







4	1	INTRODUCTION
6		SUMMARY
8.		DEVELOPMENT OF THE ENERGY MARKETS AND THE MAIN ACTIVITIES OF THE REGULATOR
		The basic details regarding the markets for electricity and natural gas in Slovenia
	.3.2	The regulator's most important activities and its organisational structure
		The development of the markets of electricity and natural gas
		The development in the market for electricity
	3.3.2	The development in the market for natural gas
		The main areas that involved the regulator
		The regulatory framework for electricity network
	3.4.2	The quality of electricity supply
		The renewable energy sources and the cogeneration of heat and power
		The adoption of general acts for exercising public powers in the area of natural gas
		The control over the retail markets for electricity and natural gas
		ELECTRICITY
	4.1	General information
	4.2	The regulation
		The regulation of transmission and distribution activities
		The business operation of the transmission system operator
		The business operation of the distribution system operator
		The business operation of the owners of the electricity distribution infrastructure
		The investments in the electricity networks
		The long-term development of the electricity network
	4.2.1.6	The business operations of the market operator
	4.2.2	The unbundling of services
		The network charges for the transmission and distribution networks
		The mode of setting the network charges for the transmission and distribution networks
		The charging for the network charge
		The setting of the network charge
		The supply quality
		The commercial quality
		The supply continuity
		The voltage quality The supply quality at the distribution level
		The voltage quality of the transmission network
		The prices for the use of electricity networks
		The allocation of cross-border transmission capacities and the congestion-management mechanisms
		The market-based activities and competition
35.		The production and the wholesale market
35		The production of electricity
38		The business operations of production companies
39		The electricity from renewable sources and cogeneration of electricity and useful heat
40		The previous support scheme
40		The new support scheme
42		The production declarations and decisions on granting support
44		Operating of the production facilities, which were receiving support in 2009
44		The guarantees of origin and the RECS certificates
44		The emission coupons
46		The degree of competitiveness of the production companies
48		The provision of ancillary services
49		Trading on the organised market
49		The prices and the extent of the trade at the electricity exchange
50		The degree of electricity-market integration with the neighbouring countries
52		The supply and the retail market
52		The suppliers in the retail market
56		The degree of competitiveness in the retail market
58		The prices for electricity
58		The prices of electricity for industrial customers
60		The prices of electricity for household customers
		Web application - Comparison of suppliers

62 4.3.2.4	The balancing
644.3.3	The measures taken to prevent any abuse of a dominant position and to ensure competition
644.3.4	The decisions on disputes and appeals
66 <mark>5</mark>	NATURAL GAS
67 <mark>5.1</mark>	General information
68 <mark>5.2</mark>	The regulation and the regulated services
685.2.1	The regulation of the transmission and distribution activities
	The transmission of natural gas
	The gas transmission network
	The business operation of the transmission system operator
	The ownership of the transmission system operator
	The investments in the transmission network
	The distribution of natural gas
	The customers connected to the distribution network
	The business operations of the distribution system operators
	The ownership structure of the distribution system operators and the network ownership
	The investments in the distribution networks
	The network charges for the gas transmission and distribution networks
	The network charge for the gas transmission network
	The network charge for the gas distribution networks
77	
	The secondary market of transmission capacities
785.2.2	The unbundling of services
78	The allocation of cross-border the transmission capacities
78	The cross-border transmission capacities of the network
	The methods of setting the maximum technical capacity
805.2.3.3	The allocation of the transmission capacities of the network
815.2.4	The congestion-management mechanisms
815.3	The market-based activities and competition
81	The sources of natural gas and the wholesale market
835.3.2	The supply and the retail market
83 5.3.2.1	The customers connected to the transmission network
84 5.3.2.2	The customers connected to the distribution networks
85 5.3.2.3 87 5.3.2.4	The market shares of the retail market
905.3.3	The prices for natural gas in Slovenia The measures taken to prevent any abuse of dominant position and to ensure competition
905.3.4	The deciding on disputes and appeals
	REALIABILITY OF SUPPLY
92 <mark>6</mark>	
936.1	The reliability of the electricity supply
936.1.1 956.1.2	The sufficiency of the production
976.1.3	The planned investments in the production facilities
97	The security of the network operation The reliability of the natural-gas supply
987	PROVISION OF PUBLIC SERVICES AND THE STATUS OF CUSTOMERS
99 7	The provision of public services
99	The protection of customers
100	The protection of vulnerable customers
100 7.2.2	The right to appeal, or the right to legal redress, and the setting of disputes
101 7.2.3	The right to compensation
101 7.2.4	The publication of the prices
101	
	The safeguarding of transparency DISTRICT HEATING
104 <mark>8</mark>	
1058.1 1078.2	The supply of district heating The distribution networks
1078.2	The prices for heat
1098.3	The Energy Agency's activities related to district heating
111	-
114	
115	List of abbreviations and acronyms

З



In 2009 due to global economic crisis the supply of electricity and natural gas was also affected. Since the Slovenian economy is integrated into the global economy, the consequences of the crises were inevitable. The reduced economic activities have led to a fall of electricity consumption, which was especially distinctive at the largest consumers of electricity, and the decreased gas consumption. The electricity consumption decreased by 11 percent, and the consumption of natural gas by 5 percent.

In comparison with the previous year, the wholesale markets for electricity and natural gas were functioning without significant changes. A new supplier entered the retail market for electricity and consequently more switches were made among the household customers of electricity.

In 2009 a new support system for producers of electricity from renewable sources and in the cogeneration facilities was set up. This system will help Slovenia to achieve the required goals for increasing the share of electricity produced from renewables and cogeneration. The new support system is designed to encourage building new and renovation of the existing facilities for environmentally friendly production of electricity set on clear and objective rules.

The new European Union agency, established to help liberalize and integrate the EU's energy markets – Agency for the Cooperation of Energy Regulators (hereinafter ACER) will be, according to the decision made in December by EU ministers in charge of energy, set in Ljubljana. Apart from the fact that the seat of one of the major agencies of the EU will be in Slovenia, this means the confirmation of professional work in the energy market and energy regulation in Slovenia.

The beginning of 2009 was in Europe marked by the shortages of gas supply because of the dispute between Russia and Ukraine. However, the reduced supply did not affect the security of supply in Slovenia. As a consequence, the structure of foreign sources of natural gas, of which Slovenia is dependent on, changed.

The Third Energy Legislative Package came into force in September 2009. It launched the preparations for the implementation and the functioning of the energy markets under the new rules.

In accordance with the legislative requirements, the future will face new activities of the development of energy markets which will operate regarding sustainable development and environmental objectives.

Irena Praček, univ. grad. econ. Director





The Energy Agency prepared the Report on the Energy Sector in Slovenia as an integrated text covering all the issues stipulated by the Energy Act, as well as the issues stipulated by the Commission of the European Communities in the prescribed framework structure of an annual report that is prepared, for the purpose of comprehensive reporting to the Commission, by all the Member States' energy regulators.

Section 3 summarizes the basic details about the development of the markets for electricity and natural gas, and the main activities that the regulator carried out in 2009.

Section 4 gives a detailed description of the electricity-market operation, including regulated and market based services. In 2009 the electricity production in Slovenia increased, in comparison with the previous year, by 1.1 percent. A total of 11,239 GWh of electricity was consumed (excluding the losses in the network), which was 11 percent lower. The consumption of the customers connected to the distribution network decreased by 4.3 percent, while the consumption of the customers connected to the transmission network decreased by 46 percent. A review of the trends in the electricity prices for typical industrial customers shows their continual increase, with respect to all types of costumers. In comparison with the previous year, the electricity prices for household customers decreased due to the economic crisis and the entry of the new supplier to the market. In 2009 a total of 12,749 customers switched supplier, which is the largest number of switches after the full opening of the Slovenian electricity market.

Section 5 gives a detailed description of the market for natural gas, also including regulated and market-based activities. End customers consumed 1,014,578 thousand Sm³ of natural gas, which is 5 percent less than in 2008. The year 2009 was characteristic for its constant increase of the natural-gas prices for all costumers groups. In the beginning of the year the prices for natural gas lower, by 7 percent, in comparison with the previous year, and in the second half of the year the prices decreased by 16 percent.

Section 6 gives a brief review of the supply reliability relating to electricity and natural gas. In 2009, as a result of economic recession, the power consumption was reduced, and Slovenia had a surplus of production over consumption.

Section 7 describes the provision of public services, customer protection and safeguarding of transparency.

The supply with district heating is, together with the regulator's task relating to this area, described in section 8. For the purpose of heat supply, licensed producers of heat for district heating and for the supply to industry, with the facilities' installed power of above 1 MW, produced 2989.4 GWh of heat and 831.25 GWh of electricity.

3 Development of the energy markets and the main activities of the regulator

3.1 The basic details regarding the markets for electricity and natural gas in Slovenia

Slovenia

Population (1. 1. 2010)	2,046,976
Area	20,273 km²
Number of electricity customers (31. 12. 2009)	913,761
Number of natural -gas customers (31. 12. 2009)	127,509
Gross domestic product (GDP)	34,894 million euros
Decrease in GDP	-7.8%
Inflation	0.9%
GDP per person	17,047 euros
Source: Statistical Office of the Depublic of Slovenia, Energy Agency	

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

Electricity

Installed capacity	3,253 MW
Hydroelectric power plants	926 MW
Thermoelectric power plants	1,305 MW
Nuclear power plant	683 MW
Small producers	339 MW
Production of electricity	15,207 GWh
Hydroelectric power plants	4,277 GWh
Thermoelectric power plants	4,700 GWh
Nuclear power plant	5,453 GWh
Small producers	777 GWh
Length of the transmission network	2,571 km
- 400 kV	508 km
- 220 kV	328 km
- 110 kV	1,735 km
Length of the distribution networks	63,517 km
- 110 kV	805 km
- 35, 20 in 10 kV	17,539 km
- 0,4 kV	45,173 km
Consumption of electricity	11,239 GWh
Business customers	8,078 GWh
Household customers	3,161 GWh
Annual consumption per person	5,472 kWh
Average household consumption per month	325 kWh

The table includes 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.

Source: Companies' data

Natural gas

Length of the transmission network	1,014 km
- more than 16 bar	805 km
- less than bar	209 km
Length of the distribution networks (up to 16 bar)	3,938 km
Consumption of natural gas	1,017,948,851 Sm ³
Customers on the distribution networks	293,219,714 Sm ³
Industrial customers	724,729,137 Sm ³
Annual consumption per person	497 Sm ³
	Source: Companies' data

3.2 The regulator's most important activities and its organisational structure

The Energy Agency of the Republic of Slovenia (henceforth referred to as the Energy Agency) acts as the regulator of energy-related activities, in line with the provisions of the energy-related legislation. By setting the network charges for electricity and gas networks, the regulator sets the objectives with respect to the operational efficiency of the regulated services, and the incentives for achieving these objectives. The regulator controls the non-discriminatory network access, and the operation of the market, where it also identifies possible cases of abuse and reports on them. In addition, the regulator decides on disputes and appeals, issues the licences for energy-related activities that require licences, and gives approval to, or opinions on, the acts of the system operators.

With respect to the production of electricity from the renewable sources (henceforth referred to as RESs) and in the cogeneration facilities (henceforth referred to as CHP), the Energy Agency issued declarations for production facilities and decision on granting support. It issues guarantees of the origin and tradable RECS certificates (Renewable Energy Certificate System) for the electricity produced from RESs. It also determines and supervises the mandatory disclosure of the production-source structure.

With respect to the supply of district heating, the Energy Agency issues the methodology for the preparation of the general acts of the heat suppliers.

The Energy Agency annually reports to the Government of the Republic of Slovenia (henceforth referred to as the government) on its operations and on the conditions in the energy sector, as well as on the development of the competition in the energy markets. It also submits a report to the European Commission.

The governing bodies of the Energy Agency are the director and the five-member council, who give guidelines to the Energy Agency and adopt its general acts. The Energy Agency has three sectors: the sector for electricity, the sector for natural gas and district heating, and the sector for common services.

3.3 The development of the markets of electricity and natural gas

In 2009 economic crisis led to reduced consumption of electricity. The reduced energy demand was most obvious in the group of larger costumers that are connected directly to the transmission network.

There was also an evident decline in gas consumption due to economic crisis. In January, Slovenia faced, as many other countries, the gas crisis, which arose from the dispute between Russia and Ukraine.

The development of the markets of electricity and natural gas in 2009 in Slovenia was marked

also by the European Commission infringement proceedings against 25 Members States for not complying with EU legislation on the internal market for electricity and gas, among the others - the Electricity Regulation (1228/2003) and the Gas Regulation (1775/2005).

The European Commission sent a reprimand to Slovenia informing it about the established irregularities regarding the implementation of Regulation 1228/2003 on access to the network for cross-border exchanges in electricity. The Commission established deficiencies in the area of congestion management in cross-border exchanges, including the lack of coordination between neighbouring countries in the regions, as well as in the area of transparency, including the provision of information relating to the physical flows in transmission system operators' network, production facilities and largest customers. Most of the identified deficiencies were corrected before the end of the year 2009.

As regards the Gas Regulation 1775/2995 on condition for access to natural gas transmission network the main concern was that no interruptible reverse flow capacity (backhaul) was offered at all interconnection points. The requirements from formal notice were in vast majority fulfilled by the end of the year.

3.3.1 The development in the market for electricity

There were no significant changes in the wholesale market structure in comparison with the previous year. In the retail market the number of the supplier switches increased, reaching the highest level since the opening up of the market. The main reason is the entry of a new supplier. The new supplier prepared an advertising campaign in print and electronic media, offering a cost-effective supply of electricity.

3.3.2 The development in the market for natural gas

In the wholesale market the conditions did not change, in spite of the entry of a new trader of natural gas. The conditions remained the same also in the retail market, although new supplier began to supply natural gas.

There were changes in the trading of capacities, since the trading of transmission capacities in the secondary market began. The prices of natural gas in 2009 were quite favourable and economic crisis only partially influenced the reduced consumption.

Because of the gas dispute between Russia and Ukraine in January there had been no reduction in security of supply of natural gas to final customers in Slovenia, but in a view of the previous year, the import of natural gas from Russia reduced, and on the other hand, the import from other countries increased on the basis of short-term contracts.

3.4 The main areas that involved the regulator

The aim of the Energy Agency, the Slovenian energy regulator, is, mainly, to provide for the transparency of the market operations and to regulate the public services in such a way that these services are carried out with high quality and at appropriate prices. The Energy Agency determines the methodologies for setting the network charges, for charging for the network charges, and for producing other documents of the system operators for electricity and natural gas. In this way it regulates the price for the use of the network infrastructure, influencing its operations, utilization and return on the assets invested in the infrastructure. In addition, the Energy Agency's role includes the safeguarding of the reliability of the supply with electricity and natural gas. The Energy Agency comprehensively monitors the operations of the energy market and its competitiveness, taking into account the national energy policy and harmonising the interests of all the market participants.

The Energy Agency also cooperates with the EU institutions and with the other EU regulators, especially within the European Regulators Group for Electricity and Gas (ERGEG) that is an advisory body to the European Commission. Together with the other EU regulators, the Energy Agency is involved in the expansion of the energy market to the countries of South-East Europe. The

energy market of the EU is being gradually developed in the internal market, and, to overcome the physical restrictions at the borders, the energy regulators from the EU countries encourage the market operations at the regional levels. In this process the Slovenian energy market is part of three electricity regions and one gas region.

3.4.1 The regulatory framework for electricity network

In 2009 the Energy Agency prepared the draft version Act Determining the Methodology for Setting the Network Charge and the Criteria for Establishing the Eligible Costs for Electricity Networks, which includes, in its annex, also the implementing criteria and parameters for setting the network charge for the electricity networks and establishing eligible costs for the regulatory period 2010–2012, and submitted it for a public discussion. In response, comments were contributed by 16 legal entities or individuals. The Energy Agency discussed the comments and considered those that were justified in the proposal of the new act. In addition, the Energy Agency integrated, in the proposal for the new act, the changes stipulated by the amended EA. When the procedures of the public discussion were completed, the Energy Agency submitted the act for approval to the Government of the Republic of Slovenia.

As in the procedure of inter-sectorial harmonisation the draft act was not harmonised by the deadline due to the expected increase in the network charges, the Energy Agency prepared a proposal of amendments to the current act that applied until 31 December 2009. The Energy Agency proposed to the Government of the Republic of Slovenia that the validity of the Grounds and the Parameters for Setting the Network Charge for Electricity Networks in the Regulatory Period 2006–2008 should be extended to 2010. In this way the network charges in 2010 did not change and remained the same as in 2009.

3.4.2 The quality of electricity supply

The Energy Agency monitors, in detail, the supply continuity, the commercial quality and the voltage quality. Due to the reached agreement on definitions of the parameters of quality of supply and obtained data, the Energy Agency for the first time determined the supply continuity for Slovenia (in line with SAIDI and SAIFI).

On the basis of the results and identified deficiencies of current methodology, for the following regulatory period the new technical grounds for the regulation with guaranteed standards relating the supply continuity and commercial quality were prepared.

To ensure harmonise and reliable data about the quality of supply and setting the network charge and the criteria for establishing the eligible costs for the next regulatory periods, the Energy Agency issued a general act. The act determines the type of and procedure for submitting the data about the quality, to ensure uniform data at the national level. In line to support the regulatory activities, the data on the supply quality include parameters on the supply continuity, the commercial quality and the voltage quality.

3.4.3 The renewable energy sources and the cogeneration of heat and power

The Energy Agency prepared a proposal for the new executive regulation regarding the issuing of declaration for the production facilities and guarantees of the origin of electricity. The Ordinance on Issuing Declarations for Production Facilities and Guarantees of the Origin of Electricity was adopted at the beginning of 2009. The Energy Agency was actively involved, with its comments, also in the harmonisation of other executive regulations relating the RESs and CHP production facilities.

In 2009 the Energy Agency issued 620 declarations for a production facility. The register of declarations for the RESs and the CHP production facilities was set up, allowing an online review of production facilities, for which declarations have been issued. The register allows public viewing of the data about different types of power plants and their nominal power.

In November 2009 a new support scheme for the electricity produced from the RESs and in the CHP began to apply. The Energy Agency issued 225 decisions on granting support, allowing the support to be obtained in line with the new support scheme.

The Energy Agency prepared a document called Announcing the Situation of the production facilities using Renewable Energy Sources or High-Efficiency Cogeneration in the Electricity Market in 2010. The announcement determines out the modes of calculating the reference prices for the electricity and the energy sources, which affect the amount of the support for the electricity produced in 2010. The Energy Agency also participated in drawing up the Plan for Carrying out the Support Schemes for Electricity Produced from the RESs and the CHP in 2010.

In 2009 the Energy Agency was issuing guarantees of the origin of electricity in line with the valid legislation. A total for more than 2246 GWh of guarantees of origin was issued. The Energy Agency also issued 35,681 RECS certificates.

3.4.4 The adoption of general acts for exercising public powers in the area of natural gas

In 2009 the Energy Agency continued the activities associated with the operating conditions in the Slovenian natural-gas market and preparing new methodologies for determine and setting the network charge. Several general acts for the system operators were issued. Two general acts regarding methodologies for determine and setting the network charge for transmission network were not adopted, since it was established that the amendments of the Energy Act (henceforth referred to as the EA) have to be carried out first.

The Energy Agency issues approvals to the proposed network charges for the gas distribution networks. Five system operators submitted 10 requests for 20 individual geographical areas, to which the Energy Agency gave its approval.

In 2009 the Energy Agency issued approval to 8 acts for the general conditions for the supply and consumption from a distribution network.

3.4.5 The control over the retail markets for electricity and natural gas

With the web application called the Comparison of suppliers it is possible to compare the prices of electricity. You can also calculate the individual components of the price of electricity (energy price, network charge, the excise duty, the value-added tax) and retail price indexes. Analyses can be conducted on a monthly or yearly basis.

On the basis of available data, the Energy Agency publishes current information about the end prices for natural gas of individual suppliers to household customers as well as current prices those suppliers for different groups of household customers. In the market of natural gas, the participants were more active, especially the suppliers of natural gas.





4.1 General information

In 2009 the electricity customers in Slovenia used 11,239 GWh of electricity (excluding the losses in the network), which was 1381 GWh, or 11 percent, less than in 2008. In comparison with 2008, the consumption of the customers connected to the transmission networks decreased by 46 percent, while the consumption of the customers connected to the distribution network decreased by 4.3 percent. The electricity losses in the transmission and distribution networks amounted to 843 GWh, or 7.1 percent of transmitted electricity, including transit, export and import of electricity.

In 2009 a total of 15,207 GWh of electricity was generated in Slovenia, which was 175 GWh, or 1.1 percent, more than in 2008. The hydroelectric power plants generated 4278 GWh of electricity, which was 767 GWh, or 22 percent, more than in the previous year. The thermoelectric power plants generated 4700 GWh of electricity, which was 3.5 percent less than in 2008. The Krško Nuclear Power Plant generated 5453 GWh of electricity, which was 517 GWh, or 8.6 percent, less than in the previous year. The small producers generated 777 GWh of electricity, which was 13.8 percent, more than in 2008. To completely cover the domestic demand, in 2009, including losses in the network, it was not necessary to import electricity, taking into account the 50-percent share of installed capacity of the Krško Nuclear Power Plant, which belongs to Slovenia. The surplus of 399 GWh was exported.

The intensive investments in new production facilities on RES and for CHP reflect in changed structure of electricity production. The share of hydroelectric power plants and power plants using other renewable sources increases every year and it was 34 percent in 2009. The power plants using fossil fuels contributed about 31 percent of total production and Krško Nuclear Power Plant 35 percent.

The highest hourly load was noted in December. It amounted to 1935 MW, which was 28 MW, or 1.4 percent, less than in 2008.



Figure 1: Balance of electricity production and consumption in 2009 in GWh

Figure 2: Structure of monthly electricity production



Table 1: Electricity production and import in 2008 and 2009 - in GWh

	2008	2009	Indeks 09/08
Hydroelectric power plants	2,032	4,277	121.8
Thermoelectric power plants	7,406	4,700	96.5
Nuclear power plant	3,182	5,453	91.3
Small producers*	810	777	113,8
Total production in the RS	13,430	15,207	101.2
Imports	7,826	7,780	125.0
Total	21,256	22,987	108.1

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

Source: Energy Agency





Electricity

Table 2: Electricity consumption and export for 2009 - v GWh

	2008	2009	Indeks 09/08
Business customers on the transmission network	2,032	1,104	54.3
Business customers on the distribution network	7,406	6,974	94.2
Household customers	3,182	3,161	99.3
Network losses	810	843	104.1
Total consumption in RS	13,430	12,082	90.1
Exports	7,826	10,865	138.8
Total	21,256	23,807	112.0

Source: Energy Agency





Source: Energy Agency





At the end of 2009 a total of 913,761 electricity customers were connected to the electricity network in Slovenia. In comparison with 2008, in the structure the share of transmission-network customers decreased, from 16 to 10 percent. The consumption share of household customers increased a little, while the consumption share of business customers on the distribution network remained the same.

4.2 The regulation

4.2.1 The regulation of transmission and distribution activities

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 public services of the transmission system operation and the distribution system operation are financed from the network charges and other sources. The network charge for the use of electricity networks is set by the Energy Agency.

Elektro Slovenija, d. o. o., provides the public service of the transmission system operation as its single service, with its main office at Hajdrihova 2, Ljubljana (www.eles.si) – henceforth referred to as Eles.

SODO, d. o. o., provides the public service of the distribution system operator as its sole activity, with its main office at Minařikovi ulica 5, Maribor, (www.sodo.si) - henceforth referred to as SODO.

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

The electricity transmission network is the high-voltage network running from the producers, or from the neighbouring transmission networks, to the distribution network, or to the network users. The Slovenian electricity transmission network is connected with Austria, Italy and Croatia, while there is no interconnection between Slovenia and Hungary. In 2009 the total length of the overhead power lines was 2571 kilometres. The owner of the electricity transmission network is Eles.

The electricity distribution network runs from the transmission network to the end customers. SODO, the distribution system operator, leases the distribution network with a length of 62,526 kilometres. The customers own 992 kilometres of the distribution network.

SODO leases:

- 16,048 kilometres of distribution network of Elektro Celje, company for electricity distribution, d. d., Vrunčeva 2a, 3000 Celje, www.elektro-celje.si,
- 5,383 kilometres of distribution network of Elektro Gorenjska, company for electricity distribution , d. d., Ulica Mirka Vadnova 3a, 4000 Kranj, www.elektro-gorenjska.si,
- 16,169 kilometres of distribution network of Elektro Ljubljana, company for electricity distribution, d. d., Slovenska cesta 58, 1000 Ljubljana, www.elektro-ljubljana.si,
- 16,304 kilometres of distribution network of Elektro Maribor, company for electricity distribution, d. d., Vetrinjska ulica 2, 2000 Maribor, www.elektro-maribor.si in
- 8,622 kilometres of distribution network of Elektro Primorska, company for electricity distribution, d. d., Erjavčeva 22, 5000 Nova Gorica, www.elektro-primorska.si.

In line with the legislation, SODO, d. o. o., has had, since the granting of the concession, a Contract for Leasing the Infrastructure for Electricity Distribution and the Provision of the Service of the Distribution System Operation (henceforth referred to as the contract) with the owners of the electricity-distribution infrastructure.

The above contract regulates all the issues relating to the extent and purpose of using the electricity-distribution infrastructure: the leasing fee, the terms and conditions, the maintenance of the electricity-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.

In 2009 SODO made a leasing contract with TDR Metalurgija, d. d., Tovarniška cesta 51, Ruše, the company that was declared bankrupt, for the electricity infrastructure and equipment.

4.2.1.1 The business operation of the transmission system operator

Eles ended the financial year 2009 with a net profit of 13.67 million euros.

In 2009 the transmission system operator generated revenues from the network charge for the trans-

mission network, the network charge for the ancillary services, the network charge for the specialised ancillary service, from allocating cross-border transmission capacities, and from other services.

The revenues from the network charge for the transmission network amounted to 56.92 million euros, which was 17.73 percent less than expected by the Energy Agency in the regulatory framework for 2009. The expected revenues from the ancillary services were 40.01 million euros, and the actual revenues were 39.85 million euros. The actual revenues from the auctions for allocating congested cross-border transmission capacities, together with the revenues from the ITC mechanism, amounted to 40.94 million euros, which was 1.47 percent, less than in 2008.

At the end of 2009 Eles had 558 employees, which is a 0.3-percent increase in the number of staff in comparison with 2008.

4.2.1.2 The business operation of the distribution system operator

SODO, d. o. o., ended the financial year 2009 with a net profit of 0.86 million euros.

In 2009 the distribution system operator generated revenues from the network charge for the distribution network, the network charge for the specialised ancillary service, from charging for the average cost for making a connection, and from other services.

In the regulatory frame for 2009 the Energy Agency expected 223.39 million euros

revenues from the network charge for the distribution network. Due to lower consumption, the revenues amounted to 221.44 million euros, which was 0.87 percent less than expected.

At the end of 2009 the company had 21 employees, which is 6 more than in 2008.

4.2.1.3 The business operation of the owners of the electricity distribution infrastructure

In 2009 the owners of the electricity distribution infrastructure generated revenues from selling electricity and services in the market, leasing out the distribution network, providing the services for the distribution system operator and from other services.

Table 3: Net profit by activity

Activities		Elektro Celje, d. d.	Elektro Gorenjska, d. d.	Elektro Ljubljana, d. d.	Elektro Maribor, d. d.	Elektro Primorska, d. d.	Total distribu- tion companies
	2008	2.63	1.69	3.71	0.40	0.50	8.93
Leasing and services	2009	-4.82	-1.06	-3.79	0.12	-2.12	-11.67
	Difference 09/08	-7.45	-2.75	-7.50	-0.28	-2.62	-20.60
	2008	-1.05	-1.30	-1.75	0.32	0.68	-3.10
Sale to eligible customers	2009	2.93	1.70	6.57	0.66	1.98	13.84
	Difference 09/08	3.98	3.00	8.32	0.34	1.30	16.94
Other	2008	-0.08	0.20	-1.80	0.75	0.26	-0.67
market-based	2009	0.21	0.75	-1.80	0.65	0.48	0.29
activities	Difference 09/08	0.29	0.55	0.00	-0.10	0.22	0.96
	2008	1.50	0.59	0.16	1.47	1.44	5.16
Total	2009	-1.68	1.39	0.98	1.43	0.34	2.46
	Difference 09/08	-3.18	0.80	0.82	-0.04	-1.10	-2.70

Source: Companies' data (unaudited financial result for 2009)

Electricity

The owners of the distribution infrastructure generated 2.46 million euros of net profit, which was 52.3 percent less than in 2008.

At the end of 2009 the owners of the distribution infrastructure employed a total of 3411 employees, which was a 0.2-percent decrease with respect to the number of staff in 2008. Leasing and the services had 2500 employees, which was 1.3-percent increase.

4.2.1.4 The investments in the electricity networks

The EA obliges the system operators of the transmission and the distribution network to maintain and develop the network system, provide long-term network capacities and to ensure the security of electricity supply. The legislation expects the system operators to continually, considerately and effectively invest in the development and restructuring of the electricity network.

The owners of the distribution infrastructure allocated for the construction of new and the upgrading of the existing distribution infrastructure, and for other necessary business investments in 2009, a total of 129.5 million euros, which was 9.4 percent less than in 2008, and 6.9 million euros less than it was planned in the development plans for the transmission network for 2009 – 2018. The plans were approved of by the ministry responsible for energy. The investments realization in 2009 exceeded the Energy Agency's expectations included in the regulatory framework 2006–2008 by 23.9 percent. The framework was extended and in use also in 2009.

The reasons for negative imbalances within development plan can be found in the current economic crisis in Slovenia, as it intense cycle of investing was planned for the period 2009–2018.

The transmission system operator invested 49.1 million euros in the assets, which was 11 percent more than in 2008. In the Evaluation Development Plan Transmission Network for 2009–2018, which was approved by the ministry responsible for energy, Eles planned investments in expected amount of 66.6 million euros, which was 17.5 million euros, or 26.4 percent, more than realized amount of investments in 2009.

The investment realisation in 2009 was, in comparison to the regulatory framework 2006–2008, which was extended to 2009, exceeded by 10.1 percent.

The total value of the investments carried out by the companies involved in the electricity distribution and transmission was 178.5 million euros, which was 4.6 percent less than in 2008.

Table 4: Amounts of realised investments

In millions of euros

2008			2009			INDEX		
	Realisation	Regulatory framework	Development plan (2009-2018)	Realisation	Realisation 09/08	Real./reg. frame	Real./ devel. plan	
Elektro Celje, d. d.	33.4	20.2	26.7	26.2	78.4	129.4	98.0	
Elektro Primorska, d. d.	17.8	17.8	18.6	18.4	103.1	103.5	99.0	
Elektro Gorenjska, d. d.	16.2	13.5	15.8	16.7	103.1	123.3	105.7	
Elektro Ljubljana, d. d.	44.0	30.4	45.9	46.8	106.4	154.0	101.9	
Elektro Maribor, d. d.	31.4	22.5	26.7	21.3	67.7	94.5	79.6	
SODO			1.1	0.1				
Total distribution + SODO	142.8	104.5	134.8	129.4	90.6	123.9	96.0	
Elektro Slovenija, d. o. o.	44.2	44.6	66.6	49.1	111.0	110.1	73.6	
Total	187.1	149.0	201.5	178.5	95.4	119.8	88.6	

Source: Companies, Energy Agency

The owners of the distribution infrastructure allocated 129 million euros for the investments in their infrastructure, of which 70 million euros, or 54.1 percent, were intended for the new electricity facilities, 43.9 million euros, or 33.9 percent, were intended for modernisation and upgrading the existing facilities. For the other necessary business investments, they allocated 15.4 million euros, or 11.9 percent, of all the allocated funds.

The largest part of the investments was spent for the medium-voltage network, mainly for the MV lines and the MV/0.4 kV transformer stations, following by high-voltage network and low-voltage network.

Eles invested 49.1 million euros in the electricity transmission infrastructure, of which 23.5 million euros, or 48 percent, of all the invested funds were spent for the new electricity facilities, and 20.7 million euros, or 42 percent, of the funds were spent for modernisation and upgrading the existing facilities. For the other necessary business investments it allocated 4.9 million euros, or 10 percent, of all the invested funds.

The system operator's difficulties in integrating the electricity facilities for electricity transmission infrastructure in the environment persisted in 2009. This was also the main reason for the system operators failing to carry out the investments to the extent expected for 2009 in the Development Plan for the Transmission Network for 2009–2018. Most of the funds were allocated for obtaining the documentation and easement relating to building new electricity transmission infrastructure and telecommunications' links. Between the investments in infrastructure is worth noting the conclusion of works in the DTS 110/20 kV in TPP Brestanica. Funds, invested for modernisation and upgrading the existing facilities, were allocated for the reconstructions of the existing 110 kV overhead power lines, DTSs of 400/110 kV and 110/20 kV, and secondary systems.

Table 5: New investments in, and reconstructions of the electricity infrastructure

	New investments	Reconstructions	Other investments	Total
Elektro Celje, d. d.	14.4	9.8	1.9	26.2
Elektro Primorska, d. d.	10.9	3.5	4.1	18.4
Elektro Gorenjska, d. d.	6.8	8.2	1.8	16.7
Elektro Ljubljana, d. d.	26.6	14.4	5.8	46.8
Elektro Maribor, d. d.	11.4	8.0	1.9	21.3
Total owners	70.0	43.9	15.4	129.4
Elektro Slovenija, d. o. o.	23.5	20.7	4.9	49.1
Total	93.5	64.6	20.3	178.4

Source: Companies' data

21

In millions of euros





Source. Litergy Agency

The owners of the electricity infrastructure financed most of the investments in 2009 taking out bank loans amounting to 78.7 million euros, which was 60.8 percent of all the investments, and by using amortisation costs of 38.4 million euros, or 29.7 percent of all the investments. They obtained the rest of the funds by using other sources of their own amounting to a total of 11.8 million euros, and with the co-investments of the network users, which amounted to 0.6 million euros.

Eles financed 51.3 percent of the investments by using amortization costs to a total amount of 25.2 million euros, and 48.7 percent, or 23.9 million euros by using other resources of its own.

Figure 7: Investments sources of the owners of the electricity distribution infrastructure





4.2.1.5 The long-term development of the electricity network

The transmission and distribution system operators have to biennially prepare ten-year development plans for the electricity networks that are evaluated and approved of by the ministry responsible for energy.

The latest upgrading of the development plans for the transmission and distribution networks was made for 2009–2018. 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 sites for new large production sources. In this way the plans determine the expected physical and financial extent of the investments in new facilities and in upgrading the existing electricity facilities on the transmission and distribution networks.

In the development plans for 2009–2018, the expected investments in the electricity infrastructure for the transmission and distribution amount to 2,401 million euros, of which 767 million euros are allocated for the transmission network, and 1,634 million euros are allocated for the distribution network.









4.2.1.6 The business operations of the market operator

Borzen, d. o. o., the electricity-market operator, is a company that is 100-percent owned by the Republic of Slovenia. It also carries out activities of the Centre of Support, and in addition, it performs a commercial activity – the provision of services for the company BSP Regional Energy Exchange, d. o. o.

In line with the EA, the activity of market operator and the Centre of Support is one public service, but it has to provide 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 2009 the company generated (unaudited financial results) 3.15 million euros of revenues, which were, in comparison with 2008, higher by 23.6 percent. The expenditure amounted to 3.05 million euros and was, in comparison with the previous year, higher by 24 percent. The net profit was 0.07 million euros. The market operator generated 0.01 million euros of the net profit, and the net profit of the Centre of Support was 0.06 million euros. At the end of the year the company had 26 employees.

4.2.2 The unbundling of services

Eles only carries out the public service of the transmission system operation covering the entire Republic of Slovenia; for this reason it does not keep separate accounts.

For the same reason SODO does not keep separate accounts, carrying out, on the basis a concession, the public service of the distribution system operator as its sole activity covering the entire territory of the Republic of Slovenia.

The requirements of the energy legislation for the management of separate accounts also apply to the legal transactions delegated, by the distribution system operator, to the third parties carrying out the energy-related activities associated with the supply of electricity.

In 2009 SODO ensured that the owners of the electricity-distribution infrastructure prepared separate accounts for the legal transactions.

The Energy Agency received audited annual reports for 2009 from all the owners of the distribution infrastructure in which the rules used for producing the separate accounts by each energyrelated activity are disclosed. In these reports the separate accounts for individual energy-related activities are also published.

4.2.3 The network charges for the transmission and distribution networks

4.2.3.1 The mode of setting the network charges for the transmission and distribution networks

The Energy Agency sets the network charges for the use of electricity networks, separately for the transmission network and for the distribution networks.

At the end of 2008 the Energy Agency amended the 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.

By amending the act the Energy Agency:

- extended the validity of the tariffs for transmission and distribution networks, which were applied on 31 December 2008;
- increased the tariffs for ancillary services from 1 January 2009

It was necessary to increase the tariffs for ancillary services because TSO had no other sources to cover the difference between the eligible costs for ancillary services and the network charge for ancillary services, considering the prices in 2008. In 2007 and 2008 the Energy Agency decreased the tariffs for ancillary services. The Energy Agency took into account a part of the surplus revenues established from the difference between realised revenues and the eligible revenues of the regulatory years 2004, 2005 and 2006 for covering the costs of ancillary services.

4.2.3.1.1 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 customer groups. To divide the costs across different voltage levels, the Energy Agency takes the gross approach with respect to calculating the network charges for the transmission and distribution networks.

4.2.3.1.2 The setting of the network charge

The methodology for setting the network charge is based on the price-cap method, taking into account the assumption that the revenue should be sufficient to cover the eligible costs for a smooth provision of the tasks of a system operator. The limit for a justified increase in the prices is expressed by the ratio of the increased prices to the eligible revenue.

Part of the costs is covered by the revenues from charging for the average costs for making a connection, with the compensations received from insurance companies relating to damages, with the revenues from the telecommunications services, with the revenues relating to the remuneration for the use of cross-border transmission capacities of the interconnection lines, and with other revenues arising from the provision of a regulated activity.

Eligible revenues are established separately for the network charge for the transmission network, the network charge for the distribution network, and the network charge for ancillary services.

4.2.3.2 The supply quality

Due to reducing the costs of monopoly services such as the transmission and distribution of electricity, the quality of the electricity supply can also become reduced, especially if the companies are not regulated on the basis of the achieved level of quality supply. The quality of electricity supply is supervised by the Energy Agency on the basis of minimum quality standards. The term supply quality covers the following:

- the commercial quality or the quality of the services that a company provides for its network users,
- the supply continuity,
- the voltage quality.

EA stipulates that the time required for connection to the electricity network and repairing the transmission and distribution networks has to be monitored. The time, required for connection to the electricity network, is one of the parameters of commercial quality, and the time for repairing the network is an indirect parameter of the supply continuity.

In 2009 the Act Concerning the Submission of Data about the Quality of the Electricity Supply was issued. By this act, the uniform rules for submitting the data and requirements for monitoring the commercial quality, the supply continuity and voltage quality on monthly and yearly basis were given.

In 2009 the Energy Agency continued to introduce regulation based on the quality of the electricity supply. The main point was to ensure the control over the supply quality and to determine the minimal standards for the supply quality of the electricity. The Energy Agency carried out its regulation in the simplest way – by making the following data publicly available:

- quality indicators for individual services (commercial quality),
- indexes of the system's average interruption duration and interruption frequency,
- the number of complaints relating to the voltage quality.

The system operator has to prepare annual reports on all three types of quality and submit them to the Energy Agency. On the basis of the data provided, the Energy Agency analysed the quality of supply and, in line with its responsibilities, took measures.

4.2.3.2.1 The commercial quality

The demand 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 customer 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.

On the basis of the data provided by the owners of the distribution networks the Energy Agency can conclude that the level of commercial quality is mostly only assessed, and rarely measured. The companies that have certificate of quality management system ISO 9000/9001, do not monitor these parameters of commercial quality, but they systematically monitor some other internal parameters.

4.2.3.2.2 The supply continuity

In 2009 the following standard indicators were used for the control of the supply continuity:

- SAIDI (the System Average Interruption Duration Index)
- SAIFI (the System Average Interruption Frequency Index)

It is clear from the International Electro-technical Commission's definition that the above indicators refer to interruptions longer than three minutes. These long-term interruptions are controlled on the MV-network and are divided into the forecasted and unforecasted interruptions. The latter are further divided, with respect to their causes, into internal, external and force-majeure interruptions. The companies calculated the SAIDI and SAIFI indicators for different observation levels, such as the MV-output of a DTS/DS, different MV-output types (urban, rural, and mixed) and the company level. On the basis of the collected data the Energy Agency calculated both indicators at the national level.

4.2.3.2.3 The voltage quality

In 2008 the technical standard SIST EN 50160:2001 (Voltage Characteristics of Public Distribution Networks), which sets minimum standards for the voltage quality, was adopted. The upper limit of voltage tolerance band at the supply terminals was changed from 230 V + 6 % to 230 V + 10 %.

In line with the legislation, companies have to continually monitor the voltage quality at the border between the transmission and distribution networks, and at the points of change of title of large producers and large customers. Occasional monitoring is done on the basis of a schedule set in advance. When dealing with a complaint, the voltage quality is monitored for at least a

week. The voltage quality is monitored also in the procedure of issuing the connection approval. By that, the issuer can examine the condition of the network.

4.2.3.2.4 The supply quality at the distribution level

The supply continuity

In 2009 the data on the supply continuity were collected by the uniform methodology, which was the same for all the owners of the distribution networks.

The SAIDI indicators for unforecasted interruptions caused internally from 2006–2009, sent by the owners, are shown in Table 6.

Table 6: SAIDI by year- 2006 in 2009 unforecasted interruption caused internally

	SAIDI – unforecasted interruption caused internally [min./cust.]					
Company	2006	2007	*2008	2009		
Elektro Gorenjska, d. d.	83	24	17	11		
Elektro Maribor, d. d.	119	46	38	54		
Elektro Primorska, d. d.	95	129	89	71		
Elektro Ljubljana, d. d.	-	-	61	49		
Elektro Celje, d. d.	-	-	39	30		

*The beginning of the reporting online

Source: Energy Agency

In almost all distribution companies (except for Elektro Maribor) the values of SAIDI are lower, which means that the supply quality is higher in a sense of shorter interruptions.

Figure 11: SAIDI by year- 2008 and 2009 unforecasted interruption caused internally



Source: Lompanies data

On the basis of the SAIDI and SAIFI indicators relating to individual network owners, the Energy Agency calculated SAIDI and SAIFI indicators on the basis of all customers in Slovenia. Table 7 also shows the SAIDI and SAIFI indicators that relates to an average Slovenian customer. At calculating these indicators, as, in addition to internal interruptions, the external interruptions, force-majeure interruptions and all the forecasted interruptions are taken into account.

Table 7: SAIDI and SAIFI at the national level for 2008 and 2009

	Unforcast	ed interruptions 2009	Forecast	ed interruptions 2009
Indicators/ causes	Internal causes	All causes	Internal causes	All causes
SAIFI - national level [interr./cust.]	1.47	2.71	1.16	2.40
SAIDI - national level [min/cust.]	51	116	46	133

Source: Energy Agency

SAIDI on the national level is lower due to bad weather conditions in vast areas in Slovenia in the beginning of the year.

Figure 12 shows the available data relating to the supply continuity in some EU countries for 2007, 2008 and 2009. A comparison between the levels of supply continuity in Slovenia for 2009 and the other SAIDI/SAIFI indicators with other EU members puts Slovenia in the middle European continuity group. It must be indicated, that some of the data can be misinterpreted (if interruptions are not properly qualified).

Figure 12: Average duration of unforecasted interruptions of electricity supply per customers for 2007, 2008 or 2009 (without force-majeure interruptions and external causes)



The commercial quality

It is clear from the reports on the level of commercial quality prepared by the owners of the distribution networks that they do not monitor the commercial-quality parameters, as these are mostly indicated by the values of the required minimum standards. The owners of the distribution networks are otherwise aware of services whose quality is specified with response times in other legislation and that the agency treats them as guaranteed commercial quality standards.

The voltage quality

The owners of the distribution networks collect the data relating to the voltage quality at the metering points for continual or periodic monitoring. They record the voltage and frequency fluctuations, the wave shapes and the symmetry of the three-phase system at all the customers that had complained.

The number of complaints varies; the trend does not reflect the increase or decrease.





The figure 14 shows a slight increase in the share of justifiable complaints for the three-year period 2007–2009. The total number of complaints (all and justifiable) is shown in Table 8.





Table 8: Number and shares of complaints relating the supply quality for 2007-2009

		2007			2008			2009	
Company	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 Celje, d. d.	103	66	64.1%	101	61	60.4%	59	49	83.1%
Elektro Gorenjska, d. d.	77	59	76.6%	36	22	61.1%	94	77	81.9%
Elektro Ljubljana, d. d.	236	120	50.8%	138	86	62.3%	158	98	62.0%
Elektro Maribor, d. d.	79	67	84.8%	80	72	90.0%	33	20	60.6%
Elektro Primorska, d. d.	25	24	96.0%	22	19	86.4%	25	16	64.0%
Total	520	336	64.6%	377	260	69.0%	369	260	70.5%

Source: Companies' data

Electricity

4.2.3.2.5 The voltage quality of the transmission network

Eles is obliged to carry out all the tasks necessary for safeguarding the service quality of the transmission system operator. The commercial quality, which defines the relationships between the producers, connected to the transmission network, and distribution companies and large customers, determine general business relations between them and the system operator. In 2009 the Energy Agency did not monitor the commercial quality. 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. The control of the voltage quality on the transmission network is carried out with a continual monitoring of the voltage quality at the connection points between the transmission and distribution networks, the producers and large customers. The monitoring of voltage quality will continue at the remaining connection points between the transmission network and its users, where it is not yet established, as well as at the connection points with transmission networks of Croatia, Austria and Italy.

On the basis of the data obtained with the continual monitoring of voltage quality it was established that the parameters recorded at the above connection points are in line with the requirements of the SIST EN 50160 standard, except for the flicker. Excessive flicker values in the areas around large customers using electric arc furnaces are caused by an irregular inductive current resulting in a large voltage fluctuation on the transmission network. This fluctuation is transferred to the distribution network.

The most extensive flicker is caused by the Jesenice Steelworks and is perceived throughout the Gorenjska Region and in some Ljubljana nodes. A minor flicker was detected in Koroška Region because of arc furnaces in the Ravne Ironworks. The Štore Ironworks is in the area of the short-circuit power (DTS Podlog), and for this reason this flicker exceeds the limit value at fewer node points.

Some minor flickers take place in the areas where arc furnaces do not operate and are caused by regular maintenance work on the networks, storms or other weather phenomena.

In 2009 Eles received no complaints relating to poor voltage quality.

4.2.3.3 The prices for the use of electricity networks

The final price for the supplied electricity includes the energy price, the price for the network use, the contributions, the excise duty, and the value-added tax. Electricity customers pay the price for the use of the networks to the system operator with respect to their classification in the customer groups, and with respect to their electricity consumption. The price for the use of an electricity network consists of the network charge for the transmission and distribution networks and the supplements used for the operation of the electricity system. The supplements to the network charge are used for covering the costs of the Energy Agency's operation, and recording the concluded contracts for electricity supply at Borzen.

The Energy Agency sets the network charge that is used to cover the eligible costs for the operations of the electricity networks, and the investments in the transmission and distribution infrastructure, as well as the price for the ancillary services. The government sets the supplements included in the use-of-network price.

In accordance with the amendments of the Energy Act, the government set two new contributions. The customers started to pay the contributions in January 2009. These contributions replace the supplement to the use-of network price relating to the preferential dispatch from the qualified producers. The first of these contributions is intended to support the production of electricity in high efficiency cogeneration and from renewable resources, while others provide security of supply by using domestic primary energy sources for electricity production.

Customers were paying different prices for the use of networks. The average price for the use of the networks in Slovenia, taking into account all the customers by customer group, was 28.5 euros/MWh. The customers connected to the low-voltage network were, on average, paying 45.1 euros/MWh for the use of the network, the industrial customers connected to the medium-voltage network were paying 13.3 euros/MWh, and the customers connected to the high-voltage network were paying 3.41 euros/MWh on average.

Figure 15: Average values of the elements included in the use-of-network price by voltage level



In final price for the supplied electricity, the share of the use-of-network price decreased due to cancelation of the supplement to the use-of network price relating to the preferential dispatch from the qualified producers. The final price depends on the amounts of consumed electricity and the profile of a customer's consumption.

Figures 16, 17 and 18 show the ratios of the price elements and the shares of the elements included in the use-of-network prices for typical industrial customers.









Electricity

32

Report on the Energy Sector in Slovenia for 2009



- Network charge transmission (6.96 EUR/MWh) Network charge – distribution
- (35.53 EUR/MWh)
- Ancillary services (8.95 EUR/MWh)
- Energy Agency (0.17 EUR/MWh)
- Contributions for the support (5.48 EUR/MWh)
- Borzen (0.13 EUR/MWh)
- Energy (55.21 EUR/MWh)
- Excise duty (1.00 EUR/MWh)
- VAT 20% (22.69 EUR/MWh)

Source: Energy Agency

Figure 20: Shares of the elements included in the final electricity price, and shares of the elements in the use-of-network price for a typical household customer with an average consumption of 3895 kWh



In 2009 the use-of-network price for D_c was 51.74 euros/MWh, and the price for a typical house-hold customer with an average annual consumption of 3895 kWh was 48.85 euros/MWh, which was 40 percent of the final price including the VAT.

4.2.4 The allocation of cross-border transmission capacities and the congestion-management mechanisms

The allocation and the use of the cross-border transmission capacities (henceforth referred to as CBTCs) in the EU are regulated by Regulation No 1228/2003 on the Conditions for Access to the Network for Cross-Border Exchanges in Electricity (henceforth referred to as Regulation 1228/2003). An integral part of Regulation 1228/2003 is the Congestion Management Guide-lines (henceforth referred to as guidelines). The system operators (henceforth referred to as the TSOs) in individual countries are responsible for the operations in this area. The Regulation 1228/2003 stipulates the basic principles relating to congestion management, including the allocation of the rights to use the CBTCs, and the implementation 1228/2003 requires the mandatory use of the market-based method for allocating the rights to use the CBTCs, so the explicit and implicit auctions are currently used in Europe.

Throughout 2009 the TSO held auctions for the capacities at the Slovenia-Italy border, in the direction to Italy, at the Slovenia-Austria border, in the direction to Austria, and at the Slovenia-Croatia border, in both directions. The Italian TSO called Terna held auctions at the Slovenia-Italy border, in the direction to Slovenia, and the Austrian TSO called APG held auctions at the Slovenia-Austria border, also in the direction to Slovenia. In this way, Slovenia introduced the basic coordinated auctions at the borders with the two Member States. At the border with Croatia, the previous method was used, according to which each of the bordering countries at an individual border held auctions for both transmission directions to the extent of 50 percent of the total available CBTCs. The TSOs then independently allocated half of its total capacity.

At the Slovenia-Italy border Eles held annual, monthly and daily auctions. The Italian TSO held the same auctions for the opposite direction. The two TSOs held the annual auctions for 2009 on 23 December 2008. The Slovenian and Austrian TSOs held the same auctions at the Slovenia-Austria border and they carried out the auctions for 2009 already on 10 December 2008. At the Slovenia-Croatia border the TSO only held daily auctions for both transmission directions. Different rules applying to individual borders

The Table 9 shows the allocated CBTCs, with the revenues and the price of allocated MWh.

Table 9: Review of the allocated CBTCs and the revenues from the auctions by borders

Allocated (MWh)	Revenue (euros)	Price for allocated CBTCs (euros/MWh)
3,062,544	38,425,247	12.55
336,621	39,531	0.12
8,836,377	738,939	0.08
2,705,706	10,615,211	3.92
3,489,968	291,387	0.08
3,417,001	2,425,361	0.71
	3,062,544 336,621 8,836,377 2,705,706 3,489,968	3,062,54438,425,247336,62139,5318,836,377738,9392,705,70610,615,2113,489,968291,387

Source: Eles

It is clear from the table that, in 2009, the TSOs from Slovenia, Italy and Austria allocated the amounts of the CBTCs that allowed larger flows that were actually realised. This was a result of the rule "use a CBTC or lose it". In accordance with this rule all the CBTCs allocated at an auction for a long period, whose use is not announced (nominated) by the relevant TSO by the deadline, will be allocated again at an auction, this time for a short period. In this way, a part of the CBTCs is auctioned several times. It is also clear from the table that in 2009 the transmission direction Austria–Slovenia generated the largest revenue. Among the remaining directions, only the direction Slovenia-Italy also generated large revenues, amounting to about two-thirds of the revenue generated by the direction Austria—Slovenia. These two directions generated, for the involved TSOs, the large majority of all the revenues from allocating the CBTCs at the Slovenian borders. With respect to the revenues listed in the table, it has to be pointed out that all the revenues generated at the borders with Austria and Italy are divided into halves, so that the Slovenian TSO is entitled to a half of the revenues, while the other half belongs to the Austrian or Italian TSO. On the other hand, the revenues from allocating the CBTCs at the Croatian border belong, for both directions and in their entirety, to the Slovenian TSO.

Since 2006 Slovenia has been involved in the regional initiative known as the European Regulators Group for Electricity and Gas (henceforth referred to as the ERGEG). Because of its geographical position, Slovenia is included in three regional markets for electricity – Central-Eastern Europe, and Central-South Europe and South-East Europe. Slovenia's involvement in these regions, for the purpose of congestion management, is also expected in the Congestion Management Guidelines that are an integral part of Regulation 1228/2003. The details on the developments in the regions are given in section 4.3.1.8 – The degree of electricitymarket integration with the neighbouring countries.

As part of the preparations for allocating the CBTCs, the Slovenian TSO prepared new sets of rules for allocating capacities for all three borders in 2010. These rules apply to for all the CBTCs in 2010. The rules for Slovenia-Austria and Slovenia-Italy borders came into force before annual auctions for 2010. Auctions were already held in 2009.

The rules for allocating the CBTCs for the Slovenia-Italy border are a Slovenian translation of a part of the auction rules for Central-South Europe. The rules for allocating the CBTCs for the Slovenia-Austria border were produced on the basis of an agreement between the Slovenian and Austrian TSOs. At the Slovenia-Croatia border the rules from 2008 were used.
4.3 The market-based activities and competition

4.3.1 The production and the wholesale market

Since the beginning of the market opening, all the companies for electricity production have, freely and independently of the system operators, traded in Slovenia, and the common European electricity market. As a rule, the production companies operate in the wholesale market, where, in addition to them, traders and electricity suppliers are active as well. Foreign electricity traders also operate in the Slovenian wholesale market, while domestic traders and electricity producers are accessing foreign markets through the Slovenian market.

4.3.1.1 The production of electricity

In 2009 the following companies operating large facilities with a capacity of over 10 MW were active in the electricity-production market:

- Drava Hydroelectric Power Plants, Maribor, d. o. o. (Drava HPPs),
- Soča Hydroelectric Power Plants, Nova Gorica, d. o. o. (Soča HPPs),
- Šoštanj Thermoelectric Power Plant, d. o. o. (Šoštanj TPP),
- Trbovlje Thermoelectric Power Plant, d. o. o. (Trbovlje TPP),
- Sava Hydroelectric Power Plants, Ljubljana, d. o. o. (Sava HPPs),
- Lower Sava Hydroelectric Power Plants, d. o. o. (Lower Sava HPPs),
- Krško Nuclear Power Plant, d. o. o. (Krško NPP),
- Ljubljana Combined Heat-and-Power Plant, d. o. o. (Ljubljana CHP),
- Brestanica Thermoelectric Power Plant, d. o. o. (Brestanica TPP).

Companies, the Drava HPPs, the Sava HPPs, the Lower Sava HPPs and the Soča HPPs, generate electricity in hydroelectric power plants, the Krško NPP in a nuclear power plant, the Šoštanj TPP and the Trbovlje TPP in thermoelectric power plants running on coal, the Brestanica TPP produces electricity from liquid and gaseous fuels, and the Ljubljana CHP cogenerates heat and electricity in a cogeneration process using coal.

Companies, the Drava HPPs, the Soča HPPs, the Šoštanj TPP and the Trbovlje TPP, were operating within the group known as Holding Slovenske elektrarne, d. o. o., (the HSE). The HSE including the above production capacities represented the first energy pillar in the wholesale market. Within the balance group of GEN energija, d. o. o., forming the second energy pillar in the wholesale market, the Sava HPPs, the Lower Sava HPPs, the Brestanica TPP and Krško NPP were operating.

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. With respect to dispersed sources there are two main types of important production in Slovenia, i.e., the production in small hydroelectric power plants and the production in industrial facilities for the cogeneration of heat and electricity. In recent years the number of small solar-power plants has increased significantly, mainly because of the drop in the prices for photovoltaic modules, the relatively favourable purchasing prices, and the operational support for the electricity generated by small solar-power plants. The number of companies and agents who provide designing and construction of small solar power plants increased. Except for solar power plants, the number of production facilities that produce electricity from other renewable sources (biomass, biogas, wood biomass, land-fill gas, etc.) also increased.

Table 10: Installed capacities of the production facilities active in the Slovenian market

Producer	Installed capacity[MW]	Share-all producers in RS	Share on the transmission network
HSE	1,614	55.4%	62.3%
Hydroelectric power plants	734		
Thermoelectric power plants	880		
GEN energija	845	29.0%	32.6%
Hydroelectric power plants	192		
Thermoelectric power plants	312		
Nuclear power plant*	342		
TE-TOL	113	3.9%	4.4%
Other small producers (on the transmission network)	21	0.7%	0.8%
Other small producers (on the distribution network)	319	10.9%	-
Small hydroelectric power plants	99		
Solar power plants	8		
Wind-powered plants	0,02		
Production facilities using biomass	4		
Production facilities using landfill gas	9		
Production facilities using gas from purification plants	0,2		
Production facilities using biogas	133		
CPH facilities using wood biomass	13		
CPH facilities using fossil fuels	23		
Other	28		
Total in Slovenia	2,911	100%	-
- on the transmission network	2,593	-	100%

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

Source: Companies' data

In line with 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 2009 Slovenian power plants produced a total of 15,523 GWh of electricity, but the actual Slovenian production was smaller, amounting to 12,793 GWh.

In 2009 the largest share of electricity production in Slovenia that actually belongs to the Slovenian customers (including a half of the Krško NPP's production) was contributed by the thermoelectric power plants and the hydroelectric power plants producing about 69 percent of all the electricity.

These are followed by the nuclear power plant, producing about one fifth of all the electricity. In comparison with 2008, we can see a slight increase in the production share of the hydroelectric power plants, in proportion to the decrease in the production share of the thermoelectric power plants. The rest of the electricity was contributed by smaller units connected to the transmission and distribution networks and, in comparison with 2008, their share was slightly increased.

Table 11: Shares of different types of electricity production in Slovenia

Type of production	Production (GWh)	Share	Production - 50% Krško NPP (GWh)	Share
Nuclear power plant	5,460	35.2%	2,730	21.3%
Thermoelectric power plants	4,409	28.4%	4,409	34.5%
Hydroelectric power plants	4,375	28.2%	4,375	34.2%
Other power plants on the transmission network	504	3.2%	504	3.9%
Power plants on the distribution network	775	5.0%	775	6.1%
Total	15,523	100.0%	12,793	100.0%

Source: Companies' data

In 2009 a good 55 MW of the new production capacities were connected to the Slovenian electricity network. No production capacities were shut down (except for one solar power plant with less than 50 kW installed capacity). The largest power plant connected to the network was HPP Blanca, with 43.5 MW installed net capacity. In 2009 more than 150 solar power plants, of the total available capacity, a little more than 7 MW, started to work. A significant increase in the available capacities of the production facilities using gas from the landfill gas or biogas was also noted. The total amount of capacities from these two categories was a good 4 MW.

Table 12: Connections of the new facilities and disconnections of the old productions facilities in 2009

Type of power plant	Installed net capacity in 2009 of the new power plants (MW)	Installed net capacity in 2009 of the disconnected power plants (MW)
Hydroelectric power plants	44.09	0
Solar power plants	6.89	0.004
Wind-powered plants	0.02	0
Production facilities using biomass	0.30	0
Production facilities using landfill gas	2.05	0
Production facilities using biogas	2.00	0
CPH facilities using fossil fuels	0.41	0
Total	55.76	0.004

Source: Companies' data

4.3.1.2 The business operations of production companies

According to the unaudited financial statements, the companies for electricity production finished 2009 with a net profit of 45,98 million euros, which was 16.0 percent less than in 2008. No company had a loss. In 2009 the best financial results were achieved by the Drava HPP, contributing 61.0 percent of the total generated amount.

Table 13: Net profits of the companies for electricity production

	In millions of euros		
	2008	2009	Index 09/08
Drava Hydroelectric Power Plants, Maribor, d. o. o.	15.44	28.19	182.6
Sava Hydroelectric Power Plants, Ljubljana, d. o. o.	1.73	2.01	116.2
Soča Hydroelectric Power Plants, Nova Gorica, d. o. o.	10.08	4.78	47.4
Lower Sava Hydroelectric Power Plants, d.o.o.	0.94	1.26	134.0
Brestanica Thermoelectric Power Plant, d. o. o.	2.54	2.55	100.4
Šoštanj Thermoelectric Power Plant, d. o. o.	18.04	0.05	0.3
Trbovlje Thermoelectric Power Plant, d. o. o.	2.17	0.72	33.2
Ljubljana Combined Heat-and-Power Plant, d. o. o.	3.78	6.42	169.8
Krško Nuclear Power Plant, d. o. o.	0.00	0.00	0.0
Total	54.72	45.98	84.0

Source: Companies' data (unaudited accounts for 2009)

At the end of 2009 the companies for electricity production had 2317 employees, of which the hydroelectric power plants employed 537, the thermoelectric power plants employed 1156, and the Krško Nuclear Power Plant employed 624 staff members. In comparison with 2008 the number of employees in the thermoelectric power plants decreased by 7 employees, or 0.6 percent. The number of employees in the Krško Nuclear Power Plant increased by 36 employees, or 6.1 percent, and the number of employees in the hydroelectric power plants increased by 11, or 2.1 percent.

Table 14: Number of employees in the companies for electricity production

	2008	2009	Index 09/08
Drava Hydroelectric Power Plants, Maribor, d. o. o.	279	288	103.2
Sava Hydroelectric Power Plants, Ljubljana, d. o. o.	121	119	98.3
Soča Hydroelectric Power Plants, Nova Gorica, d. o. o.	126	130	103.2
Lower Sava Hydroelectric Power Plants, d.o.o.	0	0	0
Brestanica Thermoelectric Power Plant, d. o. o.	135	140	103.7
Šoštanj Thermoelectric Power Plant, d. o. o.	490	498	101.6
Trbovlje Thermoelectric Power Plant, d. o. o.	220	220	100.0
Ljubljana Combined Heat-and-Power Plant, d. o. o.	304	298	98.0
Krško Nuclear Power Plant, d. o. o.	588	624	106.1
Total	2,263	2,317	102.4

Source: 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-percent share. HSE and GEN energija are 100-percent owned by the state.

Table 15: Ownership structure of the companies for electricity production

	Republic of Slovenia	HSE, d. o. o.	GEN energija, d. o. o.	City Municipality of Ljubljana	Other share- holders	Drava HPP, d. o. o.	Croatian electricity industry
Drava Hydroelectric Power Plants, Maribor, d. o. o.		100.0%					
Sava Hydroelectric Power Plants, Ljubljana, d. o. o.			86.2%		13.8%		
Soča Hydroelectric Power Plants, Nova Gorica, d. o. o.		100.0%					
Lower Sava Hydroelectric Power Plants, d. o. o.		51.0%	12.6%		5.6%	30.8%	
Brestanica Thermoelectric Power Plant, d. o. o.			100.0%				
Šoštanj Thermoelectric Power Plant, d. o. o.		100.0%					
Trbovlje Thermoelectric Power Plant, d. o. o.		81.3%			18.7%		
Ljubljana Combined Heat-and-Power Plant, d. o. o.	64.6%			35.4%			
Krško Nuclear Power Plant, d. o. o.			50.0%				50.0%

Source: Companies' data

4.3.1.3 The electricity from renewable sources and cogeneration of electricity and useful heat

The amendments to the EA published in July 2008, announced a new support scheme for electricity produced from the RESs and the CHP.

Slovenia participated in the preparation of the Decision 2007/580(ES) of the European Commission and committed itself to adopt its support scheme to the requirements of European legislation. Changes are also necessary in order to increase the share of environmentally friendly production of electricity as one of the ways to achieve environmental objectives. Due to the decision the funds for financing the supports are raised differently, that is by paying flat rate amount for the connection, regardless of the quantity and the origin for the electricity consumed. In accordance with the new support scheme the deductions will be determined on the basis of the already received supports for construction of any kind of production facilities.

The implementation of the support provision based on the new scheme started on 1 November 2009. Due to the amended legislation in 2009, executive regulations on the new support scheme s issued:

- Ordinance regarding the issuing for the production facilities and the guarantees of the origin of electricity,
- Ordinance on support for the electricity generated from renewable energy sources,
- Ordinance on support for the electricity produced in the high-efficiency cogeneration of heat and electricity
- Ordinance on compulsory metering in the production facilities receiving guarantees of the origin and support for the produced electricity
- Act on the use of the register of guarantees of the origin of electricity and the method of reporting data about electricity production,
- Ordinance determining the electricity produced in the high-efficiency cogeneration of heat and electricity, and the efficiency of the transformation of the wood-biomass energy,
- Ordinance regarding the preparations for announcing the situation of the production facilities using renewable energy sources or high-efficiency cogeneration in the electricity market,
- Rules for the operation of the Centre for Support,
- Ordinance determining the mode of setting and charging for the contribution supporting electricity from high-efficiency cogeneration and from renewable sources, the Official Gazette of the Republic of Slovenia,
- Decision determining the contribution supporting electricity from high-efficiency production and from renewable sources, the Official Gazette of the Republic of Slovenia.

4.3.1.3.1 The previous support scheme

In the old scheme, the Ministry of the Economy decided on the eligibility for the receiving of support. The basic condition for receiving support was the status of qualified producer. In the past we used the system of preferential dispatch. The system operators, to which individual producers were connected, were responsible for purchasing electricity, or for paying out the operational support (premiums). The system operators were receiving adequate funds for the provision of the support from the supplement to the use-of-network price relating to the preferential dispatch, and paid by all the customers. The supplement was used for financing the support scheme for electricity from renewables and high-efficiency production, as well as ensuring reliable supply of electricity using domestic sources of primary energy.

4.3.1.3.2 The new support scheme

In the new support scheme, the Energy Agency decides on the eligibility of support and the amount of the support. Two main conditions are that the production facility has a valid declaration issued by the Energy Agency and that is not older than 15 years – for the production facilities using RECs and 10 years in the case of the high-efficiency cogeneration facilities. The producers are eligible to receive support only for the produced electricity for which they obtained guarantees of origin and transfer them to the Centre for Support. The guarantees of origin can be obtained on the basis of a valid declaration for a production facility. New producers and the previous qualified producer, whose CHP production facilities are not older than 10 years, and producers, whose production facilities using RES are not older than 15 years, can enter new support scheme if all the conditions are met. The system of support includes the facilities using RESs whose electrical net capacity is not exceeding 125 MW, and CHP facilities whose electrical net capacity is not exceeding 200 MW.

If a production facility fulfils all the conditions for obtaining a declaration and a producer files a complete form, the Energy Agency issues, in an administrative procedure, a decision on granting a declaration for the concerned production facility. Following the decision, a producer receives a document confirming the finality of the obtained declaration for a production facility. A declaration is obtained for a specific period. Prior to the expiry of the current declaration's validity, a producer shall file a new application for obtaining a declaration, or it shall obtain a new declaration for a production facility after the expiry of the validity of the obtained declaration. If a producer fails to do so, its eligibility to receive support will cease after the expiry of the declaration.

Declaration proves that the production facility is producing electricity from RECs or in CHP, and that the appropriate metering devices are installed in the production facility. On the website of the Energy Agency, the Register of Declarations was set up allowing an online review of production facilities, for which declarations have been issued.

After obtaining the declaration for a production facility a producer may submit an application for obtaining the support. The support can be obtained also for production facilities which were renewed. There are two conditions: the renovation has to fulfil the prescribed increase of production and efficiency, as well as the minimum prescribed amount of assets has to be invested in renovation.

If the application is complete and all the conditions for obtaining support have been met, the Energy Agency shall issue a decision relating to granting support. The decision shall determine the following: the type of support, the period for which the support is granted, and the amount of support, i.e., the class of the reference costs. During the procedure, the Energy Agency also establishes whether the producer has received any other support which has the character of state aids. In proportion to its height the amount of support is reduced.

The producers can get two types of support:

- the guaranteed purchase of electricity supplied to the public network by the producers generating electricity in the CHP production facilities smaller than 1 MW and producers generating electricity in the production facilities using RESs smaller than 5 MW;
- the financial support for current operations covering the difference between the production costs and the expected market prices of electricity, support given to the producers generating electricity in the production facilities using RESs or in CHP, for the whole net electricity production that these producers sell in the market or use for their own consumption.

On the basis of the final decision on granting support, a producer shall make a contract for the provision of support with the Centre for Support operating within Borzen, d. o. o., the electricity-market operator. The contract will regulate all the issues regarding mutual obligations of the contractual parties, i.e., the receiver of the support (producer) and the Centre for Support.

The producers with the concluded contracts for the provision of support based on the metering data shall issue a bill, on the basis of which the Centre for Support shall pay the support.

The funds for the funding the support scheme are provided by all the electricity costumers who are paying a special contribution. The funds are collected at the Centre for Support. The Centre prepares an assessment of the funds necessary for the provision of the support. On the basis of the assessment, the Energy Agency determines the amount of the contribution for the provision of the support for the electricity produced from RESs and in the CHP facilities for the coming year. After the prior consent of the Government, the decision is also published in the Official Gazette of the Republic of Slovenia.

Qualified producers whose production facilities do not meet the age requirement for obtaining support under the new system (CHP facilities being older than 10 years and RES facilities being older than 15 years), can receive support until 31 December 2011 at the latest, or until the expiry of the current contracts, provided that they expire prior to the above date.

The financial support and duration of support are determined in line with legislation, taking into account all the benefits already gained in the life cycle of the investments and any other benefits or supports. In determining support for each production facility, the criteria of sustainability and other criteria in terms of biomass, use of watercourses, manure, place for solar power plants and the efficient use of production facilities are considered, as well as the size and the market share of the company eligible to receive the support.

The reference costs of electricity from RESs and CHP are the indicative costs of electricity production of each representative group and the size of the production facility. The costs are based on published scientific data on investments and operating costs for each energy technology and size of production facilities, economic and financial parameters of the investments and operating, prices of energy sources and other costs relating to the production of electricity and heat in Slovenia. They are published on the website of the Ministry of Economy, in the Methodology for determining reference costs of electricity generated from RESs and Methodology for determining the reference costs for high-efficiency cogeneration.

The reference costs of electricity produced in production facilities using RESs and CHP are the sum of fixed and variable component parts of reference costs of electricity production and energy sources. The fixed part of the reference costs is determined every 5 years or sooner, if the significant changes of investments and others parameters of investments, which were the basis for determining the fixed part of the reference costs, occur.

The variable component of the reference cost of electricity production is determined annually, if necessary, more frequently, based on forecasts of the reference prices for electricity and energy, published by the Energy Agency within the announcing the situation of the production facilities. In 2009 the Energy Agency prepared the document called Announcing the Situation of the Production Facilities Using Renewable Energy Sources or High-Efficiency Cogeneration in the Electricity Market for 2010.

Table 16: Announced reference price of electricity and energy sources

Source: Energy Agency	2.07 80105/83
Reference costs of coal	2.87 euros/GJ
Reference costs of corn silage	24.00 euros/t
Reference costs of wood biomass	41.20 euros/t
Reference costs of natural gas	0.2271 euro/Sm ³
Reference costs of electricity	53.41 euros/MWh

The reference costs of the production of electricity are the basis for determining the price of electricity at the guaranteed purchase and the amount of operational support. For the production facilities throughout the duration of the contract on the provision of support the fixed component of the reference cost of electricity production is being used, which was in force when the decision on granting support was made, and the variable part of the reference costs of the current year.

The guaranteed purchase price equals to the reference cost of electricity production, while the amount of the operational support is determined as the difference between the amount of reference costs and the product of the reference market price of electricity for the year and a factor which reflects the characteristics of each type of the operations of the production facilities. The current support scheme is shown in Figure 21.

Figure 21: The new support scheme



4.3.1.3.3 The production declarations and decisions on granting support

The Energy Agency issued 620 declarations for a production facility. Most of the declarations were issued for the hydroelectric and solar power plants. With respect to power, most declarations were issued for hydroelectric PP and cogeneration facilities.

Figure 22: Number of the issued declarations for production facilities







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

Since the beginning of the new support system, the Energy Agency issued 225 decisions on granting support, allowing the support to be obtained in line with the new support scheme.



4.3.1.3.4 Operating of the production facilities which were receiving support in 2009

The vast majority of producers received the support in accordance to the previous support scheme. All production facilities, receiving the support, in 2009 generated a total of 948.5 GWh of electricity. Most of electricity was produced in the hydroelectric and thermoelectric power plants for district heating, followed by plants using biomass and biogas, landfill gas, gas from purification plants and the co-incineration of wood biomass. A total share of produced electricity in these facilities is less than 1 percent.

Figure 26: Shares of the production facilities which were receiving support in 2009



4.3.1.3.5 The guarantees of origin and the RECS certificates

The Energy Agency issued guarantees of the origin of electricity for a total of 2,246,153,754 kWh and for a total of 35,681,000 kWh RECS certificates (Renewable Energy Certification System).

4.3.1.4 The emission coupons

The EU, as a joint signatory of the Kyoto Protocol, and the Member States committed themselves to significantly reducing greenhouse-gas emissions. Slovenia committed itself, by ratifying the Kyoto Protocol, to reduce greenhouse-gas emissions by eight percent by 2012 in comparison with the base year of 1986. Emissions' trading is one of the instruments for achieving this objective.

In 2012, the Kyoto Protocol will be closed (the goals have to be fulfilled by the end of 2010). The year 2009 was a crucial year, aimed at further action to alleviate the consequences of global warming. In December 2009, the final 'Kyoto' negotiations were held in Copenhagen. The climate change policy, launched by the European Union, has been ambitious outlined and applies to all the EU Member States. The objectives are as follows:

- the EU should by 2020 reduce the GHG emissions by 20%,
- in the final energy consumption increase renewable energy sources to 20%
- reach the 10-percent share of biofuels as transport fuel and 20-percent increase in energy efficiency.

The system of trading with emission coupons 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.

In line with the Environmental Protection Act, the National Distribution Plan for Emission Coupons for the Period 2008–2012 was prepared in Slovenia. This document sets the number of emission coupons distributed by the state free of charge. One emission coupon represents a tonne of CO2. For each current year, the companies, i.e., the operators of the facilities have to register the number of emission coupons that matches their CO2 emissions. If their emissions exceed the number of distributed emission coupons, the operators have to buy the remaining emission coupons in the market. If, on the other hand, the operators have a surplus of emission coupons because they produce small amounts of emissions, they can sell their coupons.

The National Distribution Plan for Emission Coupons for the Period 2008–2012 (second trading period) is valid between 1 January 2008 and 31 December 2012. A total amount of emission coupons for the distribution to the facility operators for the period 2008–2012 is 41,494,687 greenhouse-gas emissions or on average 8,298,937 tonnes per year.

The National Distribution Plan for Emission Coupons for the period 2008–2012 covers 41.6 percent of greenhouse-gas emissions in Slovenia (according to the data for 2004). When setting the numbers of emission coupons for individual sectors, the target emissions relating to these sectors from the Operational Programme for Reducing Greenhouse-Gas Emissions were considered.

In 2008 the thermal-energy sector received 5,899,858 coupons, which was more than 70 percent of the emission coupons distributed in Slovenia. In comparison with 2008, the amount of received emission coupons in the thermal-energy sector was equal. With respect to the actual emissions and the prices for emission coupons in the market, we can conclude that the price for emission coupons did not significantly affect the price for the electricity produced in Slovenia.



Figure 27: Number of distributed emission coupons for 2005–2009

Source: National plan for the distribution of Emission Coupons, Environmental Agency of the RS





At the beginning of the year the price for emission coupons dropped – even for 8 euros per tonne of CO_2 . Otherwise, the price in 2009 ranged between 12 and 16 euros per tonne CO_2 .

4.3.1.5 The degree of competitiveness of the production companies

The concentration rate in this area is an important indicator of the market structure. 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 accordance with the Prevention of Restriction of Competition Act, in Slovenia a market participant has a dominant position in the market if its market share exceeds 40 percent. 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 29 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 percent of the capacity installed at the Krško NPP is taken into account).

Figure 29: Cumulative shares of the one (CR₁), two (CR₂) and three (CR₃) largest producers in the market with respect to the installed capacity and 50 percent of the production from the Krško NPP



Figure 30 shows the CR indicators with respect to electricity production (50 percent of the electricity generated at the Krško NPP is taken into account).

Figure 30: Cumulative shares of the one (CR₁), two (CR₂) and three (CR₃) largest producers in the market with respect to electricity production and 50 percent of the production from the Krško NPP



In 2009 no significant changes were noted in the market structure caused by the ownership and operational restructuring of the production companies necessary for the formation of two energy pillars in the wholesale market in 2008. HSE, whose market share still significantly exceeds 40 percent (CR1) in spite of its restructuring, remained the dominant company in 2009 as well. The share of the two largest electricity producers on the transmission network (CR2) reached almost 96 percent, and the share of the three largest electricity producers on the transmission network exceeded 99 percent (CR3). That is showing an extremely tight oligopoly, caused by the fact that there are only two energy pillars in the wholesale market.

The Herfindal-Hirshmann index (HHI) takes into account the total number of companies in the market, and their relative sizes. The companies with a smaller market share have a smaller weight factor. 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 percent of the production from the Krško NPP. The situation is shown in tables 17 and 18.

Table 17: HHI with respect to the installed capacity of the producers in the Slovenian market

Producer	HHI based on the installed capacity - total in Slovenia	HHI based on the installed capacity - the transmission network
HSE, d.o.o.	3,074	3,876
GEN-Energija, d.o.o.	842	1,062
TE-TOL, d.o.o.	15	19
Other small producers (on the transmission network)	0.5	0.6
Other small producers (on the distribution network)	120	-
Total for Slovenia	4,052	-
- on the transmission network	-	4,958

Source: Companies' data

Table 18: HHI with respect to the producers on the transmission network

Producer	HHI based on the production – on the transmission network (50% Krško NPP's production)
HSE, d.o.o.	4,684
GEN-Energija, d.o.o.	749
TE-TOL, d.o.o.	12
Other small producers	1
Total	5,446

Source: Companies' data

In 2009 the HHIs did not change significantly in comparison with the previous year. However, the HHIs still significantly exceed the upper limit of the medium concentration (HHI = 1800), showing the dominant position of the producers joined in the HSE with respect to the production of electricity as well as the provision of ancillary services. As GEN energija began to manage the entire Slovenian share of the Sava HPPs, the Brestanica TPP and the Krško NPP, and due to increased capacities of the HESS by 2015, which are expected to cover 6 percent of the total national electricity consumption, we can estimate that the modest competition is slowly being introduce into the Slovenian production market.

Figure 31: HHIs of the production companies

6,000					
				5,	446
5,000		4,958	3		
4,000	4,052				
3,000					
2,000				HHI = 1,800	
1 0 0 0		1.000			
1,000	HHI = 1	1,000			
0					
	HHI for the installed capacity –	HHI for the install	led capacity –	HHI for the pro	duction – on the
	the total in the RS	on the transmis	sion network	transmission netwo	rk (50% of Krško NPP)
					Source: Companies' data

4.3.1.6 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 TSO, while the DSO also provides these services on individual parts of the distribution network. In line with the System Operation Instructions for the Electricity Transmission Network (the Official Gazette of the Republic of Slovenia, No. 49/07), the TSO, in order to ensure the safe operation of the electricity system, provides the following ancillary services:

- the control of frequency and power (primary, secondary, and tertiary control),
- the control of voltage,
- the covering of the imbalances in the regulatory area,
- the provision of a black start,
- the covering of the technical losses in the transmission network,
- the releasing of the load of the network.

By the 31 August each year, Eles has to submit to the Energy Agency the estimation of the ancillary services needed for the following year. In 2009 the next scope of the ancillary services was predicted:

- the reserve for the secondary control of frequency and power: ± 80 MW
- the reserve for the secondary control of frequency and power: 345 MW.

As a rule, the providers of the ancillary services are the producers of electricity, or traders acting on their behalf. The only ancillary service that can also be provided by electricity customers is the provision of the reserve for tertiary control, as this service can also be carried out by reducing the consumption of electricity. In 2009 the providers of the ancillary services of the primary and secondary control of frequency and power, the voltage control, and the black start were the companies with their production sources in Slovenia. On the other hand, the services of tertiary control and covering the losses in the transmission network were also provided by companies from abroad. Large customers did not independently participate in the tenders for the provision of the reserve required for tertiary control, as this reserve was included in the bids that were submitted by their suppliers and which included the reserve in the production facilities, as well as the option of a temporary reduction of the customers' consumption. In 2009 the TSO did not provide the service of releasing the load of the network by reallocating the production sources.

To lease the ancillary services for 2009, two types of procedure were used. One procedure was used for the ancillary services provided by domestic providers, the other type of procedure applied to the services provided by foreign providers. The TSO ensured the ancillary services provided by domestic providers on the basis of the call for tenders. This call for tenders referred to the provision of the reserve for secondary control, 60 percent of the reserve required for tertiary control a total of 200 MW), voltage control and the provision for a black start. On the basis of the demand and the received bids, the TSO made contracts with domestic providers regarding

the provision of ancillary services. The foreign providers of the ancillary service for providing 40 percent of the reserve required for tertiary control (a total of 145 MW) were selected on the basis of an auction.

Table 19 shows the final results of purchasing the reserve power required for the provision of ancillary services in 2009.

Table 19: Review of the amounts of leased reserve power

Selected bidder	Tertiary reserve (MW)	Secondary reserve (MW)
HSE, d. o. o.	40	77
GEN energija, d. o. o.	160	-
TE-TOL, d. o. o.	-	3
EFT	145	-
Total	340	80

Source: Eles

4.3.1.7 Trading on the organised market

The Slovenian organized electricity market for electricity is basically divided into the wholesale market and the retail market. On the wholesale market, the producers the traders and the suppliers of electricity participate. They trade on the basis of the 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. The wholesale market participants conclude their business by the bilateral transactions in so called OTC market or at the exchanges in Slovenia and abroad. In the retail market the suppliers and customers 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. Customers pay the energy supplied according to actual amount of electricity consumed, as measured by the installed meters.

Borzen, d. o. o., the organizer of the Slovenian electricity market, is in line 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 forecasts of production and consumption keeps records of the contracts between the suppliers, the consumers and electricity producers.

In 2009 a total of 70,550 closed contracts and a total of 55,755,621.90 MWh of operational forecasts included in the open contracts were registered. In comparison with the previous year, the number of recorded closed contracts and operational forecasts increased by 16.4 percent, and the total amount of electricity from recorded closed contracts and operational forecasts increased by 4.2 percent.

4.3.1.7.1 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., which also operates in the Republic of Serbia. On 31 December 2009, there were 17 full members participating at the Slovenian electricity exchange.

In auction trading the participants can submit and withdraw their bids till the end of the trading. The transactions are concluded after the end of the trading. In the continuous trading, the participants can enter and withdraw their pending offers, monitor the current prices and have an insight into the book of the bids. The transactions can be closed as soon as there are overlaps in the form of the supply and demand.

In 2009, the participants at the BSP could take part and in the auction trading.

- In the continuous market, the participants traded with five standard products: base load (00:00 24:00),
- night load (00:00 06:00 and 22:00 24:00; in the continuous trading these are two separate products),
- shoulder load (06:00 22:00)
- hourly load (for each hour between 00:00 24:00)
- euro-shoulder load (08:00 20:00),
- euro-night load (00:00 08:00 and 20:00 24:00; in the continuous trading these are two separate products)

In July 2009 the exchange BSP also offer the possibility of the clearing of the transactions concluded outside the exchange (the so-called OTC clearing).

At the annual level, the total amount of traded energy was 11,044 MWh. This amount has been made in total of 153 concluded deals, of which 59 have been concluded for the base load, 49 for the night load (00:00 to 06:00), 42 for the shoulder load and 3 for euro-night load (20:00 to 24:00). The average price for the base load was 42.89 euros/MWh and for the shoulder load 46.85 euros/MWh.

The values of Slovenian stock exchange index (SLOeX) depend on the number of the concluded deals and are described in the section on balancing (4.3.2.4).

4.3.1.8 The degree of electricity-market integration with the neighbouring countries

The Slovenian electricity market is situated between three different regional markets with very different energy prices. These are the market of Central and Eastern Europe (Germany, Austria, Poland, Czech Republic, Slovakia and Hungary), the Italian market, and the market of South-East Europe. In 2009 the market of South-East Europe continued to have shortages of electricity that led to high electricity prices in the region. In 2009 all these markets felt the effects of the economic crisis. Due to the reduction of economic activities, the consumption of electricity decreased. Reduced consumption of electricity was more distinctive in the area of East Europe and South-East Europe, which led to a greater difference between the prices in this area and the price in the Italian market, where the price remained relatively high. For this reason, a lot of trading was carried out between the three regions, resulting in increased transmission of electricity through Slovenian network.

The traders in the Slovenian electricity market are those that supply electricity to Slovenian end customers and those that resell it to other traders or suppliers. Most of these traders also participated in the neighbouring markets. The outstanding amounts of electricity required in Slovenia were bought in the markets of Central and Eastern Europe, and, in the cases of occasional surpluses, also in the markets of South-East Europe. Within the limited availability of the CBTCs, some energy was also exported to Italy. When the prices at the German and Austrian markets were high, electricity was also exported to these countries.

In 2009 the total exports from Slovenia amounted to 10,865 GWh of electricity. This figure includes the export of half of the electricity generated by the Krško NPP, which belongs to the Republic of Croatia on the basis of a bilateral agreement. The actual exports of electricity in 2009 were 8139 GWh. In the same period Slovenia imported a total of 7780 GWh of electricity. These figures show, that in 2009, Slovenia exported 359 GWh of electricity. In comparison with the previous year, the difference is significant, thus Slovenia had to import 1385 GWh of electricity, or 11.0 percent of the total Slovenian electricity consumption.

To a large extent, the electricity prices in the Slovenian wholesale market followed the prices at the German exchange, the EEX. One reason for this is the fact that there is no other liquid electricity exchange in the region, except in Italy, where the prices are significantly higher.

In 2009 the Energy Agency was involved in the activities in three regions: Central-Eastern Europe, Central-South Europe and South-East Europe.

In 2009 Central-Eastern Europe saw intense preparations for setting up an Auction House in Freising, Germany. The Auction House was established in 2008, but it did not start with its main work - to coordinate the allocation of the CBTCs for all the borders in the region, as well as setting the available CBTCs. To do this, it will replace the previous method based on the NTC and the ATC with an entirely new approach based on the actual power flows. With respect to cross-border transmission, the current approach considers the so-called contractual transmission flow, while the new approach will be based on the actual flows in the networks, considering also the so-called mesh flows outside the course of a contractual flow.

It was agreed, at a regional level, that the Auction House in Freising will start with its work on 10 March 2010. The Auction House, the all TSOs and the national regulators participated in the intensive preparations. A workshop was held for the traders with electricity. Between 1 October and 6 November the public discussion on expected auction rules was carried out. The rules for the region should come into force on 10 March 2010.

Most of the activities carried out in Central-South Europe in 2009 were focused on the preparations for allocating the CBTCs, since the current rules are not in the line with the EU legislation (Regulation 1228/2003 and its annexes). Three proposals were discussed. The first proposal was that as in the region Central and Eastern Europe, all the TSOs would set up an auction house. The second was that one of the TSOs would operate as an auction house. Following the third proposal, the coordinated auction platform – website – should be established, which will enable all the traders to participate at all auctions in the region. No consent was reached, so the agreement was that the old auctions rules should be applied for 2010- that is on bilateral level at each border. However, from 2011, the French auction house CASC will carry out the tasks of the auction house for the whole region. The problem in this region is the fact that in its centre is Switzerland, which is not an EU member, but it plays the key role in the transit of electricity from the north to Italy. In 2009 there were strong tensions to change the borders of the region, so that only south Swiss border would stay in the region. The problem will be solved by merging with Central and West Europe region, in which the French auction house CASC is active.

In 2009 the activities started to establish a merging the markets of Slovenia and Italy. Following the merging, the cross-border transmission capacities for the day ahead at the current explicit auctions will be allocated implicitly, that is the simultaneous buying power and the allocation of adequate transmission capacity. This initiative was signed by the foreign ministers of both countries.

A special working group was established, chaired by the representatives of the regulators, and formed out of the both TSOs, the electricity exchanges, Borzen and the responsible ministries. It is expected that the merge of the market will revive in the last quarter of 2010.

In the eighth region called South-East Europe the activities similar to the ones in the other two regions were carried out. In this region too, intensive preparations for establishing a coordinated auction office were in progress. As most of this region is composed of the signatories to the Energy Community Treaty, in which the liberalisation of the electricity market was introduced later than in the Member States, and is still in progress, this region differs significantly from the other regions. Unresolved political and legal issues involving individual countries or areas present large obstacles to the progress of this region.

4.3.2 The supply and the retail market

4.3.2.1 The suppliers in the retail market

Seventeen suppliers were active in the retail market supplying electricity, on the basis of the contracts, to 7 customers connected to the transmission network, and to 913,754 customers connected to the distribution network.





In 2009 the customers in Slovenia were supplied with 11.2 TWh of electricity. Elektro Ljubljana, d. d., had the largest market share, and increased its market share by 2 percent. It is followed by Elektro Maribor d. d., with the same market share in comparison with 2008. The market share of GEN-I, d. o. o., increased by 6 percent. In comparison with 2008, the market shares of Elektro Celje, d. d., Elektro Primorska, d. d., and Elektro Gorenjska, d. d., remain mostly the same. The market share of HSE, d. o. o., decreased by 9 percent.

Figure 33: Market shares of the suppliers to the customers on the distribution network at the end of 2009



With respect to the market shares of the suppliers to the customers on the distribution network, Elektro Ljubljana had the largest share covering a third of the total supply. Other supply companies kept their market shares from the previous year. GEN-I, d. o. o, increased its market share of the supply by 3 percent.



Figure 34 shows the market shares of the suppliers to the customers with an annual consumption of up to 50 MWh. The largest share has Elektro Ljubljana, d. d., following by other distribution companies, which had almost the whole market share. Household costumers represent the majority of the market.





With respect to supplying the customers with an annual consumption between 50 MWh and 2 GWh, in comparison with the previous group, GEN-I, d. o. o., had a noticeable market share, suggesting that the company had a larger share of business customers.





With respect to supplying electricity to the customers with the largest consumption, there was a change in the first place. The largest market share has Elektro Ljubljana, d d., followed by HSE, d. o. o., with almost one fifth of the market share (last year, the company had the largest market share with almost one third of the share). GEN-I, d. o. o., is third, followed by other companies.

A total of 12,749 customers switched supplier, which was the largest number of switches since the beginning of the opening of the Slovenian electricity market. In 2008, there were a total of 5211 switches.

Figure 37: Numbers of supplier switches for 2002–2009



Figure 38: Dynamics of the supplier switches in 2009 with respect to the type of the customer



Most of the MW customers decided to switch supplier at the beginning of the year, as the supply contract usually expire at the end of the year.

The number of switches of the customers on LV was highest in the middle of the year (between May and September).





The number of switches varied on a monthly basis, which can be explained by the development in the market, i.e., changes of the prices, and the commercial campaigns. The number of changes was higher in May and June. The growth in the number of switches was encouraging.

.....

Figure 40: Dynamics of the supplier switches in 2009 with respect to the amounts of energy



4.3.2.2 The degree of competitiveness in the retail market

Table 20 shows the market shares of the suppliers to the customers in the retail market connected to the distribution network.

Table 20: Market shares of the suppliers to the customers on the distribution network

Supplier	Supplied energy (GWh)	Market share	HHI
Elektro Ljubljana, d. d.	3,277.6	32.3%	1,046
Elektro Maribor, d. d.	1,678.7	16.6%	274
Elektro Celje, d. d.	1,487.1	14.7%	215
Elektro Primorska, d. d.	1,169.9	11.5%	133
GEN-I, d.o.o.	1,363.1	13.4%	181
Elektro Gorenjska, d. d.	882.8	8.7%	76
Others	275.6	2.7%	7
Total	10,134.9	100%	1,933

Source: Companies' data, Energy Agency

None of the companies in this market had a dominant position, as none of them has a share larger than 40 percent. Nevertheless, in spite of a distributed supply, the concentration is high, the HHI being more than 1800. It is also clear that the market share of Elektro Ljubljana, d. d., is relatively high, its HHI exceeding the upper limit of low concentration. With respect to ownership, the concentration is even higher, as the state is the majority owner of the Slovenian distribution companies.

Considering comparable amounts of the total energy supplied in 2009, we can conclude that GEN-I, d. o. o., increased its share the most, while Elektro Maribor, d. d., lost the largest amount of market share.

Figure 41: Changes to the market shares of the suppliers to all the customers on the distribution network in 2009 with respect to 2008



Table 21 shows the entire retail market, which includes the market of the large eligible customers on the transmission network:

Table 21: Market shares of the suppliers to all the customers

Supplier	Supplied energy (GWh)	Market share	HHI
Elektro Ljubljana, d. d.	3,277.6	29.2%	851
Elektro Maribor, d. d.	1,678.7	14.9%	223
GEN-I, d.o.o.	1,573.3	14.0%	196
Elektro Celje, d. d.	1,487.1	13.2%	175
Elektro Primorska, d. d.	1,169.9	10.4%	108
HSE, d. o. o.	903.9	8.0%	65
Elektro Gorenjska, d. d.	882.8	7.9%	62
Others	264.9	2.4%	6
Total	11,238.3	100%	1,685

Source: Companies' data

A review of the entire market, also including the customers on the transmission network, shows an additional increase in the market concentration with respect to 2008. It indicates a medium concentration, with the total HHI being below the upper limit of 1800.

Considering comparable amounts of the total energy supplied in 2009, we can conclude that GEN-I, d. o. o., increased its share the most, while HSE, d. d. o, lost the largest amount of market share. Due to economic crisis, the larger customers consumed less electricity. As their supplier was HSE, d. o. o., its market share is consequently smaller.

Figure 42: Changes to the market shares of the suppliers to all the customers in 2009 with respect to 2008



The HHIs of the suppliers to all customers slightly increased in comparison with 2008. On the other hand, HHIs of the suppliers to the customers on the distribution network decreased.



4.3.2.3 The prices for electricity

4.3.2.3.1 The prices of electricity for industrial customers

All the customers were supplied with electricity on the basis of the conditions in the open electricity market. The prices depend on the forecasted amounts of consumption, the time dynamics of the customers' consumption, and the relations in the wholesale market.

The trends of electricity prices for typical industrial customers in Slovenia for 2003–2009 show a continual growth with respect to all the customers.

The standard customer groups:

- ${\rm I}_{\rm a}$ an annual consumption of 30 MWh, a power of 30 kW
- $\rm I_b$ an annual consumption of 50 MWh, a power of 50 kW
- I_c an annual consumption of 160 MWh, a power of 100 kW
- I_d an annual consumption of 1250 MWh, a power of 500 kW
- Ie an annual consumption of 2000 MWh, a power of 500 kW
- $I_{\rm f}$ an annual consumption of 10000 MWh, a power of 2500 kW

 I_0 – an annual consumption of 24000 MWh, a power of 4000 kW

Figure 44: Trends of the electricity prices for typical industrial customers in Slovenia (old methodology by Eurostat)



Below is a comparison of the electricity prices in the EU countries for the second half of 2009. It refers to two typical industrial customers selected in line with the new Eurostat methodology. The comparison shows the final electricity prices, including the prices for the use of electricity networks, the excise duties and the value-added tax for Slovenia.

Figure 45: Comparison of electricity prices for a typical industrial customer with an annual consumption of 20 to 500 MWh in the EU countries and Slovenia for the second half of 2009



Source: Eurostat

Figure 46: Comparison of electricity prices for a typical industrial customer with an annual consumption of 20 to 70 GWh in the EU countries and in Slovenia for the second half of 2009



4.3.2.3.2 The prices of electricity for household customers

The Slovenian household customers can freely choose their electricity supplier. The suppliers prepared their offers in the form of various packages, whose prices included, in addition to the price for electricity, also the following:

- the use-of-network price,
- the price covering the supplier's costs regarding electricity supply,
- the excise duty on electricity,
- the value-added tax.

In 2009 the prices of electricity for household customers differ more than in the previous year and thus stimulated more supply switches.

Figure 47: Trend of the final electricity price for a typical household customer (D_c – 3500 kWh per year) in euros/MWh



The final electricity price for a typical household customer Dc was, between 2003 and the end of 2008, increasing with an average annual growth of 3.1 percent. During this time the use-ofnetwork price was relatively stable, and was around 51 euros /MWh per typical customer Dc. Until 1 July 2007, the electricity price was being set by the government. During that time, the selling price, which included the use-of-network price, did not entirely cover the costs of energy prices in the wholesale market. Therefore, after the market opening in 2007, the price for all customers increased by 19 percent. Due to economic crisis, the prices decreased in 2009.

Below is a comparison of the electricity prices in some of the EU countries for the second half of 2009. It refers to typical household customer, selected in line with the new Eurostat methodology. The final electricity prices are shown, including the prices for the use of electricity networks, the excise duty and the value-added tax. In comparison with other countries, the price of electricity in Slovenia was lower than the average price in the EU countries.





4.3.2.3.3 Web application - Comparison of suppliers

Since 1 July 2007 the Slovenian household customers have been able to freely choose their electricity supplier. In the same time the Energy Agency prepared the web application called the Comparison of Suppliers. The application allows calculating the elements which the final price for electricity includes (energy, network charge, contributions, excise duty, VAT). The analyses can be made on monthly or annual level. The results are calculated on the basis of the input parameters (consumption, connected load, monthly or annual calculation, etc.) and the offers made by suppliers. The results are presented in numeric and comparative analysis (when there is a choice of more results).

With this programme, the prices of electricity in the retail market are presented in more transparent way. The Energy Agency wants to promote and in the same time inform customers about the supply and delivery of electricity. Many "package offers" make the market of electricity more competitive, which is reflected in increased number of switches.



Figure 49: Comparison between the final prices for the supplied energy for the customer group D_c (December 2009)

The database of the web application the Comparison of suppliers offers data for monthly reports on prices for electricity, which are published on the Energy Agency's website. The reports contain graphic and/or analytical presentation of different analyses for standard costumer groups (I_a , I_b , I_c , I_d in I_p):

- the final price of supplied electricity
- the price of electricity by suppliers
- the retail price index, which is the minimum price of electricity in all valid tenders in a given period

Figure 50: Retail price index for the customer group D_c in 2009



Source: Energy Agency

Standard customer group D_c is defined by the following parameters:

- A power of 7 kW, an annual consumption of 3500 kWh (1300 kWh consumed in a lower tariff),
- Consumers: lighting, televisions, radios, refrigerators, small household appliances, washing machines, dishwashers, heathers.

4.3.2.4 The balancing

The transmission network operator - Eles is responsible for balancing the imbalances in the Slovenian network. Within a balance scheme, stipulated by the Rules Regarding the Operation of the Electricity Market, the balance-responsible parties are obliged to maintain the operation schedules of their balance groups within the frameworks of the forecasted values. The imbalances of individual balance groups are often mutually eliminated, as one balance group's imbalance in the positive category, together with another group's imbalance in the negative category of the same value, does not create an imbalance of the entire electricity system. However, when an imbalance of the entire system takes place, the TSO is responsible for its balancing. In line with the System Operation Instructions for the Electricity Transmission Network, the TSO can, in order to balance the imbalances, use the secondary or tertiary control reserve. In addition, it can also buy the required balancing energy, or sell it, in the balancing market or in the electricity market in Slovenia or abroad. In 2009 the balancing market in Slovenia was not yet set up; for this reason the TSO did not have an option to buy and sell energy in the balancing market. In 2009 the new Rules Regarding the Operation of the Electricity Market were adopted, however, it have come into force in 2010.

In Slovenia the market operator called Borzen is responsible for charging for the imbalances and will also be in charge of the balancing market once it is in place. Borzen carries out the imbalance accounts on the basis of the provisions from the Rules Regarding the Operation of the Electricity Market. The charging for the imbalances is done in two stages. First, the market operator calculates the imbalance amounts for each balance group and subgroup on the basis of the established imbalances; later it prepares financial accounts that provide the grounds for the settlement of imbalances. An imbalance amount is calculated as the difference between the total realisation of a balance group, or subgroup, and the forecasted operation schedule of the same balance group, or subgroup, for an individual accounting interval, which is one hour. Financial accounts are done for an individual accounting period, which is one month.

The price for imbalances is set for each accounting interval on the basis of the electricity price at the exchange (C_{SLOeX}), and the TSO's costs related to the balancing, separately for each category (P_+ and P_-). The financial accounts for an individual balance group equal the sum of the products of the imbalance amount and the imbalance price for each accounting interval of an accounting period.





Figure 51 shows the movement of the prices (P_+ and P_-) in year 2009. The average daily values for positive imbalances C₊ was 55.31 euros/MWh and for negative imbalances C₋ 43.31 euros/MWh. The diagram shows that in 2009 some major changes of values of the imbalance prices occurred, especially for positive imbalances due to costs of ancillary services. When Eles demanded these services, the imbalances prices increased significantly.

In the beginning of the year, the values of the index C_{SLOeX} were at the same level as in 2008. The values varied a lot in the second quarter of the year, followed by more stabile period. In the last quarter the values varied again. The values of the index C_{SLOeX} were, throughout the year, almost at the same level changing less than the average daily values of the main imbalance prices. The reason for this was the small number of the transactions with the base load at the energy exchange, on the basis of which the hourly index C_{SLOeX} is calculated.



Figure 52: Monthly imbalances of the Slovenian network in 2009 (in MWh)

Figure 52 shows the total monthly positive and negative imbalances of all the balance groups in Slovenia for 2009. The largest positive imbalances occurred in December and the largest negative imbalances occurred in April.

In comparison with 2008 the balance scheme in Slovenia included 9 new balance groups. Within new balance groups are the balance group of the Centre of Support, which was established for the operation of the new support scheme for the electricity produced from RESs and in CHP, and the balance group of SODO.

4.3.3 The measures taken to prevent any abuse of a dominant position and to ensure 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 web sites 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 and Borzen.

The Competition Protection Office of the Republic of Slovenia in 2009 started the infringement procedure against one of the supplier and its associated company, regarding Article 6, Prevention of Restriction of Competition Act. The procedure, in which the Competition Protection Office is establishing the violation, is ongoing. The Competition Protection Office of the Republic of Slovenia also started another infringement procedure against one of the supplier, regarding Article 9, Prevention of Restriction of Competition Act). The procedure, in which the Competition Protection Protection Office is establishing the violation, is ongoing.

The Competition Protection Office did not initiate any other proceedings relating to the restriction of competition in the electricity market. It assessed the reported concentration of the two companies - Petrol, Slovenska energetska družba, d. d., and Toplarna Hrastnik d. o. o., acting together on the Slovenian electricity market. A decision was issued that the concentration is in line with the rules of competition.

4.3.4 The decisions on disputes and appeals

The Energy Agency is legally authorised to decide, in an administrative procedure in the first instance, on disputes between the network users and the system operators or the market operator and, in the second instance, on appeals against the decisions of the system operator relating to a connection approval. In 2009 the Energy Agency received 34 requests to decide on disputes, of which 30 requests related to electricity.

The content of the decisions has changed in the last three years. In 2006 most of the decisions were made with respect to the appeals against the issued connection approvals. In 2007 and 2008 the content of the disputes and appeals was much more varied. The requests for decision-making mainly referred to the switching procedures, infringements of the general supply conditions and appeals against the issued connection approvals. A few disputes arose from the charged use-of-network prices and from established imbalances or infringements of the general acts regulating imbalances and their balancing. In 2009 most of the decisions were made with respect to the appeals against the issued connection approvals.



Report on the Energy Sector in Slovenia for 2009

Electricity

5 Natural gas



5.1 **General information**

The use of natural gas is very diverse; it is used by households as well as industrial customers. In 2009 a total of 1.014,578 Sm³ of natural gas was consumed in Slovenia, which was 5 percent less than in 2008.

The customers' demand for natural gas is covered by importing natural gas across the gas transmission network. Natural gas is transmitted to the customers in Slovenia across the transmission and distribution networks for natural gas.





As in the previous year, the consumption of natural gas varied on a monthly basis, the highest being in December, when 161 end costumers on the transmission network consumed, for own use, 75 million Sm³, while 127,348 end customers on the distribution network consumed 48 million Sm³ of natural gas.

Natural gas





Figure 54 shows the trends of the prices for Brent oil, standard heating oil, heating gas oil and the basic price for natural gas on the transmission network Pb for 2008 and 2009.

All monitored prices for oil and all oil products increased in the beginning of the year; in the middle of the year all the prices decreased significantly, except for the basic price for natural gas. In 2008 the basic price for natural gas was increasing gradually, and in 2009 gradually decreasing. In 2009 the prices for oil and heating oil after a significant decrease slowly levelled out, and then every month increased a little. The decreased is the consequence of the different political and economic issues in Europe and worldwide.

5.2 The regulation and the regulated services

Regulation is a process in which a regulatory institution formulates the rules for the operations of the regulated companies in such a way that they achieve, in a specified period, business, technical and other objectives set in advance. In 2009 the following two activities were regulated in Slovenia:

- the operation of the natural-gas transmission system,
- the operation of the natural-gas distribution system.

The services of gas storage-facility operation, liquefied-gas terminal operation, and gas-market operation could also be organised as optional national public services; however, in 2009 there was no need for these services.

In line with legislation, in the natural-gas market the Energy Agency carried out many regulatory activities. The main activities are among others setting the network charges for the gas transmission and gas distribution networks. In 2009 the network regulation was based on a one-year regulatory period.

5.2.1 The regulation of the transmission and distribution activities

The activity of operating the natural-gas transmission network is carried out as a national mandatory public service. The provider of this service is Geoplin plinovodi, d. o. o. The tasks of the transmission system operator for natural gas arise from the provisions of the EA, the Ordinance Relating to the Operating Mode of the Public Service of the System Operator of the Gas Transmission Network, the System Operation Instructions for the Gas Transmission Network, and the General Conditions for the Supply and Consumption of Natural Gas from the Transmission Network.

The regulated activity of operating the natural-gas distribution system was carried out as an optional local public service. In Slovenia, the following companies for natural-gas distribution provided this service:

- Adriaplin, d. o. o.,
- Domplan, d. d.,
- Energetika Celje, d. o. o.,
- Energetika Ljubljana, d. o. o.,
- Javno podjetje plinovod Sevnica,
- Istrabenz plini, d. o. o.,
- JEKO-IN, d. o. o.,
- Javno podjetje Komunala Slovenj Gradec, d. o. o.,
- Komunalno podjetje Velenje, d. o. o.,
- Komunalno podjetje Vrhnika, d. d.,
- Loška komunala, d. d.,
- Mestni plinovodi, d. o. o.,
- Petrol Energetika, d. o. o.,
- Petrol, d. d.,
- Petrol Plin, d. o. o.,
- Plinarna Maribor, d. o. o.,
- Plinstal, d. d.
- RP investicije, d. o. o.

In addition to the operation of the natural-gas distribution system, the companies for natural-gas distribution also provided other energy-related or market-based services.

5.2.1.1 The transmission of natural gas

The gas transmission network runs from the border metering-regulation stations (MRSs), at which natural gas is taken from the neighbouring transmission networks, to the exit points, at which the natural gas is delivered to the end customers, to a distribution network for further distribution, or to the border MRSs of the other neighbouring transmission networks.

Across the transmission network, 1011 million Sm^3 of natural gas were transported to the customers in Slovenia, which is 5.5 percent less than the previous year. The transport of natural gas to the neighbouring transmission networks was lower by 19 percent in comparison with 2008, of total amount of 1046 million Sm^3 of natural gas.

The transmission system operator provided for the transmission of natural gas across the highpressure and medium-pressure gas networks. It operated, planned and maintained the transmission network for 18 distribution companies and 161 end customers, which was one end costumers less than in 2008.

5.2.1.1.1 The gas transmission network

The gas transmission network consists of 805 kilometres of pipelines with a nominal pressure of more than 16 bars. In 2009, 34 kilometres of pipelines were built.

The length of pipelines with a nominal pressure of less than 16 bars remained the same and was 209 kilometres. The gas transmission network also consists of 197 metering-regulation stations, 43 metering stations, 4 reducing stations, a compressor station in Kidričevo and a new compressor station in Ajdovščina. (built in 2008 and trial operation in 2009).

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 transmission system operator.

To cover the demand of the customers in Slovenia, in 2009 a total of 5,334,523 Sm^3 of capacities were leased on a daily basis. The transmission was carried out within the leased capacities. The expected transmission of 1020 million Sm^3 of gas intended for the customers in Slovenia was carried out by 99 percent.

The transmission capacities were heavily used, especially the transmission path in the direction Ceršak-Rogatec-Šempeter. The highest monthly utilization of this path was, at Ceršak, 89 percent, the same as in 2008, and the highest daily utilization was 98.3 percent, two percent higher than in 2008.

The expected maintenance works on the transmission network caused supply interruptions totalling 70 hours. The longest time of an interruption was 16 hours and the shortest time was 8 hours. There were no unexpected interruptions. The transmission system operator provided for a stable operation of the transmission network, and a reliable supply in line with contractual obligations.

5.2.1.1.2 The business operation of the transmission system operator

The system operator obtained the revenues from the network charge for the gas transmission network, and other revenues related to the provision of its service. In 2009 the network charge did not change. The system operator sets the network charge for the transmission network in the Act Setting the Network Charge for the Gas Transmission Network.

The gas transmission system operator finished the financial year 2009 with a net profit of 8.5 million euros, which was 12.2 percent less than the year before. At the end of 2009 the company had 149 employees, or 5 more than in 2008.

5.2.1.1.3 The ownership of the transmission system operator

The ownership of the transmission system operator has been the same since 1 January 2005, when Geoplin, d. o. o., set up Geoplin plinovodi, d. o. o. The latter is 100-percent owned by Geoplin, d. o. o., which is a supplier of natural gas. The system operator carried out the operational and organisational actions in line with Article 31b of the EA.

5.2.1.1.4 The investments in the transmission network

In 2009 the transmission system operator allocated 42.7 million euros for the building and renovation of the transmission network, which was 31 percent more than the year before. The operator financed 27 percent of the investments by using the amortisation costs, and the rest was financed from other own sources.

Table 22: Review of 1st priority activities related to the investments in the gas transmission network

Facility	Dejavnosti v letu 2009		
Pipeline M1/1 Kidričevo-Rogatec	Completion of the construction, obtaining operating permit		
Pipeline M1/1 Ceršak–Kidričevo	Completion of the detailed documentation, obtaining easements rights, application for a partial building permit		
Pipeline M2/1 Rogaška Slatina—Trojane Pipeline M2/1 Trojane—Vodice Pipeline R25A/1 Trojane—Hrastnik	Preparation of the national detailed plan		
Pipeline M5 Vodice–Jarše Pipeline R51 Jarše–TE-TOL	Adopting the ordinance on the national detailed plan, preparation of the detailed documentation		
Compressor station Ajdovščina	Completion of the construction, obtaining the permit for trial operation		
Pipeline R21A Šmarje pri Jelšah–Slovenske Konjice MRS Krka Bršljin	Completion of the construction and obtaining operating permit		
R38 Kalce–Godovič	Preparation of the national detailed plan		
MRS Verovškova (UNITECH) MRS Marjeta (Municipalities Rače and Starše)	Preparation of the contract on connection approval		
Diversified supply and transit			
Compressor station Kidričevo 1. phase (50 bar)	Preparation of the detailed documentation		
Compressor station Rogatec	Preparation of the conceptual design		

Natural gas

Source: Geoplin plinovodi, Energy Agency
Investment activities were mainly focused on increasing the current transmission capacities of the gas transmission network, for which 74 percent of the investment funds were spent. The remaining funds were allocated for the renovation or improvement of the transmission network's reliability and for other activities. The main activity was related to obtain the operating permit of the transmission network Šmarje pri Jelšah—Slovenske Konjice and pipeline Kidričevo—Rogatec. The decision for a trial operation of the compressor station in Ajdovščina was issued. Two public procurements for the constructions of the transmission pipeline Rogaška Slatina – Trojane and Trojane – Vodice were published.

The investments in the gas transmission network are carried out on the basis of the long-term development plan prepared by Geoplin plinovodi, d. o. o., assessed and approved of by the Ministry of the Economy. This plan applies to the period 2007–2016 and has been harmonised with the Resolution on the National Energy Programme.

The investments in the new gas-production sources have not been planned. No directs incentives were provided for the construction of new transmission paths for importing and storing natural gas.

5.2.1.2 The distribution of natural gas

The distribution of natural gas, carried out as a service of a gas distribution system operator, is an optional local public service. It can be organised within a public company established by a local community, or it is regulated with a concession act between the concessionaire and the local community as the awarding authority. The tasks of the gas distribution system operators are listed in the provisions of the EA; these tasks 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.

Table 23: Provision of the regulated service of operating a distribution network

Adriaplin, d. o. o.ConcessionNova Gorica, Radeče, Rogaška Slatina, Šempeter - Vrtojb Šentjur pri Celju, Štore, Vipava, Vojnik, Zagorje ob SaviDomplan, d. d.Concession, contractKranj, Naklo, ŠenčurEnergetika Celje, d. o. o.Public companyCeljeEnergetika Ljubljana, d. o. o.Public companyBrezovica, Dobrova - Polhov Gradec, Dol pri Ljubljani, Ig, Ljubljana, Medvode, Škofljica, Log - DragomirJavno podjetje plinovod SevnicaPublic companySevnicaIstrabenz plini, d. o. o.ConcessionNovo mestoJEKO-IN, d. o. o.Public companyJeseniceJavno podjetje Velenje, d. o. o.Public companySlovenj GradecKomunalno podjetje Velenje, d. o. o.Public companyVelenje, ŠoštanjKomunalno podjetje Vrhnika, d. d.Public companyVelenje, ŠoštanjKomunala, d. d.ConcessionŠkofa LokaMestni plinovodi, d. o. o.ConcessionSkofa LokaMestni plinovodi, d. o. o.ConcessionOrmož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebo Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	F	Form of organisation	Municipalities in which service is carried out
Energetika Celje, d. o. o.Public companyCeljeEnergetika Ljubljana, d. o. o.Public companyBrezovica, Dobrova - Polhov Gradec, Dol pri Ljubljani, Ig, Ljubljana, Medvode, Škofljica, Log - DragomirJavno podjetje plinovod SevnicaPublic companySevnicaIstrabenz plini, d. o. o.ConcessionNovo mestoJEKO-IN, d. o. o.Public companyJeseniceJavno podjetje Velenje, d. o. o.Public companySlovenj GradecKomunalno podjetje Vrlnika, d. d.Public companyVelenje, ŠoštanjKomunalno podjetje Vrlnika, d. d.Public companyVrlnikaLoška komunala, d. d.ConcessionŠkofja LokaMestni plinovodi, d. o. o.ConcessionOrmož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebor Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	o. o. C	. Concession	Ajdovščina, Bled, Brežice, Ptuj, Laško, Logatec, Kamnik, Krško, Nova Gorica, Radeče, Rogaška Slatina, Šempeter - Vrtojba, Šentjur pri Celju, Štore, Vipava, Vojnik, Zagorje ob Savi
Energetika Ljubljana, d. o. o.Public companyBrezovica, Dobrova - Polhov Gradec, Dol pri Ljubljani, Ig, Ljubljana, Medvode, Škofljica, Log - DragomirJavno podjetje plinovod SevnicaPublic companySevnicaIstrabenz plini, d. o. o.ConcessionNovo mestoJEKD-IN, d. o. o.Public companyJeseniceJavno podjetje Velenje, d. o. o.Public companySlovenj GradecKomunalno podjetje Velenje, d. o. o.Public companyVelenje, ŠoštanjKomunalno podjetje Vrhnika, d. d.Public companyVrhnikaLoška komunala, d. d.ConcessionŠkofja LokaMestni plinovodi, d. o. o.ConcessionOrmož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebo Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	d. C	Concession, contract	Kranj, Naklo, Šenčur
Energetika Ljubijana, u. u. u.Public companyLjubijana, Medvode, Škofijica, Log - DragomirJavno podjetje plinovod SevnicaPublic companySevnicaIstrabenz plini, d. o. o.ConcessionNovo mestoJEKD-IN, d. o. o.Public companyJeseniceJavno podjetje Komunala Slovenj Gradec, d. o. o.Public companySlovenj GradecKomunalno podjetje Velenje, d. o. o.Public companyVelenje, ŠoštanjKomunalno podjetje Vrhnika, d. d.Public companyVrhnikaLoška komunala, d. d.ConcessionŠkofija LokaMestni plinovodi, d. o. o.ConcessionOrmož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebor Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	Celje, d. o. o. P [.]	e, d. o. o. Public company	Celje
Istrabenz plini, d. o. o.ConcessionNovo mestoJEKD-IN, d. o. o.Public companyJeseniceJavno podjetje Komunala Slovenj Gradec, d. o. o.Public companySlovenj GradecKomunalno podjetje Velenje, d. o. o.Public companyVelenje, ŠoštanjKomunalno podjetje Vrhnika, d. d.Public companyVrhnikaLoška komunala, d. d.ConcessionŠkofja LokaMestni plinovodi, d. o. o.ConcessionOrrmož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebo Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	jubljana, d. o. o. P	ljana, d. o. o. Public company	
JEKO-IN, d. o. o.Public companyJeseniceJavno podjetje Komunala Slovenj Gradec, d. o. o.Public companySlovenj Gradec,Komunalno podjetje Velenje, d. o. o.Public companyVelenje, ŠoštanjKomunalno podjetje Vrhnika, d. d.Public companyVrhnikaLoška komunala, d. d.ConcessionŠkofja LokaMestni plinovodi, d. o. o.ConcessionOrmož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebo Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	tje plinovod Sevnica P	plinovod Sevnica Public company	Sevnica
Javno podjetje Komunala Slovenj Gradec, d. o. o.Public companySlovenj GradecKomunalno podjetje Velenje, d. o. o.Public companyVelenje, ŠoštanjKomunalno podjetje Vrhnika, d. d.Public companyVrhnikaLoška komunala, d. d.ConcessionŠkofja LokaMestni plinovodi, d. o. o.ConcessionOrmož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebo Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	ini, d. o. o. C	d. o. o. Concession	Novo mesto
Komunalno podjetje Velenje, d. o. o.Public companyVelenje, ŠoštanjKomunalno podjetje Vrhnika, d. d.Public companyVrhnikaLoška komunala, d. d.ConcessionŠkofja LokaMestni plinovodi, d. o. o.ConcessionOrmož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebo Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	э. о. Р [.]	. Public company	Jesenice
Komunalno podjetje Vrhnika, d. d.Public companyVrhnikaLoška komunala, d. d.ConcessionŠkofja LokaMestni plinovodi, d. o. o.ConcessionOrmož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebo Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	je Komunala Slovenj Gradec, d. o. o. P	omunala Slovenj Gradec, d. o. o. Public company	Slovenj Gradec
Loška komunala, d. d.ConcessionŠkofja LokaMestni plinovodi, d. o. o.ConcessionOrmož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebo Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	podjetje Velenje, d. o. o. P	jetje Velenje, d. o. o. Public company	Velenje, Šoštanj
Mestni plinovodi, d. o. o. Concession Ormož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebo Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	podjetje Vrhnika, d. d. P [.]	jetje Vrhnika, d. d. Public company	Vrhnika
Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi	nala, d. d. C	a, d. d. Concession	Škofja Loka
	vodi, d. o. o. C	ii, d. o. o. Concession	Ormož, Lendava, Ljutomer, Murska Sobota, Polzela, Prebold, Radenci, Zreče, Žalec, Hrastnik, Središče ob Dravi
Concession, investments of Petrol Energetika, d. o. o. public capital in the activities of Dravograd, Prevalje, Mežica, Ravne na Koroškem the private-law entities	jetika, d. o. o. pi	ka, d. o. o. public capital in the activities	of – Dravograd, Prevalje, Mežica, Ravne na Koroškem
Petrol, d. d. Concession Domžale, Trzin, Mengeš	С	Concession	Domžale, Trzin, Mengeš
Patrol Plin dia a	l. o. o. C	o. Concession	Beltinci, Komenda, Odranci, Radovljica, Rogatec, Sežana, Slovenska Bistrica, Turnišče, Tržič, Vodice, Slovenske Konjice
Plinarna Maribor, d. o. o. Concession Hoče - Slivnica, Maribor, Ruše, Šentilj	ribor, d. o. o. C	r, d. o. o. Concession	Hoče - Slivnica, Maribor, Ruše, Šentilj
Plinstal, d. d. Concession Žirovnica	. C	Concession	Žirovnica
RP investicije Concession Šenčur	je C	Concession	Šenčur

Source: Energy Agency

In 2009 there were 54 local communities that had this service regulated with a concession contract between the concessionaire and the local community. In 16 local communities had public companies providing this service, and in one local communities this service was carried out in a different way. In 71 local communities, this service was carried out by 18 system operators of the distribution network. In another 13 local communities the concessions for the provision of the service of the gas distribution system operator were awarded; however, the gas distribution was not carried out, as the distribution networks had not vet been constructed.

Table 24: Local communities in which the services of operating a distribution network was not yet carried out in 2009, while the concession were awarded

Company	Form of organisation	Municipalities in which the service is not yet carried out
Istrabenz plini, d. o. o.	Concession	Litija, Koper
Petrol Plin, d. o. o.	Concession	Cerklje na Gorenjskem, Gornja Radgona,
Plinarna Maribor, d. o. o.	Concession	Miklavž na Dravskem polju, Rače - Fram, Selnica ob Dravi, Starše
Petrol Energetika, d. o. o.	Concession	Muta
Mestni plinovodi, d. o.o .	Concession	Križevci, Veržej, Razkrižje
Adriaplin, d. o. o.	Concession	Gorje

Source: Energy Agency

In Slovenia the distribution of natural gas is carried out by the companies that have fewer than 100,000 customers connected to a distribution network. For this reason the legal unbundling of services is not required, 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 2009 Slovenia had a total of 3938 kilometres of gas-distribution pipelines with different pressure levels. The majority, as much as 53 percent of these lines, operate at a pressure between 100 millibars and 4 bars, and only one percent of the lines have a pressure of over 4 bars (Table 25). The distribution lines, together with the corresponding facilities, are mainly owned by the system operators.

Table 25: Distribution lines

Length of the network with pressure level between 4 and 16 bar	33 km
Length of the network with pressure level between 100 mbars and 4 bars	2,103 km
Length of the network with pressure level up to 100 mbars	1,802 km
Number of metering stations	26
Number of metering-regulation station	144
	Course: Energy Ageney

Source: Energy Agency

The reliable and safe operation of a gas distribution network is only possible if regular and extraordinary maintenance work is carried out. The regular maintenance work was, on average, completed in 7 hours, only in some cases did it take a few days. Unexpected interruptions were mainly caused by damage to the networks. There was a total of 132 unexpected supply interruptions, the total duration of which was 243 hours.

5.2.1.2.1 The customers connected to the distribution network

In 2009 a total of 127,348 gas customers, in 71 local communities, were connected to all the distribution networks. The distribution system operators distributed 293 million Sm^3 of natural gas to these customers.

As a result of the development of the distribution networks, the number of new customers of natural gas has increased. The customers wishing to connect to a gas distribution network have to obtain the connection approval necessary for making a physical connection to a network. In 2009 the distribution system operators connected 3086 new customers.



Figure 55: Numbers of new customers on the distribution networks for 2005–2009

On average, the distribution system operators issue a connection approval in 24 days after the receipt of an application. At one system operator, the procedure, on average, lasted 74 days, which was the longest period for issuing the connection approvals. To make a physical connection to a network took 8 days on average.

In 2009 the use-of-network prices charged to the customers connected to a gas distribution network were regulated.

The customers connected to the distribution networks use natural gas mainly for cooking, preparing hot water and heating. As much as 97 percent of customers use up to 4500 Sm³ of natural gas per year; however, these customers consume only 36 percent of the total consumption of the customers connected to a distribution network.

5.2.1.2.2 The business operations of the distribution system operators

In 2009 nine distribution companies had a total net profit of 3034 million euros, the remaining nine companies had a total net loss amounting to 1822 million euros.

5.2.1.2.3 The ownership structure of the distribution system operators and the network ownership

The companies for gas distribution are mainly owned by the local communities and by domestic legal entities. Two system operators are without a majority owner, as they are owned by several individuals.

Distribution networks are mostly owned by the system operators. The system operators that are not the owners of the distribution networks and had managed assets in line with the Slovenian Accounting Standard 35, have to, by the beginning of 2010, settle the contracts with the owners of the networks.

Table 26: Ownership structure of the companies for gas distribution

Ownership structure of the companies for gas distribution	Number of companies
Majority ownership of one or more municipalities	7
Majority ownership of a domestic legal entity	7
Majority ownership of a foreign legal entity	2
No majority owners	2
Total	18

Source: Energy Agency

5.2.1.2.4 The investments in the distribution networks

The programmes of investments in the distribution networks are, in most cases, harmonised between the system operators and the local authorities, and most often the schedule of investments is already determined in the concession contract or another act of a local community.

In 2009 a total of 168 kilometres of the new gas pipelines of the distribution networks were constructed, which was 32 percent less than in 2008.

Figure 56: Length of new distribution networks in 2005–2009



5.2.1.3 The network charges for the gas transmission and distribution networks

The price for the use of networks consists of the network charge and the supplement, and it is used for financing the system operators and covering other costs. The network charges for the transmission and distribution networks are set by the system operators, with an approval from the Energy Agency, while the supplement is set by the government.

As an integral part of the price for the use of networks, the network charge is used for financing the costs of the system operators and the costs of ancillary services.

5.2.1.3.1 The network charge for the gas transmission network

The network charge for the transmission network consists of the following:

- the price for the transmission of natural gas set with respect to the leased annual capacity,
- the price for a company's own use,
- the price for making measurements..

The network charge for the gas transmission network 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 and implements this act in the Official Gazette of the Republic in Slovenia after obtaining approval from the Energy Agency.

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 Network. The methodologies were adopted by the Energy Agency after obtaining approval from the government.

The methodology for setting the network charge determine the mode, conditions and method of setting the network charge, and the criteria for establishing the eligible costs of the system operator. The method of price capping is used when setting the network charge. The regulatory period is determined as a period of one year. Return on the new network's investments equals the return on the current assets. When establishing eligible costs in 2009, operating expenses, the costs for the gas losses in a network, the amortisation costs, and the system operator's return on assets were considered.

The network charge for the transmission network is, for individual customer groups, unified for the whole territory of Slovenia, as the postage-stamp method is used for charging for the network charge. The charge depends on the leased contractual transmission capacity, the transported amount of natural gas and the type of metering device used.

Movements of the prices for the gas transmission by customer group from 2006–2009 are shown by the diagram in Figure 57.

......



Figure 57: Movements of the prices for the gas transmission by customer group for 2006–2009

The prices for the transmission of natural gas across the transmission network were different, depending on the leased daily capacity at the annual level (Sm³/day/year). In 2009 the same prices for gas transmission as in 2008 were used, more precisely – the prices used from 1 August 2008. The prices reflect the eligible costs of the system operator, though they were not set on the basis of benchmarking foreign system operators' prices.

On the bills for the customers connected to the gas transmission network, the network charge is disclosed separately from the other price items.

5.2.1.3.2 The network charge for the gas distribution networks

The network charge for a distribution network consists of the following elements:

- the price for the distribution of natural gas,
- the price for making measurements.

The network charges for the distribution networks also include the costs related to the use of the transmission network.

The system operator set the network charges for the gas distribution networks with the Act Setting the Network Charge for the Gas Distribution Network relating to an individual local community. The basis for the setting of a network charge is provided by 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 methodologies were adopted by the Energy Agency, after obtaining approval from the government.

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. The regulatory period is determined as a period of one year. The method of price capping is used when setting the network charge, which means that the network charges for the distribution networks are unified for individual areas that the local authorities determine as the area in which the optional local public service of operating the distribution network is provided. Individual customer groups are defined in line with the methodology for charging for the network charge. The distribution system operators may join the customer groups and propose a unified price for several customer groups.

In 2009 a total of 11 acts setting the network charges for the gas distribution networks were implemented in 37 local communities. In addition, at the end of 2008, the Energy Agency issued approval to an amended system operator's act on determine the network charge for the distribution network, taking effect on 1 January 2009 and applying to 17 local communities. In 2009 the Energy Agency gave approval to 10 acts of 5 system operators for a total of 20 local communities.

The publishing of an act setting the network charge provides the basis for disclosing the use-ofnetwork price separately from the price for natural gas on the customers' bills. The Energy Agency has established that, by the end of 2009, only one gas distribution system operator did not provide for a separate disclosure of the use-of-network price on the bills issued to its customers.

The network charges for the gas distribution networks are not the same for all typical customers in different distribution areas, as their prices reflect different costs of the system operators in individual areas.

Figure 58 shows different average prices for the use of the network in average prices for natural gas in 2009 for 5 large suppliers which are also the system operators of the distribution networks.





5.2.1.4 The balancing

To ensure a reliable operation of the transmission network, the transmission system operator has to receive natural gas at the entry point and deliver it at the exit point. The discrepancy between expected receipts and deliveries of natural gas that occur within allowed tolerance amounts, is balanced by the system operator by the intra-technical transmission capacity.

The balancing involves the transmission system operator and the balance-responsible parties. In 2009 two balance groups operated in Slovenia on the basis of the Ordinance on Natural-Gas Market Operations. The relations between a balance- responsible party and the transmission system operator are determined with the Ordinance on Natural-Gas Market Operations, while the rules for the cooperation between the balance-responsible parties and the balance-group members are determined with a mutual agreement. Establishing, charging for and balancing of the above imbalance amounts, as well as ensuring the required amounts of natural gas for the transmission system operator's own use were, in 2009, carried out in line with the Act Determining the Methodology for Charging for the Network Charge for the Gas Transmission Network.

The amounts of gas required for balancing imbalance amounts, amounted to 3 percent of the Slovenian annual gas consumption in 2009.



Figure 59: Amounts of natural gas required for balancing imbalance amounts

The ground for settlement of imbalances is the basic price for natural gas on the transmission network (Figure 60), which was in 2009 on average 0.2688 euro/Sm³.





The transmission system operator charged the users of the transmission network for the amounts of gas required for the transmission system operator's own use (fuel for the compressors, technological gas for heating) on the basis of the monthly deliveries at the regulated price (PB).

5.2.1.5 The secondary market of transmission capacities

The secondary market of transmission capacities operates in line with the Rules for the Procedures of Implementing Regulation (EC) No 1775/2005 on the conditions for access to the natural-gas transmission network.

In the secondary market, the transmission capacities are allocated to all the interested users. The users of the gas transmission network can trade, among themselves, with amounts of leased and used transmission capacities.

In 2009, 18 companies submitted 29 offers of free capacities, but only 15 bids were made by 10 interested users. A total of 2.3 million Sm³ of natural gas/per day was submitted, which exceeded the received bids for 11 percent. The number of the contracts on subleasing was 11. By that, 81 percent of total amount of demands were covered.

5.2.2 The unbundling of services

In Slovenia the mandatory national public service of the gas transmission-system operation is carried out by one provider, while the optional local public service of the gas distribution-system operation is carried out by 18 providers.

The gas transmission system operator has carried out its service within an independent legal entity since 2005, and it is 100-percent owned by a domestic legal entity supplying natural gas to Slovenia. The gas transmission system operator owns the assets required for the provision of this service. In 2009 we did not notice any special effects of legal unbundling on the investments and supply reliability in comparison with the previous years. The investments in the gas transmission network are described, in detail, in section 5.2.1.1.4.

None of the 18 gas distribution system operators were subject to legal unbundling, as the EA does not require service unbundling within those distribution companies that have fewer than 100,000 customers connected to a distribution network. Table 26 in Section 5.2.1.2.3 shows the ownership structure of the gas distribution system operators. In 2009 all the distribution system operators also carried out other energy-related and market-based activities, and for this reason they maintained separate accounts for each activity, in line with Article 38 of the EA. The providers of energy-related services relating to the supply of electricity, natural gas or heat are, in line with Article 37 of the EA, obliged to have their accounts audited, and to make them publicly available. Audited annual reports have to include the rules used for the production of separate accounts by energy-related activity, for which the operators had previously obtained approval from the Energy Agency. The use of the listed rules for producing separate accounts has to be examined by an auditor.

5.2.3 The allocation of cross-border the transmission capacities

5.2.3.1 The cross-border transmission capacities of the network

The cross-border transmission capacities are used for the provision of a reliable supply with natural gas in Slovenia and for the transit of natural gas. In 2009 the utilisation of the metering-regulation station in Ceršak was lower. Also the average utilisation of the metering-regulation station in Šempeter changed. However, in the first part of 2009, the utilisation was a little bit higher than in 2009. With respect to the metering-regulation station in Rogatec, decreased utilization was noticed.

The lower utilisation of the capacity of the transmission network in 2009 was a result of the operating conditions caused by dispute between Russia and Ukraine. In the second half of 2009, the utilisation of the capacity of the transmission network was higher due to increased transmission of natural gas for the production of electricity. In 2009 the average annual utilisation of the capacity of the most important border- entry metering-regulation station, Ceršak, was 68 percent and the average monthly utilisation of the entry-exit station Šempeter was 31 percent. Figures 61 to 63 show the highest daily utilisation and the average monthly utilisation of individual border metering-regulation stations.



Figure 61: Maximum daily and average monthly capacity utilisation of the metering-regulation station Ceršak

Source: Geoplin plinovodi, Energy Agency

.....

Figure 62: Maximum daily and average monthly capacity utilisation of the metering-regulation station Šempeter





5.2.3.2 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 the transmission system operator considers 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.

The transmission system operator sets the maximum technical capacity of the gas network on the basis of the model for calculating the gas network capacity by way of considering possible combinations of the supply and consumption of natural gas, and the statistical model of forecasting the gas consumption of domestic customers.

The following two models for simulating the gas consumption are used:

- the online model that can, on the basis of current conditions in the gas network, forecast the conditions for the following 48 hours;
- the offline model used for assessing the conditions and the transitional features, depending on the expected data and expected expansions, or changes, of the gas network.

The forecasting of the daily gas consumption is based on the model of forecasting by way of autolearning, 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 customers. The technical capacity of the gas network, therefore, depends on the operation of the system and also on the current distribution of the consumption points for domestic consumption.

5.2.3.3 The allocation of the transmission capacities of the network

The gas transmission system operator allocates the transmission capacities in line with the regulations regulating the general conditions for the supply and consumption of natural gas from the transmission network. With respect to managing transmission capacities, the system operator also started to use the Rules for the Procedure of Implementing Regulation (EC) No 1775/2005 on the conditions for access to the natural-gas transmission networks.

Transmission capacities were allocated to all the interested users of the transmission network. If the transmission system operator had received requests for the capacities in an amount larger than allowed by the technical network restrictions, it would have used the allocating mechanism based on the pro-rata principle. In 2009 the transmission system operator had 135 uninterruptible access contracts with the network users. The users of the gas transmission network used the transmission capacities for the supply of natural gas to Slovenia, and for the transit between two transmission networks. Transmission capacities were allocated in line with contracts for long-term network access. In the primary market of the transmission capacities, 16 contracts for short-term network access were concluded between the system operator and the network users.

5.2.4 The congestion-management mechanisms

Congestion on the transmission network can be contractual or physical. Contractual congestion occurs when the network users wish to make contracts for transmitting amounts of gas larger than allowed by the network. On the other hand, physical congestion occurs when the actual supply requires all of the technical network's capacities.

The most congested part of the Slovenian transmission network was still in the direction of Ceršak – pipelines M1 and M2 – where the supply of natural gas from the east (Russian and Austrian supply sources) is carried out.

At this point, the congestion was very close to 100-percent utilisation, indicating physical congestion. The most critical month was December, when the average daily utilisation of capacity was almost 98.3 percent. Apart from average annual capacity utilisation, in comparison with 2008, the physical congestion in the last quarter of the year indicates the need for new capacities which will prevent congestions and increase safety and reliability of operating.

In 2009 the contractual congestion occurred at the entry point in Ceršak, where the technical capacities of the network were exceeded by 10 percent.

To manage contractual congestion, two mechanisms, in addition to the existing ones, are available in Slovenia. The first mechanism is the primary market for short-term interruptible capacities. In the case of a contractual congestion, this mechanism allows the selling of the leased and unused transmission capacities for short periods. The other mechanism is the secondary market (Section 5.2.1.5) allowing the users of the gas transmission network to trade, among themselves, with small amounts of leased and unused transmission capacities.

5.3 The market-based activities and competition

The liberalization of the gas markets in Slovenia and other EU members allows customers to choose their suppliers, who operate in a competitive market. In 2009 there were 19 suppliers selling natural gas to 127,509 end customers. The number of switches increased by almost two times, but the proportion of customers who switched supplier, is still below 0.1 percent.

5.3.1 The sources of natural gas and the wholesale market

Slovenia depends almost entirely on natural gas supplied from abroad, as it has only about one percent of its own gas sources. In 2009 most of it, as much as 48 percent was supplied from Russia, 29 percent from Algeria, 17 percent from Austria and 5 percent from Italy.

The sources changed due to dispute between Russia and Ukraine in January. The reliability of supply was not at risk. However, the import from Russia decreased for 5 percent, and other hand the import from other countries increased on the basis of short-term contracts..

Due to decreased demand, the suppliers imported 1017 million Sm³ of natural gas, which was 6 percent less than the year before.

The largest importer, trader and supplier of natural gas was Geoplin, d. o. o. In 2009 its share of the total imports increased by half percent, and was 95.1 percent. The share of the other two suppliers, Adriaplin, d. o. o, and Petrol Plin, d. o. o., was less than 5 percent. Adriaplin, d. o. o, began to operate in the Slovenian market on 1 January 2008. Petrol Plin, d. o. o., supplied natural gas to its customers through the gas suppliers in Italy and Croatia.

Figure 64: Sources of natural gas



Table 27: Imported gas, for domestic consumption, for 2007–2009 in Sm³

Supplier	2007	2008	2009
Geoplin, d. o. o.	1,117,226,504	1,018,856,140	967,668,943
Adriaplin, d. o. o.		54,337,731	46,854,189
Petrol Plin, d. o. o.	2,801,091	3,430,474	3,371,134
Total	1,120,027,595	1,076,624,345	1,017,894,266

Source: Companies' data, Energy Agency

The importers were buying natural gas mostly on the basis of long-term contracts; only one percent of natural gas was imported on the basis of short-term contracts.

The participants of the wholesale market are the traders who supply natural gas to other suppliers. In 2009 five suppliers of natural gas operated in the Slovenian wholesale market.

The largest share in the wholesale market had Geoplin, d. o. o., by 80.4 percent. Table 28 shows the market shares and the HHIs for the wholesale market.

Table 28: Market shares and the HHIs relating to the wholesale gas market

Wholesale market	Share	нні
Enos, d. o. o.	0.7%	0
Geocom, d. o. o.	0.7%	0
Geoplin, d. o. o.	80.4%	6,461
Istrabenz plini, d. o. o.	0.1%	0
Petrol Energetika, d. o. o.	18.1%	329
Total	100.0%	6,791

Source: Companies' data, Energy Agency

A new supplier entered the wholesale gas market; however, the conditions in the market did not change in comparison with the previous year.

There is no organised gas market in Slovenia, where the demand for and the supply of certain standard products would meet. The sales of natural gas to other gas suppliers were carried out only on the basis of long-term contracts. No gas-release mechanisms were introduced.

5.3.2 The supply and the retail market

The participants in the Slovenian retail market are the suppliers and end customers of natural gas. The new supplier, who at the same time provides public service of the system operator of the distribution network, entered the market.

The shares of the suppliers did not change. Geoplin, d. o. o., had a 70-percent share of the Slovenian retail market, while the suppliers to the customers on the distribution networks had a total of 30 percent of the market.

The retail market in Slovenia consists of the end customers connected to the gas transmission network, and the end customers connected to the gas distribution networks.

Table 29 shows the market shares and HHIs.

Table 29: Market shares and the HHIs relating to the retail market

Supplier	Share	нні
Geoplin, d.o.o.	69.56%	4,839
Energetika Ljubljana, d.o.o.	6.95%	48
Adriaplin, d.o.o.	4.61%	21
Plinarna Maribor, d.o.o.	5.41%	29
Energetika Celje, d.o.o.	2.63%	7
Others	10.90%	119
Total	100.0%	5,063

Source: Companies' data, Energy Agency

5.3.2.1 The customers connected to the transmission network

In 2009 a total of 161 large industrial customers consuming 725 million Sm³ of natural gas were connected to the transmission network. Geoplin, d. o. o., had more than 90-percent share of the supply to the customers connected to the transmission network.

As the supply continued to be reliable and there was no abuse of the dominant position of Geoplin, d. o. o., no measures for the promotion of competition, such as a programme for releasing long-term supply contracts, were taken.

The review of the structure of gas supply to the end customers connected to the transmission network by purpose of use is shown in Figure 65.

Figure 65: Structure of gas supply to the end customers connected to the transmission network by purpose of use



5.3.2.2 The customers connected to the distribution networks

There were 18 distribution companies operated in the Slovenian gas market (listed in Table 23, section 5.2.1.2). Household and non-household customers are connected to the distribution network.

In 2008 there were 124,262 customers that were supplied with 300 million Sm³ of natural gas and in 2009 the number of customers was 127,348, and they were supplied with 293 million Sm³ of natural gas. Natural gas was supplied by public companies for gas distribution and by private-law entities.

The change of consumption in total amount of 8 million Sm³ of natural gas, or 2.7 percent, is related to the Russian-Ukrainian dispute at the beginning of the year and the current global economic crisis.

With respect to the total number of customers, households' amount remained the same, that is more than 90 percent. Their consumption accounts little less than 40 percent of total consumption of the costumers connected to the distribution networks.

Figure 66: Ratio between the number of customers on the distribution networks and their consumption



Figure 67 shows the movements of gas consumption on the distribution networks by month.





Source: Companies' data, Energy Agency

The activities of the market for natural gas are reflected also by the number of customers that switched supplier. In comparison with 2008, when only 69 out of 124,262 customers connected to the gas distribution networks switched supplier, in 2009 there were 126 switches (a total number of customers was 127,509).

The expected annual consumption of the customers that changed supplier was in the previous year 5.6 million Sm^3 , and in 2009 almost twice as much, 9.5 million Sm^3 .





Source: Companies' data, Energy Agency

5.3.2.3 The market shares of the retail market

The smaller part of the activities on the retail market is related to the supply of the final customers on the transmission network and the major part is the supply of the final customers on the distribution network.

In 2009 the retail market had 2 suppliers delivering natural gas to 161 (last year 162) end customers connected to the transmission network, and 18 suppliers delivering gas to 127,348 (last year 124,262) end customers.

The market shares of individual suppliers in the retail market differ with respect to the amount of annual consumption of their suppliers. When presenting the market shares of individual suppliers, the customers are classified in the following groups with respect to the amount of their annual consumption:

- the customers with an annual consumption of more than a million Sm^3 of natural gas.
- the customers with an annual consumption of between 4500 and a million Sm³ of natural gas,
- the customers with an annual consumption of less than 4500 Sm³ of natural gas;

or they are classified as non-household and household customers:

- large non-household customers (large industrial customers, very large industrial customers),
- small and medium-sized non-household customers (commercial customers small and medium-sized enterprises, small industrial customers, medium-sized industrial customers),
- household customers (small household customers D₁, medium-sized household customers D_2 , large household customers – D_3).

The group with consumption more than a million Sm^3 had the lowest number of customers. There were 106 such customers, which meant 10 percent less than in 2008. Their total consumption was 751 million Sm³ of natural gas or 74 percent of total consumption, a percent more than in 2009, or 3 million Sm³ of natural gas more.

Geoplin, d. o. o., had the largest market share in the group of large household customers or 92.8-percent share.

Table 30 shows the ratio in the retail market. The HHIs show that Geoplin, d. o. o. had a dominant. position in this customer group.

Table 30: HHIs for the largest suppliers to the large non-household customers

Company	Share	ННІ
Geoplin, d.o.o.	92.8%	8,606
Plinarna Maribor, d.o.o.	3.1%	10
Petrol Energetika, d.o.o.	2.9%	9
Adriaplin, d.o.o.	1.2%	1
Others	0.0%	0
Total	100.0%	8,625

Source: Companies' data, Energy Agency

The group of customer with an annual consumption of between 4500 and a million Sm³ of natural gas, included 4477 customers, whose consumption was 162,447,734 million Sm³ or 15.9 percent of the total consumption (last year 4143 customers, with consumption of 166 million Sm³). Energetika Ljubljana, d. o. o, had the largest market share in this customer group.

Geoplin, d. o. o., had the largest market share in the group of large non-household customers. Geoplin supplied 33.6 percent of these customers.

The HHIs show that no supplier has a dominant position in this customer group.

The customers with an annual consumption of less than 4500 Sm³ of gas include the households, small industrial customers and commercial customers. The number of these customers is similar as in 2008 and is over 120,000, their total consumption in 2009 was 105 million Sm³ of gas or 10.3 percent of the total gas consumption.

The situation in this part of the retail market is shown in Table 32.

Energetika Ljubljana, d. o. o., has the largest market share – 39 percent.

The HHIs show that Energetika Ljubljana, d. o. o., has a partly dominant position in this customer group (as in 2008).

Table 31: HHIs for the largest suppliers to the small and medium-sized non-household customers

Company	Share	нні
Geoplin, d.o.o.	33.6%	1,126
Energetika Ljubljana, d.o.o.	12.0%	143
Adriaplin, d.o.o.	11.9%	141
Plinarna Maribor, d.o.o.	9.4%	89
Energetika Celje, d.o.o.	9.3%	86
Others	23.9%	573
Total	100%	2,158

Source: Companies' data, Energy Agency

Table 32: HHIs for the largest suppliers to the household customers

Company	Share	нні
Energetika Ljubljana, d.o.o.	39.0%	1,521
Plinarna Maribor, d.o.o.	11.5%	133
Adriaplin, d.o.o.	10.9%	120
Domplan, d.o.o.	9.7%	94
Mestni plinovodi, d.o.o.	4.7%	22
Others	24.1%	582
Total	100.0%	2,472

Source: Companies' data, Energy Agency

5.3.2.4 The prices for natural gas in Slovenia

The final price for natural gas for the customers connected to the transmission network consists of the regulated fraction for the use-of-network price, the market-based fraction for natural gas, and the taxes.

By selecting their suppliers, the customers can influence only one fraction of the final price, i.e., the price for natural gas that the suppliers set on the market-based principle. The remaining fractions of the final price for natural gas are regulated, being set by the Energy Agency (the network charge) and the government (the supplements to the network charge).

Table 33: Standard customers groups of industrial customers

Consu		Consumption
Group	from	to
I ₁	-	26,435 Sm ³
I ₂	26,435 Sm ³	264,349 Sm ³
l ₃	264,349 Sm ³	2,643,489 Sm ³
I ₄	2,643,489 Sm ³	26,434,886 Sm ³
I ₅	26,434,886 Sm ³	105,739,542 Sm ³

Source: Statistical Office of the Republic of Slovenia

The year 2009 was characterised by continued decrease in the gas prices for all standard groups of customers in Slovenia.

Industrial customers of natural gas have been classified in following standard customer groups, having been defined with respect to the interval of an annual consumption.



Figure 69: Final gas prices for industrial customers including VAT and other taxes

pe trends of the gas prices by groups of the industrial customers of patural gas

......

Figure 69 shows the trends of the gas prices by groups of the industrial customers of natural gas for the period starting in the middle of 2008 and finishing at the end of 2009. A decrease in the prices for all groups is noted.

In the beginning of 2009 the prices of natural gas decreased, in comparison with 2008, by 7 percent, and from the first to the second part of the year were decreased by 16 percent. An average price of natural gas for the industrial customers - I_1 - was 0.70 euro/Sm³, for the group I_2 was 0.67 euro/Sm³ and for I_3 0.52 euro/Sm³.

Figure 70: Final gas prices including VAT and other taxes for typical industrial customers I₃ in Slovenia and some other EU countries



Source: Eurostat, Energy Agency

EUR/Sm³

Figure 70 shows final gas prices in Slovenia and some other EU countries for industrial customers I_3 with an annual consumption between 264,349 and 2,643,489 Sm³ of gas in the second part of 2008, and in 2009. The average gas price in EU countries was 0.43 euro/Sm³ of gas and in Slovenia was higher, namely 0.52 euro/Sm³ of gas. The highest average price had Denmark - 0.72 euro/Sm³ of gas.

The new standard customer groups of typical household customers using natural gas were also formed in line with the new methodology used by Eurostat and the Statistical Office of the Republic of Slovenia. The prices relating to the above group were calculated and presented in line with this methodology.

Table 34: Standard customers groups of household customers

Group		Consumption	
	from	to	
D ₁	-	529 Sm ³	
D ₂	529 Sm ³	5,287 Sm ³	
D ₃	5,287 Sm ³	-	

Source: Statistical Office of the Republic of Slovenia

Figure 71: Final gas prices for typical household customers including VAT and other taxes in Slovenia for 2nd half of 2008 and 2009



Source: Statistical Office of the Republic of Slovenia SURS, Energy Agency

The figure shows the movements of the prices for typical household customers in all the groups. The prices were lower in the first half of 2009 than in the second half of 2008. They decreased a little at the end of 2009 for all the customer groups. The average gas price for household customers was during this period the lowest for the group D_3 , in the amount of 0.64 euro/Sm³. The average price for all groups during this period was 0.72 euro/Sm³.





In 2009 the final gas prices for typical household customers D_2 with an annual consumption between 529 Sm³ and 5287 Sm³ varied. The average price of gas during this period was 0.58 euro/Sm³ of gas. In comparison with 2008 the price decreased by 7 percent. These prices for this group showed a general trend of decreasing in all observed EU countries. In 2009 were lower than in the second half of 2008, except in Croatia, where were higher. In Poland the prices decreased in the first half of 2009, and than went up in the second half of 2009.

5.3.3 The measures taken to prevent any abuse of dominant position and to ensure competition

In 2009 the Competition Protection Office initiated no proceedings with respect to an assessment of restrictive practice in the gas market.

5.3.4 The deciding on disputes and appeals

In 2009 the Energy Agency received 4 requests to decide in the area of natural gas. The requests related to the right to access the network, the charged prices and the infringements of the general conditions for the supply and consumption. In all cases the requests were dismissed.



Natural gas

Report on the Energy Sector in Slovenia for 2009



6.1 The reliability of the electricity supply

The reliability of the electricity supply depends on two parameters – the sufficiency of production sources and the security of the network. The sufficiency of production sources is the ability of all the available production sources to meet the demand for electricity. The ability of a network to allow the electricity to be supplied from the producers to the customers is called the network security. As errors occur in the operations of the production facilities and network elements, causing interruptions to the operation, it is also necessary to safeguard the supply in such cases. For this reason, a sufficient reserve of the production sources has to be provided for; this reserve can be found outside the domestic electricity system, while the domestic network has to fulfil certain security measures, the most commonly used being the n-1 criterion. This criterion determines that in the case of an outage of any transmission element (power line, transformer), the supply to any network user should not be interrupted. In Slovenia the n-1 criterion is used for the transmission network, and for higher levels of the distribution networks, while, for economic reasons, it is not used for the lower levels of the distribution networks.

6.1.1 The sufficiency of the production

Figures 73 and 74 show how electricity demand was covered in the period 1998–2009. In the period 1998–2002 Slovenia had large surpluses of electricity, but from 2003 to 2008 it has had a deficit of electricity that has increased every year. The global economic crisis in 2009 led to a lower consumption of electricity, thus Slovenia had surpluses of electricity this year. The production did not contribute anything, as no new production facilities have not been connected to the transmission network.

On the distribution network, the capacities were increased by 7 percent, mostly due to solar power plants. In comparison with 2008, the production increased, but was mainly caused by favourable hydrological conditions, due to which the Slovenian hydroelectric power plants increased their production for almost 22 percent, with the same net capacity.

Figure 73: Production and consumption of electricity on the Slovenian transmission network for 1998–2009 (period 1998–2002 includes the total production of the Krško NPP)







Figure 75: Structure of electricity production on the Slovenian transmission network for 1998–2009 (period 1998–2002 includes the total production of the Krško NPP)



94

...

.....

The conditions relating to the provision of the required power, or production reserves, are similar to the conditions relating to fulfilling the energy demand, and can be described as the ratio between the available power of the power plants and the peak power of consumption. Since the production in 2009 has remained almost the same, the conditions were better due to lower peak-power consumption. Figure 76 shows the installed capacity of the production facilities, the power available to the Slovenian market and the peak consumption on the transmission network for 1998–2009. The difference between the installed capacity of the production facilities and the power available to the Slovenian market is the same as 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.

The ratio between the available power of all the production facilities and the peak-power consumption was 1.49, and the ratio between the available power of the production facilities connected to the transmission network and the peak-power consumption was 1.31.





6.1.2 The planned investments in the production facilities

In 2008 the TSO for the electricity network produced a development plan for the transmission network in Slovenia for 2009–2018. This plan includes expected trends of electricity consumption from the transmission network and possible scenarios for covering the demand with the production facilities. The plan also lists expected changes by production unit connected to the transmission network.

Table 35: Changes to the production units for 2009-2010

	Installed power (MW)	Expected year of completion
Hydroelectric power plants		
Medvode (renovation)	20	2009
PSPP Avče	180	2009
Blanca	43	2010
Krško	40	2013
PSPP Kozjak	440	2014
Suhadol	41	2014
Učja	26	2015
Moste 2,3	52	2016
Trbovlje	33	2016
Brežice	42	2016
Mokrice	31	2017
Renke	34	2018
Wind power plants		
Volovja reber	50	2011
Dolenja vas	100	2012
Senožeška Brda	100	2014
Selivec - Vremščica	150	2015
Thermoelectric power plants		
TEŠ GPP 1	42	2009
TEŠ GPP 2	42	2010
TET GBs I + II	-58	2010
TE-TOL block II	-29	2011
TEŠ blocks I + II + III	-119	2013
TEŠ block IV	-248	2013
TET CGS block III	291	2013
CHP Vevče (TEB)	25	2013
TE-TOL block IV CGS	144	2013
CGS Koper	234	2013
TEŠ block VI	540	2015
TEB GPP 4×50	200	2015
TET block II	-110	2016
TE-TOL block V CGS 2	72	2017

Source: Eles

Table 35 shows the changes to be made by the Slovenian electricity producers as expected in the development plan for the transmission network. The positive power values indicate new production facilities or a renovation of the existing facility, where an increase in the capacity is planned. The negative values indicate closures of the concerned units.

Reliability of supply

6.1.3 The security of the network operation

The TSO managed to successfully balance the production and demand with regard to electricity. The total amount of unsupplied electricity was 47.37 MWh, which was almost five times as much as in 2008, when the total amount was 9.48 MWh. Snow storms on 27 and 28 January caused as much as 59.6 percent of all the unsupplied electricity. Another important factor was an explosion of a current transformer in the distribution-transformer station Kleče on 15 March, which was the cause of 16.1 percent of the unsupplied electricity. The remaining 25 percent of the unsupplied electricity and errors that occurred during some activities on the network. As much as 80 percent of all the unsupplied electricity was caused by weather factors, very similar as in the previous year. The very small amount of the unsupplied electricity is caused by system operators' own errors or defects on the network.

Although the Slovenian production resources, despite the fall of consumption in 2009, were barely sufficient to meet domestic demand, the supply was never interrupted as a result of an electricity shortage.

6.2 The reliability of the natural-gas supply

In line with the EA, the gas system operators have to ensure such capacities that ensure a safe and reliable supply. The suppliers of natural gas are obliged; by the EA, to provide a reliable supply of natural gas. The suppliers of natural gas to specific customers and the gas distributors distributing gas to specific customers are obliged, by the EA, to supply gas, this being their special task, also in certain specific circumstances, stipulated by the legislation.

In 2009 the supply with natural gas to the customers on the transmission and distribution networks was not at risk in any way.

In line with the EA, the gas system operators have to carry out their activities in a way that allows a safe and reliable network operation. Such a way of network operation also allows a reliable supply of natural gas provided by the gas suppliers. In the case of exceptional circumstances affecting the provision of the transmission or distribution services, the system operators start to take emergency measures.

The suppliers to end customers, including the specific customers, supplied natural gas through the wholesale gas suppliers. Slovenia has neither its own gas sources nor its own storage facilities, with which it could increase the reliability of the gas supply. All the suppliers importing gas to Slovenia strive to increase the supply reliability by making long-term contracts and by leasing the storage facilities in Austria, Italy and in Croatia.

The suppliers also increase the reliability of the supply to end customers by making interruptible-supply contracts. These are mainly made with the boiler-room facilities or larger industrial customers that have an option to use other energy sources. Some suppliers also own gas appliances, the gas supply to which can be interrupted, so that they do not have to make special interruptible-supply contracts. However, they do try to identify the large customers willing to accept an interruptible supply.

The gas transmission system operator will, as part of its tasks relating to the provision of the security and reliability of its operation and in line with the findings relating to the physical congestion, try to release the overloaded parts of the network by making new investments. The constructions will be carried out in line with the priorities determined in the development plans that were approved of by the government. The studies of technical feasibility and economic justification of increasing the supply reliability by constructing our own storage facilities for natural gas are still in progress.

In line with its responsibilities, the Energy Agency reviewed the suppliers' report on the provision of the supply reliability received from the ministry responsible for energy. It found that the measures taken by the suppliers in 2008 had no negative effect on the operation of the naturalgas market.

7 Provision of public services and the status of customers



7.1 The provision of public services

In Slovenia the commodities and the services that are in the public interest are provided by public services organised within one of the legally recognised forms stipulated by the Public Services Act. With respect to the energy sector, the EA determined the following as the mandatory public services:

- the transmission-system operation for electricity and natural gas;
- the electricity distribution-system operation;
- the electricity-market operation.

The gas distribution-system operation, the gas storage-facility operation or the liquefied-gas terminal operation, and the gas-market operation are determined as the optional local public services. This means that these services are organised only if a local community decides to provide them to its citizens.

In 2009 the gas distribution was provided by 71 local communities. The optional services of the gas storage-facility operation or the liquefied-gas terminal operation, and the gas-market operation were not carried out.

7.2 The protection of customers

The household customers of electricity and natural gas buy energy as individuals and use it for their own domestic use. For this reason their rights are protected with the regulations regulating the energy market and also with the Consumer Protection 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. On the other hand, the customers have the following rights with respect to concluding and realising the contractual relations:

- if a customer fails to fulfil its obligations arising from the contracts on the provision of public services and commodities, the creditor shall ask the customer, in writing, to fulfil its obligations and shall set a new deadline for fulfilling these obligations that should not be shorter than 15 days;
- contractual terms and conditions include all the contract components determined by the company, especially those that are determined in a standard-form contract or the general operating conditions that are a part of this contract;
- contractual terms and conditions are binding on a customer only if the complete text of these terms and conditions is presented to the customer prior to the conclusion of the contract;
- unclear contractual provisions shall be interpreted in favour of the customer;
- companies shall not set any terms and conditions that are unfair to customers;
- companies shall sell the goods to the customers, or provide the services to them, in a way that
 is not contrary to good business practice, and under conditions ensuring the equal treatment
 of all the customers;
- companies shall clearly indicate the prices for their goods or services;
- customers are charged for their actual energy consumption recorded at the customers' metering points.

On the basis of the General Conditions for the Supply and Consumption of Electricity from the Distribution Network, a supplier has to inform a household customer, prior to signing a supply contract, about the contractual terms and conditions. In addition, a household customer has to be informed, in due time, about any intended change to the contractual terms and conditions (above all, about a price increase) and about the right to terminate the contract.

The system operators determine, in the general conditions for the supply and consumption of natural gas, also the customer-protection measures. These refer to the content of the contract between a supplier and a customer, appropriate information about the intended changes to the contract or the price data, the customer's right to switch supplier free of charge, different payment modes, and deciding on the customer's complaints.

The suppliers have to, in addition to legislation related to the general consumers protection, consider addition protection of customers, which is determined in the energy legislation. The structure and the content of the contracts for the supply of electricity or natural gas are not defined, thus the general conditions for the supply and consumption demand some elements that have to be included in the contracts and are in line with the requirements of European directives. The suppliers of electricity have to, at least once a year, informed customers about their consumption and the composition of the production resources of consumed electricity.

7.2.1 The protection of vulnerable customers

The protection of vulnerable customers is one of the most important forms of customer protection, and it is regulated by the EA. This act determines that a system operator should not stop the amount of supplied electricity or gas below the limit that is, with respect to circumstances, necessary so that the life and health of a customer, and the persons living with the customer, are not threatened. The supplier's costs arising from such a situation are covered by the revenues from the use-of-network price. The supply to vulnerable customers is the responsibility of the system operator, which also carries out the last-resort supply to the customers whose supply contracts were terminated because of the insolvency or illiquidity of the supplier. This supply has a limited duration, aimed at preventing a situation in which a customer could remain without an energy supply because of the above reasons on the supplier's part. The system operator has to inform customers about the conditions required for the provision of the above supply.

A household customer that is without the necessary financial means, so that the life and health of the customer, and the persons living with the customer, are threatened, may, with respect to the season (between 1 October to 30 April) exercise the right to maintain the energy supply, provided the customer submits to the system operator a proof of receiving a welfare allowance.

The supplier's costs arising from the situation in which the supply should not be stopped are covered by the revenues from the use-of-network price.

7.2.2 The right to appeal, or the right to legal redress, and the setting of disputes

In Slovenia the customer's right to legal redress is appropriately provided for, as the regulations determine several ways of exercising this right in the energy market.

In line with the EA, a user of an electricity or gas network has the right to appeal against the decision of a system operator relating to issuing or denying a connection approval. The Energy Agency decides on the appeal. A network user also has the right to ask the Energy Agency to decide on the user's request, previously addressed to the system operator that the operator rejected, or failed to decide on, and that relates to the network access, the charged use-of-network price, an alleged breach of the general supply conditions and the system operation, or the status of a specific customer.

In line with the general rules of civil law, the court is responsible for settling the disputes arising from the contractual relationships that are not under the authority of the Energy Agency. In Slovenia any breaches of the general rules relating to consumer protection are addressed and also appropriately sanctioned by the Market Inspectorate.

In accordance with the provisions from the General Conditions for the Supply and Consumption of Electricity from the Distribution Network, one of the key elements of a supply contract made with a customer is an agreement on the mode of dispute- settling arising from the contractual relationship.

In line with the Ordinance on Natural-Gas Market Operations, the customers also have an option to express a comment or disagreement relating to the conduct, i.e., the operation of a gas supplier. The supplier is obliged to examine the customer's comment and reply to it..

7.2.3 The right to compensation

The General Conditions for the Supply and Consumption of Electricity from the Distribution Network give a network user the right to compensation for damages, if the system operator interrupted, or stopped, the electricity supply without due cause, if a supply interruption lasted for an unreasonably long period, if the quality of the electricity does not meet the current standards or the contractually agreed value, or if another user has been causing disturbances.

7.2.4 The publication of the prices

In 2009 the electricity suppliers were publishing the electricity prices for households on their websites. These publications included prices for different products or the so-called electricity-supply packets for households.

The electricity distribution system operator was publishing the conditions and electricity prices for the last-resort supply.

The suppliers independently set the gas prices for household customers, while the use-of-network prices are charged for by the gas distribution system operators. Customers can get complete and up-to-date supply information from the gas suppliers.

7.3 The safeguarding of transparency

In the Slovenian markets for electricity and natural gas, the transparency of prices, of the relevant data, and of the conditions for the supply and consumption is provided for.

The transparency of the conditions for the supply and consumption of electricity and natural gas is provided for by the general acts of the system operators that were published in the Official Gazette of the Republic of Slovenia, and thus made available to all the market participants. In the area of electricity, the relevant document, with respect to the transmission and distribution networks, is the General Conditions for the Supply and Consumption of Electricity adopted by a system operator after obtaining a positive opinion from the Energy Agency and approval from the government. In the area of natural gas, the relevant document, with respect to the transmission network, is the General Conditions for the Supply and Consumption of Natural Gas from the Transmission Network adopted by the transmission system operator after adopting a positive opinion from the government. With respect to the gas distribution network, the relevant document is the General Conditions for the Supply and Consumption of Natural Gas from the Distribution Network adopted by the distribution system operator after obtaining approval from the local authority and from the Energy Agency. The Energy Agency is also responsible for settling disputes arising from the alleged breaches of the general supply conditions relating to electricity and natural gas.

The General Conditions for the Supply and Consumption of Natural Gas from the Distribution Network regulate, among other issues, certain mandatory elements of the access contracts relating to all the customers and of the supply contracts relating to household customers. Prior to concluding a supply contract, a supplier is obliged to inform a household customer about the contractual conditions. It is also obliged to inform a customer, in writing, about any later change to these conditions. The rest of the provisions of a contract are determined freely, and are reviewed in line with the provisions of the Code of Obligations. The settling of disputes arising from the provisions of these contracts is the responsibility of the court.

The General Conditions for the Supply and Consumption of Electricity from the Distribution Network determine that the customers have to be informed, in due time, about any intended change to the contractual conditions and about the right to terminate the contract. A supplier's responsibility relating to communicating with a customer is also a direct and timely informing of any increase in the electricity price that has to be made 30 days before the implementation of the change, at the latest. In the case of making a supply contract for a specified period, it is the supplier's responsibility to inform a customer, 30 days prior to the contract's expiry, at the latest, about the consequences of the contract's expiry.

On the basis of the Ordinance on Natural-Gas Market Operations a supplier of natural gas has to publish information about the current prices, or costs, in a transparent way, easily available to the customers. A supplier also has to inform its customers, in writing, about any change in the prices with the first bill for the gas supply issued after the implementation of the price change. With respect to information about the contractual conditions, a supplier has to publish them on its website and make them available to a customer prior to concluding a supply contract. In the case of any intended change to the contractual conditions, a supplier has to inform its customers about it in writing.

The suppliers have to, in addition to legislation related to the general consumers protection, consider addition protection of customers, which is determined in the energy legislation. The structure and the content of the contracts for the supply of electricity or natural gas are not defined, thus the general conditions for the supply and consumption demand some elements that have to be included in the contracts and are in line with the requirements of European directives. The suppliers of electricity have to, at least once a year, informed customers about their consumption and the composition of the production resources of consumed electricity.



Provision of public services and the status of customers



District heating in Slovenia is defined as a local optional public service. The distribution of heat includes the supply of heat or cold from the distribution networks, and the operation of the system operator of the distribution network. By way of distributing heat or cold, the supply with heat energy, required for the district-heating or cooling systems in the buildings of the end customers of heat energy is provided for. Prior to the start of these services, the providers have to obtain, from the Energy Agency, a licence to produce heat for the district heating or cooling if the total installed thermal power of their production units is above 1 MW, or to distribute heat.

The data presented in the sections below describes only the conditions in the area of district heating in Slovenia with respect to the licensed distributors of heat or cold and the licensed producers of heat for the district heating or cooling, whose total installed thermal power is above 1 MW.

8.1 The supply of district heating

In Slovenia, 66 of the 84 licence holders, active in 47 municipalities, were involved in heat supply in 2009. Of these companies, 48 were involved in both heat distribution for district heating and heat production for district heating of above 1 MW; 8 companies were only involved in the distribution, while the remaining 10 companies only produced heat.

With respect to district cooling in Slovenia, one system with a cooling power of the 965 kW operates in Slovenia. To generate cold, the cooling facility uses heat from the district-heating distribution system.

For the purpose of heat supply, licensed producers of heat for district heating and for the supply to industry, with the facilities' installed power of above 1 MW, produced 2989.4 GWh of heat and 831,25 GWh of electricity, or 710.8 GWh of electricity at the busbars of the cogeneration processes. The largest share of heat –1088.4 GWh, or 36.4 percent – was used for the supply to 118,410 household customers, while 1062.52 GWh or 35.5 percent of heat was used for the supply to industrial and other non-household customers. Heat losses incurred during the distribution amounted to 15.4 percent of all the heat delivered to the distribution networks. The difference between the produced and distributed heat, 447.1 GWh, was used for the producers' or distributors' industrial processes.

Non-households, i.e., industrial customers, used 222.9 GWh or 9.5 percent of all the heat in the form of industrial steam. Figure 77 shows the heat consumption by type of customers and the customer numbers.



Figure 77: Heat consumption by type of customers and the customer number

In the structure of used primary energy sources for the heat production, coal had a 54.2-percent share, natural gas had a 31.0-percent share and heating oil had a 2.7-percent share. Wood biomass and other primary renewable sources of energy had a 12.14-percent share in the structure of the energy sources.



.....

Figure 78: Structure of the primary energy sources for the production of heat for district heating

The five largest heat-distribution companies supplied 88,231 households, or 74.5 percent of all the households, distributing 82.9 percent of the heat produced for district heating. Figure 79 shows the five largest distributors of heat with respect to the amount of heat distributed to households in 2009, and the customer numbers.





The five largest distribution companies supplied heat to 55.6 percent of all non-household customers, distributing to them as much as 81.2 percent of the required heat (Figure 80).



8.2 The distribution networks

In 2009 the service of heat distribution was, in the Republic of Slovenia, carried out by 56 licence holders. The heat distribution networks were set up in 47 of the 210 Slovenian municipalities, their total length being 704.9 kilometres. The system of with a cooling power is carried out only in the Velenje City Municipality, the distribution network is 600 metres long. Figure 81 shows their locations and the sizes of the distributed amounts.



Source: Energy Agency

With respect to the temperature regime of the operations of individual networks, the networks are the warm-water networks and hot-water networks cover 97.85 percent, and steam networks cover 2.65 percent of the total distribution networks. The municipalities with the longest networks are Ljubljana (251.54 kilometres of hot-water and warm- water network) and Velenje, together with Šoštanj, (155.85 kilometres of warm- water network). Figure 82 shows the lengths of the 10 largest heat distribution networks in individual municipalities, and the numbers of connected users.

Figure 82: Length of heat distribution networks by municipality, and the numbers of connected users in 2009



8.3 The prices for heat

The average retail prices for heat from the distribution systems of district heating in individual municipalities can be compared with respect to the standard customer group of D3b households; this is a group with a connected load of 10 kW and an annual consumption of 34.9 MWh, using the heat for hot water and central heating.

The data relating to the average retail prices for heat from the distribution networks have been taken from the current price-lists of selected business entities for the production and supply of heat. The data relates to a selected number of Slovenian municipalities, whose amount of heat supplied to the households in 2009 accounted for 82.9 percent of the total supply.

Figure 83 shows the average retail prices for heat from the distribution systems relating to selected Slovenian municipalities, calculated as a weighted average of the retail prices versus the number of heat customers. It also shows the average Slovenian retail heat price, calculated as a weighted average of the prices for a selected number of towns.





8.4 The Energy Agency's activities related to district heating

With respect to heat supply, the Energy Agency performs the following tasks:

- issuing general acts for exercising the public powers relating to:
- the methodology for setting the general conditions for the supply and consumption of heat from the distribution networks;
- the methodology for the preparation of the tariff systems for the supply and consumption of heat from the distribution networks;
- giving approval to the system operation instructions for the heat distribution networks,
- deciding on the issuing and revoking of the licences for producing heat for district heating of above 1 MW and for distributing heat for district heating.

On the basis of the seventh paragraph of Article 71 of the EA, the Energy Agency keeps the records of appeals against the decisions on issuing or refusing an approval to connect to the network for the supply of heat or an energy gas. On the basis of the notifications from different municipalities, the Energy Agency established that, in 2009, there were no appeals against the decisions on issuing or refusing a connection approval made by the mayors in line with the sixth paragraph of Article 71 of the EA.



List of figures

Figure 1:	Balance of electricity production and consumption in 2009 in GWh	5
Figure 2:	Structure of monthly electricity production	6
Figure 3:	Structure of the production sources for electricity in Slovenia in 2009	6
Figure 4:	Fluctuations in electricity consumption	7
Figure 5:	Shares of electricity consumption by consumption type	7
Figure 6:	Amounts of the investments in, and reconstructions of the electricity infrastructure22	2
Figure 7:	Investments sources of the owners of the electricity distribution infrastructure22	2
Figure 8:	Investments sources of the transmission system operator	3
Figure 9:	Existing and planned high-voltage network in Slovenia	3
Figure 10:	Expected investments of the transmission and distribution companies for 2009–2018.	4
Figure 11:	SAIDI by year- 2008 and 2009 unforecasted interruption caused internally22	7
Figure 12:	Average duration of unforecasted interruptions of electricity supply per customers for 2007, 2008 or 2009 (without force-majeure interruptions and external causes)28	8
Figure 13:	Number of all complaints relating to voltage quality for 2007–2009 by company	9
Figure 14:	Total share of justifiable complaints relating to voltage quality for 2007–2009	9
Figure 15:	Average values of the elements included in the use-of-network price by voltage level 3	1
Figure 16:	Shares of the elements included in the final electricity price for a typical industrial customer (I_b – 50 kW, per year 50 MWh)	1
Figure 17:	Shares of the elements included in the final electricity price for a typical industrial customer (I $_{\rm e}$ – 500 kW, per year 2 GWh)	2
Figure 18:	Shares of the elements included in the final electricity price for a typical industrial customer (I_g – 4 MW, per year 24 GWh)	2
Figure 19:	Shares of the elements included in the final electricity price, and shares of the elements in the use-of-network price for a typical household customer D _c with an average consumption of 3500 kWh.	2
Figure 20:	Shares of the elements included in the final electricity price, and shares of the elements in the use-of-network price for a typical household customer with an average consumption of 3895 kWh.	3
Figure 21:	The new support scheme	2
Figure 22:	Number of the issued declarations for production facilities	2
Figure 23:	Net capacity in MW for production facilities with issued declaration in 20094	3
Figure 24:	Number of the issued granted support for the productions facilities	3
Figure 25:	Shares according to the net capacity, for the production facilities that received decisions on granting support in 2009.	3
Figure 26:	Shares of the production facilities which were receiving support in 2009	4
Figure 27:	Number of distributed emission coupons for 2005–2009	5
Figure 28:	Movement of the price for emission coupons from the second trading period in 200945 \pm	5
Figure 29:	Cumulative shares of the one (CR ₁), two (CR ₂) and three (CR ₃) largest producers in the market with respect to the installed capacity and 50 percent of the production from the Krško NPP	6
Figure 30:	Cumulative shares of the one (CR ₁), two (CR ₂) and three (CR ₃) largest producers in the market with respect to electricity production and 50 percent of the production from the Krško NPP 46	6
Figure 31:	HHIs of the production companies.	8

Figure 32:	Market shares of the electricity suppliers at the end of 2009.	52
Figure 33:	Market shares of the suppliers to the customers on the distribution network at the end of 2009	. 52
Figure 34:	Market share of the suppliers to the customer with an annual consumption of up to 50 MWh	53
Figure 35:	Market shares of the suppliers to the customers with an annual consumption between 50 MWh and 2 GWh.	53
Figure 36:	Market share of the suppliers to the customers with an annual consumption of over 2 GWh.	53
Figure 37:	Numbers of supplier switches for 2002–2009.	. 54
Figure 38:	Dynamics of the supplier switches in 2009 with respect to the type of the customer	54
Figure 39:	Dynamics of the supplier switches with respect to the number of the household customers	55
Figure 40:	Dynamics of the supplier switches in 2009 with respect to the amounts of energy	55
Figure 41:	Changes to the market shares of the suppliers to all the customers on the distribution network in 2009 with respect to 2008.	56
Figure 42:	Changes to the market shares of the suppliers to all the customers in 2009 with respect to 2008.	. 57
Figure 43:	Trends of the HHIs in retail markets for 2008 and 2009.	58
Figure 44:	Trends of the electricity prices for typical industrial customers in Slovenia (old methodology by Eurostat).	58
Figure 45:	Comparison of electricity prices for a typical industrial customer with an annual consumption of 20 to 500 MWh in the EU countries and Slovenia for the second half of 2009	59
Figure 46:	Comparison of electricity prices for a typical industrial customer with an annual consumption of 20 to 70 GWh in the EU countries and in Slovenia for the second half of 2009.	59
Figure 47:	Trend of the final electricity price for a typical household customer (D _c – 3500 kWh per year) in euros/MWh.	60
Figure 48:	Comparison of the total electricity prices for a household customer with an annual consumption of 2500 to 5000 KWh in the EU countries and in Slovenia for the second half of 2009.	61
Figure 49:	Comparison between the final prices for the supplied energy for the customer group D _c (December 2009).	. 61
Figure 50:	Retail price index for the customer group D _c in 2009	62
Figure 51:	Average daily values of the main imbalances prices P_+ and P in 2009.	
Figure 52:	Monthly imbalances of the Slovenian network in 2009	63
Figure 53:	Basic details about the transmitted and consumed amounts of natural gas	67
Figure 54:	Trends of the prices for oil, oil products and the basic price of natural gas	68
Figure 55:	Numbers of new customers on the distribution networks for 2005–2009	73
Figure 56:	Length of new distribution networks in 2005–2009.	74
Figure 57:	Movements of the prices for the gas transmission by customer group for 2006–2009	75
-	Average prices for the use of the network and average prices of natural gas in 2009. $\!\!\!$	
-	Amounts of natural gas required for balancing imbalance amounts	77
Elevine CO.		
_	Movements of the prices for natural gas for the company's own use and for balancing imbalance amounts in 2008 and 2009. Maximum daily and average monthly capacity utilisation of the metering-regulation	

Figure 62:	Maximum daily and average monthly capacity utilisation of the metering-regulation station Šempeter.	.79
Figure 63:	Maximum daily and average monthly capacity utilisation of the metering-regulation station Rogatec.	.80
Figure 64:	Sources of natural gas.	.82
Figure 65:	Structure of gas supply to the end customers connected to the transmission network by purpose of use.	.84
Figure 66:	Ratio between the number of customers on the distribution networks and their consumption.	,84
Figure 67:	Movement of gas consumption on the distribution networks by month for 2008 and 2009.	.85
Figure 68:	Ratio between the number of customers that switched supplier and their consumption with respect to the leased capacities.	85
Figure 69:	Final gas prices for industrial customers including VAT and other taxes	.88
Figure 70:	Final gas prices including VAT and other taxes for typical industrial customers ${\rm I}_3$ in Slovenia and some other EU countries.	.88
Figure 71:	Final gas prices for typical household customers including VAT and other taxes in Slovenia for 2 nd half of 2008 and 2009.	.89
Figure 72:	Final gas prices including VAT and other taxes for typical household customers D_2 in Slovenia and in some other EU countries.	.90
Figure 73:	Production and consumption of electricity on the Slovenian transmission network for 1998–2009 (period 1998–2002 includes the total production of the Krško NPP)	.93
Figure 74:	Surpluses and deficits of electricity on the Slovenian transmission network for 1998–2009 (period 1998–2002 includes the total production of the Krško NPP)	.94
Figure 75:	Structure of electricity production on the Slovenian transmission network for 1998–2009 (period 1998–2002 includes the total production of the Krško NPP)	.94
Figure 76:	Installed capacity of the production facilities, the power available to the Slovenian market and the peak consumption on the transmission network for 1998–2009	.95
Figure 77:	Heat consumption by type of customers and the customer number	105
Figure 79:	Largest distributors of heat to households in 2009.	106
Figure 78:	Structure of the primary energy sources for the production of heat for district heating?	106
Figure 80:	Largest distributors of heat to non-households in 2009	107
Figure 81:	Heat distribution networks in Slovenia in 2009.	107
Figure 82:	Length of heat distribution networks by municipality, and the numbers of connected users in 2009.	108
Figure 83:	Trends in the average retail prices of district heating for household in selected Slovenian towns for 2007–2009.	109

List of tables

Table 1:	Electricity production and import in 2008 and 2009 – in GWh	16
Table 2:	Electricity consumption and export for 2009 – v GWh	17
Table 3:	Net profit by activity	19
Table 4:	Amounts of realised investments.	20
Table 5:	New investments in, and reconstructions of the electricity infrastructure	21
Table 6:	SAIDI by year- 2006 in 2009 unforecasted interruption caused internally	27
Table 7:	SAIDI and SAIFI at the national level for 2008 and 2009.	28
Table 8:	Number and shares of complaints relating the supply quality for 2007–2009	29
Table 9:	Review of the allocated CBTCs and the revenues from the auctions by borders	34
Table 10:	Installed capacities of the production facilities active in the Slovenian market	36
Table 11:	Shares of different types of electricity production in Slovenia	37
Table 12:	Connections of the new facilities and disconnections of the old productions facilities in 2009	
Table 13:	Net profits of the companies for electricity production	
Table 14:	Number of employees in the companies for electricity production	38
Table 15:	Ownership structure of the companies for electricity production	39
Table 16:	Announced reference price of electricity and energy sources.	41
Table 17:	HHI with respect to the installed capacity of the producers in the Slovenian market.	47
Table 18:	HHI with respect to the producers on the transmission network	47
Table 19:	Review of the amounts of leased reserve power	49
Table 20:	Market shares of the suppliers to the customers on the distribution network	56
Table 21:	Market shares of the suppliers to all the customers	
Table 22:	Review of 1 st priority activities related to the investments in the gas transmission network	70
Table 23:	Provision of the regulated service of operating a distribution network	71
Table 24:	Local communities in which the services of operating a distribution network was not yet carried out in 2009, while the concession were awarded	
Table 25:	Distribution lines	72
Table 26:	Ownership structure of the companies for gas distribution.	74
Table 27:	Imported gas, for domestic consumption, for 2007–2009 in Sm ³	82
Table 28:	Market shares and the HHIs relating to the wholesale gas market	82
Table 29:	Market shares and the HHIs relating to the retail market.	83
Table 30:	HHIs for the largest suppliers to the large non-household customers	86
Table 31:	HHIs for the largest suppliers to the small and medium-sized non-household customers.	87
Table 32:	HHIs for the largest suppliers to the household customers.	87
Table 33:	Standard customers groups of industrial customers.	87
Table 34:	Standard customers groups of household customers.	89
Table 35:	Changes to the production units for 2009–2010.	96

List of abbreviations and acronyms

ACER	The European Agency for the Cooperation of Energy Regulators
Borzen	Borzen, d. o. o.
Brestanica TPP	Brestanica Thermoelectric Power Plant, d. o. o.
CBTC	cross-border transmission capacities
CEER	Council of European Energy Regulators
CGS	combined gas and steam
CHP	combined heat and power
CSLOeX	hourly index
Drava HPPs	Drava Hydroelectric Power Plants, Maribor, d. o. o.
DSO	distribution system operator
DTS	distribution-transformer station
EA	Energy Act, the Official Gazette of the RS, 27/07 (EZ-UPB2), 70/08 (EZ-C)
EEX	European Energy Exchange AG, Leipzig
EFT	Električni finančni tim, d. o. o.
Eles	Eles – Elektro Slovenija, d. o. o.
Energy Agency	Energy Agency of the Republic of Slovenia
ERGEG	European Regulators Group for Electricity and Gas
ETSO	European Transmission System Operators
GDP	gross domestic product
GPP	gas power plant
GoO	guarantee of the origin
HHI	Herfindahl Hirshmann-index relating to market concentration
HPP	hydroelectric power plant
HSE	Holding Slovenske elektrarne, d. o. o.
HV	high voltage
Krško NPP	Krško Nuclear Power Plant, d. o. o.
Ljubljana CHP	Ljubljana Combined Heat-and-Power Plant, d. o. o.
Lower Sava HPPs	Lower Sava Hydroelectric Power Plants, d. o. o.
LV	low voltage
MRS	metering-regulation station
MV	medium voltage
NPP	nuclear power plant
P+ and P-	main energy imbalance prices
PSPP	pumped-storage power plant
RECS	Renewable Energy Certificate System
RES	renewable energy sources
RS	Republic of Slovenia
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
Sava HPPs	Sava Hydroelectric Power Plants, Ljubljana, d. o. o.
SLOeX	organised electricity market index
Soča HPPs	Soča Hydroelectric Power Plants, Nova Gorica, d. o. o.
SODO	SODO Electricity Distribution System Operator, d. o. o.
Šoštanj TPP	Šoštanj Thermoelectric Power Plant, d. o. o.
ТРР	thermoelectric power plant
Trbovlje TPP	Trbovlje Thermoelectric Power Plant, d. o. o.
TSO	transmission system operator



Report on the Energy Sector in Slovenia for 2009 September 2010 Design and typesetting: Studio 8 Printing: Tiskarna Petrič

Q