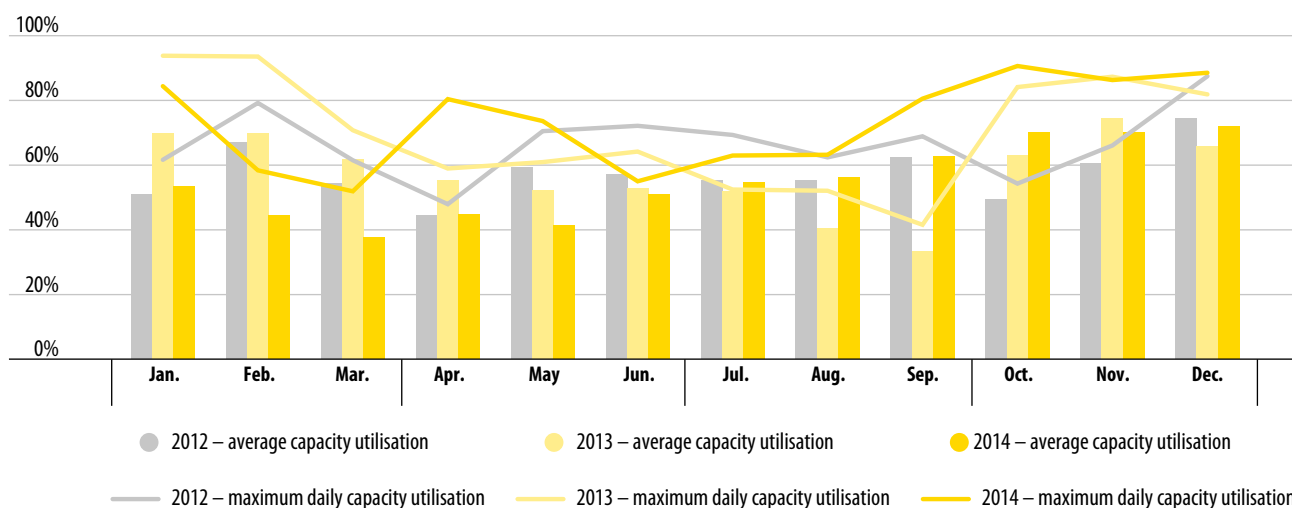


**Figure 71: Maximum daily and average monthly capacity utilisation of the border-entry point Šempeter**



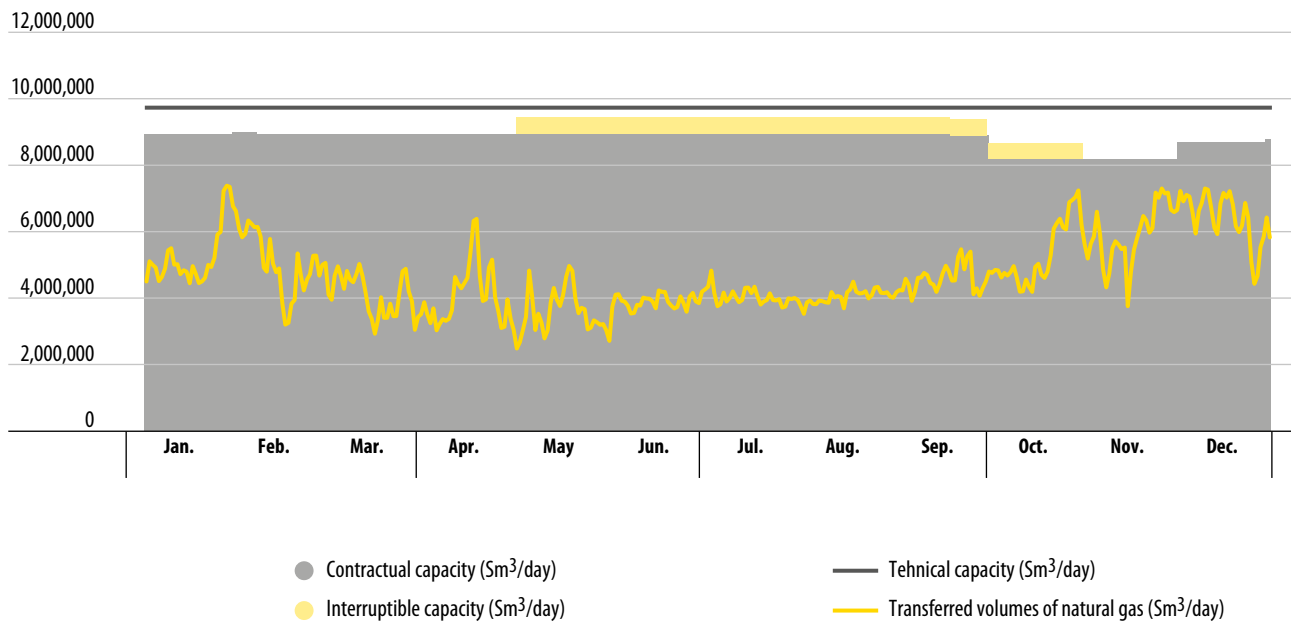
Source: Plinovodi

**Figure 72: Maximum daily and average monthly capacity utilisation of the border exit point Rogatec**



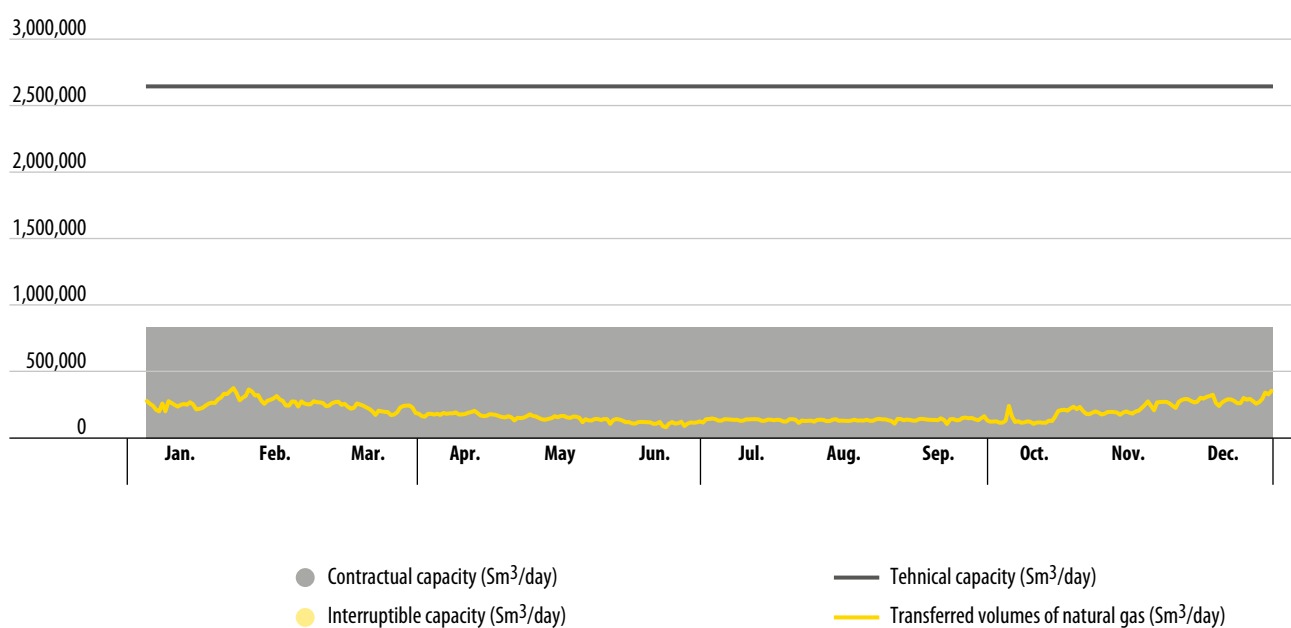
Source: Plinovodi

**Figure 73: Dynamics of daily transferred volumes of natural gas, technical, contractual and interruptible capacity at the border-entry point Ceršak**



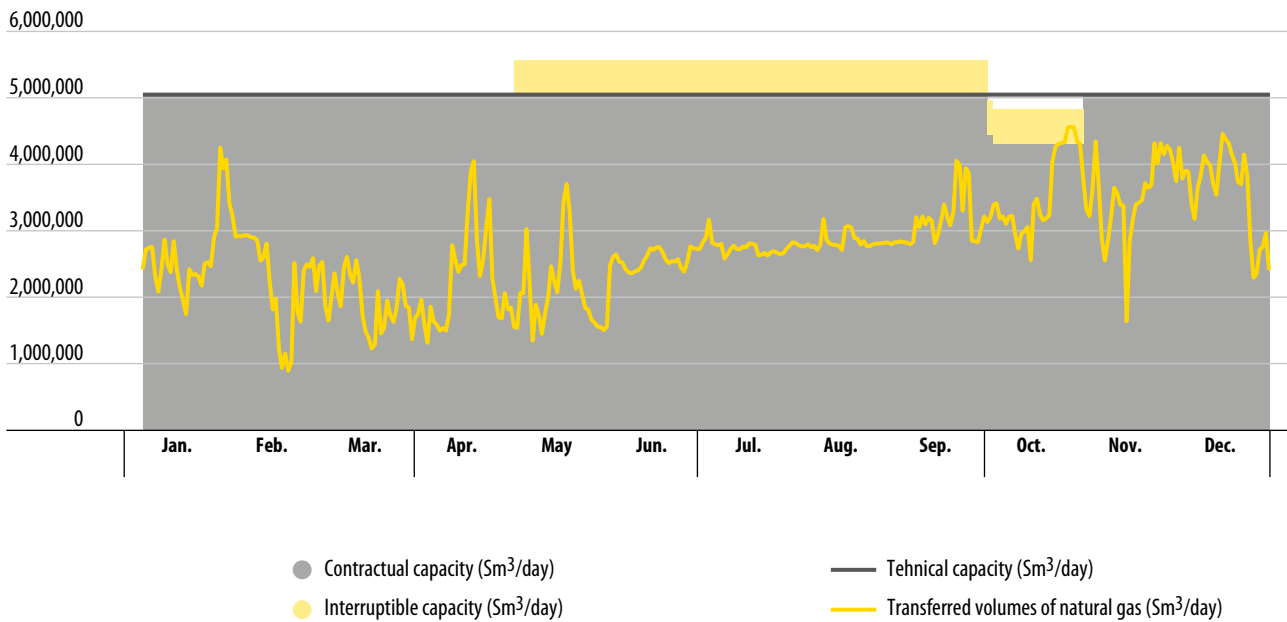
Source: Plinovodi

**Figure 74: Dynamics of daily transferred volumes of natural gas, technical, contractual and interruptible capacity at the border-entry point Šempeter**



Source: Plinovodi

**Figure 75: Dynamics of daily transferred volumes of natural gas, technical, contractual and interruptible capacity at the border-exit point Rogatec**



Source: Plinovodi

#### 4.2.6.2 The methods of setting the maximum technical capacity

The maximum technical transmission capacity is the one that is physically available for the transmission of natural gas from a selected entry point to an exit point. When setting the maximum technical capacity of relevant border point the gas TSO has to consider the technical capacities of all the transmission components of the pipeline system, the configuration and the operational characteristics of the entire system, and its operational boundary conditions have to be considered.

The forecasting of the daily gas consumption is based on the model of forecasting by way of auto-learning, which activates historical data on gas consumption in different operational conditions. The expected daily consumption is calculated on the basis of this data, the forecasted operational conditions, and the daily forecasts of individual gas consumers. It is also possible to analyse the quality of gas (gas composition) in the system, both geographically and in time.

### 4.2.6.3 The allocation of the transmission capacity

Management of the natural gas transmission system is due to its economic importance and ensuring fair and transparent access for all users fully regulated, and with European and domestic legislation consistent activity.

In 2014, the average total amount of transmission capacity at border entry/exit points amounted to just over 10 million Sm<sup>3</sup>/day. A change in the average lease compared to the previous year was to a some extent a result of exceptional contractual congestion in the exit point Rogatec, which was determined in November 2013 on the basis of demands of the users of the transmission network, as well as the expiry of the bigger transmission contract of the foreign system user in the border entry/exit point, which in regard to leasing capacity already pursues the thermal instead of calendar year. On the amount of leased transmission capacity in the most important entry point Ceršak also influenced the users who did not opt to go into interruptible contracts, and trading with transmission capacity on the secondary market.

In 2014, 761 million Sm<sup>3</sup> of natural gas was transferred for the Slovenian consumers, which was for 9.8% less than in 2013. From the data on transferred volumes is evident that the realisation of the transmission was lower mainly in the first quarter of 2014 as a result of exceptionally warm winter and spring. In addition to temperature effects, the reason for the reduced transmission for the Slovenian consumers is also markedly lower consumption of natural gas for electricity production.

In the cross-border transmission, 1008 million Sm<sup>3</sup> of natural gas was transferred in 2014, which was by 5% less than in 2013. In the comparable period in 2013 the decrease in cross-border transmission was particularly significant in the first three months (on average by 69%). After a significant decline in the first half of 2014, the transmission increased in the second half of the year, and it was on average by 24% higher than the cross-border transmission in the comparable period of 2013. The largest increase in cross-border transmission of 84% was recorded in September.

Users of the natural gas transmission system used the leased capacity for transmission of natural gas to the consumption points in Slovenia. Capacity was allocated in line with long-term and short-term contracts for the network access.

According to the Energy Agency's records in 2014, at the border entry points 220 and exit points in Slovenia 303 contracts were concluded of different maturities and different services.

## 4.2.7 The congestion-management mechanisms

The technical characteristics and configuration of the transmission system determine its technical capacity or the maximum firm capacity in individual points of the transmission system, which system operator can provide to the users of the transmission system.

If demand for firm capacity at each border entry or exit point exceeds its available technical capacity, we talk about contractual congestion of a border point. In addition to contractual congestion, physical congestion occurs when the actual demand in individual point exceeds its technical capacity.

If case of contractual congestion the gas TSO at each border point initiates the congestion management mechanisms in accordance with the Rules on the procedure for the allocation of capacity on the transmission system for the entry and exit points in the Republic of Slovenia, the congestion management procedure and capacity trading on the secondary market.

The following procedures for eliminating contractual congestion are provided:

- Capacity surrender
- Long-term UIOLI (Use-It-Or-Lose It)
- Oversubscription & Buy-back

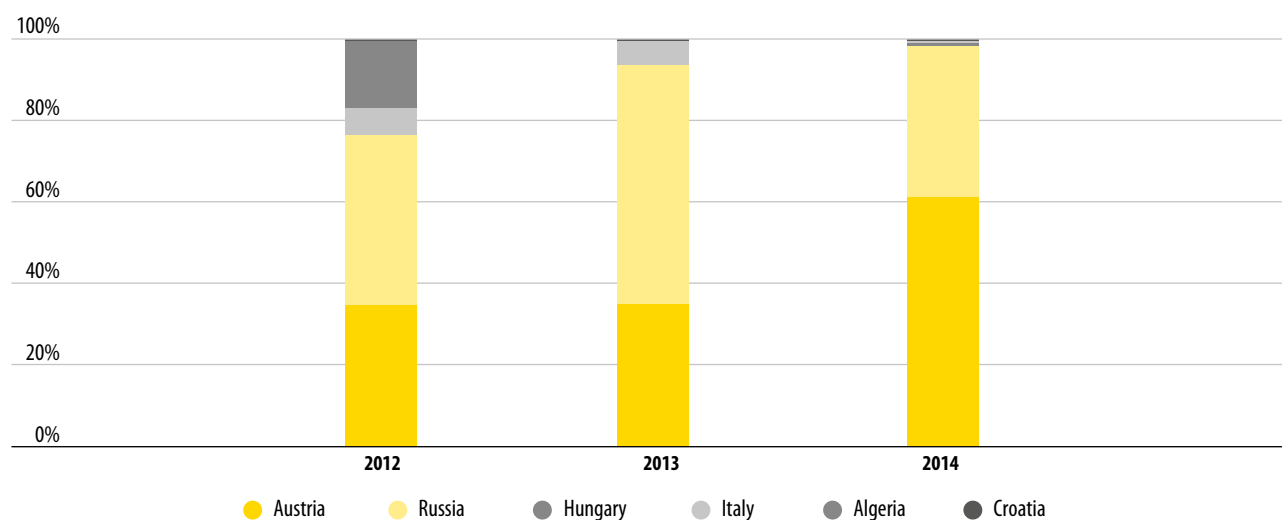
Apart from listed procedure, in Slovenia there are two market-oriented mechanisms to manage contractual congestion. The first mechanism is the possibility of leasing of short-term interruptible supply on the primary market of transmission capacity. In case of contractual congestion allows the gas TSO to sale already leased and at the same time unused entry/exit capacity in the form of short-term interruptible capacity. The second mechanism is a secondary market for transmission capacity, in which the users of the gas transmission network offer for sublease the surpluses of transmission capacity to users who need it.

The gas TSO, the company Plinovodi, in recent years, followed the demand for transmission capacities by upgrading of the system. In December 2014 was with the construction and filling the pipeline M2/1 from Trojane to Vodice with gas successfully completed a ten-year investment cycle of building a parallel high-pressure pipeline from the Austrian border to central Slovenia. In the last quarter of 2014, two investments were completed; the upgrades of the compressor station in Kidričevo and the upgrade of equipment in MRS Rogatec. Due to these upgrades the transmission capacity of the commercial most interesting paths from Austria to Croatia and from Austria to central Slovenia and Italy increased. Upgrades of the border point Šempeter from 1 January also enable physical reverse flow from Slovenia to Italy. After the completion of the ten-year investment cycle at the end of 2014, there are no longer bottlenecks or connection points in which physical congestion would occur.

## 4.3 THE MARKET-BASED ACTIVITIES AND COMPETITION

### 4.3.1 The sources of natural gas and the wholesale market

We continued to remain dependent on import. In 2014, an important change in the import of gas happened. Country, from which Slovenia imported most of gas, was Austria. Gas was purchased in the Austrian trading hub Baumgarten, where 61% of gas imported to Slovenia. The importers do not know the original source of this gas, but most likely is a gas of Russian origin. Directly from Russia Slovenia imported 37% of gas. An interesting fact is that the traders imported almost 1% of gas from Hungary. The quantities imported from Croatia and Italy are almost insignificant. Figures 76 shows the described imported volumes.

**Figure 76: Sources of natural gas from 2012 to 2014**

Source: Energy Agency

In Table 37 final volumes of imported natural gas, which indicate some significant changes, are shown for the period from 2012 to 2014. In 2014, imported gas volumes decreased again. Among the suppliers, in the first place remained the company Geoplin. Nevertheless, its imported gas volumes decreased by 20%. An important change occurred also in the fourth and fifth place – for Elektro Energija and Elektro Celje Energija; both of them increased imported volumes for the Slovenian consumers. To the list of gas importers joined the company Elektro Maribor Energija plus.

**Table 37: Imported gas for consumption in Slovenia from 2012 to 2014 in Sm<sup>3</sup>**

Suppliers	2012	2013	2014
Geoplin	785,313,598	685,876,146	546,258,663
Adriaplin	65,742,373	68,635,308	93,048,954
GEN-I	14,947,419	80,483,314	81,813,649
Elektro Energija	–	2,735,898	8,522,764
Elektro Celje Energija	–	69,331	4,281,339
Petrol	3,557,733	3,406,576	2,564,708
Energija plus	–	–	2,834,279
<b>Total</b>	<b>869,561,123</b>	<b>841,206,573</b>	<b>739,324,356</b>

Source: Energy Agency

The participants of the wholesale market are the companies that supply natural gas to other suppliers. In the Slovenian wholesale market five suppliers of natural gas were active. Their markets shares are shown in Table 38.

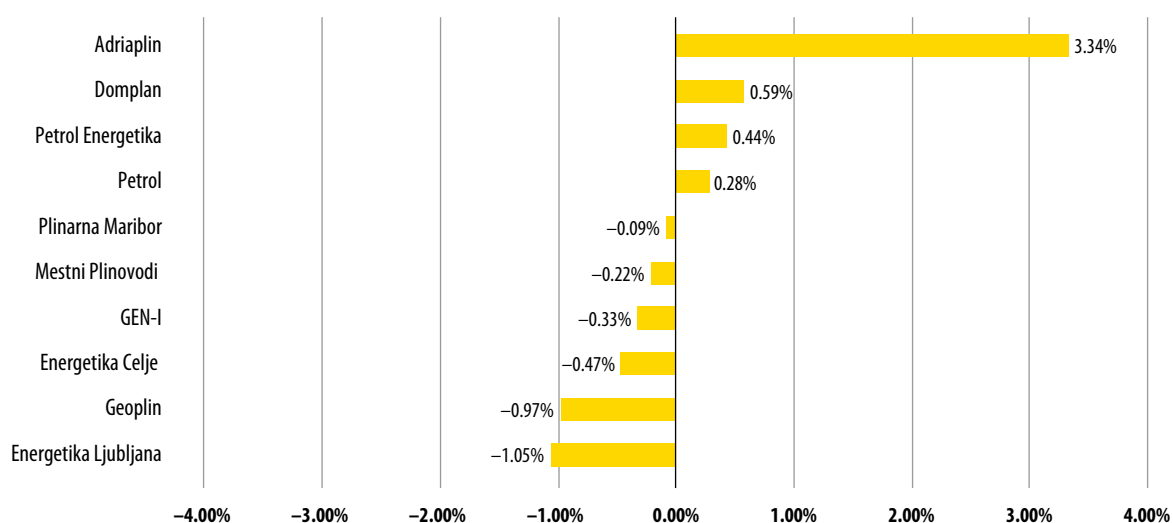
**Table 38: Market shares and the HHIs relating to the wholesale gas market**

Wholesale market	Share
Geoplin	65.76%
Petrol Energetika	31.02%
Adriaplin	2.72%
ENOS	0.35%
Istrabenz Plini	0.15%
Total	100%
HHI of the wholesale market	5,294

Source: Energy Agency

In the wholesale market, 227 million Sm<sup>3</sup> of gas were sold, which was for 30 million less than the previous year. Among the traders in the wholesale market, the company Geoplin decreased its market share by 1%, and by 1% the company Adriaplin increased its market share. The shares of other companies did not change significantly. HHI decreases again, and it amounted to 5294, which is a sign of better competition of the natural gas wholesale market. Changes in market shares between 2013 and 2014 is shown in Figure 77.

**Figure 77: Changes in market shares between 2013 and 2014**



Source: Energy Agency

### 4.3.2 The supply and the retail market

In 2014, the relationships between the suppliers in the retail market changed. The largest market share with almost 57% retained the company Geoplin, but in comparison with 2013 it lost 1%. GEN-I fell to the third place, but not so much on account of reduction of market share, which was negligible, but mainly because of the increase in market share of Adriaplin. This company increased its market share by 3%. For a good percentage, a market share also fell to Energetika Ljubljana, which nevertheless remained in the fourth largest supplier in the retail market. The situation of other companies with more than one percent share of the natural gas retail market did not change significantly.

Table 39 shows the shares in the natural gas retail market; it can be seen that HHI once again slightly fell, which indicates that the retail market's competitiveness is improving.

**Table 39: Market shares and the HHIs relating to the natural gas retail market**

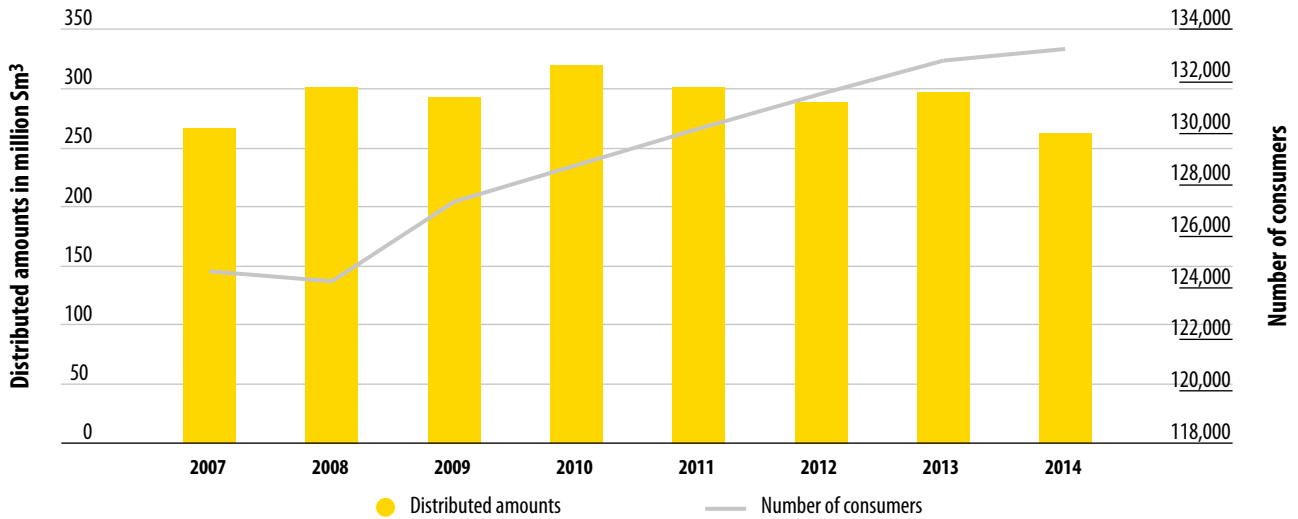
Company	Share
Geoplin	56.77%
Adriaplin	10.41%
GEN-I	7.84%
Energetika Ljubljana	5.68%
Plinarna Maribor	5.20%
Petrol Energetika	3.73%
Petrol	3.41%
DOMPLAN	1.68%
Energetika Celje	1.29%
Mestni Plinovodi	1.16%
Others	2.83%
<b>Total</b>	<b>100.00%</b>
<b>HHI of the retail market</b>	<b>3,485</b>

Source: Energy Agency

Volumes of natural gas sold in the retail market in 2014 further decreased. Around 65% of the quantities were sold to 134 consumers connected directly to the transmission system. The remaining amount was transferred to 133.230 consumers, 425 more than in 2013. This number covers 119,025 household consumers, which consumed almost 91 million of Sm<sup>3</sup>, and 14,205 business consumers; their consumption was 171 million Sm<sup>3</sup> of gas. The consumption on the distribution network fell by 8.7%. The distributed volumes compared to a number of consumers are shown in Figure 78.



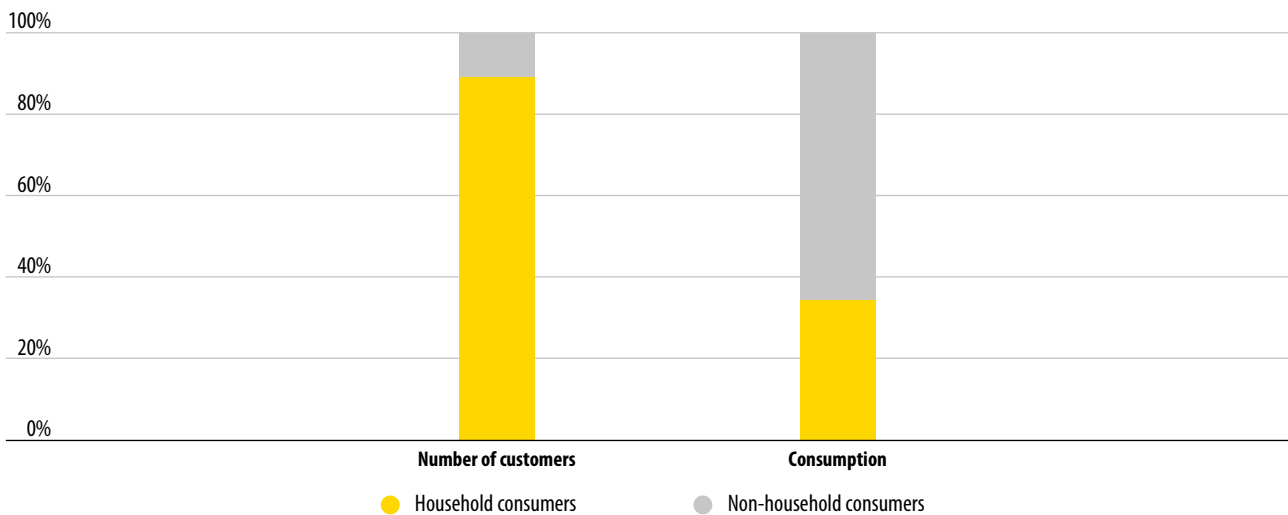
Figure 78: Distributed quantities and the number of consumers on the distribution network from 2007 to 2014



Source: Energy Agency

The ration between household and business consumers did not change and remained 90% of household and 10% of business consumers. Numbers of both only minimally increased. On the other hand, the ratio between these two groups changed; household consumers used 35% and business consumers 65% of distributed gas. This ratio is shown in Figure 79.

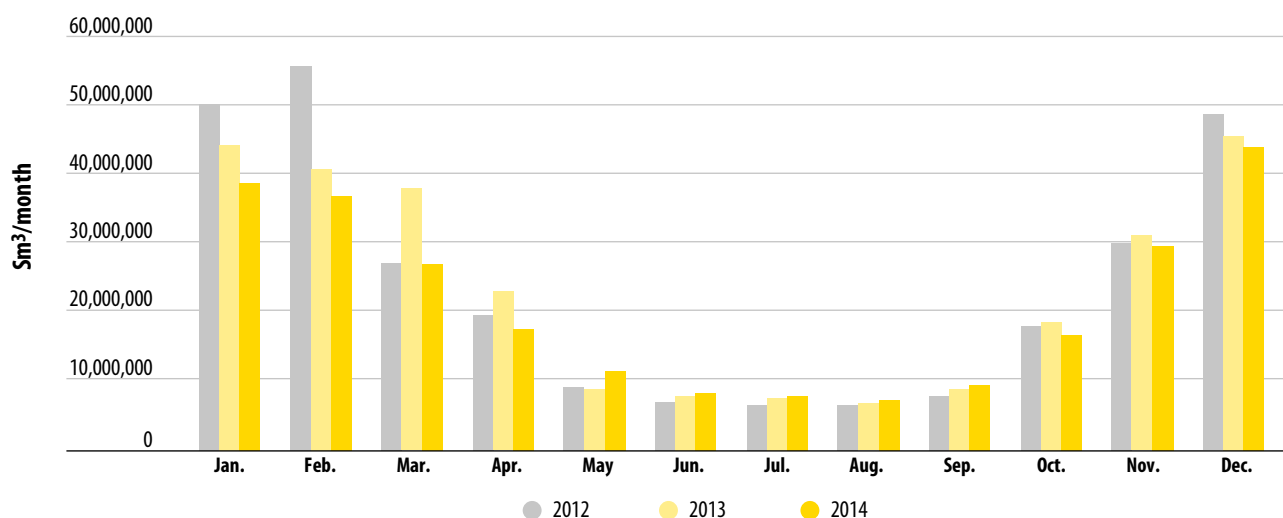
Figure 79: Ratio between the numbers of consumers connected to the distribution network and their consumption



Source: Energy Agency

Trends of gas consumption on the distribution network by months is shown in Figure 80.

**Figure 80: Gas consumption by months in 2012–2014**



Source: Energy Agency

The number of switchings of a supplier, which is an indicator of competition in the market, was again slightly lower. After the record year 2012, such decrease was expected. Switchings of a supplier are more conditioned by a season of the year and heating season. In 2014, switching was done by 9.4% business consumers and 2.9% of household consumers.

#### 4.3.2.1 Monitoring the level of transparency

The Energy Agency has established a legal basis for monitoring of the natural gas retail market with the emphasis on the households and small business consumers. The Energy Agency carries out the monitoring also on the basis of the number and characteristics of publicly announced tenders. The information on current tenders and any modification of their characteristics are by liable entities every month send to the Energy Agency, which in the single point of contact uses this information to inform all stakeholders.

In order to ensure transparency of the natural gas retail market, the e-services are available on the Energy Agency's websites, among which is a web application for comparison the gas supply offers. The application allows the calculation and comparison of the costs for the gas supply for individual type of consumption according to price lists entered in the application by suppliers.

The web application for comparison of gas supply also includes the service "Check the bill", which allows a consumer to check the accuracy of a bill for supplied gas, according to the supply and consumption profile. Billing on a monthly basis is shown separately in line with legal components.

The web application for comparison of gas supply enables monthly and annual calculation and display of individual elements of the bill, which together form a final amount to be paid:

- the amount for consumed gas
- the amount for gas distribution
- the amount for measurements of gas consumption

- supplements, contributions, excise duty (contributions to increase energy efficiency, environmental taxes – CO<sub>2</sub>, contributions for RES and CHP)
- excise duty
- VAT

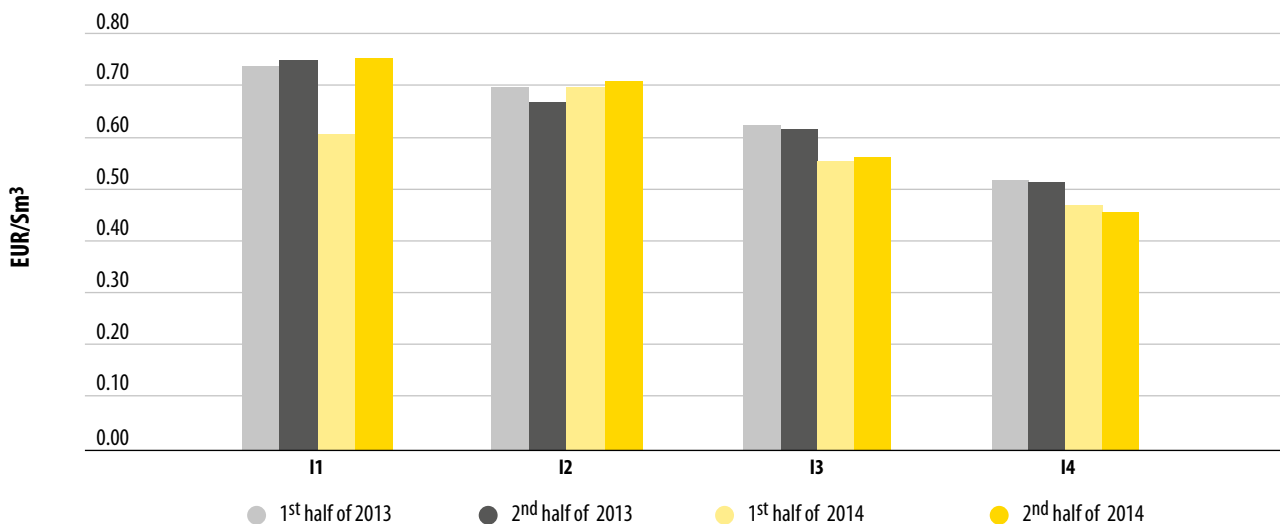
A comparison of the costs is in the publicly available part of the comparative services from the implementation of the Energy Act-1 (EA-1) onward restricted to regular price lists. This means that consumers no longer have the single access to all price lists and offers and that they have to search for this information at individual supplier.

Until March 2014, an average Slovenian consumer (profile of annual consumption approx. 1000 Sm<sup>3</sup>) had the access to all entered supply offers of an individual local community, and also the comparison of these supply offers was possible. From April onward, only regular price lists defined by the provisions of the EA-1 are allowed to be published in the comparative record of supply offers. An average consumer in Ljubljana had in March 2014 available 27 different offers for gas supply; in April this record provided only six such supply offers.

### 4.3.2.2 Natural gas prices in Slovenia

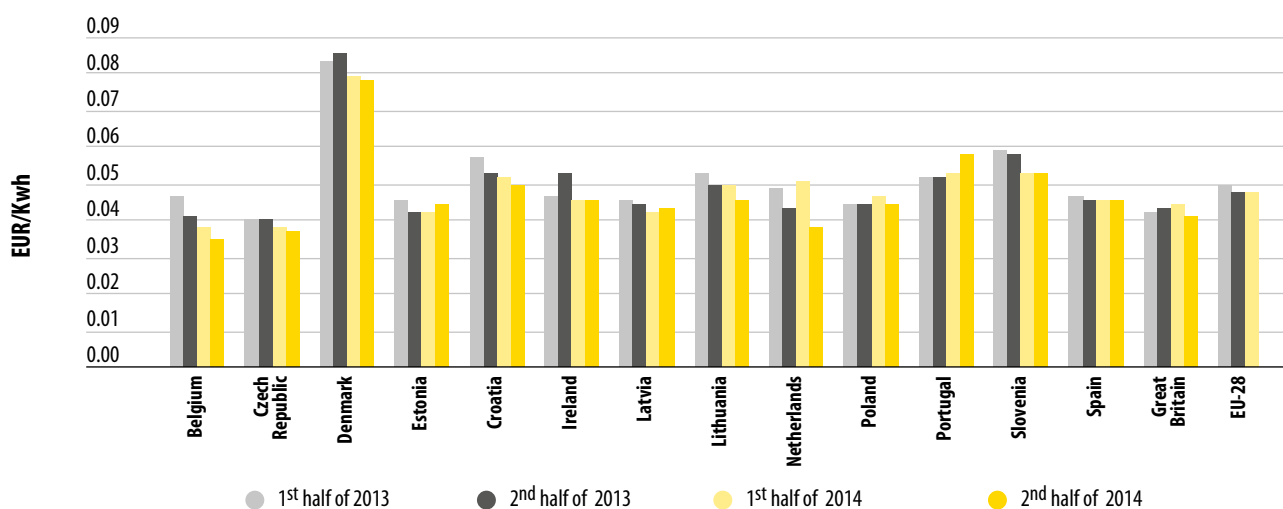
The trend of falling prices of natural gas changed for business consumers. For large consumers, the downward trend continue. The price for the largest consumers in the second half of 2014 fell below 0.5 EUR/Sm<sup>3</sup>. At consumers groups I1 and I2 the has trend reversed. In comparison with the first half of 2013, the prices slightly increased. The described price movements for business consumers is shown in Figure 81.

Figure 81: Final gas prices for business consumers including VAT and other taxes in Slovenia from 2013 to 2014



Sources: Statistical Office of the Republic of Slovenia, Energy Agency

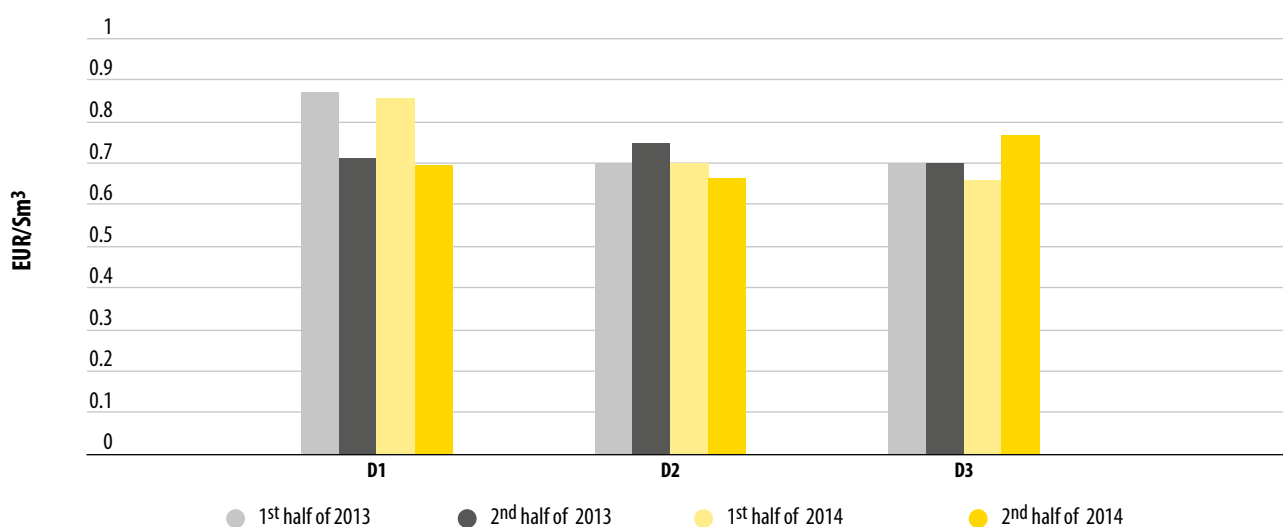
**Figure 82: Final gas prices including VAT and other taxes for typical business consumers I3 in Slovenia and individual EU countries from 2013 to 2014**



Sources: Eurostat, Energy Agency

Figure 82 shows the movements of gas prices including VAT and other taxes in 2013 and 2014 in Slovenia and other EU countries for large gas industrial consumers I3 with annual consumption from 264,349 to 2,643,489 Sm<sup>3</sup> of gas. In most EU countries, the prices for this group decreased slightly, which can be seen also in the trend of average gas price movement for EU-28 for second half of 2014. Despite falling prices, prices in Slovenia remained higher than the average of the EU-28.

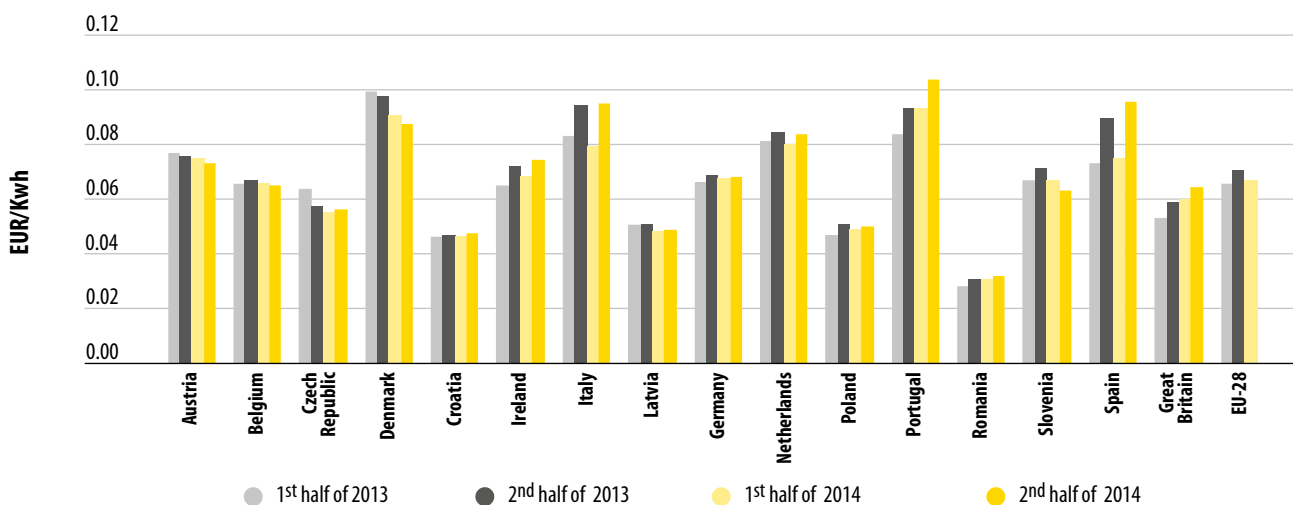
**Figure 83: Final gas prices including VAT and other taxes for household consumers in Slovenia from 2013 to the second half of 2014**



Sources: Statistical Office of the Republic of Slovenia, Energy Agency

Figure 83 shows movements in gas prices including VAT and other taxes for household consumers from the first half of 2013 to the second half of 2014. Prices for group D1, which are the highest, decreased significantly and almost reached the price of natural gas for consumers of the group D2. It is also interesting the jump in prices for the group of large household consumers in the second half of 2014, where the prices were higher than for the group D1.

**Figure 84: Final gas prices including VAT and other taxes for typical household consumers D2 in Slovenia and in individual EU countries from 2013 to 2014**



Sources: Eurostat, Energy Agency

Gas prices for typical household consumers D2 with an annual consumption between 529 Sm<sup>3</sup> and 5287 Sm<sup>3</sup> in Slovenia, and most of the EU countries are shown in Figure 84. Price trends are quite different. In some countries, the price for natural gas in the relevant period increased, and in others slightly decreased. Slovenia is among those countries in which price was steadily decreasing, and came close to the average European price.

### 4.3.3 Ensuring compliance with legislation

The Energy Agency must in accordance with Directive 2009/73/EC comply with and carry out all relevant legal binding decisions of the European Commission and ACER to ensure the compliance with this Regulation (EC) No 715/2009.

The Energy Agency was responsible for ensuring compliance with Regulation (EC) No 715/2009 and guidelines adopted under this Regulation, as well as monitor whether the gas undertakings were fulfilling the obligation arising from the European legislation. No special breaches of the European legislation were identified. Thus, no penalties were imposed in 2014.

Compliance with the European legislation was also monitored in the process of approving the general act for exercising public powers of the gas TSO. In 2014, the Energy Agency issued an approval to the Rules on the procedure for the allocation of capacity on the transmission system

for the entry and exit points in the Republic of Slovenia, the congestion management procedure and capacity trading on the secondary market.

According to Article 7(4)(a) of Regulation (EU) No 994/2012, the Energy Agency granted an exemption from the obligation to enable bi-directional capacity for cross-border connection point Rogatec until 31 December 2016 and notified the European Commission of its decision.

## 4.4 SECURITY OF GAS SUPPLY

For the provision of gas supply, three major sets of activities were carried out. The first one was aimed to compensate a delay, which was a result of the late implementation of the new energy legislation that introduced the necessary legal basis for providing the security of supply. The second set of activities was directed to deal with the anticipated problems of ensuring the security of supply due to political instability and war in Ukraine, which is an important transit route for supplying EU with natural gas. The last set of activities was focused on routine updating of national legislation on the security of supply in accordance with Regulation (EC) No 994.

The Energy Agency was appointed as the competent authority for the security of gas supply in accordance with Regulation mentioned above. On the basis of already completed risk assessment, the Energy Agency prepared the drafts of the Preventive action plan and Emergency plan. After the consultation process, the documents were finalized and published. Based on the Regulation on the preventive action plan for natural gas supply (Preventive action plan) the Energy Agency for the first time reported on the compliance with the supply standard. The Energy Agency determined the temperatures needed to calculate additional volumes provided for by the supply standard. The gas undertakings in due time successfully carried out the first reporting on compliance with the requirements of the standard. In order to prepare the implementation of the activities required by the Preventive action plan, the Energy Agency together with gas undertakings that import gas to Slovenia, gas TSO and relevant ministry started to coordinate organizational aspects of the requirements of the plan.

These activities were interrupted since the European Commission required the implementation of the stress tests. In Slovenia, the stress test started in the second third of the year; more intense completion, verification and analysis of the results was held from August to October. In the test, all gas importers were participating, since the Energy Agency used their data to analyse the Slovenia's preparedness to possible interruption of natural gas supply due to the Ukrainian-Russian political crisis. The verification was focused on predicting the occurrence of a time-varying length of the unfavourable conditions of temperature and at the same time the lack of natural gas supply.

In the second half of the year, the Energy Agency initiated the renewal of the risk assessment in accordance with Regulation (EC) No 994. The risk assessment should be updated every two years. Preventive action plan and the Emergency plan must reflect the updated risk assessment. Both documents were successfully updated by the Energy Agency and published in December.

In December 2014, the exemption from providing bi-directional capacity at the border point Rogatec expired. The exemption was issued by the former ministry in charge, which was a competent authority for the security of supply. The Energy Agency received an application from the gas TSO to re-issue the exemption. The Energy Agency granted an exemption from the obligation to enable bi-directional capacity for cross-border connection point Rogatec until 31 December 2016 and notified the European Commission of its decision.

## 4.5 CONSUMERS PROTECTION

### 4.5.1 Protection of natural gas consumers

The household consumer of natural gas buys energy as individual and uses it for own domestic use, which excludes business activities. His rights are protected with the regulations regulating the energy market and also with the Consumer Protection Act and Consumer Protection against Unfair Commercial Practices Act.

The companies and other organisations providing public services and commodities to the customers in Slovenia are obliged to ensure a regular and high-quality provision of services and strive to appropriately develop and improve the service quality.

The Energy Agency on its website provide for a household consumers a single point of contact of access to information on their rights, valid regulation and general acts for the exercise of public authority and the methods for handling complaints in the event of a dispute with a supplier or DSO.

A supplier has to inform a household customer, prior to signing a supply contract, about the conditions to be supplied with natural gas of certain quality. Household consumer may demand that the DSO provides free access to consumption data to certain natural gas undertaking.

#### 4.5.1.1 Supply contract and general terms and conditions

A household consumer has the right to choose freely a supplier of natural gas and conclude a supply contract. A supplier has to provide for household consumers on its website information on applicable prices and tariffs, and on standard terms and conditions on supply. An integral part of the supply contract are the contractual terms; a supplier has to inform a household customer, prior to signing a supply contract, about the general terms and conditions. Supply contract must include information on consumer's rights, including on handling the complaints relating to gas supply, and the system of reimbursement and compensation, if the level of quality of services under the contract are not achieved.

A supplier must inform a household consumer at least one month prior to their taking effect, about any intended changes to the contractual terms and conditions. At the same time, due to a modification of the standard terms and conditions, a consumer has to be informed about the right to withdraw from a gas supply contract within one month following the entry into force of modified general terms and conditions without notice and without being subject to a penalty payment. Also, a supplier must inform consumers of any increase in the natural gas price before the expiry of the billing period after the increase comes into effect.

Suppliers must offer household consumers a choice of payment methods, including prepayment systems. Household consumers may not be charged for flat-rate operating costs on the basis of a regular price list; they may be charged for in action or bundled offers.

A household consumer may withdraw from a supply contract without paying a penalty, damages, compensation or any other form of payment for reasons of withdrawal from the contract prior to the expiry of the set time limit, provided that such withdrawal takes effect at least one year following the conclusion of the contract.

A household consumer has a right to choose and switch a gas supplier. An operator that receives a request to switch supplier has to do everything necessary to enable a consumer to begin implementing the natural gas supply contract with the new supplier within 21 days of a completed request being submitted. A consumer may not be charged for changing supplier. If a consumer

withdraws from a supply contract prior to one year following the conclusion of the contract, may be obliged to bear the consequences of early withdrawal laid down in the supply contract.

#### **4.5.1.2 Disconnection of a household consumer**

The gas DSO may disconnect a household consumer at any individual consumption point upon prior notice if the system user fails to comply with its obligations within the time limit specified in the notice. A household consumer must be informed at least 15 days in advance. The gas DSO may not disconnect a vulnerable consumer if he is eligible for an emergency supply.

In 2014, the gas DSOs disconnected 901 household consumers, 861 of them due to non-payment of the use-of-the-network charge. Because of invalid contract or withdrawal from the contract 28 household consumers were disconnected, and for other reasons 12 consumers. The distribution was stopped permanently to 945 users, which was 172 more than in 2013. Gas DSOs from 30 April to 1 October did not disconnect 106 household consumers despite non-payment of bills. Four of them were referring to the rights of not being disconnected because their lives and health would be endangered.

#### **4.5.1.3 Protection of vulnerable consumers and emergency supply**

Protection of vulnerable consumers is one of the most important forms of consumers protection.

A vulnerable consumer is a household consumer who, due to his financial circumstances, income and other social circumstances and living conditions, is unable to obtain an alternative source of energy for household use that would incur the same or smaller costs for essential household use. A gas DSO may not disconnect a vulnerable consumer from the gas supply or restrict his consumption of natural gas before it reaches a quantity that is absolutely necessary in view of the circumstances (season, temperatures, place of residence, health condition and other similar circumstances) in order not to jeopardise life and health of the customer and persons living in his household.

Prior to disconnection, the gas DSO must inform the consumer of the possibilities of emergency supply and of the evidence to be provided by the consumer in order to be approved for emergency supply by the operator. According to the provision of the Decree on functioning of the natural gas market (by entering EA-1 into force this decree is no longer valid, but its application is extended as long as the new executive regulation is going to be implemented), a household consumer who has no means of subsistence and therefore his life and health or life and health of persons living with him, exercising the right to maintain the energy supply, if he is the recipient of social welfare. This right can be exercised between 1 October to 30 April, but only for a time when bad finance situation can be proved. Costs of supply are covered by a gas DSO until they are paid by the vulnerable consumers. Four household consumers exercised this right in 2014.

#### **4.5.1.4 Handling the complaints of household consumers**

One of the key elements of the supply contract concluded with a household consumer is an agreement on how to handle the complaints relating to gas supply. Household consumers have the right to transparent, simple and inexpensive procedures for dealing with complaints on gas supply. For this purpose, the supplier alone or with other suppliers within the Association shall appoint an independent and impartial person or several persons responsible for the treatment of complaints and to whom household customers shall address their complaints in relation to alleged violations of the supplier in implementing a natural gas supply contract.



A supplier must provide the household consumer with the following information, in writing or any other suitable form:

- a precise description of the types of complaint to be decided upon by the person appointed, as well as any existing restrictions and the value of the disputed claim
- the rules governing the referral of the matter to the person appointed, including any requirements that the household consumer may have to meet, as well as other procedural rules, notably those concerning the written or oral nature of the procedure, attendance in person and the languages of the procedure
- the rules serving as the basis for decisions
- the types of decision to be taken in the procedure

The person appointed must decide on complaints within two months following their receipt. The decision must be binding on the supplier if the consumer confirms it by means of a written statement within eight days of its receipt. If the consumer disagrees with the decision, he may bring an action before the court.

More detailed rules on the appointment of persons for handling complaints, information to household consumers on complaint handling, the system of reimbursement and compensation and the procedure for complaint handling must be disclosed by the supplier or association of suppliers and published on its website.

The supplier or association may determine a system of reimbursement and compensation for consumers which must apply to individual breaches of their obligations relating to supply, provided this is justifiable given the amount of damage, gravity of the breach and level of responsibility.

The gas DSOs received 3173 complaints or disagreement, 2684 of them were from household consumers. Most of the complaints were related to billing, namely 82%. There were 979 unjustified complaints, 36% of all complaints received. A detailed presentation of complaints by subject is given in Table 40.

**Table 40: Complaints of household gas consumers to suppliers in 2014**

<b>Numbers of all complaints</b>	<b>2684</b>
Reasons:	
Terms of sale	27
Contract terms	67
Price of gas	90
Bill	2212
Disconnection due to non-payment	29
Supplier switching	27
Technical reasons	73
Others	159
<b>Unjustified complaints</b>	<b>979</b>

Sources: Companies, Energy Agency

Appointed persons received two new complaints by household consumers; one complaint was rejected as unjustified, and one discarded because it was not qualified for the ruling before the appointed person. In comparison with 2013, appointed persons received five complaints less.

A household consumer may submit a request to the Energy Agency to decide on a dispute with a gas DSO. A request may be submitted to the Energy Agency if prior a preliminary procedure was carried out with a gas DSO. In the area of gas, DSOs received 2064 complaints of consumers. Household consumers filed 1626 complaints, 1133 less than in 2013. Most of the complaints were related to billing and metering. There were 603 unjustified complaints of household consumers, which presented 37% of all complaints received by household consumers. The details are shown in Table 41.

**Table 41: Complaints of gas consumers to DSO in 2014**

<b>Number of all complaints</b>	<b>1626</b>
Reasons:	
Connection procedure	4
Planned interruption of supply	1
Unplanned interruption of supply	0
Network charge	8
Metering	446
General conditions	18
Bill	1017
Supplier switching	25
Others	107
<b>Unjustified complaints</b>	<b>603</b>

Sources: Companies, Energy Agency

Possible violations of the general rules for the protection of household consumers in Slovenia are monitored and appropriately sanctioned also by the Market Inspectorate.

#### **4.5.1.5 Publication of prices**

All the suppliers of natural gas were publishing gas prices for household and small business consumers on their websites. Households could also use the Energy Agency's web application for comparison of gas supply costs, which are based on regular price lists and enable the comparison and calculation of the costs of supply on a monthly or annual level. The gas prices are set by the suppliers while the prices for the use of the network gas DSOs charged in accordance with the price lists published in the Official Gazette.

## 4.5.2 Consumer protection in administrative procedures

With the implementation of the EA-1, the Energy Agency was given increased responsibility and powers to impose sanctions related to the supervision of functioning of energy markets and the protection of the consumers' rights or users of the network.

The Energy Agency, acting under public authorisation, decides on disputes between the electricity and gas system users, operators or the electricity market operator in the following cases:

- access to the system
- the amount charged for the use of the system
- violations of the system operating instructions
- establishing imbalances and amounts for covering the costs of imbalance settlement and violations of general acts governing imbalances and their settlement
- other issues where stipulated by the EA-1

In resolution of disputes an additional criteria is taken into account, namely that contested subject of these disputes relates to the rights and obligations arising from directly applicable regulation of the European Union, EA-1 or executive regulations issued on its basis or the act on exercise of public authority.

The Energy Agency resolves disputes by administrative procedure, and issues individual acts with which decides on the rights, obligations and legal benefits of individuals; EA-1 provides also some special features.

When a party requests that the Energy Agency decides on a dispute with another party, such a request is allowed only if the first party provides evidence that it has requested in writing from the party against which it is filing a request that said party accede to its request that is the subject of the dispute and has set an appropriate time limit for the opposing party to respond to the request. This time limit may not be shorter than 15 days.

The Energy Agency has in relation to the final decision in the decision-making process on a dispute between the parties extensive powers since it can:

- decide on a request of a party
- order the party to carry out an action or prohibit to carry out an action
- repeal, partially or in full, a contract or any other act
- decide on a claim concerning an overpaid or underpaid network charge or price for the operator service
- decide on other matter if so provided by the legislation

Against a decision of the Energy Agency, only judicial protection in front of the Administrative Court is possible.

The Energy Agency in an administrative procedure decides at the second instance on an appeal against a system operator's decision on issuing or rejecting a connection approval.

Procedures related to consumer protection conducted by the Energy Agency are free of charge since no administrative fees are charged for final decisions; all these procedures are short due to a tight legal framework. The Energy Agency must decide on the appeal within two months of receiving a full application; this deadline may be extended only with the consent of the applicant.

In the area of natural gas, the Energy Agency received only one request to decide on the application. The application was related to the network access, but it was rejected.

### 4.5.3 Monitoring the natural gas market

As already mentioned, with the implementation of EA-1 the Energy Agency was given extensive powers to supervise the implementation of the provisions of EU regulations and the provisions of the EA-1 concerning electricity and gas markets and regulations and general acts issued pursuant to EA-1. The Energy Agency controls and imposes the control measures by official duty or in connection with the notification of the alleged infringement. If the violation is established, the Energy Agency is in accordance with EA-1 obliged to:

- carry out preventive measures and issue a warning
- carry out measures to protect the rights of other persons
- propose that another competent authority adopt measures
- order other measures for which the Energy Agency is authorised by this Act or any other regulation

The supervision is concluded by way of an administrative decision and imposing measures. If the established violation also has signs of minor offence, the authorised Energy Agency's employee proceeds the minor offence procedure, and fine is imposed on responsible persons; the purpose of the fine is to ensure the consistent implementation of the rules or to discourage from repeating these violations.

In 2014, the Energy Agency conducted supervisory procedures in 19 cases, one of them was transferred to the competent inspectorate. Out of these, six supervisions were related to natural gas; four of them were resolved by the end of the year. Most of the violations were connected to the incorrect publishing of general conditions of gas supply, implementation of the provisions of the Preventive action plan for gas supply, and reporting on the security of supply. The Energy Agency achieved that violations were eliminated during the procedures; thus, only warning were issued with a reference to comply with applicable law.

Two procedures, which were not concluded in 2014, relate to carrying the distribution without a concession, and disruption of switching supplier.



5.

HEAT SUPPLY

NATURE KNOWS NO PAUSE IN PROGRESS  
AND DEVELOPMENT, AND ATTACHES  
HER CURSE ON ALL INACTION.

JOHANN WOLFGANG VON GOETHE  
German poet, 1749–1832



Supply of heat or other energy gases from isolated distribution systems (hereinafter: distribution system) is in Slovenia carried out as an optional local service of general economic interest, or under certain legal requirements as a commercial distribution of supply of final consumers. Heat supply means the distribution and supply of heat or cold used for heating or cooling, industrial processes, and sanitary hot water.

In 2014, the Energy Agency was delegated new powers in the area of heat supply from distribution systems, which include, in addition to regulating the price of heat distribution when provided as a service of general economic interest and the regulation of prices of regulated heat producers, also keeping records of providers of the energy activities of heat distribution where the total rated power capacity of the connected consumers' equipment on the network exceeds 500 kW, and analysing of heat prices.

The report on heat supply from distribution systems includes aggregated data so far recorded distribution systems and the data of a recorded heat producers that supply heat to these systems.

## 5.1 HEAT DISTRIBUTION

The supply of heat from distribution systems was carried out by 54 distributors and 10 heat producers in 54 municipalities from 80 distribution systems. 50 companies were involved in both – heat distribution and heat production, and four of them only heat distribution. Only two large distribution systems exist, with a total installed capacity of 3.88 MW of cooling units. The cooling distribution system with a total installed capacity of 0.965 MW, which uses heat from district heating, operates in the Municipality of Velenje, and the cooling distribution system with the installed capacity of electrical generators 2 X 1.45 MW in a former industrial complex of the company Iskra Labor in the Municipality of Kranj.

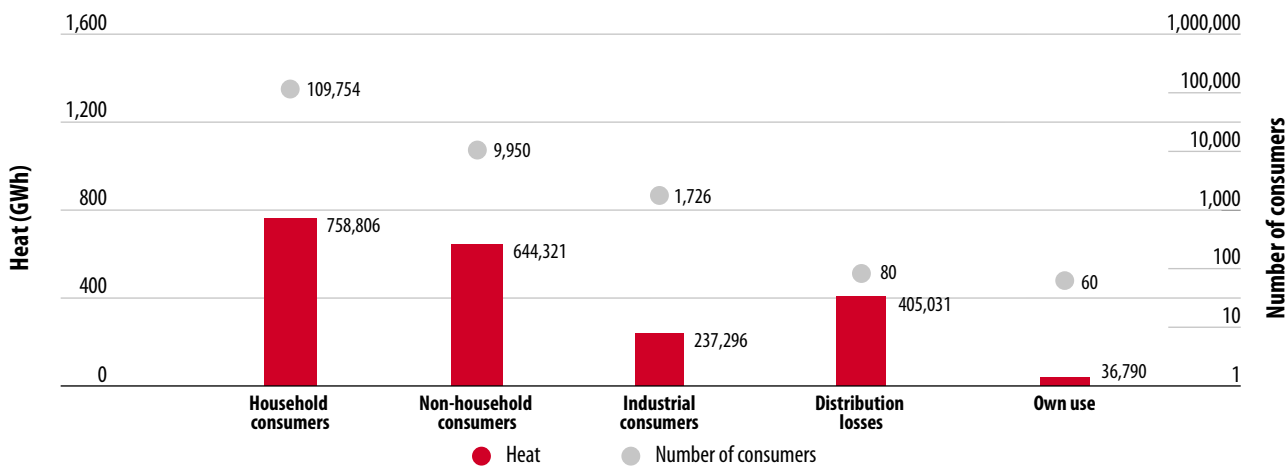
For heat supply, producers of heat with their own production and heat producers that supply heat to distribution systems generated 2082.4 GWh of heat and 778.3 GWh of electricity, or 686,3 GWh at the busbars of the cogeneration processes for heat supply and for the supply to industry.

The largest share of useful heat, 36.4% or 758,806 GWh was used for 109,754 household consumers; 644,321 GWh or 30.9% for the supply to 9950 business consumers, and 237,296 GWh or 11.4% of heat for 1,726 business consumers.

Losses in the district heating networks are estimated to 19.5% of heat delivered to the distribution network; the latter amounted to 2,045,610 GWh. The difference between the produced and supplied heat and heat losses presents the share of heat, which was used in industrial processes of producers or suppliers.

Heat consumption by type of consumers and their number are shown in the Figure 85.

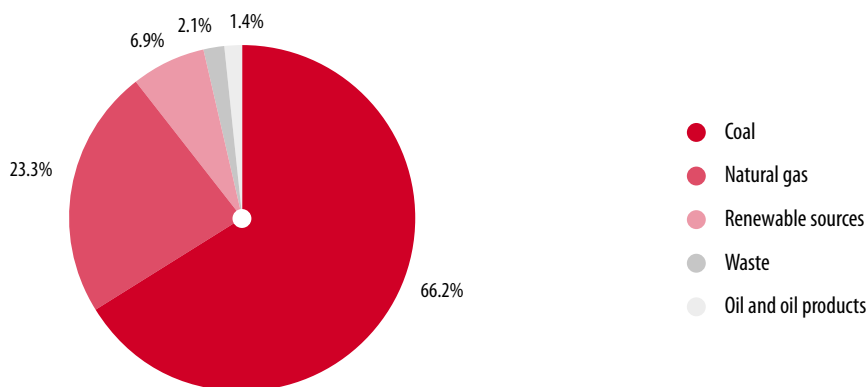
Figure 85: Heat consumption by the type of consumers and numbers of consumers



Source: Energy Agency

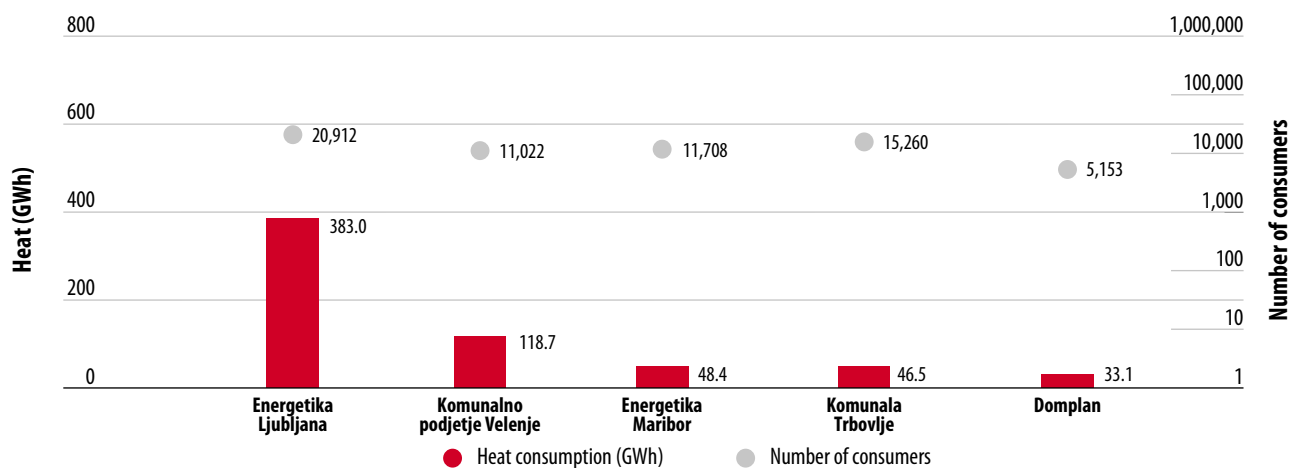
In the structure of primary energy sources used for the production of heat for heating and sanitary water, coal covered 66.2%, and natural gas in the second place with 23.3%. Primary renewable sources like biomass and others covered 6.9%; 2.9% of heat was produced in the municipal waste-incineration plant (Celje Heating Plant).

Figure 86: Structure of the primary energy sources for the production of heat for district heating



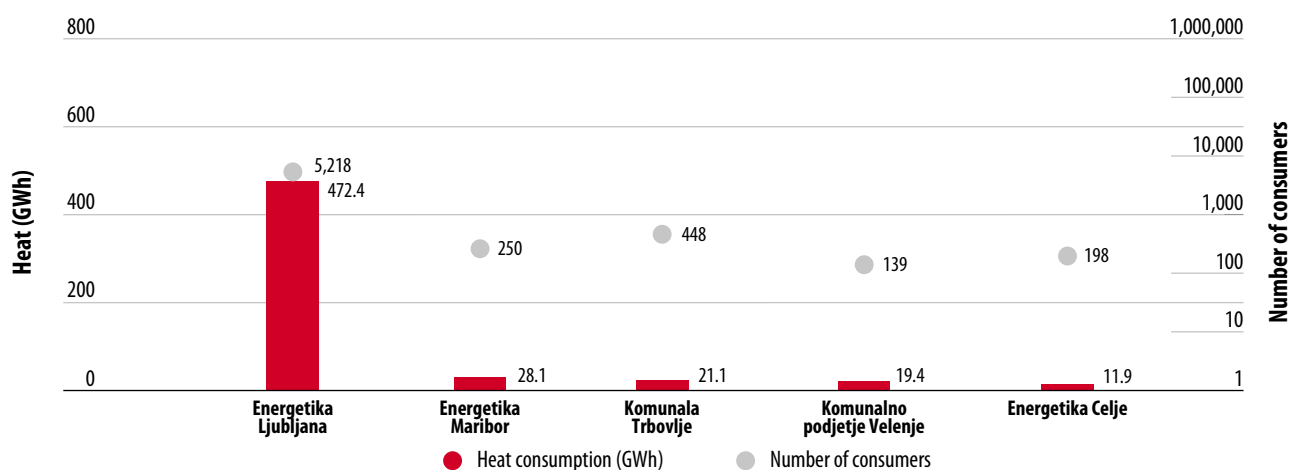
Source: Energy Agency

First five largest heat-distribution companies supplied 53.5% of all households, distributing 83% of the heat for district heating. Figure 87 shows the distributed amounts of heat to the household consumers and the number of consumers supplied by the five largest companies.

**Figure 87: The largest distributors of heat to households in 2014**

Source: Energy Agency

First five largest heat distributors supplied 62.8% of all business and other consumers, and delivered them 85.8% of the required heat (Figure 88).

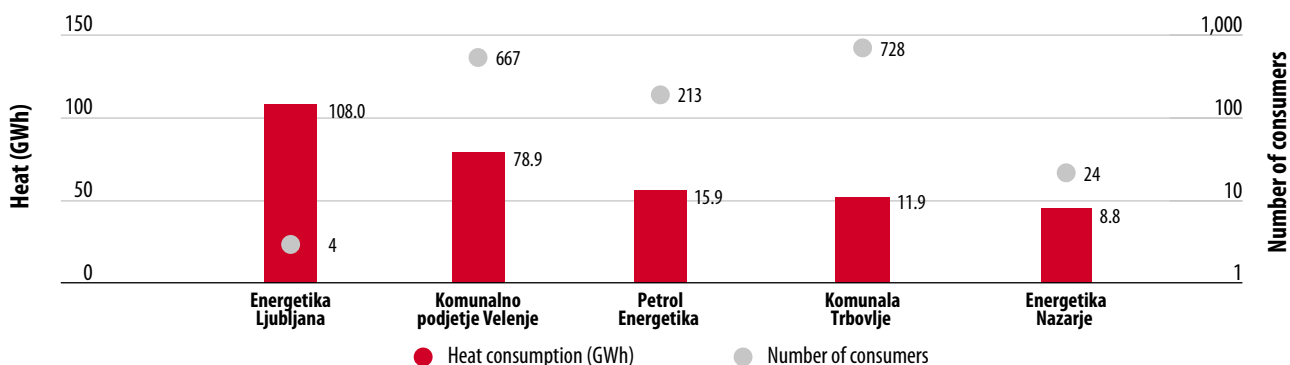
**Figure 88: The largest distributors of heat to non-households in 2014**

Source: Energy Agency

94.8% of all business consumers were supplied by the five largest distribution companies, and received 94.2% of heat (Figure 89).



Figure 89: The largest distributors of heat to business consumers in 2014

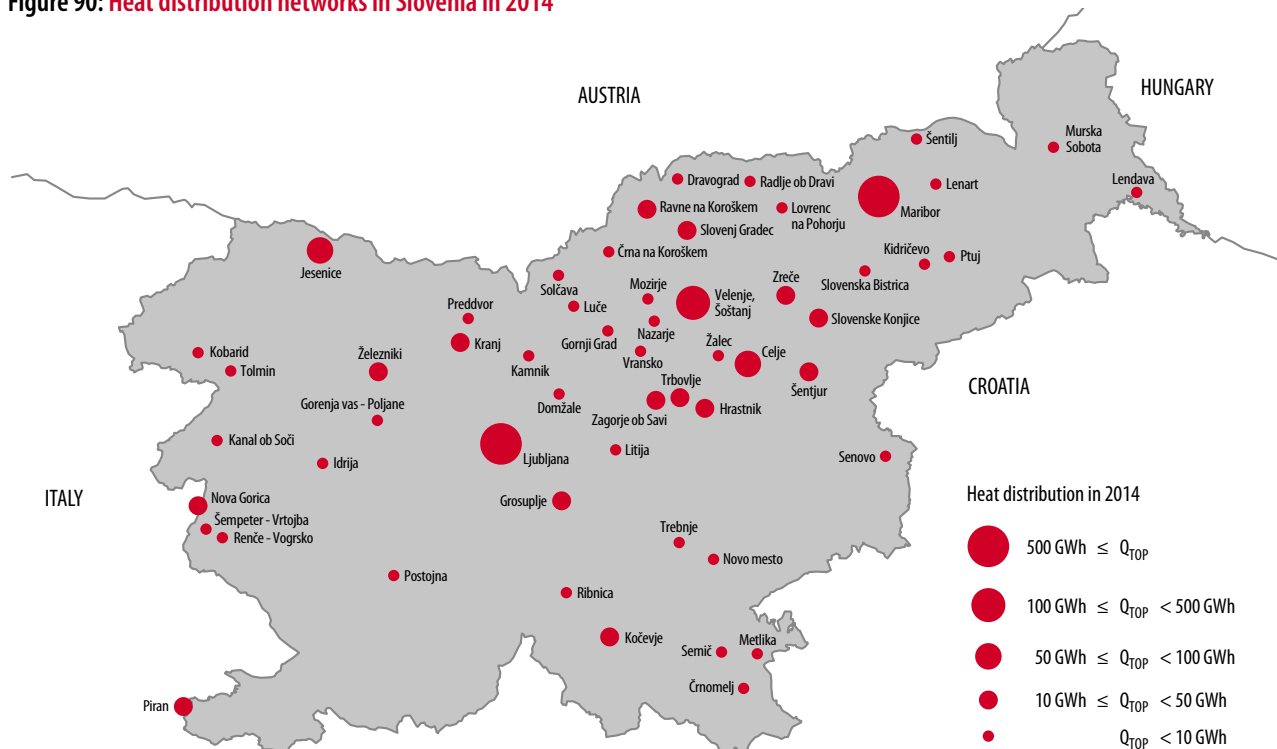


Source: Energy Agency

## 5.2 THE DISTRIBUTION NETWORK

In 2014, the service of heat distribution was carried out by 80 distribution networks, set in 54 (out of 212) Slovenian municipalities; their total length was 985.8 kilometres. The activity of heat distribution was in 36 cases carried out as a optional local service of general economic interest in 42 Slovenian municipalities; in 16 the activity was carried out as commercial distribution, and in two as the supply from private distribution network. These last two are among the largest systems for supply of household consumers since they supply 6250 consumers.

Figure 90: Heat distribution networks in Slovenia in 2014



Source: Energy Agency

Large systems of district cooling are only in the Municipalities of Velenje and Kranj, in the length of 1.9 metres.

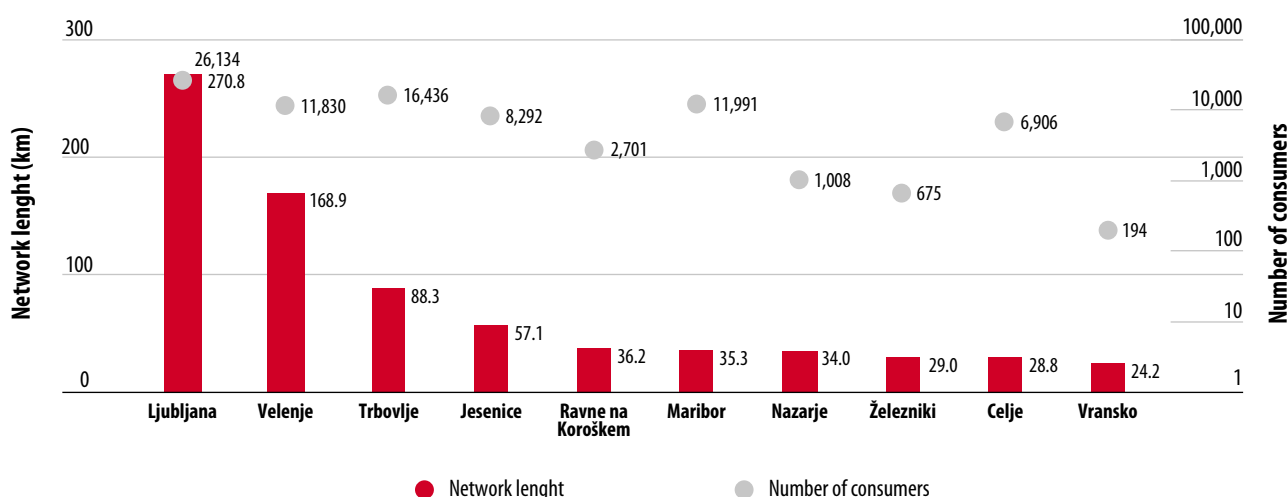
Figure 90 shows the dispersion of distribution networks and the amount of distributed heat by individual municipalities.

With respect to the temperature regime of the operations of individual networks, the networks are the warm-water networks, hot-water networks and steam distribution networks. Warm-water networks and hot-water networks cover 97.9%, steam networks cover 2.1% and cooling networks 0.2% of the total distribution networks.

The municipalities with the longest networks are Ljubljana (270.8 kilometres of hot-water and warm-water network), and Velenje, together with Šoštanj, (168.8 kilometres of warm-water network).

Figure 91 shows the lengths of the 10 largest heat distribution networks in individual municipalities, and the numbers of connected users.

**Figure 91: Length of heat distribution networks by municipality, and the numbers of connected users in 2014**



Source: Energy Agency

### 5.3 HEATING PRICE

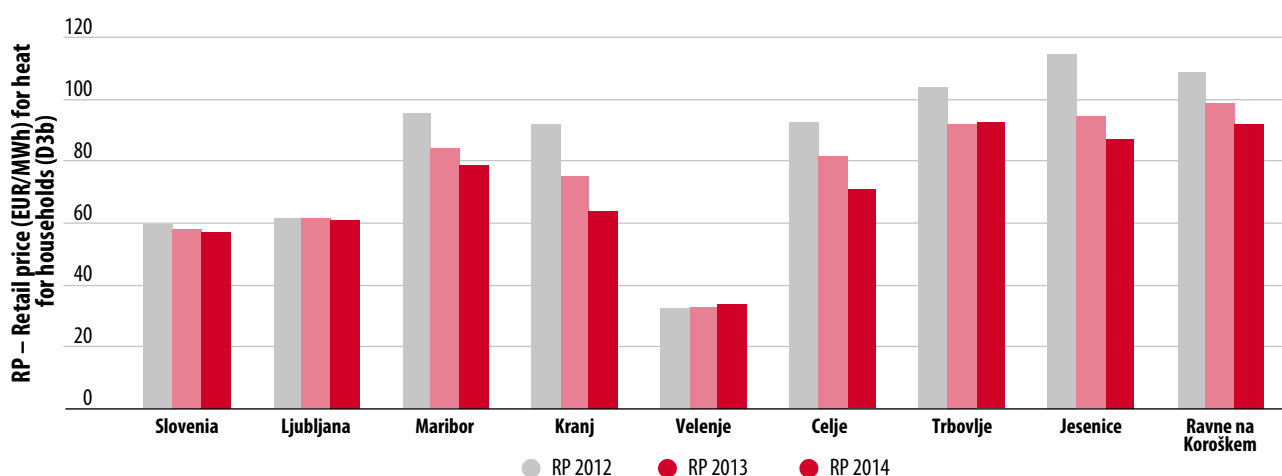
From the price lists of the selected business entities for heat production and supply the data on average retail prices of heat from district heating distribution networks are summarized; the data are valid for standard customer group - households – D3b in selected Slovenian municipalities, in which the distributed heat in 2014 represented 36.4% of the total distributed heat from the distribution networks.

The standard customer group is a group with a connected load of 10 kW and an annual consumption of 34.9 MWh, using heat for hot water and central heating.

The average retail prices for heat from the distribution systems relating to selected Slovenian municipalities are shown in Figure 92. Prices displayed are calculated as the weighted average retail prices in comparison with the number of consumers; at the same time the average retail price of heat from the distribution networks for the entire territory of the Republic of Slovenia is

presented. The graph shows that the prices of heat for household consumers compared to 2013 on average lowered by 1.4%, retail prices increase affected only consumers in the municipalities of Velenje and Šoštanj, by 3%, and in the Municipality of Trbovlje by 0.7%.

Figure 92: Trends in the average retail prices of district heating for households in selected Slovenian municipalities for 2012–2014



Source: Statistical office of the Republic of Slovenia

## 5.4 REGULATION OF THE PRICE OF HEAT FOR DISTRICT HEATING

With the implementation of the new Energy Act (EA-1), the Energy Agency has gained a power to regulate the price of heat for district heating, which was so far under the Price Control Act carried out by the Ministry of Economic Development and Technology.

EA-1 sets the obligation of regulating the price of heat for district heating:

- for a heat distributor carrying out heat distribution as a service of general economic interest, and with distribution systems of total rated power capacity of the connected consumers' equipment on the network exceeds 500 kW
- a regulated heat producer supplying heat to heat distributor that carries out a service of general economic interest and to which is associated by ownership, or it sells him more than 30% of the total planned distributed heat in the next year

Heat price regulation is not a subject to:

- privately-owned distribution systems, which are co-owned or jointly owned by final consumers and may also include a production source
- commercial distribution which means a mode of distribution of heat or other energy gases without granting exclusive rights or imposing a mandatory connection to the system

The heat price regulation will be performed by the Energy Agency in accordance with the methodology for determining the prices of heat for district heating. For this purpose in 2014 activities started in order to prepare the methodology, which will be prescribed by the Energy Agency in its general act in 2015.

The methodology will determine the following:

- the types and criteria for determining eligible costs
- the elements of the starting price, which is composed of a fixed and a variable part
- the method of determining the starting price and the grounds for its amendment
- the criteria or mechanism for adjusting the individual elements of the starting price to changes in eligible costs
- the type, form and method of the submission of the information necessary to determine the eligible costs and the starting price

The heat price regulation will be carried out on the basis of eligible costs that are necessary to carry out the activity of distribution as a service of general economic interest.

The starting price of heat, which is set on the basis of eligible costs and composed of a fixed and variable part, will be in accordance with the act determined by the liable persons. Distributors will have to obtain the Energy Agency's approval of the starting price or amendment to it.

## 5.5 UNBUNDLING

Distributors that provide services of general economic interest and, in addition to carrying out the activity of distribution, also carry out other activities, must keep separate accounting records in accordance with accounting standards; their accounting records shall show separate accounts for heat distribution, heat production and other activities as required if the activities in question are carried out by separate undertakings.

The heat distributors must in their internal acts set the criteria for the allocation of assets and liabilities, costs, expenditure and revenue to be observed in keeping separate accounting records and preparation of separate accounting records, and fully disclose them in explanatory notes to the financial statements. The suitability of the criteria and their proper use must be audited annually by an auditor, who must draw up a special report.

## 5.6 NOTIFICATION OF THE ACTIVITY

The distributor must provide prior notice to the Energy Agency of the beginning or termination of the energy activities of heat distribution or the distribution of other energy gases through a particular distribution system. At the beginning of 2014 we published on the website an electronic form for notification of the distribution activity and established a record of notified distribution systems.

We received 37 notifications of the activities of distribution systems for district heating, three of them were new, and three notifications of existing distribution systems of other energy gases.



# APPENDIX

LIST OF FIGURES,  
LIST OF TABLES,  
LIST OF ABBREVIATIONS  
AND ACRONYMS

LOOK DEEP INTO NATURE,  
AND THEN YOU WILL UNDERSTAND  
EVERYTHING BETTER.

ALBERT EINSTEIN  
German physicist and mathematician, 1879–1955



## LIST OF FIGURES

<b>Figure 1:</b>	Balance of electricity production and consumption in 2014	14
<b>Figure 2:</b>	Structure of monthly electricity production and import	14
<b>Figure 3:</b>	Structure of the production sources for electricity in Slovenia in 2014	15
<b>Figure 4:</b>	Fluctuations in electricity consumption in 2014	16
<b>Figure 5:</b>	Shares of electricity consumption by consumption type	17
<b>Figure 6:</b>	Average daily values of basic prices of imbalances $C'_+$ and $C'_-$ and index SIPX in 2014	21
<b>Figure 7:</b>	All imbalances of the Slovenian electricity network in 2014	22
<b>Figure 8:</b>	Positive and negative imbalances of the Slovenian electricity network from 2012–2014	23
<b>Figure 9:</b>	SAIDI for long-term unplanned interruptions for 2012–2014 (caused internally)	25
<b>Figure 10:</b>	SAIFI for unplanned long-term interruptions for 2012–2014 (caused internally)	25
<b>Figure 11:</b>	Number of complaints relating to voltage quality by distribution companies for 2012–2014	29
<b>Figure 12:</b>	Investments in the distribution network in 2014	32
<b>Figure 13:</b>	Profit from leasing and service activities for SODO in million euros	36
<b>Figure 14:</b>	Cumulative share of the one ( $CR_1$ ), two ( $CR_2$ ) and three ( $CR_3$ ) largest producers with respect to the installed capacity (50% of Krško NPP)	43
<b>Figure 15:</b>	Cumulative share of the one ( $CR_1$ ), two ( $CR_2$ ) and three ( $CR_3$ ) largest producers with respect to electricity production (50% of Krško NPP)	44
<b>Figure 16:</b>	HHIs of the production companies	46
<b>Figure 17:</b>	Number of the issued declarations for production facilities entering the register for the first time in 2014	49
<b>Figure 18:</b>	Net capacity in MW of production facilities with issued declarations entering the register for the first time	50
<b>Figure 19:</b>	Number of the issued declarations for production facilities, which were already in the register	50
<b>Figure 20:</b>	Net capacity in MW of production facilities with issued declarations in 2014, which were already in the register	51
<b>Figure 21:</b>	Number of issued decisions on granting support for new production facilities	51
<b>Figure 22:</b>	Net capacity of the production facilities in MW that received decisions on granting support	52
<b>Figure 23:</b>	Number of issued decisions on granting support for other production facilities	52
<b>Figure 24:</b>	Net capacity of other production facilities in MW that received decisions on granting support	53
<b>Figure 25:</b>	Number of distributed emission allowances from 2005 to 2014	54
<b>Figure 26:</b>	Trends of the price for emission allowances on the power exchange in the third trading period in 2014	55
<b>Figure 27:</b>	Market shares of the electricity suppliers to all end consumers at the end of 2014	55
<b>Figure 28:</b>	Market shares of the suppliers to the consumers on the distribution network at the end of 2014	56
<b>Figure 29:</b>	Market shares of the suppliers to all business consumers at the end of 2014	57
<b>Slika 30:</b>	Market shares of suppliers to the business consumer with respect to the consumption group at the end of 2014	58
<b>Figure 31:</b>	Market shares of the suppliers to the household consumers at the end 2014	58

<b>Figure 32:</b> Market shares of the suppliers to the household consumers with respect to the consumption group and at the end of 2014	59
<b>Figure 33:</b> Changes to the market shares of the suppliers to all consumers	60
<b>Figure 34:</b> Changes to the market shares of the suppliers to consumers on the distribution network in 2014 with respect to 2013	61
<b>Figure 35:</b> Changes to market shares of the suppliers to all business consumers	62
<b>Figure 36:</b> Changes to the market shares of the suppliers to the household consumers in 2014 with respect to 2013	63
<b>Figure 37:</b> Trends of the HHIs in the retail market from 2010–2014	64
<b>Figure 38:</b> Semi-annual movements of electricity prices for typical business consumers in Slovenia from 2007–2014	65
<b>Figure 39:</b> Comparison of electricity prices for a typical business consumer with an annual consumption of 20 to 500 MWh in the EU countries and in Slovenia for 2014	65
<b>Figure 40:</b> Comparison of electricity prices for a typical business consumer with an annual consumption of 20 to 70 GWh in the EU and Slovenia for 2014	66
<b>Figure 41:</b> Trend of the final electricity price for a typical household consumer ( $D_c$ – 3500 kWh per year) in EUR/MWh	66
<b>Figure 42:</b> Retail market indices for standard consumers groups $D_a$ , $D_b$ , $D_c$ , $D_d$ and $D_e$ and for an average consumption of a household consumer in Slovenia from 2010–2014	67
<b>Figure 43:</b> Comparison of the final electricity prices for a typical household consumer with an annual consumption of 2500 to 5000 kWh in EU and Slovenia for 2014	68
<b>Figure 44:</b> Number of supplier switching from 2002 to 2014	69
<b>Figure 45:</b> Trend of supplier switching in 2014 with respect to the type of consumption	69
<b>Figure 46:</b> Supplier switching with respect to the amount of electricity in 2014	70
<b>Figure 47:</b> Structure of electricity production on the transmission network in Slovenia from 2004 to 2014	73
<b>Figure 48:</b> Production and consumption of electricity on the transmission network in Slovenia from 2004 to 2014	73
<b>Figure 49:</b> Surpluses and deficits of electricity on the transmission network in Slovenia from 2004 to 2014	74
<b>Figure 50:</b> Installed capacity of production facilities, the power available for the Slovenian market, and the peak consumption from 2004 to 2014	76
<b>Figure 51:</b> Number of disconnections of electricity supply due to non-payment of electricity bills from 2011 to 2014 (household consumers)	80
<b>Figure 52:</b> Shares of disconnections of electricity for non-payment from 2011 to 2014 (household consumers)	80
<b>Figure 53:</b> Share of dismissed, rejected and granted complaints in 2014	83
<b>Figure 54:</b> Basic information about the transmitted and consumed amounts of natural gas	87
<b>Figure 55:</b> Transported natural gas volumes in million Sm <sup>3</sup>	89
<b>Figure 56:</b> Number of end consumers on the transmission network	90
<b>Figure 57:</b> Schematic map of the gas network with relevant points	90
<b>Figure 58:</b> Number of new consumers on the distribution networks for 2012–2014	94
<b>Figure 59:</b> The trend of building new distributions systems	95
<b>Figure 60:</b> Length of new distribution systems in 2010–2014	96
<b>Figure 61:</b> Structure of the final gas price for business consumers	97

<b>Figure 62:</b> Structure of the final price of natural gas for household consumers	98
<b>Figure 63:</b> Amounts of positive imbalances and amounts purchased for balancing	99
<b>Figure 64:</b> Amounts of negative imbalances and amounts purchased for balancing	99
<b>Figure 65:</b> Effectiveness of balancing the transmission system	100
<b>Figure 66:</b> Imbalances in 2014 by months	100
<b>Figure 67:</b> Fluctuation of imbalances in the four years	101
<b>Figure 68:</b> Basic price (CB) movements from 2012 to 2014	101
<b>Figure 69:</b> Development of the secondary capacity market	102
<b>Figure 70:</b> Maximum daily and average monthly capacity utilisation of the border-entry point (metering-regulation station Ceršak)	103
<b>Figure 71:</b> Maximum daily and average monthly capacity utilisation of the border-entry point Šempeter (metering-regulation station Šempeter)	104
<b>Figure 72:</b> Maximum daily and average monthly capacity utilisation of the border exit point Rogatec (metering-regulation station Rogatec)	104
<b>Figure 73:</b> Dynamics of daily transferred volumes of natural gas, technical, contractual and interruptible capacity at the border-entry point Ceršak	105
<b>Figure 74:</b> Dynamics of daily transferred volumes of natural gas, technical, contractual and interruptible capacity at the border-entry point Šempeter	105
<b>Figure 75:</b> Dynamics of daily transferred volumes of natural gas, technical, contractual and interruptible capacity at the border-exit point Rogatec	106
<b>Figure 76:</b> Sources of natural gas	109
<b>Figure 77:</b> Changes in market shares between 2013 and 2014	110
<b>Figure 78:</b> Distributed quantities and the number of consumers on the distribution network	112
<b>Figure 79:</b> Ratio between the numbers of consumers connected to the distribution network and their consumption	112
<b>Figure 80:</b> Gas consumption by months in 2012–2014	113
<b>Figure 81:</b> Final gas prices for business consumers including VAT and other taxes in Slovenia	114
<b>Figure 82:</b> Final gas prices including VAT and other taxes for typical business consumers I3 in Slovenia and individual EU countries	115
<b>Figure 83:</b> Final gas prices including VAT and other taxes for household consumers in Slovenia from 2013 to the second half of 2014	115
<b>Figure 84:</b> Final gas prices including VAT and other taxes for typical household consumers D2 in Slovenia and in individual EU countries	116
<b>Figure 85:</b> Heat consumption by the type of consumers and numbers of consumers	126
<b>Figure 86:</b> Structure of the primary energy sources for the production of heat for district heating	126
<b>Figure 87:</b> The largest distributors of heat to households in 2013	127
<b>Figure 88:</b> The largest distributors of heat to non-households in 2014	127
<b>Figure 89:</b> The largest distributors of heat to business consumers in 2014	128
<b>Figure 90:</b> Heat distribution networks in Slovenia in 2014	128
<b>Figure 91:</b> Length of heat distribution networks by municipality, and the numbers of connected users in 2014	129
<b>Figure 92:</b> Trends in the average retail prices of district heating for households in selected Slovenian municipalities for 2012–2014	130



## LIST OF TABLES

<b>Table 1:</b>	Electricity production and import in GWh	15
<b>Table 2:</b>	Electricity consumption and export for 2013 in 2014 in GWh	16
<b>Table 3:</b>	The share of consumption and the number of consumers by the type of consumption	16
<b>Table 4:</b>	Products for the tertiary reserve in 2014	19
<b>Table 5:</b>	Auction results for the lease of tertiary reserve for 2014	20
<b>Table 6:</b>	SAIDI and SAIFI by companies for the period 2012–2014 for unplanned interruptions (caused internally)	24
<b>Table 7:</b>	SAIDI and SAIFI at the national level for 2012–2014 (unplanned interruptions)	26
<b>Table 8:</b>	SAIDI in SAIFI at national level from 2012–2014 (planned interruptions and all interruptions)	26
<b>Table 9:</b>	Some commercial quality indicators in 2014	27
<b>Table 10:</b>	Number and shares of justifiable complaints relating to commercial quality for 2014	27
<b>Table 11:</b>	Number and shares of justifiable complaints to voltage quality for 2012–2014 by companies	29
<b>Table 12:</b>	Transmission system operator's network charge	34
<b>Table 13:</b>	Review of the allocated CBTCs and the revenues from the auctions by the border	37
<b>Table 14:</b>	Utilization rate of CBTCs in 2014	38
<b>Table 15:</b>	Installed capacities in the production facilities in Slovenia	41
<b>Table 16:</b>	Shares of different types of electricity production in Slovenia	42
<b>Table 17:</b>	Connections and shutdowns of production facilities in 2014	43
<b>Table 18:</b>	HHI with respect to the installed capacity	45
<b>Table 19:</b>	HHI with respect to production	45
<b>Table 20:</b>	Net profits of the companies for electricity production	46
<b>Table 21:</b>	Number of employees in the companies for electricity production	47
<b>Table 22:</b>	Ownership structure of the companies for electricity production	47
<b>Table 23:</b>	Average prices for Base and Peak on the Slovenian and neighbouring power exchanges 2014	47
<b>Table 24:</b>	Production of units included in the support scheme and paid support	53
<b>Table 25:</b>	Standard groups of business consumers according to Eurostat	57
<b>Table 26:</b>	Market shares and HHIs of the suppliers to all end consumers in Slovenia in 2014	60
<b>Table 27:</b>	Market shares and HHIs of the suppliers to all consumers on the distribution network in 2014	61
<b>Table 28:</b>	Market shares of and HHIs the suppliers with respect to supply to business consumers in 2014	62
<b>Table 29:</b>	Market shares and HHIs of the suppliers to the household consumers in 2014	63
<b>Table 30:</b>	Changes to the production facilities on the transmission network	75
<b>Table 31:</b>	The review of disconnections of electricity supply due to non-payment of electricity bills of household consumers from 2011 to 2014	79
<b>Table 32:</b>	Electricity consumers' complaints to suppliers in 2014	83
<b>Table 33:</b>	Investment activities in 2014	92
<b>Table 34:</b>	Distribution lines, metering and metering-regulation stations	93
<b>Table 35:</b>	Ownership structure of the companies for gas distribution	95
<b>Table 36:</b>	Trading of transmission capacities in the secondary market	102
<b>Table 37:</b>	Imported gas for consumption in Slovenia from 2012 to 2014 in Sm <sup>3</sup>	109
<b>Table 38:</b>	Market shares and the HHIs relating to the wholesale gas market	110
<b>Table 39:</b>	Market shares and the HHIs relating to the natural gas retail market	111
<b>Table 40:</b>	Complaints of household gas consumers to suppliers in 2014	120
<b>Table 41:</b>	Complaints of gas consumers to DSO in 2014	121

## LIST OF ABBREVIATIONS AND ACRONYMS

<b>ACER</b>	Agency for the Cooperation of Energy Regulators
<b>CBTC</b>	Cross-Border Transmission Capacities
<b>CEE</b>	Central-East Europe (electricity region)
<b>CEER</b>	Council of European Energy Regulators
<b>CHP</b>	Combined Heat and Power
<b>CSLOeX</b>	Hourly index
<b>CPI</b>	Consumer Price Index
<b>CSE</b>	Central-South Europe (electricity region)
<b>CWE</b>	Central-West Europe (electricity region)
<b>DSO</b>	Distribution System Operator
<b>DTS</b>	Distribution-Transformer Station
<b>EA-1</b>	Energy Act-1; the Official Gazette of the RS, No 17/04
<b>EC</b>	European Commission
<b>EEX</b>	European Energy Exchange
<b>ENTSO-E</b>	European Network of Transmission System Operators for Electricity
<b>ENTSO-G</b>	European Network of Transmission System Operators for Gas
<b>GDP</b>	Gross Domestic Product
<b>GPP</b>	Gas Power Plant
<b>GoO</b>	Guarantee of Origin
<b>HHI</b>	Herfindahl-Hirschman Index
<b>HV</b>	High Voltage
<b>HHP</b>	Hydroelectric Power Plant
<b>IEM</b>	Internal Energy Market
<b>INC</b>	Imbalance Netting Cooperation
<b>LV</b>	Low Voltage
<b>MV</b>	Medium Voltage
<b>MRS</b>	Metering-Regulation Station
<b>NPP</b>	Nuclear Power Plant
<b>NRA</b>	National Regulatory Authority
<b>NTC</b>	Net Transfer Capacity
<b>PCI</b>	Project of Common Interest
<b>P+ and P-</b>	Main energy imbalance prices
<b>PSPP</b>	Pumped-Storage Power Plant
<b>REMIT</b>	Regulation on Wholesale Energy Market Integrity and Transparency
<b>RES</b>	Renewable Energy Sources
<b>RES-E</b>	Energy from Renewable Energy Sources
<b>PRISMA</b>	Platform for European Gas Capacity Booking
<b>RESC</b>	Renewable Energy Certificate System
<b>RPI</b>	Retail Price Index
<b>SEE</b>	South-East Europe (electricity region)
<b>RS</b>	Republic of Slovenia
<b>SAIDI</b>	System Average Interruption Duration Index
<b>SAIFI</b>	System Average Interruption Frequency Index
<b>SLOeX</b>	Organised electricity market index
<b>SODO</b>	Electricity Distribution System Operator, public limited company
<b>SURS</b>	Statistical Office of the Republic of Slovenia
<b>SWE</b>	South-West Europe (electricity region)
<b>TPP</b>	Thermoelectric Power Plant
<b>TSO</b>	Transmission System Operator
<b>VAT</b>	Value Added Tax



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