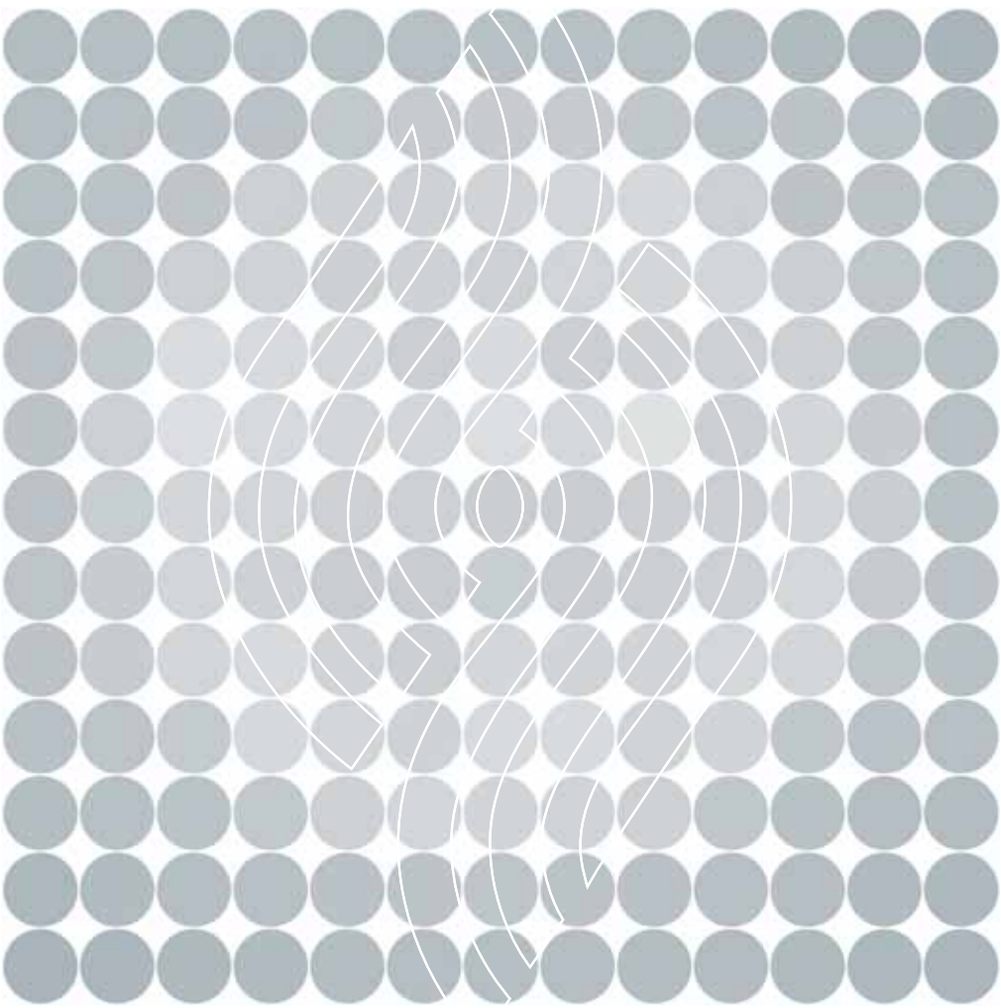
CROATIAN ENERGY REGULATORY AGENCY



ANNUAL REPORT
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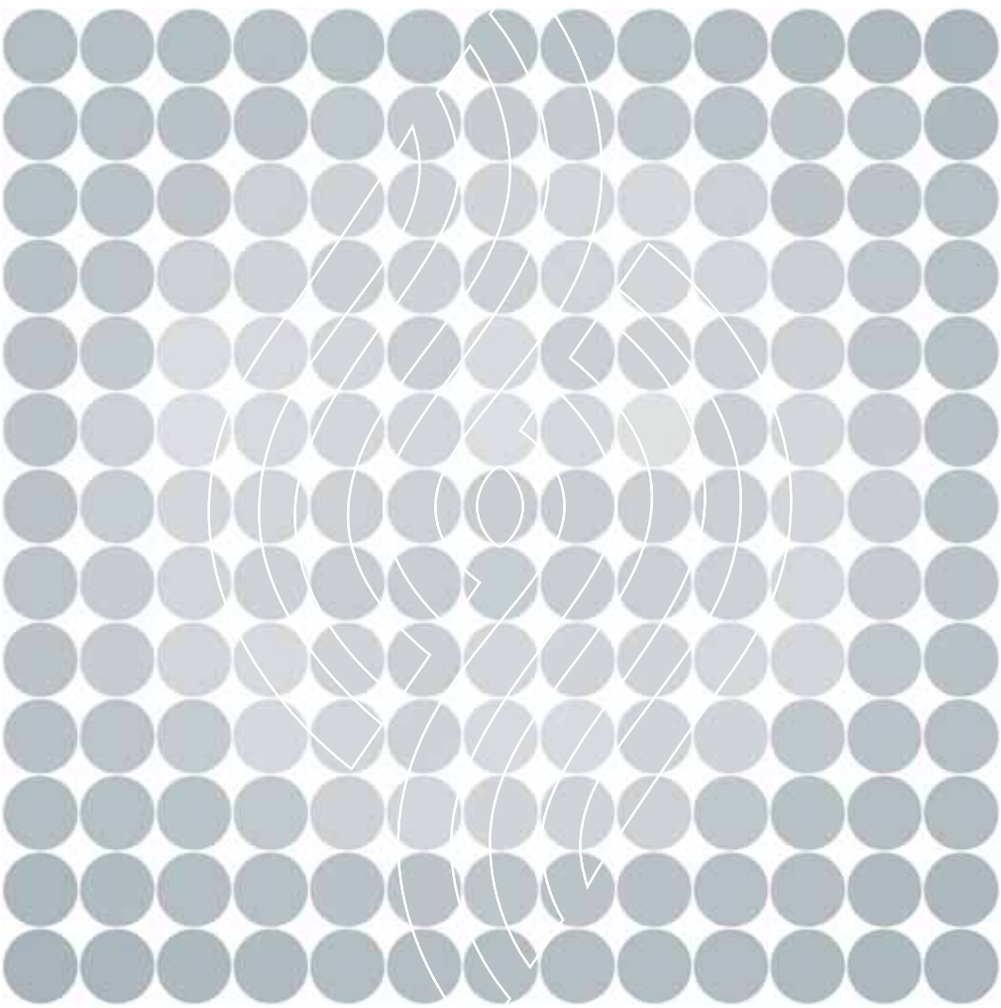


INTRODUCTION

Dear Reader,

The publication you are holding in your hands is the finalized Report on the Work of the Croatian Energy Regulatory Agency for the Year 2006, listing all main activities of the Croatian Energy Regulatory Agency, its Steering Committee and its Technical Services. Data and observations relevant for market and public services development in the energy sector are presented, as well as the results based on the comprehensive analysis of the energy sector in the Republic of Croatia and basic financial reports related to the realization of the Croatian Energy Regulatory Agency's budget.

The Croatian Energy Regulatory Agency has increased its staff significantly in the course of 2006 and has ended the year with 36 employees. In the second half of 2006 the Agency has assumed all duties and responsibilities it is entitled to according to the Act on the Regulation of Energy Activities and other laws regulating carrying out of particular energy activities, as well as secondary legislation passed based on these laws. The cooperation with research and professional institutions has continued and new projects have been launched on specific professional issues from the field of energy regulation, development of relevant studies and preparation and design of expert blueprints.

In the course of 2006 the Croatian Energy Regulatory Agency has had a whole range of international activities, among which have been the continuation of the cooperation with European and the US regulatory bodies, participation in the work of the Council of European Energy Regulators (CEER) and the Energy Regulators Regional Association (ERRA). The Agency participated in the process of establishing the Energy Community Regulatory Board (ECRB), in line with the Energy Community Treaty. As a member of the Energy Community the Agency has participated in the work of the Athens Electricity Forum and Vienna Gas Forum.

In 2006 almost all pieces of electricity related secondary legislation prescribed by relevant laws have been passed, which has ensured the legal foundation and legislative framework for opening of the electricity market in the Republic of Croatia. Pursuant to the Act on the Electricity Market the electricity market for customers with annual consumption over 9 GWh was opened on July 1, 2006. The status of eligible customer has been granted to 112 customers with electricity consumption that makes up 25% of the entire consumption in the Republic of Croatia.

A great effort has been made in creating the new Gas Market Act in line with the European Union directives. By the end of the year the text of the Act was being finalized and it was passed in the first quarter of 2007. Concerning thermal energy field, all relevant pieces of secondary legislation have been passed, opening up the possibilities for further adjustment of organization and business processes of energy undertakings from thermal energy generation, distribution and supply sectors respectively, in line with the existing legislative framework.

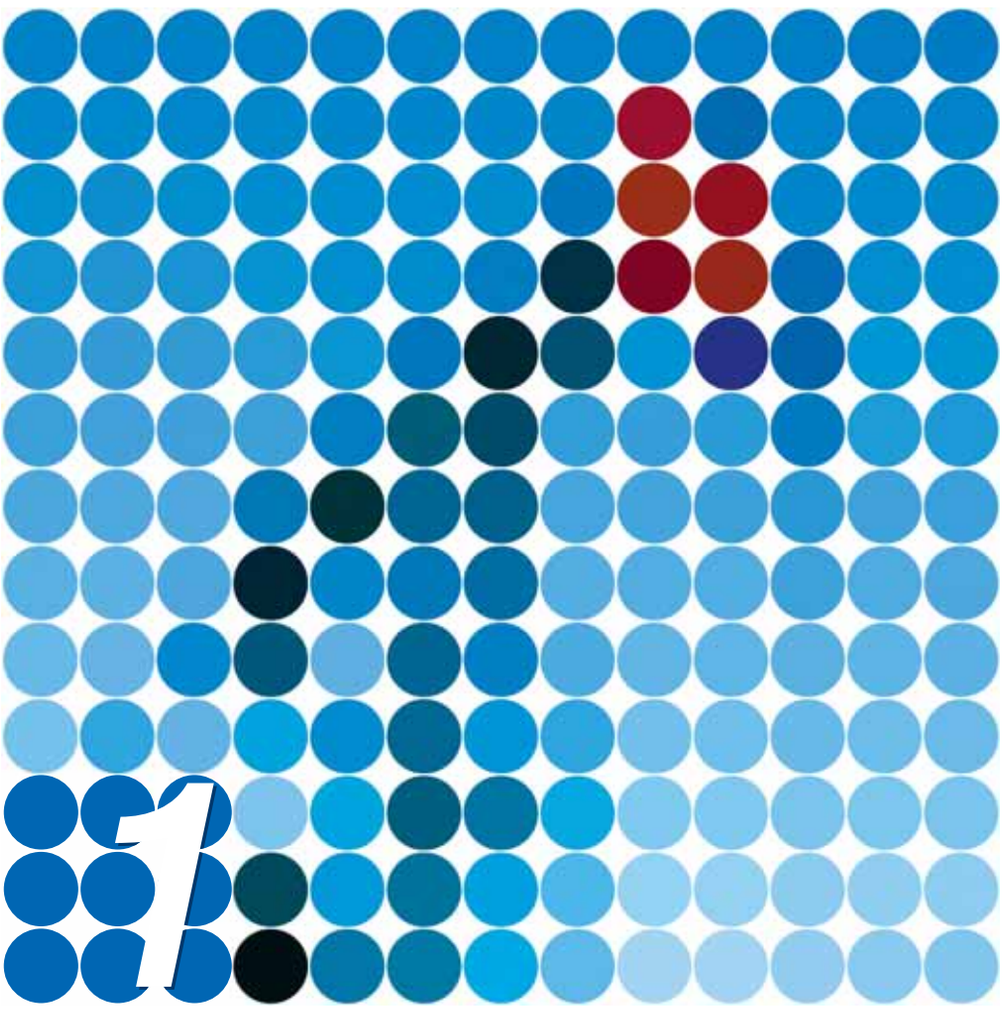
The Croatian Energy Regulatory Agency in cooperation with other relevant bodies of state administration and institutions has had a number of activities related to the preparation of secondary legislation intended for setting up an adequate legislative framework for usage of renewable energy sources and cogeneration.

In the course of 2006 the Agency has been active also in the field of consumer protection either through monitoring of energy undertakings or through the cooperation with the Consumer Protection Council, by dealing with individual customers' appeals and complaints about the work of energy undertakings, conditions for connections, connection tariffs or usage of energy
and quality of energy services.

To conclude, in the course of 2006 the Croatian Energy Regulatory Agency has fulfilled all preconditions for efficient performing of all duties and tasks of energy activities regulation in line with the existing laws.

Yours sincerely,

Steering Committee Chairman
Tomo Galić, B.Sc.



REPORT ON THE WORK OF THE AGENCY IN THE YEAR 2006

REPORT ON THE WORK OF THE AGENCY IN THE YEAR 2006

1.1 The Agency - General Overview

The Croatian Energy Regulatory Agency (further: Agency) was founded in 2004 by the Act on the Regulation of Energy Activities (*"Official Gazette", No. 177/04*) as an autonomous, independent and non-profit public institution for the purpose of establishing and carrying out regulation of energy activities.
The Agency is the legal successor to the Council for Regulation of Energy Activities founded by the Act on the Regulation of Energy Activities (*"Official Gazette", No. 68/01 and 109/01*).
The founder of the Agency is the Republic of Croatia and founding rights are exercised by the Government of the Republic of Croatia.
The Agency's affairs are of special interest for the Republic of Croatia and the Agency performs them based on the public authority.
According to the Act on the Regulation of Energy Activities, the Agency is obligated to submit a report on its work to the Croatian Parliament once a year, emphasizing the following aspects of its work:

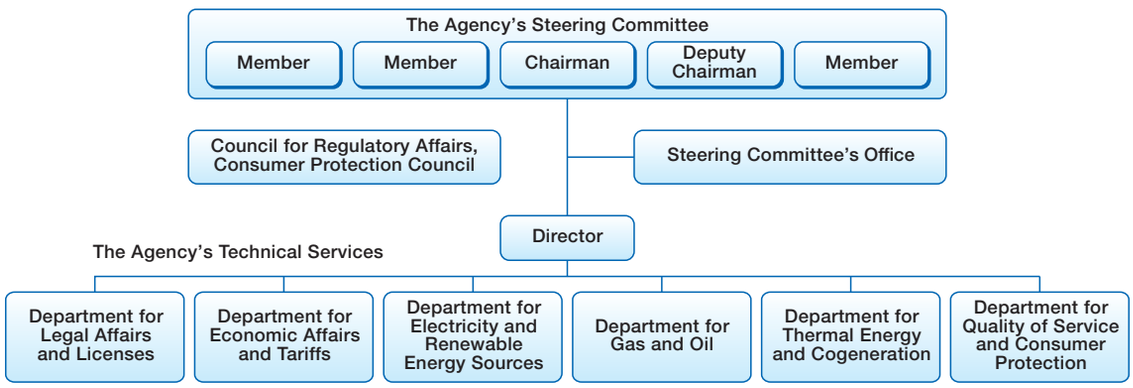
- Observations relevant for the development of the energy market and public services in the energy sector,
- Energy sector analysis and
- Realization of the Agency's budget for previous year.

Further, pursuant to the Article 10 of the Act on the Regulation of Energy Activities, the Agency's obligation is to submit annual reports on the results of monitoring described in the Article 10, Paragraph 2 of the Act on the Regulation of Energy Activities, such as monitoring of cross border transfer capacities and congestion management, separation of energy undertakings' books to prevent cross-subsidies, the level of market competition transparency etc.
When the report is accepted, the Agency is obliged to publish it in the Agency's newsletter in Croatian and in English.
The Agency's internal structure, representation, work, its business operations and other issues relevant for the Agency's functioning are laid down in the Act on the Regulation of Energy Activities, the Croatian Energy Regulatory Agency's Statute (*"Official Gazette", No. 86/05*) and other Agency's general acts.
The Agency is made up of two basic organizational units: The Agency's Steering Committee and its Technical Services (*Picture 1*).
The Chairman, Deputy Chairman and Members of the Steering Committee are appointed by the Croatian Parliament to a five-year term and current Steering Committee Members: Tomo Galić, Chairman, Darko Pavlović, Deputy Chairman, Dubravka Štefanec, Member, dr. Eraldo Banovac, Member and dr. Milan Puharić, Member, were appointed on May 20, 2005.
The Steering Committee runs the Agency and the work of the Steering Committee is managed by the Steering Committee Chairman.
The Steering Committee Chairman represents the Agency, undertakes all legal actions on behalf of the Agency and is responsible for the legality of its work.
The Technical Services, headed by the Director of the Agency deal with all professional, administrative and technical issues of the Agency and its Steering Committee.
Director of the Agency organizes and heads the professional work of the Agency and is appointed by the Steering Committee to a four-year term.
There are six departments within the Agency's Technical Services:

1. Department for Legal Affairs and Licenses
2. Department for Economic Affairs and Tariffs
3. Department for Electricity and Renewable Energy Sources
4. Department for Gas and Oil
5. Department for Thermal Energy and Cogeneration
6. Department for Quality of Service and Consumer Protection

In 2006 the Agency's staff has increased by 21, so at the end of 2006 the Agency had the total of 36 employees with permanent status.
The employment-related rights and obligations of the Agency's Director and employees are laid down in their individual work contracts, in the Agency's general acts and in the general labor legislation.

Picture 1: The Agency's structure



1.1.1 Financing of the Agency

Pursuant to the Decision of the Government of the Republic of Croatia on Charges for Carrying Out Regulation of Energy Activities (*"Official Gazette", No. 73/05*) the Agency is financed from the following sources:

- The charge in the amount of 0.06% of the total annual income from sales of goods and/or services realized in the previous year by energy undertakings based on the license for carrying out energy activities,
- Charges (one-off payments) for the work of the Agency according to the Review of Charges for the Work of the Agency, which is an integral part of the Decision (charges for issuing licenses for carrying out activities, for issuing opinions and consents, for settling appeals and complaints etc.).

1.1.2 Accountability and Supervision of the Agency's Work

Pursuant to the Article 7 of the Act on the Regulation of Energy Activities, the Agency is accountable for its work to the Croatian Parliament.

Pursuant to the Act on Institutions (*"Official Gazette", No. 76/93*) the legality of Agency's work is supervised by the Ministry of Economy, Labor and Entrepreneurship.

1.1.3 The Agency's Scope of Work

The legislative framework for performing duties from the Agency's jurisdiction is defined by the following pieces of legislation:

1. Act on the Regulation of Energy Activities (*"Official Gazette", No. 177/04*),
2. Energy Act (*"Official Gazette", No. 68/01 and 177/04*),
3. Act on the Electricity Market (*"Official Gazette", No. 177/04*),
4. Act on the Gas Market (*"Official Gazette", No. 68/01 and 87/05*),
5. Act on Thermal Energy Production, Distribution and Supply (*"Official Gazette", No. 42/05*),
6. Act on the Oil and Oil Derivatives Market (*"Official Gazette", No. 57/06*),
7. Act on Ratification of the Energy Treaty (*"Official Gazette" - International Contracts", No. 6/06 and 9/06*),
8. Act on the General Administrative Procedure (*"Official Gazette", No. 53/91 and 103/96*),
9. Rulebook on Conditions for Carrying Out Energy Activities *("Official Gazette", No. 6/03 and 94/05*),
10. Decision on the Charge Amount for Regulating Energy Activities (*"Official Gazette", No. 73/05*),
11. "Decree on Period of Time for which License for Carrying Out Energy Activities is Issued" (*"Official Gazette", No. 116/02 and 71/05*),
12. Rulebook on Data Energy Undertakings are Obliged to Submit to the Council for Regulation of Energy Activities (*"Official Gazette", No. 97/03*) and
13. Other secondary legislation passed based on the Energy Act and other laws regulating carrying out particular energy activities.

The Agency's activities are laid down in the Articles 9, 10 and 11 of the Act on the Regulation of Energy Activities and consist of the following:

- Issuing licenses for carrying out energy activities,
- Passing regulations from the Agency's jurisdiction (tariff systems without the amounts of tariff items, rulebook on determination of fees for connection to network/system and for increase in connected

power, tariff system for oil transport through oil pipeline etc.),
- Giving opinion or consent to rules and regulations in the energy sector,
- Consumer protection,
- Granting the status of eligible producer,
- Monitoring (tariff systems' implementation and implementation of all prescribed fees, energy undertakings and their quality of service),
- Settling disputes related to carrying out of regulated energy activities,
- Monitoring cross border capacities and congestion management,
- Cooperation with the Ministry and relevant inspectorates,
- Filing requests for minor offence court proceedings,
- Other activities.

Pursuant to the Decision of the Government of the Republic of Croatia on Assignment of the Energy Institute "Hrvoje Požar" to Provide Technical Services for the Needs of the Council for Regulation of Energy Activities (*"Official Gazette", No. 147/02*), providing technical services for the Agency was assigned to the Energy Institute "Hrvoje Požar" based on the Contract on Providing Services from March 31, 2003. In the first half of 2006 the Contract was changed twice, reducing the amount and type of technical services the Institute had been providing to the Agency, reflecting the increase in the Agency's staff and it expired on May 30, 2006.
Since June 2006 the Agency has become autonomous in undertaking all organizational and other measures necessary for undisturbed performing of all functions and fulfillment of all Agency's duties entrusted to it by the Act on the Regulation of Energy Activities, which has also resulted in its increased capability to pass professional decisions independently.

1.2 The Agency's Steering Committee

The Agency's Steering Committee runs the Agency and performs the following duties:
- Passes acts necessary for the Agency's work and business operations, such as work and development programs, monitors their implementation and decides on the financial plan and the Agency's annual accounts determined by the Article 15 of the Act on the Regulation of Energy Activities,
- Passes decisions related to carrying out all regulatory duties laid down in the Article 9, Paragraph 1 of the Statute and the Articles 10 to 13 of the Act on the Regulation of Energy Activities.

In the course of 2006 the total of 28 sessions of the Agency's Steering Committee were held with 137 agenda items discussed.

1.3 Issuing licenses for carrying out energy activities

One of the Agency's most important tasks is issuing licenses for carrying out energy activities, which are issued by the Agency at the request of an energy undertaking, following the procedure laid down in the Energy Act and related secondary legislation. The license is issued to the energy undertaking that meets all technical and financial requirements as well as professional standards for carrying out a particular energy activity laid down in the Rulebook on Conditions for Carrying Out Energy Activities.
Pursuant to the Energy Act it is necessary to obtain a license for carrying out 24 out of the total of 25 energy activities and for 3 energy activities (production of biofuel, transport of oil, oil derivatives and biofuel by road transport and trading, mediation and representation at the energy market) the license can be obtained by natural persons as well.
In the course of 2006 the Agency has issued the total of 79 licenses for the following energy activities:
- Electricity generation - one license (Enersys d.o.o. from Dubrovnik),
- Electricity supply - two licenses (HEP Operator distribucijskog sustava d.o.o. from Zagreb and HEP Toplinarstvo d.o.o. from Zagreb),
- Organizing of the Electricity Market - one license (Hrvatski operator tržišta energije d.o.o. from Zagreb),
- Trading, mediation and representation at the energy market - seven licenses (Elektrogrupa d.o.o. from Split, Ezpada d.o.o. from Zagreb, Dalekovod-projekt d.o.o. from Zagreb, Lumius d.o.o. from Varaždin, Istrabenz-gorenje d.o.o. from Zagreb, EFT Hrvatska d.o.o. from Zagreb and Eko d.o.o. from Zagreb),
- Wholesale trade of oil derivatives - two licenses (Europa-Mill d.o.o. from Zagreb and Luka Ploče trgovina d.o.o. from Ploče),
- Storage of oil and oil derivatives - two licenses (Luka Ploče trgovina d.o.o. from Ploče and INA d.d.

from Zagreb),
- Natural gas storage - one license (INA d.d. from Zagreb),
- Thermal energy supply - one license (Termodin d.o.o. from Zadar),
- Transport of oil, oil derivatives and biofuel by road transport - 62 licenses

(Legal persons - TINA prijevoz i trgovina d.o.o. from Komin, Ferotom Zagreb d.o.o. from Zagreb, Budo promet d.o.o. from Velika Gorica, Koltrans d.o.o. from Zagreb, Brala trade d.o.o. from Posedarje, P-Petroleum d.o.o. from Rijeka, Anić d.o.o. from Rijeka, Sedam plin d.o.o. from Virovitica, Biškić d.o.o. from Zagreb;
Natural Persons - Hauler Damir Grcić from Drniš, Haulage company Čičak from Zagreb, Hauler Vlado Jagatić from Dugo Selo, Hauler Mirko Liović from Slavonski Brod, "Jurakić" transport-trade-catering industry-services from Sesvete, Jozić Hauler from Slavonski Brod, Hauler Mato Jerković from Ježdovac, Soldan prijevoz haulage company from Slavonski Brod, Hauler Štefo Soldan from Slavonski Brod, Hauler Tomo Jelinić from Slavonski Brod, Haulage company owned by Darko Gusak from Zagreb, Hauler Niko Soldan from Slavonski Brod, Haulage company owned by Veronika Došen from Zagreb, Haulage company Anić from Rijeka, Haulage company owned by Ivan Bubnjek from Dubrava, "Hauler" Mirsad Ičanović from Sisak, Ivica Ninčević "Hauler" from Solin, "Svem" trading-haulage company from Solin, Zlatko Šlosar Hauler from Matulji, Hauler "Kuštrotrans" from Zagreb, Hauler Anto Stanić from Sesvete, "Hauler" Božidar Grgurić from Kloštar Ivanić, "Prafrom" Haulage company from Špišić Bukovica, Haulage company owned by Ivan Marić from Zaprešić, Antolović-prijevoz from Sesvete, Marić Haulage, car wash and tire repairing from Pušća, Hauler Niko Soldan from Rijeka, Hauler Vlado Rončević from Petrinja, "Partner centar" Service and trading company from Petrinja, Martin Šlogar Hauler from Čazma, Haulage company Šebalj services owned by Pavao and Mica Kostelac from Sisak, Robert Mavar Haulage company from Kastav, Andro Ceković Haulage company from Dubranac, Transport of oil and oil derivatives "Žuti" from Ploče, Haulage company Mijić from Solin, Haulage company "Croma" from Omišalj, Haulage company "Jerković" from Sesvete, Haulage company "Rijeka Trans" from Rijeka, Hauler Collins Dumančić from Dražice, Public transport of fuel - owned by Arsen Čermelj from Viškovo, Stjepan Panežić, owner of "Pan-Oil" from Petrinja, Haulage company Lučijano Fućak from Viškovo, Hauler Dario Ljubas from Škriljevo, Hauler Vladimir Jurakić from Sesvete, Stojan Marinac Hauler from Klana, Internal public transport - inflammable liquids - owned by Maksimir Simčić from Klana, Miroslav Muškinja Hauler from Rijeka, Hrvoje Tomić Hauler from Drniš, Marijan Kljajić owner of "Autoprijevoz i dr." from Zagreb, Barica Dijanežević owner of the gas station "AS" from Staro Čiče, Transport Vuletić transport-trade and catering industry from Sisak, Ilija Čičak Hauler from Slavonski Brod and Transport "Martić" from Babina Greda.).

There has not been any complaints to any of the Agency's rulings.

The next table (*Table 1*) shows the number of licenses issued in the course of 2006 by energy activity:

Table 1: *Review of licenses for carrying out energy activities in 2006*

Energy activity	No. of issued licenses
Electricity generation	1
Electricity supply	2
Organizing of the electricity market	1
Natural gas storage	1
Transport of oil, oil derivatives and biofuel by road transport	62
Oil derivatives wholesale trade	2
Storage of oil and oil derivatives	2
Thermal energy supply	1
Trading, mediation and representation at the energy market	7
TOTAL	79

On December 31, 2006 in the Agency's Collective Registry there were 282 licenses. Table 2 shows the number of all issued licenses by energy activity. The list of all licenses and energy undertakings can be found on the Agency's web site (http://www.hera.hr/hrvatski/html/dozvole.html).

Table 2: Review of all issued licenses for carrying out energy activities on December 31, 2006

Energy Activity	No. of issued licenses - status on December, 31 2006
Electricity generation	4
Electricity transmission	1
Electricity distribution	1
Electricity supply	3
Organizing of the electricity market	2
Natural gas wholesale supply	1
Natural gas storage	0
Gas transport	1
Gas distribution	39
Natural gas supply	0
Oil derivatives production	1
Biofuel production	0
Oil transport by oil pipelines and other means of transport	2
Oil derivatives transport by product pipelines and other means of transport	3
Transport of oil, oil derivatives and biofuel by road transport	118
Oil derivatives wholesale trade	17
Storage of oil and oil derivatives	16
Thermal energy production	16
Thermal energy distribution	10
Thermal energy supply	16
Trading, mediation and representation at the energy market	21
Transport and storage of liquefied natural gas (LNG)	0
Wholesale and retail trade of liquefied petroleum gas (LPG)	10
Wholesale trade of liquefied natural gas (LNG)	0
TOTAL	282

1.4 Passing regulations from the Agency's jurisdiction

Pursuant to the provision of the Article 30 of the Act on the Amendments to the Energy Act (*"Official Gazette", No. 177/04*) from December 2004, the Agency's obligation was to pass tariff systems without the amounts of tariff items by December 23, 2006 for those energy activities for which according to the above mentioned Act it is determined that the energy price shall be determined by tariff systems' implementation.
In the course of 2006 the Agency has passed the following tariff systems without the amounts of tariff items:

- Tariff System for Natural Gas Transport, without the amounts of tariff items (*"Official Gazette", No.32/06*),
- Tariff System for Services of Energy Activities Production, Distribution and Supply of Thermal Energy, without the amounts of tariff items (*"Official Gazette", No. 57/06*),
- Supplement to the Tariff System for Services of Energy Activities Production, Distribution and Supply of Thermal Energy, without the amounts of tariff items (*"Official Gazette", No. 88/06*),
- Amendments to the Tariff System for Services of Energy Activities Production, Distribution and Supply of Thermal Energy, without the amounts of tariff items (*"Official Gazette", No. 105/06*),
- Amendments to the Tariff System for Services of Energy Activities Production, Distribution and Supply of Thermal Energy, without the amounts of tariff items (*"Official Gazette", No. 116/06*),
- Amendments to the Tariff System for Natural Gas Transport, without the amounts of tariff items (*"Official Gazette", No. 3/07*),

- Tariff System for Electricity Generation, With the Exception of Eligible Customers, without the amounts of tariff items (*"Official Gazette", No. 143/06*),
- Tariff System for Electricity Transmission, without the amounts of tariff items (*"Official Gazette", No. 143/06*),
- Tariff System for Electricity Distribution, without the amounts of tariff items (*"Official Gazette", No. 143/06*) and
- Tariff System for Electricity Supply, With the Exception of Eligible Customers, without the amounts of tariff items (*"Official Gazette", No. 143/06*).

Pursuant to the provision of the Article 31 of the Act on the Amendments to the Energy Act (*"Official Gazette", No. 177/04*) from December 2004, the Agency was obliged to pass secondary legislation from the Article 29a of the above mentioned Act, so in March 2006 the following

- Rulebook on the Fee for Connection to the Electricity Network and Increase in Connected Power (*"Official Gazette", No. 28/06*) was passed.

Pursuant to the provision of the Article 11 of the Act on the Regulation of Energy Activities (*"Official Gazette", No. 177/04*), in November 2006 the Agency passed also the following

- Methodology for Providing Electricity Balancing Services in the Electric Power System (*"Official Gazette", No. 133/06*).

1.5 Giving opinion and consent

Pursuant to the Act on the Regulation of Energy Activities and other energy acts regulating carrying out of particular energy activities the Agency gives opinions or consents to rules and regulations in the energy sector. In the course of 2006 the Agency has been actively following development of draft regulations in the energy sector and by providing analyses, opinions and suggestions to those proposing new acts and secondary legislation the Agency has contributed significantly to the harmonization of the legislation in the energy sector.

In the course of 2006 the Agency has provided the following opinions to the regulations in the energy sector:

- Opinion to the draft Act on the Oil and Oil Derivatives Market;
- Opinion to the Decision on the Fee for Connection to the Electricity Network and Increase in Connected Power;
- Opinion to the draft General Conditions of Electricity Supply;
- Opinion to the Agreement on Joint Monthly Auctions of Monthly Cross border Transfer Capacities for 2006 and Rules for Joint Monthly Auctions of Cross border Transfer Capacities for 2006 between MAVIR Hungarian Power System Operator Company Ltd from Budapest, Hungary and HEP Operator prijenosnog sustava d.o.o. (Transmission System Operator) Zagreb, Hrvatska;
- Opinion to the draft General Conditions of Thermal Energy Supply;
- Opinion to the draft Consumers' Protection Act;
- Opinion to the Unique Additional Load Diagram for 2007;
- Opinion to the draft Gas Market Act;
- Opinion to the Ordinance on Incentives for Electricity Generation from Renewable Energy Sources;
- Opinion to the draft Ordinance on Minimal Electricity Share from Incentivized Renewable Energy Sources and Cogeneration;
- Opinion to the draft Tariff System for Electricity Generation from Renewable Energy Sources and Cogeneration;
- Opinion to the proposal for change of tariff items' amounts for natural gas transport through gas pipeline transport system for 2007 and
- Opinion to the proposal of the List of Prices for HEP Operator distribucijskog sustava d.o.o. (Distribution System Operator)'s Non-Standard Services.

1.6 Consumer protection

In the field of consumer protection the Agency has been active in the following ways:

- By monitoring energy undertakings, monitoring energy undertakings' quality of service and by collecting and processing data related to energy undertakings' activities in the field of consumer protection, pursuant to the Energy Act and other legislation regulating carrying out of particular energy activities and by cooperation with relevant ministries and authorized inspectorates, in line with particular laws,

- Through the Consumer Protection Council, whose members are also representatives of consumer protection groups, which issues recommendations and opinions on measures for consumer protection in the implementation of the system of regulation of energy activities, it deals with consumer protection-related issues, follows relevant legislation and their effects on consumer protection, issues opinions on legislation and secondary legislation with respect to consumer protection and gives initiatives for changes of legislation in the field of consumer protection and
- By working on individual consumers' appeals and complaints, based on the public authority pursuant to the Act on the Regulation of Energy Activities.

Consumers protect their rights at the Agency by submitting appeals, complaints, claims and other written queries with respect to the work of energy undertakings in the fields of electricity, thermal energy, natural gas and oil.
All queries are processed in the Agency's Technical Services, by relevant expert departments, Quality of Service and Consumer Protection Department and the Department for Legal Affairs and Licenses and by dealing with these queries the Agency is able to gain direct insight into the work of energy undertakings and their implementation of energy-related and other regulations concerning consumer protection.
The Agency's decision on disputes the settlement procedure of which is carried out by the Agency, is final and a dissatisfied party can appeal against it at the Administrative Court of the Republic of Croatia.

1.6.1 Consumers' appeals

Pursuant to the provision of the Article 9, Paragraph 5 of the Act on the Regulation of Energy Activities, the Agency settles disputes concerning carrying out of regulated energy activities, especially with regard to the following:

- Declining of connection to the transmission system/transport system and
- Determining of compensation for connection and usage of transmission network/transport system.

Energy buyers appeal to the Agency against energy undertakings' decisions concerning carrying out of regulated energy activities, that is, energy activities performed as public services (electricity generation for tariff customers, electricity transmission, electricity distribution, organizing of the electricity market, electricity supply of tariff customers, natural gas storage, natural gas transport, natural gas distribution, natural gas supply of tariff customers and thermal energy distribution) and concerning carrying out of trading activities.
The most frequent reasons for appeals by energy buyers in 2006 have been the following:

- Electricity sector:
  - Declining of connection to the electric power network,
  - Connection conditions and
  - Determining of compensation for connection and for usage of the electric power network.
- Natural gas sector:
  - Declining of access to the natural gas transport system,
  - Conditions of access to the natural gas transport system,
  - Declining of access to the natural gas distribution system,
  - Conditions of access to the natural gas distribution system and
  - Compensation for connection and for usage of transport/distribution natural gas system.
- Thermal energy sector:
  - Declining of access to the distribution network,
  - Conditions of access to the distribution network,
  - Withholding of consent to a thermal energy tariff customer on a joint thermal energy meter for separation from the thermal energy system and
  - Withholding of consent to owners of those parts of buildings that represent and independent usage entity for installation of a device for local division of delivered thermal energy, a device for regulation of heat separation and a device for measuring thermal energy consumption.

1.6.2 Consumers' complaints

Consumers' complaints to the work and decisions taken by energy undertakings in 2006 can be divided in three basic groups, depending on the content of complaints and the way they are handled by the Agency.

- The first group of complaints consists of complaints about the performance of energy undertakings in carrying out of energy activities (for example, complaints about the quality of electricity supply, that is, complaints about the voltage quality, the reliability of service and quality of service to consumers at the point of energy take over or the point of delivery, the quality of thermal energy and gas delivery etc.).

- The second group of complaints consists of complaints about the performance of energy undertakings that does not fall within the Agency's jurisdiction but is in jurisdiction of municipal or commercial courts (for example, complaints about billing for electricity consumption, damages consumers suffered due to force majeure etc.).
- The third group of complaints consists of complaints about the performance of energy undertakings from the Article 12 of the Regulation of Energy Activities with respect to the following:
  - The performance of energy undertakings concerning issues from the Article 10 of the Act on the Regulation of Energy Activities (for example, complaints about the length of time needed to build connections or fix damages etc.) and
  - The decision on methodologies from the Article 11 of the Act on the Regulation of Energy Activities (for example, complaints about tariff system implementation, classification of consumers in categories etc.).

1.6.3 Consumers' claims and other written queries

In the course of 2006 energy consumers have approached the Agency with requests for consent for connections to another consumer's electric power facilities and installations, for electricity consumption via another consumer's metering point, for opinions on energy regulations, for interpretation of energy-related and other legislation, for settling their contractual relations with energy undertakings etc. Further, energy consumers have initiated implementation of supervision over tariff systems on several occasions, as well as over energy undertakings' work and have informed the Agency on detected irregularities in their work.
Consumers' claims and other queries have been handled by the Agency in line with its legal authority from the Act on the Regulation of Energy Activities. The cases that did not fall under the Agency's jurisdiction were sent to the relevant body or instructions were given to consumers on their rights and how to claim them.

1.6.4 Case statistics

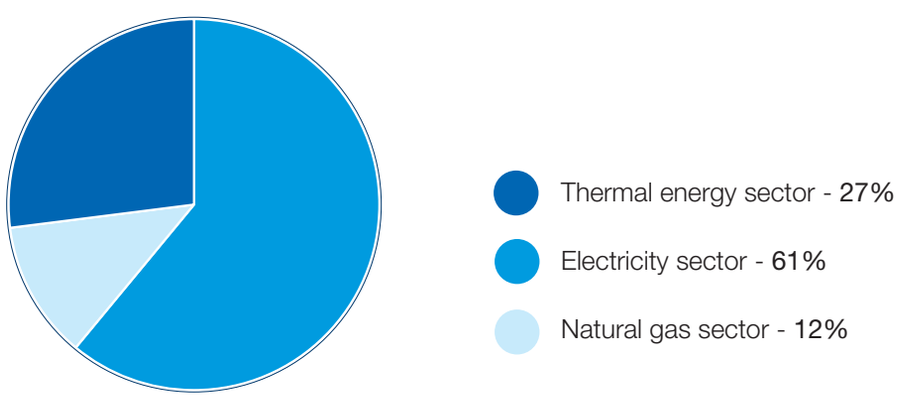
In the course of 2006 101 cases have been submitted to the Agency. In the following table (*Table 3*) they are listed by sectors:

Table 3: Cases by sectors

Energy sector	Number
Electricity sector	62
Natural gas sector	12
Thermal energy sector	27

The structure of the submitted cases is displayed in the Picture 2. The greatest share of the submitted cases is from the electricity sector - 61%, followed by the thermal energy sector with 27% and the natural gas sector with 12%.

Picture 2: Cases by sectors



1.6.4.1 Cases from the electricity sector

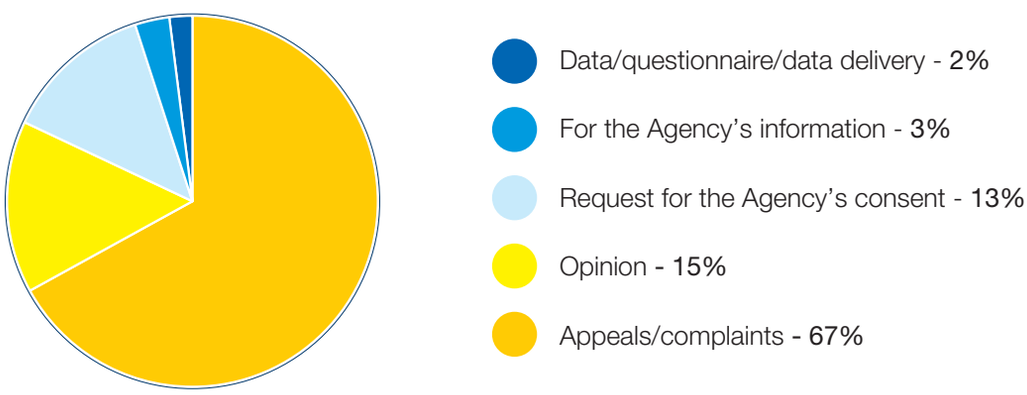
Cases from the electricity sector are displayed in the following table by case content (*Table 4*):

Table 4: Case types from the electricity sector

Description	Number
Appeals/complaints	42
Request for Agency's opinion	9
Request for Agency's consent	8
For the Agency's information	2
Report/questionnaire/providing data	1
Total	62

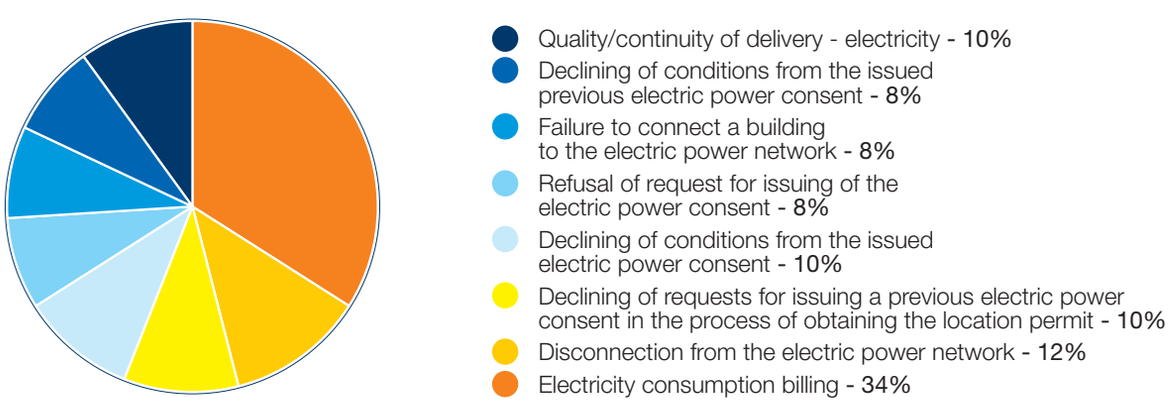
The share of a particular case type in the total number of submitted cases from the electricity sector is displayed in the Picture 3. Appeals and complaints have the largest share - 67%. Consumers' requests for the Agency's consent for connection to electric power facilities and installations of another consumer and for electricity consumption via another consumer's metering point also have a significant share - 13%.

Picture 3: Share of particular case types from the electricity sector



The access to the electric power network has the greatest share out of the total of submitted consumers' appeals and complaints - 56%, followed by cases referring to the electricity consumption billing - 34% and quality of electricity supply cases, as shown in the Picture 4:

Picture 4: Case groups from the electricity sector



1.6.4.2 Cases from the natural gas sector

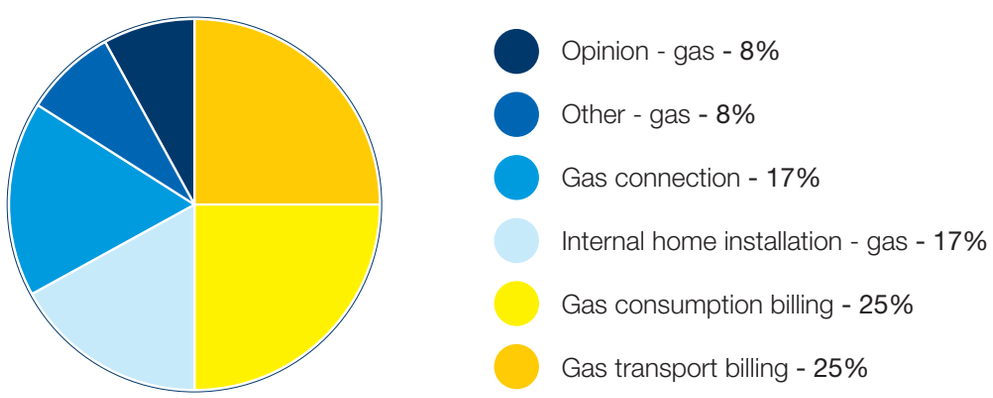
Cases from the natural gas sector by case groups are displayed in the Table 5 as follows:

Table 5: Case groups from the natural gas sector

Group	No.
Natural gas transport billing	3
Natural gas consumption billing	3
Internal home installation - gas	2
Gas connection	2
Other - natural gas	1
Request for the Agency's opinion	1
Total	12

The share of a particular case group in the total number of submitted cases from the natural gas sector is displayed in the Picture 5. The billing for natural gas transport and the billing for natural gas consumption have the greatest share in the natural gas sector - 25% respectively, followed by cases related to connection to gas network/system and the internal home installation with 17% respectively.

Picture 5: Case groups from the natural gas sector



1.6.4.3 Cases from the thermal energy sector

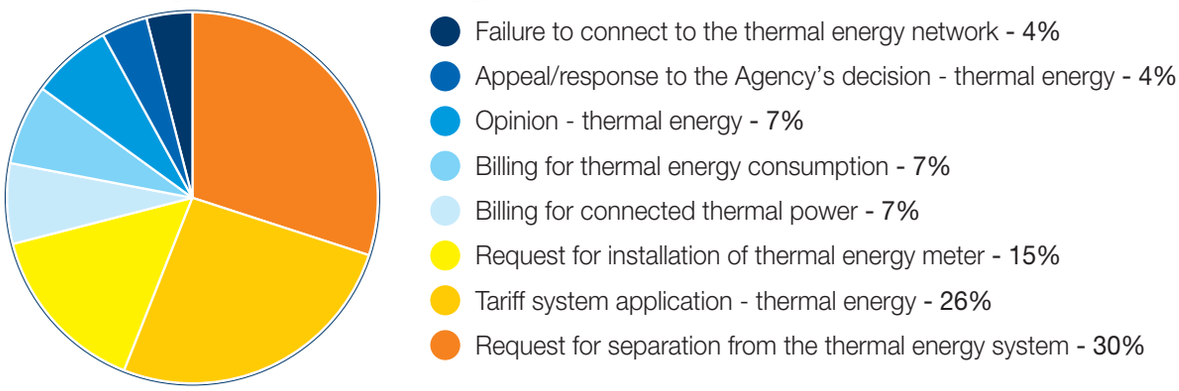
Case groups from the thermal energy sector are displayed in the Table 6, as follows:

Table 6: Case groups from the thermal energy sector

Group	No.
Request for separation from the thermal energy system	8
Tariff system application	7
Request for installation of thermal energy meter	4
Billing for connected thermal power	2
Billing for thermal energy consumption	2
Request for the Agency's opinion	2
Appeal/response to the Agency's decision	1
Failure of connection to the distribution network	1
Total	27

The share of a particular case group in the total number of submitted cases in the thermal energy sector is displayed in the Picture 6. The requests for separation from the thermal energy system has the greatest share in the thermal energy system with 29%, followed by tariff system application with 26%. Among the most represented case groups are also those related to the requests for installation of thermal energy meters with 15% and case groups pertaining to billing for thermal energy consumption and for connection of thermal power with 7% respectively.

Picture 6: Case groups from the thermal energy sector



1.7 Monitoring Tariff System's Implementation

Pursuant to the Article 9, Paragraph 1, Subparagraph 7 of the Act on the Regulation of Energy Activities, the Agency shall monitor the implementation of all tariff systems and the prescribed compensations. Accordingly, based on the thermal energy consumers' complaint the Agency monitored the thermal energy sector's tariff systems' implementation in the cities of Zagreb,
Karlovac, Slavonski Brod and Rijeka and as a conclusion of the performed monitoring passed the following opinions:

- Opinion on monitoring of thermal energy price increase by energy undertakings HEP Toplinarstvo d.o.o. from Zagreb, Toplana d.o.o. from Karlovac and Toplina d.o.o. from Slavonski Brod (September 2006) and
- Opinion on monitoring of thermal energy price increase by energy undertaking Energo d.o.o. from Rijeka (September 2006).

The above listed opinions have been forwarded by the Agency to the State Inspectorate of the Republic of Croatia for further processing.

1.8 The Agency's Cooperation with Other Institutions and International Activities

1.8.1 The Agency's cooperation with Government institutions

In the course of 2006 the Agency has had the significant cooperation with the Ministry of Economy, Labor and Entrepreneurship (hereinafter: the Ministry) as the body proposing and passing regulations in the energy sector and the body with authority to carry out administrative monitoring of laws and secondary legislation passed based on the Energy Act. In addition to that, the Agency has collaborated with the Ministry on issues concerning protection of energy consumers, especially through the Council for Consumer Protection at the Ministry, where the Agency has had one representative.
When performing its duties, the Agency has also collaborated with the authorized inspections, especially the State Inspectorate and as a legal successor to the Council for Regulation of Energy Activities it has continued the cooperation with the Croatian Competition Agency in order to settle all issues related to carrying out of energy activities on the market, which are not regulated by the Act on the Regulation of Energy Activities and are related to prevention, limiting and distortion of market competition.
In November of 2006 the Agency signed the Agreement on Cooperation on Competition Protection on the Energy Activities' Market with the Croatian Competition Agency.
In the course of 2006 there have not been any disputes involving prevention, limiting or distortion of market competition to which the Competition Act (*"Official Gazette", No. 122/03*) should have been applied.

1.8.2 International activities and cooperation

In the course of 2006 the Agency has had a whole range of international activities and has continued its cooperation with both European and the US regulatory bodies. In addition to that, it has participated in the activities of the international regulators' associations: CEER - Council of European Energy Regulators and ERRA Energy Regulators' Regional Association, where it has provided its contribution in the development of studies, reports and recommendations. In order to implement the obligations from the Energy Community Treaty the Agency has participated in the work of the Athens Fora (electricity sector) and Vienna Fora (natural gas sector).

In the course of 2006 various seminars, workshops and presentations have been held at the Agency's premises, with representatives from foreign regulatory bodies, universities and international organizations. What follows is a more detailed report on the Agency's international activities.

1.8.2.1 Energy Community

The European Community on the one hand and the following Contracting Parties on the other hand: Republic of Albania, Republic of Bulgaria, Bosnia and Herzegovina, Republic of Croatia, Republic of Macedonia, Republic of Montenegro, Romania, Republic of Serbia and the United Nations Interim Administration Mission in Kosovo (*Picture 7*) signed the Energy Community Treaty in Athens on October 25, 2005, ratified by the Croatian Parliament on June 2, 2006, which has been in effect since July 1, 2006, pursuant to the Ministry of Foreign Affairs' declaration.

Picture 7: Energy Community Geographical Area

Source: Energy Community Secretariat

Within the framework of achieving goals laid down in the Energy Community Treaty there are two Fora, consisting of representatives of all interested parties, including industry, regulatory bodies and groups representing industry and consumers that advise the Energy Community.
The conclusions reached at the two Fora are adopted by consensus and forwarded to the Permanent High Level Group.

1.8.2.2 Electricity Forum - Athens Forum

The electricity Forum meets in Athens. The Agency has actively participated in the work of the Athens Forum by preparing studies and presentations for the Forum, participating actively in discussions and drawing up conclusions and decisions.
In the course of 2006 there were two meetings of the Electricity Forum in Athens (the eighth and the ninth) and one preparatory meeting in Dubrovnik before the eighth Athens Forum.
The main topics on the Athens Forum's agenda in the course of 2006 were the following:

- Dry-run of coordinated explicit flow based transmission capacity auctions mechanism in SEE region;
- Regional Balancing Mechanism (BM) within South East European (SEE) and possibility of dry-run;
- SEE ITC 2006 mechanism for cross border trading and prospective of integration of the EU and SEE ITC mechanism;
- Tariff comparison in the region of South-Eastern Europe;
- Monitoring the electricity markets in the region of South-Eastern Europe;
- Electricity market transparency in the region;
- Obstacles in electricity trading and compatibility of market rules in the countries of the region of South-Eastern Europe;
- Mechanism for better use of cross border transfer capacities in the region of South-Eastern Europe;
- Consumer protection with special focus on vulnerable consumers;
- Following the progress of electricity and gas markets opening.

1.8.2.3 Gas Forum

Within the framework of cooperation with the Energy Community in the course of 2006 the Agency's representatives participated in the meeting of the Gas Working Group held in Belgrade in March of 2006, the gas experts' meeting held in Vienna in September of 2006, the Gas Industry Working Group held in Vienna in October of 2006 and in the Forum held in Vienna in October of 2006.
The following topics were dealt with at the above listed meetings:

- Security of supply and diversification of supplying routes;
- Investments in gas infrastructure;
- New gas infrastructure investment regulation;
- Regulation of gas infrastructure activities;
- Gasification Study for the region of South-Eastern Europe;
- Gas sector development - gas road maps;
- Natural gas regional projects.

1.8.2.4 ECRB

The representatives of both the Agency's Steering Committee and the Technical Services participated in the establishment of the ECRB (Energy Community Regulatory Board), which pursuant to the Article 58 of the Energy Community Treaty performs the following duties:

- Advises the Ministerial Council or the Permanent High Level Group on the details of statutory, technical and regulatory rules,
- Issues Recommendations on cross border disputes involving two or more Regulators, upon request of any of them,
- Takes Measures, if so empowered by the Ministerial Council and
- Adopts Procedural Acts.

1.8.2.5 Participation in CEER

The CEER (Council of European Energy Regulators) is a non-profit organization, which brings together the independent national energy regulators from the Member States of the European Union (EU) and European Economic Area (EEA). The CEER acts as a focal point for contacts between national energy regulators and is their interface at a European level with the European Commission, in particular DG Transport and Energy on all energy issues. The overall aim of the Council of European Energy Regulators (CEER) is to facilitate the creation of a single competitive, efficient and sustainable internal market for

gas and electricity in Europe.
Among other responsibilities, the CEER prepares materials for the ERGEG (European Regulators Group for Electricity and Gas), established by the European Commission as an advisory group of independent national regulatory bodies preparing formal recommendations for the European Commission in its effort to help establishing single open electricity and gas market. The CEER's main mission is to promote efficient competition on the European electricity and gas markets via successful liberalization and establishment of the single European energy market.
The regulatory bodies' working program deals with the following: energy policy development, detailed technical recommendations on regulation and rules, monitoring and reporting on recommendations' acceptance, efficiency and competition status on the energy markets in Europe.
In the course of 2006 the CEER dealt with the following main topics:
- Cross border trade and security of supply,
- Monitoring of market and regulation development,
- Information transparency,
- Regional markets and South-East Europe and
- Best practices in regulation.

1.8.2.6 Participation in ERRA

The Agency is a member of the ERRA (Energy Regulators Regional Association). ERRA's main goals are:
- To improve national energy regulation in member countries,
- To foster development of stable energy regulators with autonomy and authority and to improve cooperation among energy regulators.
- To increase communication and the exchange of information, research and experience among members and increase access to energy regulatory information and experience around the world and promote opportunities for training.

In the course of 2006 the Agency's representatives participated in the work of the ERRA's annual General Assembly conference, they have actively participated in the work of ERRA's Tariff/Pricing Committee, Licensing/Competition Committee and the Legal Working Group.
In the course of 2006 several meetings of the above listed ERRA's Committees and the Working Group were held as follows: - three meetings of the Tariff/Pricing Committee in Warsaw, Budapest and Kishinev, where the experiences were exchanged from the following areas:
- Cost allocation between regulated and non-regulated activities,
- Methods of cost allocation in distribution and electricity supply,
- Green energy pricing,
- Transmission tariffs,
- Taxes and losses in the energy sector,
- Efficiency factor determination (X - factor),
- Cross subsidizations among the tariff customers groups.

- two meetings of the Licensing/Competition Committee in Budapest and Riga, where experiences were exchanged from the following areas:
- Distribution of authority and responsibilities and cooperation among regulatory bodies and other institutions and bodies in the energy sector of the ERRA members,
- The role of a regulatory body in the implementation of the principle of keeping separate business accounts and unbundling of energy activities from other activities the legal person holding the license for carrying out energy activities performs,
- Third party access to the network,
- The issue of regulating the status of energy traders with respect to the license for carrying out energy activities issued in one of the EU member countries and carrying out energy activities in a country where such a license hasn't been issued.

- two meetings of the Working Group for legal regulatory issues in Budapest and Tallinn, where experiences were exchanged from the following areas:
- Legal framework for the functioning of the electricity market,
- Legal framework for establishing liberalized energy market,
- Court practice in the ERRA members against regulatory bodies' decisions.

The Agency's representatives have also participated in several workshops, seminars and courses organized by ERRA in the course of 2006, working on various energy sector regulation related issues, and issues concerning organizing and functioning of the energy market, tariff systems and energy prices, providing information and publicity of regulatory bodies' work etc., the most important ones being:

- ERRA's Training for new commissioners,
- ERRA's Regulatory information and public participation training,
- ERRA-CEU international summer school on energy regulatory practices.

1.8.2.7 Cooperation with the USAID

In the framework of cooperation with the USAID (US Agency for International Development) it is worth emphasizing the workshops held in the Agency dealing with design of tariff systems for electricity generation, distribution, transmission and supply.

As part of the Partnership Program with the New York State Public Services Commission (NYPSC) workshops were held in Zagreb and in Dubrovnik from July 3 to 7, 2006 and the Agency's representatives participated by delivering presentations. Also, experiences and knowledge have been exchanged with American regulatory bodies.

The above mentioned Partnership Program also included a workshop held in October of 2006 in Albany, New York State. During their visit to the United States, the Agency's representatives also participated in the work of the meeting of regulatory bodies-USAID partners held as part of the World's Regulatory Forum in Washington D.C. on October 8, 2006. An Agency's representative held a presentation on the current work of the Agency and its role in the international electricity trade and creation of the regional electricity market.

1.8.2.8 Croatia - EU accession negotiations

The Agency's representatives have participated in the work of the negotiating teams for the accession of the Republic of Croatia to the European Union for the Chapter 15 - Energy, the Chapter 21 - Transeuropean Networks and the Chapter 28 - Consumer Protection, analyzing the level of harmonization of national laws and regulations with the Acquis Communautaire, carried out jointly by the candidate country and the European Commission.

1.8.2.9 Other activities

As part of international activities, the Agency has exchanged visits and had contacts with the regulatory bodies of France, Austria, Macedonia, Bosnia and Herzegovina and Slovenia.

On September 11 and 12, 2006 the international workshop titled Competition Market and Policy in the Electricity Market was held at the Agency and the Agency's representatives delivered the presentation The Croatian Electricity Market - Current Situation and Plans for Full Opening of the Market to Effective Competition.

A number of other round tables, workshops and meetings have also been held at the Agency, with the purpose of developing the package of secondary legislation concerning electricity market, tariff systems, renewable energy sources and cogeneration etc.

1.9 The Agency's Councils

Pursuant to the Article 28 of the Agency's Statute the Agency establishes advisory and professional bodies (councils) that participate in particular areas of the Agency's activities as follows:

- Council for Regulatory Affairs and
- Council for Consumer Protection

The person appointed the Agency's Council member must be a natural person who can assist the Agency assert its professional positions by his/her public work and reputation or his/her professional involvement. The Agency's Steering Committee founded the Council for Regulatory Affairs and the Council for Consumer Protection in February 2006 and appointed Council chairs and nine members respectively.

Councils are advisory and professional bodies giving recommendations and opinions on issues from their scope of work, and they meet mostly upon the Steering Committee's Chairman's initiative, but at least twice a year.

1.9.1 Council for Regulatory Affairs

The Council for Regulatory Affairs gives recommendations and opinions on issues directly related to the Agency's regulatory affairs, such as passing tariff systems, without the amounts of tariff items, giving opinions on the amounts of tariff items and on regulations in the energy sector etc.

The Council had three sessions in 2006 discussing the following:

- Draft Tariff System for Services of Energy Activities of Thermal Energy Production, Distribution and Supply, Without the Amounts of Tariff Items,
- Draft Tariff System, Without the Amounts of Tariff Items for:
  Electricity generation, with the exception of eligible customers,
  Electricity transmission,
  Electricity distribution,
  Electricity supply, with the exception of eligible customers.

1.9.2 Council for Consumer Protection

The Council for Consumer Protection gives recommendations and opinions on measures for protection of consumers in the implementation of the system of regulation of energy activities, it follows consumer protection related issues, current regulations and their effects on consumer protection, reacts to all laws and secondary regulations concerning consumer protection and gives initiatives for change of regulations. Accordingly, the Council for Consumer Protection held four sessions in the course of 2006 and discussed the following issues:

- Draft Tariff System for Services of Energy Activities of Thermal Energy Production, Distribution and Supply, Without the Amounts of Tariff Items,
- Pricelist of non-standard services in the activities of electricity distribution and supply,
- Draft Tariff Systems, without the amounts of tariff items for:
  Electricity generation, with the exception of eligible customers,
  Electricity transmission,
  Electricity distribution,
  Electricity supply, with the exception of eligible customers.

1.10 The Agency's Financial Report for 2006

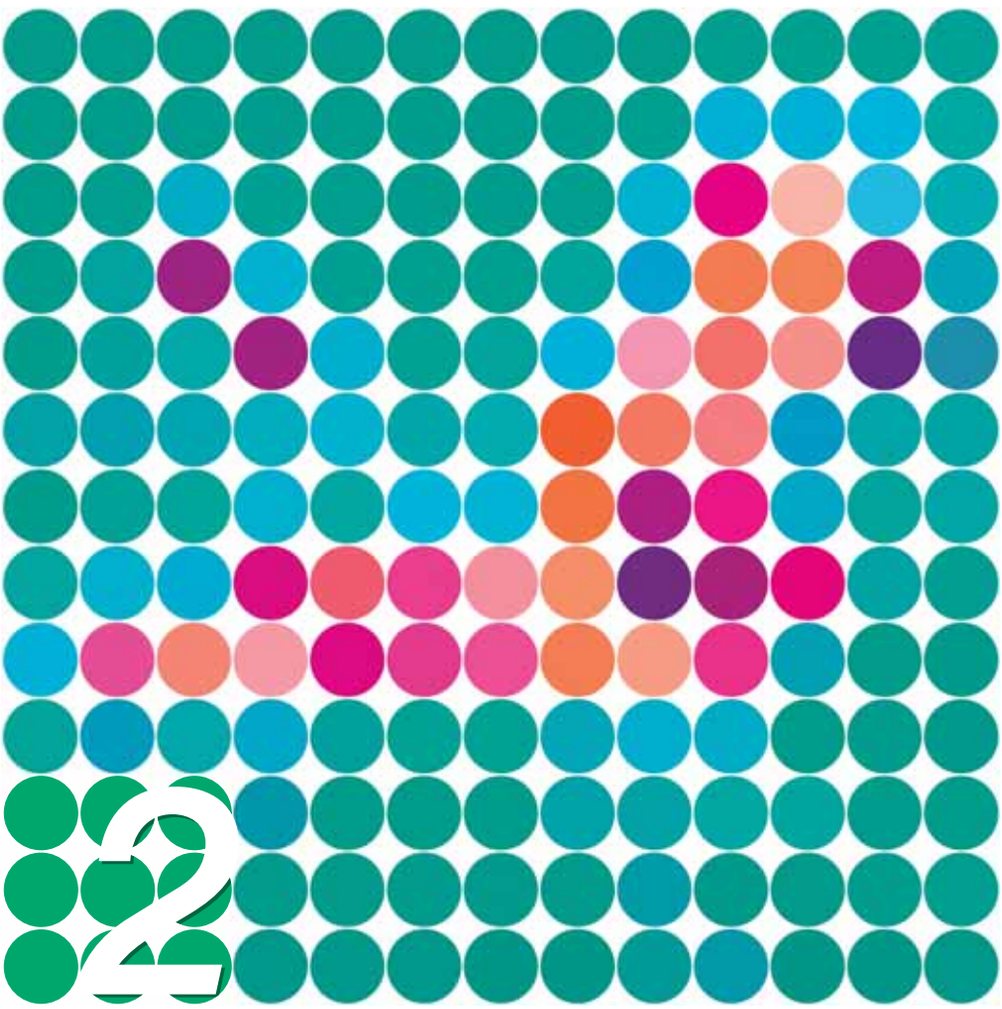
The Agency's financial reports for 2006 have been composed in line with the Decree on Accounting for Non-Profit Organizations (*"Official Gazette", No. 112/93*) and the Rulebook on Bookkeeping and Accounting for Non-Profit Organizations (*"Official Gazette", No. 20/94 and 40/94*). According to the authorized auditor's report the Agency's financial reports reflect the financial situation on December 31, 2006 and the results of business operations realistically and objectively.

1.10.1 Profit and Loss Statement for the Period from January 1 until December 31, 2006

		- in Kuna -	
No.	Position	2005	2006
A.	REVENUES	16,986,131	18,244,914
1.	Revenues from the budget		
2.	Revenues from contributions	16,284,929	17,430,890
3.	Revenues from membership fees and other charges		
4.	Revenues from transfer		
5.	Revenues from own activities	625,480	562,900
6.	Other revenues	75,722	251,124
B.	EXPENSES	9,611,743	13,709,397
1.	Operating charges	5,258,163	5,618,067
1.1.	Materials	174,737	237,134
1.2.	Energy	95,206	161,072
1.3.	Services	4,988,220	5,219,861
1.4.	Other expenses		
2.	Expenses for employees	2,980,932	6,287,648
2.1.	Salaries and compensations	2,915,929	6,187,797
2.2.	Other expenses	65,003	99,851
3.	Non-material expenses	599,078	1,052,677
4.	Transfers		
5.	Expenses relating to investments	773,450	750,233
6.	Other expenses	120	772
C.	SURPLUS OF REVENUES	7,374,388	4,535,517
D.	DEFICIT OF REVENUES		

1.10.2 Balance Sheet as per December 31, 2006

		- in Kuna -	
No.	Position	Status on 12/31/2005	Status on 12/31/2006
1	2	3	4
	ASSETS		
A.	LONG-TERM ASSETS	1,686,442	1,955,006
1.	Intangible assets		
2.	Tangible assets	1,686,442	1,955,006
2.1.	Equipment and machinery	1,970,172	2,572,931
2.2.	Other intangible assets	401,286	548,761
2.3.	Correction of intangible assets' value	685,016	1,166,686
3.	Financial assets		
4.	Receivables		
B.	CURRENT ASSETS	17,599,439	22,344,919
1.	Inventories		
2.	Receivables	2,720,411	2,573,547
2.1.	Receivables from customers		
	and receivables from prepaid amounts	2,670,079	2,467,366
2.2.	Receivables from employees	2,213	13,018
2.3.	Receivables from government and other institutions		21,627
2.4.	Other receivables	48,119	71,536
3.	Financial assets		
4.	Cash at banks and in hand	14,879,028	19,771,372
C.	PREPAYMENTS		117,230
D.	TOTAL ASSETS	19,285,881	24,417,155
E.	OFF BALANCE SHEET ITEMS	1,245,491	2,335,296
	LIABILITIES		
A.	LIABILITIES	1,015,525	1,342,718
1.	Long-term liabilities		
2.	Short-term liabilities	1,015,525	1,342,718
2.1.	Liabilities for advances	242,977	257,115
2.2.	Accounts payables	454,114	406,784
2.3.	Liabilities for salaries	163,114	350,464
2.4.	Liabilities for taxes, contributions and other	155,320	328,355
B.	DEFERRED INCOME		
C.	SOURCES OF FINANCING	18,270,356	23,074,437
1.	Sources of financing from founder	10,626,343	18,269,295
2.	Sources of financing from own activity		
3.	Other sources of financing	269,625	269,625
4.	Fund balance	7,374,388	4,535,517
D.	TOTAL LIABILITIES	19,285,881	24,417,155
E.	OFF BALANCE SHEET ITEMS	1,245,491	2,335,296



MARKET AND PUBLIC SERVICES DEVELOPMENT IN THE ENERGY SECTOR

MARKET AND PUBLIC SERVICES DEVELOPMENT IN THE ENERGY SECTOR

2.1 Electricity

2.1.1 Legislative framework

The legislative framework for the field of electricity consists of the Energy Act, the Act on the Electricity Market and the Act on the Regulation of Energy Activities. In the course of 2006 new secondary legislation was passed that rounded off the institutional framework of the electric power sector under the new market-oriented circumstances.

Pursuant to the provisions of the Energy Act, the Act on the Electricity Market and the Act on the Regulation of Energy Activities, the following secondary legislation has been passed:

- General Conditions of Electricity Supply (*"Official Gazette", No. 14/06*);
- Grid Code of the Electric Power System (*"Official Gazette", No. 36/06*);
- Rules of Electricity Market Functioning (*"Official Gazette", No. 133/06*);
- Rules on Balancing the Electric Power System (*"Official Gazette", No. 133/06*);
- Rules on Allocation and Use of Cross Border Transfer Capacity (http://ops.hep.hr/ops/dokument/akti/);
- Rulebook on the Fee for Connection to the Electric Power Network and Increase in Connected Power;
- Methodology of Providing Electricity Balancing Service in the Electric Power Network;
- Tariff System for Electricity Generation, With the Exception of Eligible Customers, Without the Amounts of Tariff Items;
- Tariff System for Electricity Transmission, Without the Amounts of Tariff Items;
- Tariff System for Electricity Distribution, Without the Amounts of Tariff Items;
- Tariff System for Electricity Supply, With the Exception of Eligible Customers, Without the Amounts of Tariff Items.

Pursuant to the provisions of the Energy Act, Article 28, the amounts of tariff items in the above listed tariff systems are passed by the Government of the Republic of Croatia.

There follows a short description of those regulations.

2.1.1.1 General Conditions of Electricity Supply

General Conditions of Electricity Supply are the basic secondary legislation piece that regulates relations between electricity buyers and energy undertakings participating directly in their electricity supply. General conditions stipulate the following:

- Procedure of issuing preliminary connection approval and setting up conditions for connection to the electric power network,
- Procedure of issuing connection approval,
- Conditions for connection, electricity supply and network use,
- Quality of electricity supply,
- Bilateral contractual relations between energy undertakings and network users,
- Rights and duties of energy undertakings and network users,
- Conditions of metering and billing of delivered electricity,
- Conditions of application of procedures of electricity delivery limitation or suspension,
- Procedures of determining and billing of unauthorized electricity consumption.

2.1.1.2 Grid Code

The Grid Code regulates the following:

- Operation and management of the electric power system,
- Development and construction of the electric power system,
- Technical conditions of connection to the transmission and distribution network in the electric power system,
- Metering rules for a billing metering point.

This regulation is of paramount importance in the conditions of an open electricity market, since it allows access to the electric power network to different energy undertakings, that is, network users.

The Grid Code stipulates the following:

- Technical and other conditions of connection of users to the network,
- Technical and other conditions for safe electricity system operation for the purpose of reliable supply of high quality electricity, including the development planning,
- Procedures in times of electricity system crisis,
- Technical and other conditions for interconnection and interactions of systems,
- Technical and other conditions for metering and billing of electricity,

- Rights, obligations and interrelations of electricity market participants in order to ensure reliable and efficient functioning of the electric power system.

2.1.1.3 Rules of Electricity Market Functioning

These rules define the relations on the electricity market in the following segments:
- procedures used by the Croatian Electricity Market Operator (hereinafter: HROTE) to organize the electricity market,
- relations between HROTE and electricity market participants,
- relations between HROTE and HEP Operator prijenosnog sustava d.o.o. (Transmission System Operator, hereinafter: HEP TSO), and HROTE and HEP Operator distribucijskog sustava d.o.o. (Distribution System Operator, hereinafter: HEP DSO).

This regulation provides preconditions for the functioning of the electricity market.

2.1.1.4 Rules on Balancing the Electric Power System

Rules on Balancing the Electric Power System provide definitions of the following important elements in the process of maintaining balance between consumption and production in the electric power system:
- entities responsible for deviations (hereinafter: ERFD),
- service providers of balancing electric power system,
- the relations between ERFDs and service providers of balancing electric power system with the HEP TSO and HROTE,
- balancing electricity settlement method (hereinafter referred to as the "balancing energy") and balancing energy payment method.

2.1.1.5 Rules on Allocation and Use of Cross Border Transfer Capacity

Rules on Allocation and Use of Cross Border Transfer Capacity on the connection lines of the electric power system of the Republic of Croatia with electric power systems of neighboring countries regulate methods and conditions of allocation and use of cross border transfer capacity.
It is a regulation of paramount importance for establishment of the international electricity market, so that the European Commission has issued special instructions concerning these issues.

2.1.1.6 Rulebook on the Fee for Connection to the Electric Power Network and Increase in Connected Power

This Rulebook stipulates the methodology of determining the fee for connection of a producer's or a buyer's facility to the transmission or distribution network and increase in connected power of the already connected producer or buyer.
The Government of the Republic of Croatia has issued the Decision on the Fee for Connection to the Electric Power Network and Increase in Connected Power (*"Official Gazette", No. 52/06*), determining the connection fee of 1,350 Kn/kW, with the exception of the city of Zagreb where due to exceptionally high costs the connection fee is 1,700 Kn/kW.

2.1.1.7 Methodology for Providing Balancing Energy Services in the Electric Power System

The purpose of the Methodology for Providing Balancing Energy Services in the Electric Power System is the following:
- Providing possibility of contracting the service of electric power system balancing (hereinafter: balancing service) between the transmission system operator and the balancing energy service provider,
- Establishing the framework for determining the reference price of the balancing energy and
- Determining the price of balancing energy for Balance Responsible Parties.

2.1.1.8 Tariff System for Electricity Generation, with the Exception of Eligible Customers, without the Amounts of Tariff Items

Tariff System for Electricity Generation, with the Exception of Eligible Customers, without the Amounts of Tariff Items, i.e. the methodology for determining the tariff items for electricity generation for tariff customers determines the following:
- Goals and principles of the Tariff System,
- Methods and criteria for determining tariff items for electricity generation,
- Characteristics of the methodology,
- Data and documents used to determine costs of electricity generation,
- Customers' categories,

- Methods of determining prices of electricity generation and its sensitivity,
- Structure of tariff models and tariff items and
- Methods of determining proposals for changing the tariff items' amounts.

2.1.1.9 Tariff System for Electricity Transmission, without the Amounts of Tariff Items

Tariff System for Electricity Transmission, without the Amounts of Tariff Items, i.e. the methodology for determining tariff items for transmission of electric power determines the following:
- Goals and principles of this Tariff System,
- Methods and criteria for determining tariff items for electricity transmission,
- Characteristics of the methodology,
- Customers' categories
- Data and documents used to determine costs of electricity transmission,
- Structure of tariff items and
- Methods of determining proposals for changing the tariff items' amounts.

2.1.1.10 Tariff System for Electricity Distribution, without the Amounts of Tariff Items

Tariff System for Electricity Distribution, without the Amounts of Tariff Items (further: Tariff System), i.e. the methodology for determining tariff items for distribution of electricpower determines the following:
- Goals and principles of this Tariff System,
- Methods and criteria for determining tariff items for electricity distribution,
- Characteristics of the methodology,
- Customers' categories,
- Data and documents used to determine costs of electricity distribution,
- Structure of tariff items and
- Methods of determining proposals for changing the tariff items' amounts.

2.1.1.11 Tariff System for Electricity Supply, with the Exception of Eligible Customers, without the Amounts of Tariff Items

This Tariff System for Electricity Supply, with the Exception of Eligible Customers, withoutthe Amounts of Tariff Items (further: Tariff System), i.e. the methodology for determiningtariff items for electricity supply for tariff customers determines the following:
- Goals and principles of this Tariff System,
- Methods and criteria for determining tariff items for electricity supply,
- Characteristics of the methodology,
- Data and documents used to determine costs of electricity supply,
- Customers' categories, methods of determining prices of electricity supply,
- Method of determining the price of electricity supply,
- Structure of tariff items and
- Methods of determining proposals for changing the tariff items' amounts.

2.1.2 Opening of the electricity market

Pursuant to the provisions of the Act on the Electricity Market, after July 1, 2006, all customers with consumption exceeding 9 GWh will be granted eligible status, that is, the right to choose their electricity supplier. Annual consumption refers to all customer's metering points.
Based on their annual consumption in 2005, the status of eligible customer has been granted 112 customers, whose electricity consumption participates in the overall electricity consumption in the Republic of Croatia with about 25 %.
On July 1, 2007 all customers, except for the household category customers, will be granted eligible status, and on July 1, 2008 the eligible customers' group will include household category customers as well, by which the electricity market in the Republic of Croatia will be fully open.
Such dynamics of the market opening is not far from the processes in the European Union where the electricity market will be fully open on July 1, 2007 (even though some of the EU countries had already fully opened their electricity markets several years ago). The real electricity market openness is reflected in the number of customers that have decided to switch to a different electricity supplier, that is, that have decided to use their right and the possibility of changing the current electricity supplier.

In the following table (*Table 7*) there is a review of customers who have switched to a different electricity supplier in the EU countries in the course of 2005. In 2006 the situation has not changed significantly.

Table 7: Share of customers in the electricity consumption that have switched their supplier - cumulatively from the beginning of the market opening until 2005

Country	Large industrial customers	Medium size industrial and business customers	Small business customers and households
Austria	29%	29%	4%
Belgium[1]	20%	10%	
Denmark	>50%	ca. 15%	
Finland	>50%	82%	30%
France	15%		0%
Germany	41%	7%	5%
Greece	2%	0%	0%
Ireland[2]	56%	15%	9%
Italy[3]		60%	-
Luxembourg	25%	3%	0%
Netherlands	-	-	11%
Portugal		16%	
Spain[3]	25%	22%	19%
Sweden	>50%	-	29%
Great Britain	>50%	>50%	48%
Norway	>50%	>50%	44%
Estonia	0%	0%	0%
Latvia	0%	0%	0%
Lithuania	15%	0%	0%
Poland	19%	0%	0%
Czech Republic	5%	1%	0%
Slovakia	-	0%	0%
Hungary	32%		0%
Slovenia	8%	2%	0%
Cyprus	0%	0%	0%
Malta	0%	0%	0%

[1] *The data for the Kingdom of Belgium refer to Flanders only (customers that have abandoned the regulated tariffs' system: 40% industry, 53% small business customers and households).*
[2] *The data on Ireland include switching to ESB.*
[3] *The data on the Republic of Italy and the Kingdom of Spain include all customers, i.e. also those who have abandoned the regulated tariffs' system by recontracting.*

Source: Commission of the European Communities, Brussels, SEC(2005) XXXX, Commission Staff Working Document, Report on Progress in Creating the Internal Gas and Electricity Market, Technical Annex to the Report from the Commission to the Council and the European Parliament

As shown in the Table above, many customers have not used their right to change their electricity supplier. That applies especially to the household category, except for the customers in Great Britain and the Scandinavian countries to a certain extent.
In the neighboring countries the process of the electricity market opening has been significantly slower, which is underlined by the following examples:

- Republic of Albania: on December 31, 2006 the status of eligible customer was granted to the customers with the consumption exceeding 100 GWh and in the course of 2007 the same status will be granted to customers with the consumption exceeding 10 GWh and further market opening depends on the Government decision;
- Bosnia and Herzegovina: January 1, 2007 the status of eligible customer was granted to customers with the consumption exceeding 10 GWh and on January 1, 2008 the status of eligible customer will

be granted to all customers except for the household category customers and on January 15, 2015 the status of eligible customer will be granted to household category customers, too;
- Republic of Serbia: in the course of 2006 the status of eligible customer has been granted to customers whose consumption is exceeding 25 GWh and on January 1, 2007 the status of eligible customer will be granted to customers with consumption exceeding 3 GWh;
- UNMIK: January 1, 2007 the status of eligible customer will be granted to high-voltage customers and the customers on the voltage of 35 kV.

From the above listed data it is obvious that the real opening of the electricity market in the aforementioned countries has just begun.

2.1.3 Activities in the electric power sector restructuring

In the course of 2006 all activities related to the electric power sector restructuring in the Republic of Croatia have continued in line with legal provisions, by establishing a separate company HEP DSO (HEP Distribution System Operator).
HEP DSO has taken over all distribution network related functions and it also carries out the activity of tariff customers supply, pursuant to the Act on the Electricity Market and with all necessary licenses issued by the Agency.
HEP TSO and HEP DSO have acted independently in their daily business operations with relation to each other and to other energy undertakings from the HEP Group. In both companies great efforts have been made to improve the efficiency of business operations without jeopardizing the security of facilities and quality of services.
On October 30, 2006 the HEP Trade Sector was transformed into the daughter company HEP Trgovina d.o.o. which, due to its functions (electricity purchasing from abroad for the needs of customers in the Republic of Croatia, but also its buying and selling transactions), has contributed to the greater transparency in the overall HEP Group business operations.

2.1.4 Cross border capacities and congestion management

Determining of cross border capacity on cross border lines and its allocation has great significance for electricity trading and maintenance of the Croatian electric power system's work security under the market conditions.
Nett transfer capacity in the direction of import and export is determined for all borders of the Croatian electric power system. Transmission system operators from both sides of the border dispose of 50% of the determined capacity in the direction import and export, unless agreed otherwise by a bilateral contract. System operators from neighboring countries exchange
information on available transfer capacity at the border and its allocation.
In the first half of 2006 the “Pro-rata” method of cross border transfer capacity allocation on the annual and monthly basis was applied on the Croatian borders. The Hungarian transmission system operator - MAVIR proposed carrying out of bilateral auctions at the Croatian-Hungarian border. After negotiations and acceptance of the Rules on Joint Monthly Auctions of Cross border Transfer Capacities for 2006, the auctions on the monthly basis started on June 8, 2006 by announcing the available transfer capacities for the month of July 2006. The Auctions Office is located in Hungary. The available transfer capacity and all other information related to joint monthly auctions can be found on the web site www.mavir.hu.
In the SEE region there is currently the Dry-Run of the explicit coordinated auctions based on power flows.
The Regulation 1228/2003/EC of the European Parliament and the Council of the European Union from June 26, 2003 on conditions for access to the network for cross border exchanges in electricity (hereinafter: Regulation 1228/2003/EC) and the corresponding Guidelines on Congestion Management as the minimum request for usage of cross border capacities determine the explicit bilateral auctions on each border. From the starting minimal request there are two possible further directions. The first is the direction of regional coordinations with the final goal of explicit coordinated auctions, while the other direction is towards implicit hybrid auctions. Pursuant to the Regulation 1228/2003/EC and the corresponding Guidelines on Congestion Management in Europe there are seven regions defined in which the common principles on cross border transfer capacities shall be applied starting on January 2007:
- Northern Europe (Denmark, Sweden, Finland, Germany and Poland);
- North-West Europe (Belgium, Netherlands, Luxembourg, Germany and France);
- Italy (Italy, France, Germany, Austria, Slovenia and Greece);
- Central Eastern Europe (Germany, Poland, Czech Republic, Slovakia, Hungary, Austria and Slovenia);
- South-West Europe (Spain, Portugal and France);

- UK, Ireland and France and
- Baltic states (Estonia, Latvia and Lithuania).

With regard to that it is important to mention that in 2006 the ERGEG has issued the Regional Electricity Initiative with the list of countries that will be the implementation groups leaders.
The Rules on Allocation and Use of Cross border Transfer Capacities passed by HEP TSO in December of 2006 regulate the regime of cross border capacities allocation on the borders of the Republic of Croatia and by July 1, 2007 that document should be fully harmonized with the Regulation 1228/2003/EC.

2.2 Gas

2.2.1 Legislative framework

Legislative Framework for the natural gas sector consists of the Energy Act, the Gas Market Act and the Act on the Regulation of Energy Activities.
Pursuant to the above listed acts in 2006 the Tariff System for Natural Gas Transport, Without the Amounts of Tariff Items has been adopted and the draft Tariff System for Natural Gas Distribution, Without the Amounts of Tariff Items and the draft Tariff System for Natural Gas Supply, Without the Amounts of Tariff Items have been developed.
In addition to that, there has been intensive work on drafting of the new Gas Market Act.
What follows is the short review of the Tariff System for Natural Gas Transport, Without the Amounts of Tariff Items.

2.2.1.1 Tariff System for Natural Gas Transport, without the Amounts of Tariff Items

The Tariff System for Natural Gas Transport, without the Amounts of Tariff Items determines the following:

- Tariff items for transport of natural gas through the gas pipeline system,
- The method of calculation of charge for gas pipeline transport system usage,
- The natural gas transporter's and users' actions related to the calculation of charge for usage of gas pipeline transport system,
- The obligation of measuring the daily peak load and the method of carrying out the final billing.

According to the Amendments of the Tariff System for Natural Gas Transport, Without the Amounts of Tariff Items, passed by the Agency in December of 2006, the financial amounts used for developing a proposal of tariff items' amounts shall not be expressed in US dollars any more but in EUR.
Pursuant to the Article 28 of the Energy Act the decision on tariff items' amounts in the said tariff system shall be determined by the Government of the Republic of Croatia.

2.2.2 Natural gas market opening

The process of the liberalization of the European natural gas market is founded on the provisions of the Directive 2003/55/EZ of the European Parliament and the Council of the European Union from June 26, 2003 on common rules of internal natural gas market and abolishing of the Directive 98/30/EZ, with the goal of creating the unified internal completely open and competition-based energy market of the European Union.
The goal of the liberalization policy is lowering of the price levels and increase of the quality of service for customers on the unique European natural gas market. The level of liberalization and openness of particular gas markets varies significantly in the European countries today. As opposed to declaratory openness, which signifies the relation between the total consumption of all consumers with the right to choose their supplier and the general natural gas consumption on the particular market, the real openness refers to the relation between the total consumption of all consumers that have actually switched to a different supplier and the general natural gas consumption on the particular market, all taken annually.
In the European countries the level of real gas market openness is significantly lower than the declaratory openness, since large number of consumers do not exercise their eligibility right (*Table 8*). According to the real openness level, Great Britain leads with 47% of households and more than 50% of industrial customers that have switched to a different natural gas supplier. High level of openness show also the gas markets in Ireland and Spain. In the countries where the eligibility status has been granted to household category too, only a small number of customers have exercised that right, except in Great Britain and Italy (35%).

Table 8: Gas market openness in the EU member states and in the candidates for accession to the EU

Country	Criteria/eligibility threshold	Level of declaratory openness	Level of real openness enterpreneurship	household	Unbundling of gas transport from other activities	Unbundling of gas distribution from other activities
Austria	Since 10/2002: all	100%	9%	0.5%	legal	legal
Belgium	Since 07/2004: Region Walloon and Brussels - all customers in the business sector connected to the distribution network From 01/2007: Brussels and Walloon region - all customers	91.5%	60%*	4%**	legal	legal
Bulgaria	> 20 mil. m^3	83%	-	-	accounting	accounting
Czech Republic	Since 2005: > 15 mil m^3	28%	0%	0%	not implemented	not implemented
Denmark	Since 01/2004: all customers	100%	30%	< 5%	ownership	legal
Estonia	All except households	95%	20%	0%	not implemented	accounting
Finland	Since 2000: > 5 mil. m^3	90%	-	-	-	-
France	Since 2000: > 22 mil. m^3 Since 2003: > 7.5 mil. m^3	70%	25%	0%	legal	accounting
Greece	Since 07/2005: electricity generation and cogeneration > 25 mil. m^3	-	-	-	-	-
Ireland	Since 04/2002: > 2 mil. m^3 Since 01/2003: > 0.5 mil m^3 Since 20. 7. 2004: All except households	86%	> 50%	0%	not implemented	management
Italy	Since 01/2003: all customers	100%	30%	35%	legal	legal
Latvia	Directive not implemented	0%	0%	0%	not implemented	accounting
Lithuania	> 1 mil m^3	90%	0%	0%	not implemented	accounting
Luxembourg	Since 2000: > 15 mil m^3 Since 07/2004: all except households From 07/2007: all customers	80%	5%	0%	not implemented	management
Hungary	Since 01/2004: all except households	67%	5%	0%	legal	accounting
Netherlands	Since 2002: > 1 mil m^3 Since 07/2004: all customers	100%	30%	2%	ownership	legal
Germany	All customers, undertakings acc. to foreign reciprocity	100%	7%	2%	accounting	accounting
Poland	Since 07/2000: > 25 mil m^3 Since 07/2004: all commercial customers From 07/2007: all customers	72%	0%	0%	not implemented	accounting
Portugal	Directive implementation postponed until 2007	0%	0%	0%	-	-
Romania	> 1,24 mil m^3	75%	-	-	legal	accounting
Slovakia	Since 01/2004: > 5 mil m^3 Since 01/2005: all except households From 07/2007: all customers	72%	0%	0%	not implemented	management
Slovenia	Since 07/2004: all except households From 07/2007: all customers	91%	0%	0%	not implemented	accounting
Spain	Since 01/2003.: all customers	100%	> 50%	5%	legal	legal
Sweden	Since 07/2005: all except households From 07/2007: all customers	95%	< 5%	0%	ownership	accounting
Great Britain	Since 1998: all except Northern Ireland	100%	> 50%	47%	ownership	ownership

* Flanders 90%, Wallonia 40%;
** only Flanders
*** Data for 2006
Source: 1: BNP Paribas; Gas Trends - Energy Commodities Export Project; October 2006;
2: Cedigaz; Panorama 2006.; The Liberalization of Gas Markets in Europe

2.2.2.1 Opening of the natural gas market in the Republic of Croatia

In the Republic of Croatia in the last couple of years significant changes have taken place in the natural gas sector. The unbundling of the energy activities of natural gas supply and the natural gas transport has been carried out in a way that the company for natural gas transport Plinacro d.o.o. has been separated from the ownership of INA d.d. company.

The Gas Market Act determines the necessary preconditions for natural gas market development and ensuring of reliability and quality of supply of natural gas consumers, as well as for construction and modernization of the transport and distribution system.

The status of eligible gas customer has been granted to customers that buy natural gas for the following purposes:

- For electricity generation, regardless of annual consumption (HEP Proizvodnja d.o.o. from Zagreb);
- For cogeneration of electricity and thermal energy, regardless of annual consumption (Pliva Hrvatska d.o.o. (location in Savski Marof);
- For own purposes only with annual consumption of natural gas greater than 100 mil. m^3 (Petrokemija d.d. from Kutina);
- Buyers that carry out the activity of crude cast iron, steel and ferroalloy production, with annual production of the minimum of 50,000 tons of crude steel (Valjaonica cijevi Sisak d.o.o.).

The share of natural gas buyers' consumption with eligibility status in the overall natural gas consumption is 42%, which means the natural gas market openness in the Republic of Croatia is of declaratory nature.

Table 9: Natural gas market openness in the Republic of Croatia

Country	Criteria/eligibility threshold	Level of declaratory openness	Level of real openness		Unbundling of gas transport from other activities	Unbundling of gas distribution from other activities
			entrepreneurship	households		
Republic of Croatia	Since 07/2001: > 100 mil m3, for electricity generation, for cogeneration of electricity and thermal energy; Since 07/2004: for production of crude cast iron, steel and ferroalloy (with annual production of > 50,000 t of crude steel)	41.95%	0%	0%	ownership	unbundling of accounts under way

2.3 Oil and Oil Derivatives

2.3.1 Legislative framework

The legislative framework for the oil sector consists of the Energy Act, the Oil and Oil Derivatives Market Act and the Act on the Regulation of Energy Activities.
In 2006 the new Oil and Oil Derivatives Market Act and a number of secondary legislation pieces were passed, the description of which follows.

2.3.1.1 The Oil and Oil Derivatives Act

The Oil and Oil Derivatives Act has introduced several significant changes:
- Establishing of the Croatian Agency for Obligatory Oil and Oil Derivatives' Reserves;
- The access to the oil pipeline transportation system for legal and natural persons is defined in an objective and transparent way according to the principle of third party contractual approach;
- It is prescribed that biofuels that must comply with all prescribed conditions on biofuel quality and other regulations effective at the time of placing oil derivatives on the market, can be added to oil derivatives, which are to be placed on the market;
- The method of determining the maximum price level for particular oil derivatives is prescribed by the Minister;
- For the purpose of consumer protection, market regulation or for other justified reasons, the Government of the Republic of Croatia can prescribe the maximum price level for particular oil derivatives for a period not longer than 90 days;
- Upon the proposal of the Ministry the Government of the Republic of Croatia passes the Intervention Plan in case of disturbances on the domestic market caused by an unexpected or continuous oil and oil derivatives shortage, in case of an immediate threat to the country's independence and integrality, great natural catastrophes, technological disasters or in case of an unexpected and high jump of oil and oil derivatives prices;
- The obligatory oil an oil derivatives reserves are established in order to ensure supply in case of a threat to the country's energy security, due to extraordinary supply disturbances, the amount of which corresponds to the 90-days of average oil derivatives consumption in the previous calendar year.

2.3.1.2 The Act on the Amendments to the Act on the Special Tax on Oil Derivatives

The Act on the Amendments to the Act on the Special Tax on Oil Derivatives (*"Official Gazette", No.57/06*) prescribes that the special tax on oil derivatives shall be calculated per:
- Liter of derivative at the temperature of +15 °C for motor fuels, diesel fuels, Eurodiesel, blue-colored diesel fuel and extra light and light special heating oil,
- Kilogram of derivatives' net weight for all types of heating oil (light, medium and heavy), the liquefied petroleum gas, jet fuel and aircraft gasoline and all types of petroleum.

2.3.1.3 Rulebook on Determination of Oil Derivatives' Prices

The Rulebook on Determination of Oil Derivatives' Prices (*"Official Gazette", No. 68/06 and 75/06*) determines the method of determining the oil derivatives' prices and in addition to the existing elements, introduces new elements as follows:
- The element X4 in the basis for calculation, registered as costs of primary storage and manipulation,
- The element X5 on the gross selling price of the oil derivative, registered as the fee for financing the work of the Croatian Agency for Obligatory Oil and Oil Derivatives' Reserves and financing of obligatory oil and oil derivatives' reserves.

Oil derivatives' selling prices are changed every 14 days. The day new oil derivatives are implemented is Tuesday at 00:01.

2.3.1.4 Decree on the Payment Method for Financing of the Croatian Agency for Obligatory Oil and Oil Derivatives' Reserves and of Obligatory Oil and Oil Derivatives' Reserves

Pursuant to the Decree on the Payment Method for Financing of the Croatian Agency for Obligatory Oil and Oil Derivatives' Reserves (*"Official Gazette", No. 85/06*), oil derivatives' producers and importers shall pay a fee of 120,00 Kuna per ton of oil derivative into the state budget of the Republic of Croatia until a relevant decision is passed by the Government of the Republic of Croatia.

2.3.1.5 Decree on the Quality of Liquid Oil Fuels

The Decree on the Quality of Liquid Oil Fuels (*"Official Gazette", No. 53/06*) prescribes new marginal values for qualities of liquid oil fuels, the method of their determination and the method of proving congruity, whereby the following needs to be stressed:

- From January 1, 2009 the marginal value of sulfur in motor fuel and diesel to be put on the domestic market must not exceed 10 mg/kg;
- Diesel fuel may contain up to 5% v/v of fatty acid methyl-ester (FAME), that is, biodiesel, according to the special regulation;
- Monitoring of the liquid oil fuel quality by supplier is carried out according to the annual program of liquid oil fuel monitoring passed by the Ministry and the first program shall be developed for the year 2008.

2.3.1.6 Decree on Technical Standards of Environment Protection from Volatile Organic Compounds' Emissions Due to Gasoline Storage and Distribution

The Decree on Technical Standards of Environment Protection from Volatile Organic Compounds' Emissions Due to Gasoline Storage and Distribution (*"Official Gazette", No. 135/06*) prescribes technical standards aimed at reducing air pollution from emissions of volatile organic compounds and loss of gasoline on terminals, gas stations and movable reservoirs and the obligation to keep record on the type and the number of terminals and gas stations, carried out by the Environment Protection Agency.

2.3.1.7 Decision on Determining Annual Quantities of Liquid Oil Fuel To Be Placed on the Domestic Market, which Do Not Comply with Marginal Values of Quality Characteristics of Liquid Oil Fuels Prescribed by the Decree on Liquid Oil Fuels Quality

The Decision on Determining Annual Quantities of Liquid Oil Fuel To Be Placed on the Domestic Market, which Do Not Comply with Marginal Values of Quality Characteristics of Liquid Oil Fuels Prescribed by the Decree on Liquid Oil Fuels Quality (*"Official Gazette", No. 18/06 and 142/06*) prescribes quantities to be placed on the market of the Republic of Croatia in the course of 2006, which deviate from marginal values by steam pressure, distilled quantity, benzene, lead and sulfur content, in line with the allowed variations.

2.4 Thermal Energy

2.4.1 Legislative framework

The legislative framework for the thermal energy sector consists of the Energy Act, the Act on the Thermal Energy Production, Distribution and Supply and the Act on the Regulation of Energy Activities.
Uniform regulation of energy activities in the thermal energy sector for the entire territory of the Republic of Croatia began in 2001 by adopting the Energy Act that prescribes energy activities from the thermal energy sector and according to the Article 39 of that Act, the activities of thermal energy production, distribution and supply shall be regulated by a separate Act. The process has continued by passing the Act on the Amendments to the Act on Municipal Economy (*"Official Gazette", No. 82/04*) that prescribes deleting of the municipal service of thermal energy supply from the content of that Act on the day the new act regulating the activity of thermal energy production, distribution and supply comes into effect.
In March 2005 the Act on the Thermal Energy Production, Distribution and Supply was passed, establishing in that way the legal framework for comprehensive and organized business operations in the thermal energy sector. Also, for the most part the harmonization with the relevant European Union regulations has been completed.
The Act on Thermal Energy Production, Distribution and Supply prescribes the following:

- Conditions and way of carrying out the activities of thermal energy production, distribution and supply,
- Rights and obligations of undertakings carrying out the above mentioned activities,
- Rights and obligations of thermal energy buyers,
- Ensuring financial means for carrying out of these activities,
- Financing of construction of facilities and installations for thermal energy production and distribution,
- Supervising the implementation of the Act and
- Fines for those violating the legal provisions.

In line with the Energy Act, the Act on Thermal Energy Production, Distribution and Supply and the Act on the Regulation of Energy Activities in 2006 two new secondary legislation pieces were passed

regulating the carrying out of energy activities from the thermal energy sector, as follows:
- The Tariff System for Services of Energy Activities of Thermal Energy Production, Distribution and Supply, Without the Amounts of Tariff Items and
- General Conditions of Thermal Energy Supply (*"Official Gazette", No. 129/06*).

Following is a short description of the above mentioned regulations.

2.4.1.1 Tariff System for Services of Energy Activities of Thermal Energy Production, Distribution and Supply, without the Amounts of Tariff Items

Tariff System for Services of Energy Activities of Thermal Energy Production, Distribution and Supply, without the Amounts of Tariff Items prescribes the following:
- Matrix of tariff models and elements for determination of regulated maximum income,
- Tables for monitoring the normalized costs,
- Formula for calculation of total income via tariff items,
- Procedure of submitting proposals for change of tariff items' amounts.

The Tariff System consists of the prescribed methodology for determining tariff items with tariff items' amounts that vary depending on the user type and production technology. The Tariff System is based on the justified business operations' costs and the costs of maintenance, replacement, construction or reconstruction of facilities and environment protection, including a reasonable rate of return on investments in energy facilities, installations and the network.
Particular tariff items' amounts in tariff systems are determined by the Government of the Republic of Croatia, upon the Ministry's proposal. The energy undertaking for the activities of which the Tariff System is applied submits the proposal on tariff items' amounts to the Ministry, which asks for the Agency's opinion. The tariff system's implementation is supervised by the Agency.

2.4.1.2 General Conditions of Thermal Energy Supply

General Conditions of Thermal Energy Supply are the basic piece of secondary legislation regulating relations between thermal energy buyers and energy undertakings participating directly in their thermal energy supply. In addition to that, technical conditions and economic relations between distributors, suppliers and thermal energy buyers are defined. General Conditions prescribe the following:
- The procedure of issuing thermo energetic consent and creating conditions for connection to the distribution network,
- Conditions of connection, delivery and supply of thermal energy and network usage,
- Monitoring security of supply and quality,
- Bilateral contractual relations between energy undertakings and network users,
- Energy undertakings' and network users' rights and duties,
- Conditions of measuring, calculation and billing of delivered thermal energy,
- Conditions for implementation of limitation procedures or suspension of thermal energy delivery,
- Procedures for determination and calculation of unauthorized thermal energy consumption.

In 2006 the activities were started on the preparation of the Rulebook on Costs Distribution and Calculation for Delivered Thermal Energy and the Rulebook on Conditions for Granting The Status of Eligible Thermal Energy Producer.

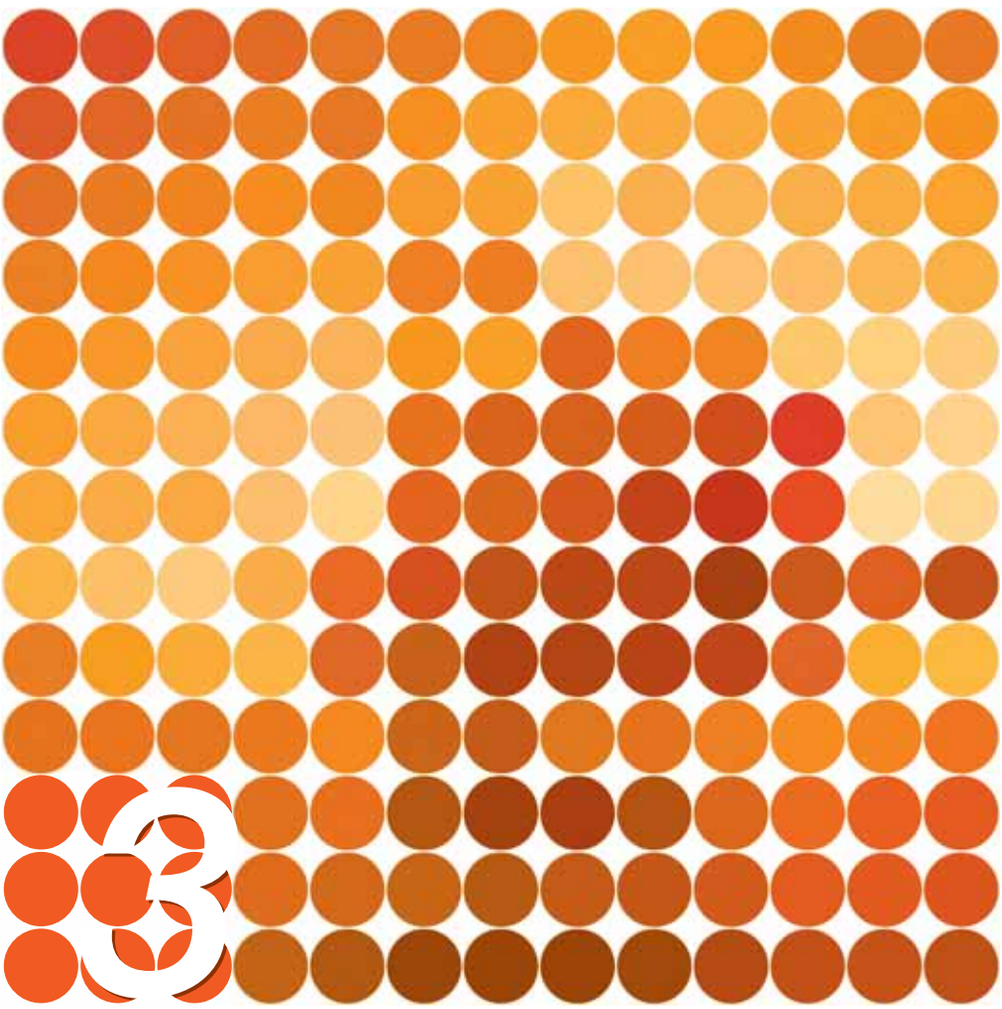
2.5 Renewable Sources of Energy and Cogeneration

2.5.1 Legislative framework

The legislative framework for the sector of renewable energy sources and cogeneration consists of the Energy Act, the Electricity Market Act, the Act on the Fund for Environment Protection and Energy Efficiency (*"Official Gazette", No. 107/03*) and the State Subsidies Act (*"Official Gazette", No. 140/05*).
The Energy Act states explicitly that the use of renewable energy sources and cogeneration is in the interest of the Republic of Croatia and it determines that national energy programs are to be developed through the Energy Development Strategy, as well as incentives for investments in renewable energy sources and cogeneration. Further, it is prescribed that the Government of the Republic of Croatia shall pass energy balances, the integral part of which are requirements regarding minimum share of renewable energy sources and efficient use of energy.
The Energy Act prescribes adoption of the Rulebook on the Use of Renewable Energy Sources and

Cogeneration and creates a precondition for introduction of incentives for usage of renewable energy sources and cogeneration through the Tariff System for Electricity Generation from Renewable Energy Sources and Cogeneration. The Electricity Market Act elaborates in more details the position of energy undertakings using renewable energy sources or owning cogeneration facilities. These producers can be granted the status of eligible electricity producers by the Agency's ruling, which opens the possibility for them to be entitled to the incentivized price of generated electricity. It is explicitly stated that the transmission system operator or the distribution system operator have the obligation to ensure taking over of the total of generated electricity from the eligible producers. In the course of 2006 the Agency has been actively involved in the preparation of the following secondary legislation from the field of renewable energy sources and cogeneration:

- The Tariff System for Electricity Generation from Renewable Energy Sources and Cogeneration;
- The Decree on the Minimal Share of Electricity Generated from Renewable Energy Sources and Cogeneration, which is incentivized;
- The Decree on Incentives for Electricity Generation from Renewable Energy Sources and Cogeneration;
- The Rulebook on Usage of Renewable Energy Sources and Cogeneration;
- The Rulebook on Acquiring the Eligible Electricity Producer Status.



3

ENERGY SECTOR ANALYSIS

3.1 Electricity

Croatian electric power system is shown in the following picture (high voltage network) (*Picture 8*).

Picture 8: Croatian electric power system

Table 10: Electric Transmission System

SS 400/x kV:	5 pieces / 4.100 MVA	Lines 400 kV	1,159 km
SS 220/110 kV:	6 pieces / 2.270 MVA	Lines 220 kV	1,145 km
SS 110/x kV:	101 pieces / 4,672 MVA	Lines 110 kV	4,600 km

In the following picture (*Picture 9*) there is HEP DSO territorial structure (21 distribution areas).

Picture 9: *HEP DSO distribution areas*

Table 11: *Electric Distribution System*

SS 110/x kV[1]:	81 pieces / 1,626 MVA	Lines 110 kV	70 km
SS 35/10(20) kV:	355 pieces / 4,260 MVA	Lines 35 kV	4,721 km
SS 10(20)/0,4 kV:	23.991 pieces / 7,073 MVA	Lines 10(20) kV	33,638 km
		Network LV	61,524 km
		Connections LV	27,617 km

[1] zajednički objekti s HEP OPS-om, osim 6 TS

3.1.1 Electricity balance of the Republic of Croatia

The electricity balance shows the relation between the electricity generation and purchasing of electricity from abroad with the total electricity consumption. The following table (*Table 12*) shows the data from the electricity balance of the Republic of Croatia for 2006 and for previous two years. It needs to be stressed that there was no electricity purchasing from thermal power plants located in ex-Yugoslav countries, in the construction of which HEP had participated (TE Obrenovac, TE Tuzla, TE Kakanj and TE Gacko), as shown in the table.

Table 12: Electricity balance of the Republic of Croatia (in GWh)

	2004	2005	2006	Change (%)
Run-of-river HE generation	1,722,9	1,511,4	1,466,3	-3.0
Reservoir HE generation	5,198,6	4,806,6	4,541,2	-5.5
Small HE generation	79.1	70.0	62.5	-10.7
Total generation HE	**7,000,7**	**6,388,0**	**6,070,0**	**-5.0**
- Total generation HE on transmission network	6,728,9	6,186,2	5,793,7	-6.3
- Total generation HE on distribution network	271.8	201.8	276.3	36.9
Conventional TE generation	5,388,5	5,150,3	5,435,8	5.5
Generation NE (for HEP)	2,605,9	2,806,5	2,644,5	-5.8
Generation DE	0.0	0.0	0.0	0.0
Total generation TE	**7,994,4**	**7,956,8**	**8,080,3**	**1.6**
- Total generation TE on transmission network	7,902,1	7,834,5	8,011,0	2.3
- Total generation TE on distribution network	92.3	122.3	69.3	-43.3
TOTAL GENERATION	**14,995,1**	**14,344,8**	**14,150,3**	**-1.4**
Purchasing from TE outside of Croatia	0.0	0.0	0.0	-
Import	2,732,7	5,995,6	5,729,0	-4.4
TOTAL PURCHASING	**17,727,8**	**20,340,4**	**19,879,3**	**-2.3**
- Total purchasing on transmission network	17,363,7	19,946,3	19,533,7	-2.1
- Total purchasing on distribution network	364.1	394.1	345.6	-12.3
Delivery to distribution	14,265,3	14,884,9	15,475,9	4.0
- Delivery to distribution from transmission network	13,901,2	14,490,8	15,130,3	4.4
- Delivery to distribution on distribution network	364.1	394.1	345.6	-12.3
Delivery to direct customers	1,063,3	1,057,5	947.4	-10.4
Pumping of RHE Velebit	132.6	149.5	177.1	18.5
Other consumption on transmission network	47.1	54.6	43.9	-19.5
Transmission losses	586.7	560.4	544.0	-2.9
TOTAL CONSUMPTION	**16,095,0**	**16,706,9**	**17,188,4**	**2.9**
- Total consumption on transmission network	15,730,9	16,312,8	16,842,8	3.2
- Total consumption on distribution network	14,265,3	14,884,9	15,475,9	4.0
Export	1632.8	3633.5	2690.9	-25.9
TOTAL CONSUMPTION AND EXPORT	**17,727,8**	**20,340,4**	**19,879,3**	**-2.3**
Transmission consumption	**15,144,2**	**15,752,4**	**16,298,8**	**3.5**
Transmission losses (%)	**3.73**	**3.44**	**3.23**	**-6.0**

Change (%) = (2006-2005)x100/2005

The following Table (*Table 13*) shows the electric power system's peak loads in the last three years. The change of the peak load compared with 2005 is 4.7%.

Table 13: The electric power system's peak loads in the last three years

Year	Peak load *(MWh/h)*	Date	Hour
2004	2,793	12/23	18
2005	2,900	3/2	20
2006	3,036	1/25	20

3.1.2 Electricity generation

The electricity generation capacities in the Republic of Croatia are mostly concentrated within the HEP Group, either 100% owned by the HEP Group or in mixed ownership. The following tables show the review of these power plants. The basic characteristics of thermo-electric power plants managed by HEP Proizvodnja d.o.o. as a daughter-company within the HEP Group are aging generation units (the average age of thermo-electric power plants is 39 years), low energy efficiency level and great installed power of generation units that run on heating oil (TE Rijeka and TE Sisak). In spite of their age, the generation facilities' availability is still high, as a result of regular maintenance. It is expected that thermo-electric power plants' generation facilities of the total installed power of over 1100 MW will gradually stop operating in the next 15 years, due to expiring of their useful life time. For that reason and due to constant increase in consumption in the course of 2006 the construction of a new generating facility has begun - HE Lešće. In spite of the aging assets, the hydroelectric power plants' availability for work in 2006 was high. All HEP Group hydroelectric power plants have certificates for electricity generation from renewable energy sources, that is, certificates on harmonization of generation with principles of environmental protection. In the course of 2006 the thermo-electric and heating power plant Zagreb was granted the international certificate ISO 14001:2004, which is an environmental management standard.

Table 14: Thermo-electric power plants in the Republic of Croatia, part of HEP Group

Thermo-electric power plants	Available threshold power *(MW)*	Fuel
TE Plomin I	98	Coal
TE Plomin II (50% HEP, 50% RWE)	192	Coal
TE Rijeka	303	Heating oil/natural gas
TE Sisak	396	Heating oil/natural gas
TE-TO Zagreb	337	Heating oil/natural gas
EL-TO Zagreb	90	Heating oil/natural gas
KTE Jertovec	83	Extra light oil/natural gas
PTE Osijek	48	Extra light oil/natural gas
TE-TO Osijek	42	Heating oil/natural gas
Intervention gas and diesel power plants	42	
Thermo-electric power plants total	**1,631**	

50% of the nuclear power plant Krško is owned by the HEP Group. Available threshold power for the purposes of the Republic of Croatia is 338 MW (50% of total power).
In the neighboring countries the Republic of Croatia before 1990 participated in the construction of four thermo-electric power plants, total power of which is 650 MW, as follows: 300 MW in TE Obrenovac (Serbia) and 200 MW in TE Tuzla, 50 MW in TE Kakanj, 100 MW in TE Gacko (Bosnia and Herzegovina).

Table 15: Hydroelectric power plants in the Republic of Croatia, part of the HEP Group

Hydroelectric power plant	Installed capacity *(MW)*	Potential generation *(GWh)*	Type of hydroelectric power plant
HE Senj	216	919	Reservoir
HE Sklope	22.5	66	Reservoir
HE Vinodol	84		Reservoir
CHE Lepenica	1.4/-1.2		Reservoir
CHE Fužine	4/-4.8		Reservoir
HE Peruča	41.6	102	Reservoir
HE Orlovac	237	287	Reservoir
HE Zakučac	486	1,295	Reservoir
RHE Velebit	276/-240	360	Reservoir
HE Dubrovnik	216	1,250	Reservoir
HE Đale	40.8	123	Reservoir
HE Kraljevac	46.4	29	Reservoir
CS Buško Blato	11.4/-10.3		Reservoir
Total reservoir type	**1,683/-256**	**4,552**	
HE Rijeka	36	79	Run-of-river
HE Miljacka	24	119	Run-of-river
HE Golubić	6.5	19	Run-of-river
HE Gojak	48	208	Run-of-river
HE Varaždin	86.5	452	Run-of-river
HE Čakovec	77.4	357	Run-of-river
HE Dubrava	77.8	336	Run-of-river
Total run-of-river	**356.2**	**1,570**	
Small hydroelectric power plants	16.7	71	
Total hydroelectric power plants	**2,059,8/-256.5**	**6,193**	

- The total power plants' power in the Republic of Croatia: 3.691 MW
- Nuclear power plant Krško, 50%: 338 MW
- Total: 4.029 MW

Apart from the above listed power plants, entirely or partially owned by the HEP Group, in the Republic of Croatia in 2006 there were several power plants operating outside of that system. The data on the more relevant power plants outside the HEP Group system, delivering energy into Croatia's electric power system are displayed in the following table (*Table 16*):

Table 16: Power plants outside the HEP Group

Power plant	Installed capacity *(MW)*	Note
VE Ravna 1 (Pag)	5.95	
VE Krtolin (Šibenik)	11.20	
TE Pliva Savski Marof	4.40	cogeneration
HE Roški Slap (Drniš)	2.26	

3.1.3 Electricity sales

Electricity purchasing and sales in 2005 and 2006 and the accompanying losses in distribution are shown in the following table (*Table 17*).

***Table 17:** Electricity purchase and sales in 2005 and 2006*

	2005	2006
Total electricity purchase (kWh):	15,942,418,139	17,370,777,504
Total electricity losses in distribution (%):	9.85	7.86
Total electricity sales (kWh):	14,371,920,800	15,058,532,817

Electricity sales is shown in the following table (*Table 18*). Electricity sales means total sales, that is, for tariff and eligible customers, by categories. Number of customers means the total number of metering points at both tariff and eligible customers.

***Table 18:** Electricity sales in 2006 by customers' categories*

Customers' category	Electricity sales				No. of customers	Energy per customer	Power per customer
	ST (kWh)	DT (kWh)	NT (kWh)	Total (kWh)		(kWh)	(kW)
HV 110 kV		659,922,713	498,512,074	1,158,434,787	41	28,254,507	4,805
MV 35 kV		496,663,144	337,877,403	834,540,547	91	9,170,775	1,874
MV 10, 20 kV		1,549,965,779	868,882,779	2,418,848,558	1,899	1,273,749	308
LV entrepreneurship, blue	328,245,572			328,245,572	56,335	5,827	
LV entrepreneurship, white		918,255,741	418,992,711	1,337,248,452	112,822	11,853	
LV entrepreneurship, red		1,398,511,488	659,679,796	2,058,191,284	12,411	165,836	54
LV entrepreneurship, orange	51,940			51,940	101	514	
Public lightning	402,704,140			402,704,140	19,498	20,654	
LV household, blue	1,833,162,405			1,833,162,405	804,298	2,279	
LV household, white		2,906,214,610	1,768,680,193	4,674,894,803	1,182,333	3,954	
LV household, black		11,898,667	24,484	11,923,151	3,195	3,732	
LV household, orange	278,632			278,632	204	1,366	

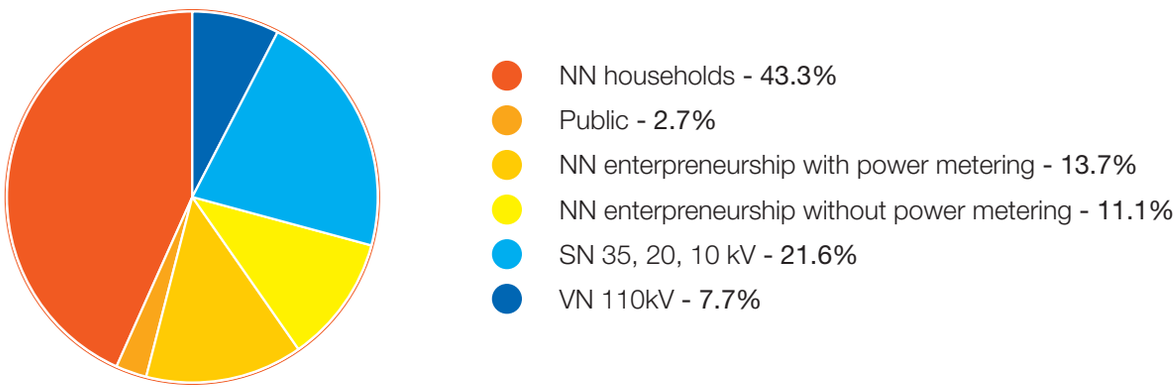
Shares of customers' categories in electricity sales are shown in the following table (*Table 19*).

***Table 19:** Shares of customers' categories in electricity sales in 2006*

Customers' category	Electricity sales				No. of customers	Energy per customer	Share
	ST *(kWh)*	DT *(kWh)*	NT *(kWh)*	Total *(kWh)*		*(kWh)*	%
VN 110 kV		659,922,713	498,512,074	1,158,434,787	41	28,254,507	7.7
MV 35, 20, 10 kV		2,046,628,923	1,206,760,182	3,253,389,105	1,990	1,634,869	21.6
LV entrepreneurship, without power metering	328,297,512	918,255,741	418,992,711	1,665,545,964	169,258	9,840	11.1
LV entrepreneurship, with power metering		1,398,511,488	659,679,796	2,058,191,284	12,411	165,836	13.7
Public lightning	402,704,140			402,704,140	19,498	20,654	2.7
LV household	1,833,441,037	2,918,113,277	1,768,704,677	6,520,258,991	1,990,030	3,276	43.3
TOTAL	2,564,442,689	7,941,432,142	4,552,649,440	15,058,532,817	2,193,228		100.0

The most represented customers' category are customers on low voltage with the share of 43.3%, followed by entrepreneurship on low voltage with the total share of 24.8%. On medium and high voltage the electricity sales is realized with the total share of 29.3%.

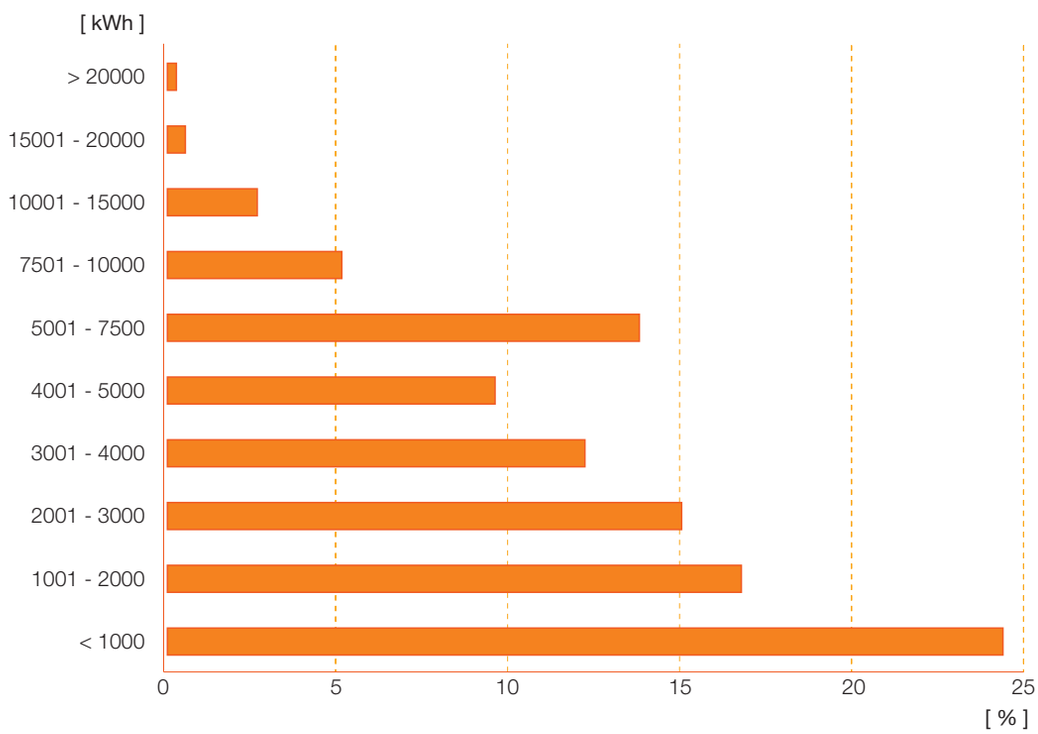
Picture10: Shares of customers' categories in electricity sales in 2006.



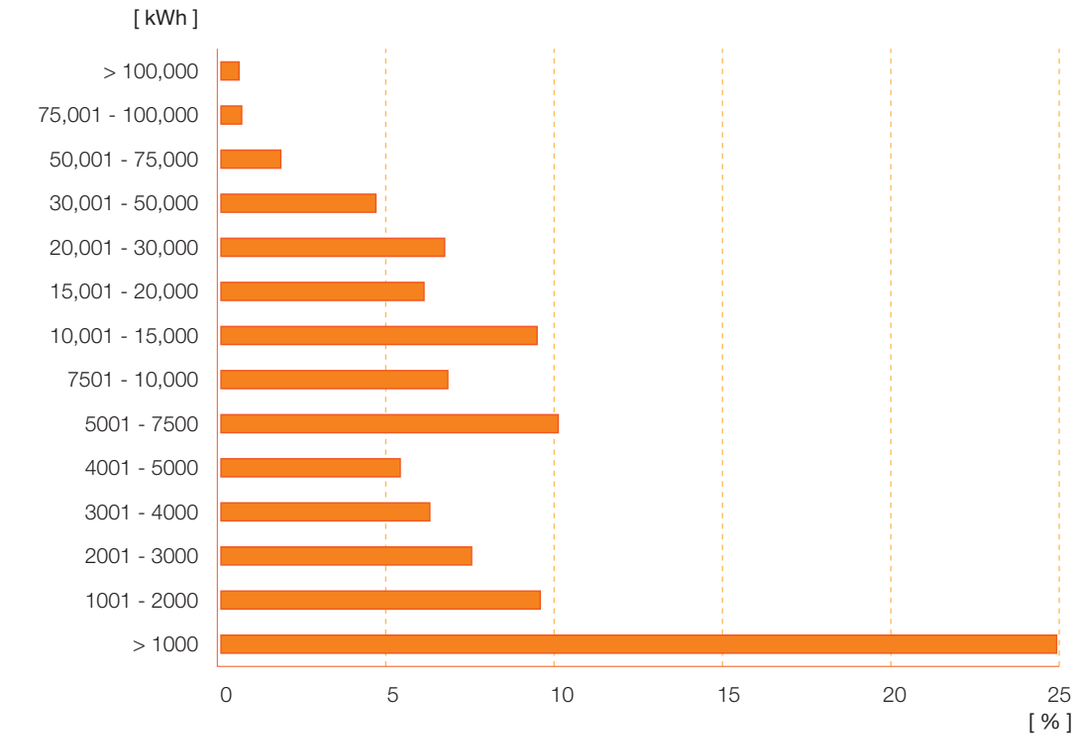
3.1.4 Electricity consumption

The following two pictures show customers' shares by consumption groups for customers' category households (*Picture 11*) and entrepreneurship on low voltage without power metering (*Picture 12*). It is obvious that the most represented customers are those with consumption under 1,000 kWh/year with the share of almost 25% in their customers' category.

Picture 11: Share of customers by consumption group for customers' category households

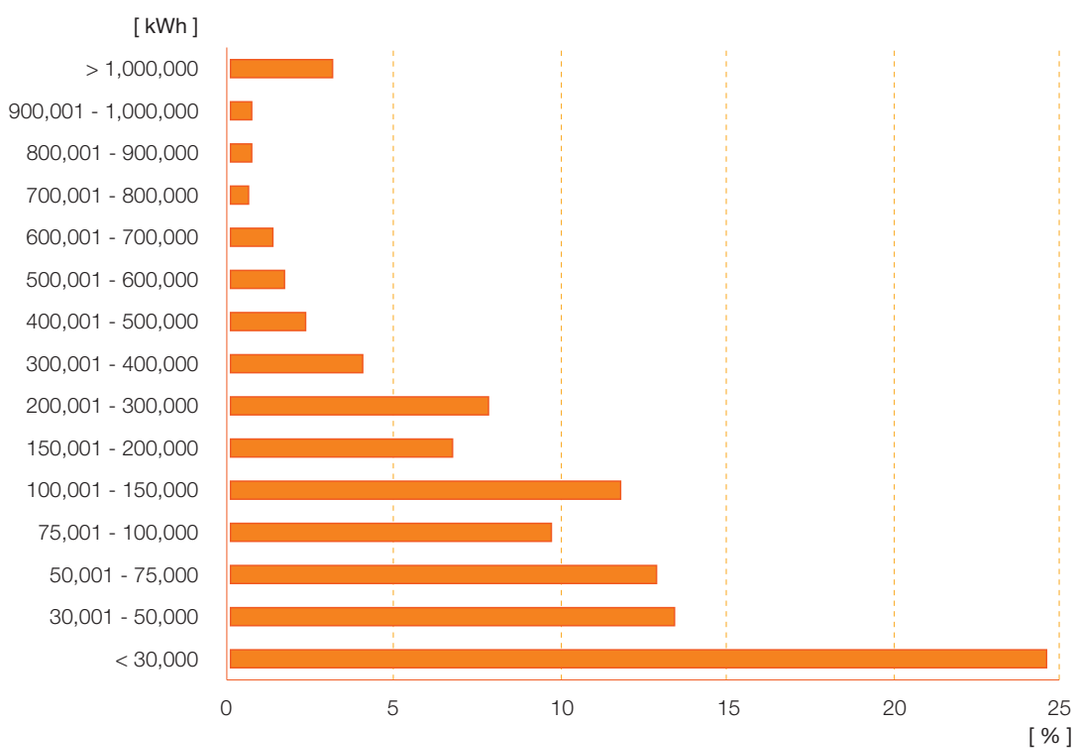


Picture 12: Share of customers by consumption group for customers' category entrepreneurship on low voltage without power metering



With regard to the share of customers by consumption group for customers' category entrepreneurship on low voltage with power metering, customers with consumption under 30,000 kWh/year are the most represented group with the share of almost 25% (*Picture 13*).

Picture 13: Share of customers by consumption group for customers' category entrepreneurship on low voltage with power metering



3.1.5 Review and comparison of electricity prices for end consumers

The following table (*Table 20*) shows realized average selling electricity prices by tariff categories in 2006.

Table 20: Average selling prices for end consumers (Kn/kWh) for 2005 and 2006

Customers' category	2005	2006
Customers on high voltage	0.31	0.31
Customers on medium voltage	0.43	0.45
Total customers on high and medium voltage	0.41	0.43
Customers on LV - entrepreneurship	0.57	0.59
Customers on LV - public lightning	0.47	0.49
Customers on LV - households	0.56	0.58
Total customers on low voltage	0.56	0.58
Total tariff customers	0.52	0.54

For the purpose of comparison of unit electricity prices in the Republic of Croatia with the European countries the data from the Eurelectric statistical report were used. In the following text there are definitions of customers' category households reference customers.

Table 21: Definitions of reference customers for the household category

Mark	Consumption - total	Consumption by night (kWh/year)	Consumption range
A	600	0	< 1,000
B1	1,200	0	1,000 - 2,000
B2	1,700	0	1,000 - 2,000
C1	3,500	0	2,001 - 5,000
C2	3,500	1,300	2,001 - 5,000
D	7,500	2,700	5,001 - 10,000
E1	13,000	5,000	> 10,000
E2	13,000	9,500	> 10,000
F1	20,000	8,000	> 10,000
F2	20,000	15,000	> 10,000

Source: Electricity Tariffs as of 1 January 2006, Eurelectric, June 2006

Table 22: Definitions of reference customers for the category entrepreneurship/industry

Mark	Max. load (kW)	Duration of peak load (h)	Consumption (MWh/year)
A	100	1,600	160
B1	500	2,500	1,250
B2	500	4,000	2,000
C1	1,000	2,500	2,500
C2	1,000	4,000	4,000
D1	2,500	4,000	10,000
D2	2,500	6,000	15,000
E1	4,000	4,000	16,000
E2	4,000	6,000	24,000
F1	10,000	5,000	50,000
F2	10,000	7,000	70000

Source: Electricity Tariffs as of 1 January 2006, Eurelectric, June 2006

Data based on the classification from the previous table (*Table 22*) is harder to compare than the data from the household category since in the category entrepreneurship/industry the data on the standard customers' connection voltage for particular countries are not listed. On the other hand, connection conditions for big customers are not the same in all countries.
Comparison of electricity prices in Croatia with selected European countries shows that electricity prices in Croatia are relatively low compared with most EU countries, but they are higher than electricity prices in new EU member states.

Table 23: Average electricity prices (1/100€) for end customers, from customers' category households, without tax

Standard customer's mark:	A	B1	B2	C1	C2	D	E1	E2	F1	F2
Consumption (kWh/year.):	600	1,200	1,700	3,500	3,500	7,500	13,000	13,000	20000	20000
By night (kWh/year):					1,300	2,500	5,000	9,500	8,000	15,000
BULGARIA	4.17	4.69	5.14	5.70	4.81	5.18	5.16	4.32	5.17	4.33
CROATIA	***12.09***	***9.97***	***9.34***	***8.57***	***7.52***	***7.28***	***6.93***	***5.58***	***6.80***	***5.43***
FRANCE	12.83	11.13	10.71	10.58	9.05	8.76	8.23	7.14	8.27	7.17
FRANCE option Tempo						6.47		7.72		
GERMANY Hamburg	21.80	17.20	15.85	14.18	13.62	12.68		8.62		8.27
GERMANY West	25.09	18.93	17.11	14.99	14.56	13.01		9.21		8.70
GERMANY Southwest	23.54	18.98	17.13	14.85	13.78	12.43		8.43		7.96
GREECE	7.95	7.47	7.33	8.25	6.43	7.44	9.16	5.55	9.63	5.68
IRELAND	26.57	19.65	98.621	15.10	12.85	11.73	10.89	8.62	10.55	8.25
ITALY	8.48	8.80	8.72		15.48	14.50				
LATVIA	5.48	5.48	5.48	5.48	7.02	5.66	5.11	4.56	4.88	4.32
LUXEMBOURG	26.73	19.46	17.32	14.69	13.90	12.56	11.53	8.73	11.12	8.28
NETHERLANDS	23.14	16.38	14.39	11.94	12.59	11.40	10.60	8.65	10.27	8.30
POLAND Upper Silesia	9.64	8.21	7.79	7.49	7.44	5.5	7.08	5.50	6.94	5.35
PORTUGAL	13.77	15.58	13.97	14.17	13.43	11.95	10.89	9.30	10.31	8.70
SLOVENIA	11.66	10.06	0.00	0.00	8.74	7.83	0.00	0.00	0.00	6.13
SPAIN	12.03	12.03	11.04	10.98	9.40	8.63	8.12	6.28	7.97	6.16

Source: Electricity Tariffs as of 1 January 2006, Eurelectric, June 2006

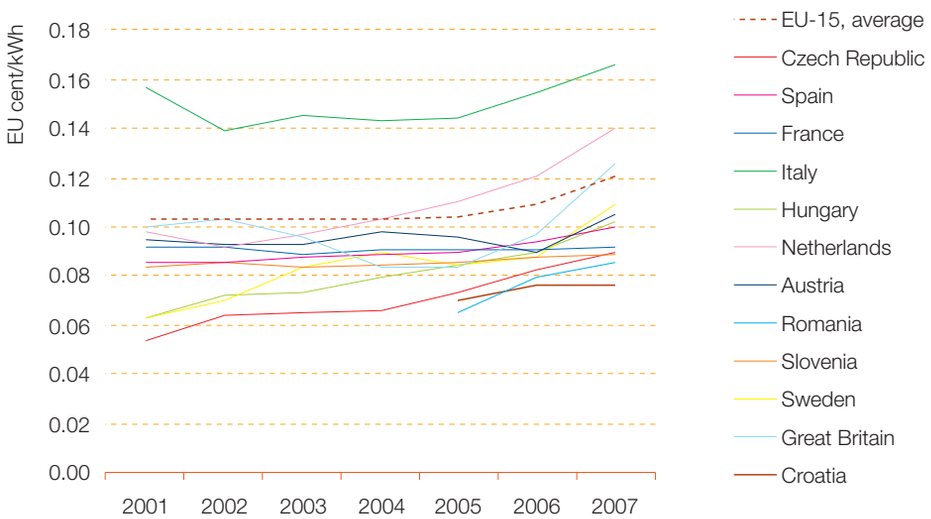
Table 24: Average electricity prices (1/100€) for end customers, from customers' category entrepreneurship/industry, without tax

Standard customer's mark:	A	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2
Peak load (kW):	100	500	500	1000	1000	2500	2500	4000	4000	10000	10000
Duration of peak load (h):	1600	2500	4000	2500	4000	4000	6000	4000	6000	5000	7000
Consumption (MWh/year):	160	1250	2000	2500	4000	10000	15000	16000	24000	50000	70000
Country											
BULGARIA	5,43	4,84	4,41	4,84	4,41	4,41	3,89	4,41	3,89	4,12	3,67
CROATIA	***9,48***	***7,53***	***6,30***	***7,52***	***6,29***	***6,29***	***5,49***	***4,86***	***4,21***	***4,43***	***3,97***
FRANCE	7,70	6,29	5,33	6,29	5,33	5,33	4,55	5,33	4,55		
GERMANY Southwest	11,84	10,04	8,63	9,96	8,51	8,48	7,56	8,47	7,55	7,48	6,93
GERMANY Industrial zone	13,21	11,39	9,76	11,03	9,64	9,14	8,24	8,91	8,18	8,45	7,86
GERMANY South	14,17	9,23	7,98	9,18	7,95	7,94	7,21	7,93			
GREECE	9,06	7,28	6,68	7,28	6,68	6,68	5,67	6,47	5,60	5,25	4,60
IRELAND	13,23	11,23	9,98	11,23	9,91	10,01	9,10	9,92	9,04	8,87	8,31
ITALY	10,62	9,74	9,34	11,,31	10,19	10,18	9,32	10,18	9,32	9,00	8,45
LATVIA	4,59	4,15	4,10	4,14	4,10	3,30	3,28	3,30	3,28	3,28	3,27
LUXEMBOURG	10,68	9,50	8,45	9,46	8,43	NC	NC	NC	NC	NC	NC
POLAND Upper Silesia	8,17	5,55	5,30	5,34	5,02	5,02	4,74	4,74	4,63	4,67	4,60
PORTUGAL	10,21	8,92	8,17	8,90	8,16	8,16	7,53	8,15	7,30	6,31	5,82
SLOVENIA	23,14	7,11	6,51			6,32			5,59		
SPAIN	8,53	7,83	7,21	7,36	6,76	6,76	6,08	6,76	6,08	6,10	5,61

Source: Electricity Tariffs as of 1 January 2006, Eurelectric, June 2006

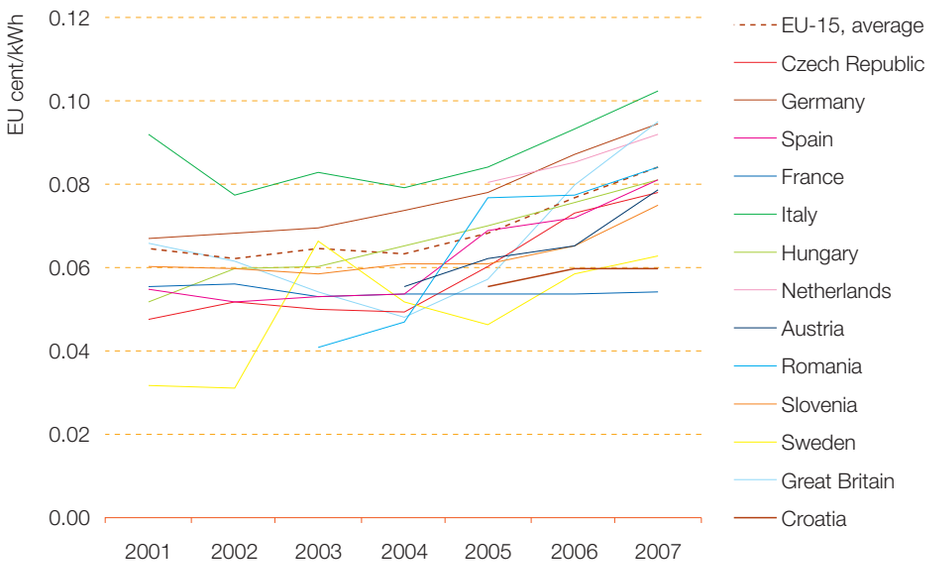
The following pictures (*Picture 14 and Picture 15*) show the trend of electricity price increase in EU countries for customers' categories households and entrepreneurship. For certain years no data were available.

Picture 14: Electricity prices' trends in EU countries for customers in the household category C2, from 2001 until 2007, without tax



Source: Eurostat/Environment and Energy/Energy/Prices/Electricity prices - households

Picture 15: Electricity prices' trends in EU countries for customers in the entrepreneurship category B2, from 2001 until 2007, without tax



Source: Eurostat/Environment and Energy/Energy/Prices/Electricity prices - industrial users

3.1.6 Quality of electricity supply

Pursuant to the Act on the Regulation of Energy Activities, one of the Agency's activities is also monitoring of energy undertakings, in line with the Energy Act and other acts regulating carrying out of particular energy activities and supervision of energy undertakings' quality of supply.

General Conditions of Electricity Supply define electricity supply quality as voltage quality, reliability of supply and the quality of service provided to network users at the point of electricity receipt and/or delivery.

- Reliability of supply - the capability of the network to ensure stable electricity supply over a given time period, as determined by indicators of the number and duration of supply disruptions,
- Quality of service - the level of provision of services prescribed in these General Conditions which the transmission system operator or the distribution system operator is required to ensure to network,
- Voltage quality - the stability of physical characteristics of the voltage relative to the prescribed value (effective value, frequency, wave shape, symmetry of voltage phase values, etc.)

General Conditions of Electricity Supply prescribe that the transmission system operator and the distribution system operator have the obligation to set up the following:

- System for disturbance data collection, processing and storage by January 1, 2007;
- Monitoring of voltage quality by January 1, 2007;
- Monitoring of quality of service by July 1, 2006.

Of the listed obligations, regarding monitoring of electricity supply quality, HEP DSO has fulfilled the following:

- From July 1, 2006 the system for monitoring the quality of services has been set up in HEP DSO,
- From January 1, 2006 a systematic approach to monitoring the continuity of supply with help of DISPO software application has been introduced in HEP DSO,
- A study has been launched on establishment of the system for monitoring the voltage quality in the HEP DSO network.

Based on that, the Agency has requested the data from HEP-DSO's system for monitoring the quality of service and from the system for monitoring the continuity of supply.

With regards to the fact that in December 2005 CEER published The Third Benchmarking Report on Quality of Electricity Supply in EU Countries, hereinafter: The Report on Quality of Electricity Supply, the data on electricity supply quality by HEP-ODS will be compared with the data from that report.

3.1.6.1 Reliability of supply

Pursuant to the Report on quality of Electricity Supply the usual indicators of supply reliability quality, that is, electricity distribution reliability are the following:

System Average Interruption Frequency Index:

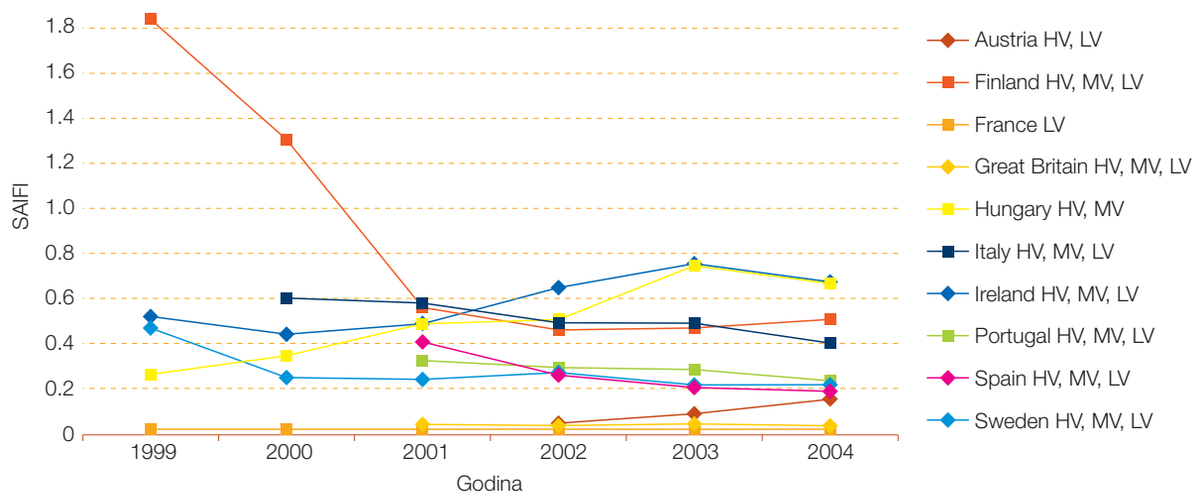
$$SAIFI = \frac{\text{Total number of customer ineterruptions}}{\text{Total number of customers served}}$$

System Average Interruption Duration Index:

$$SAIDI = \frac{\text{Sum of all customer interruption durations}}{\text{Total number of customers served}}$$

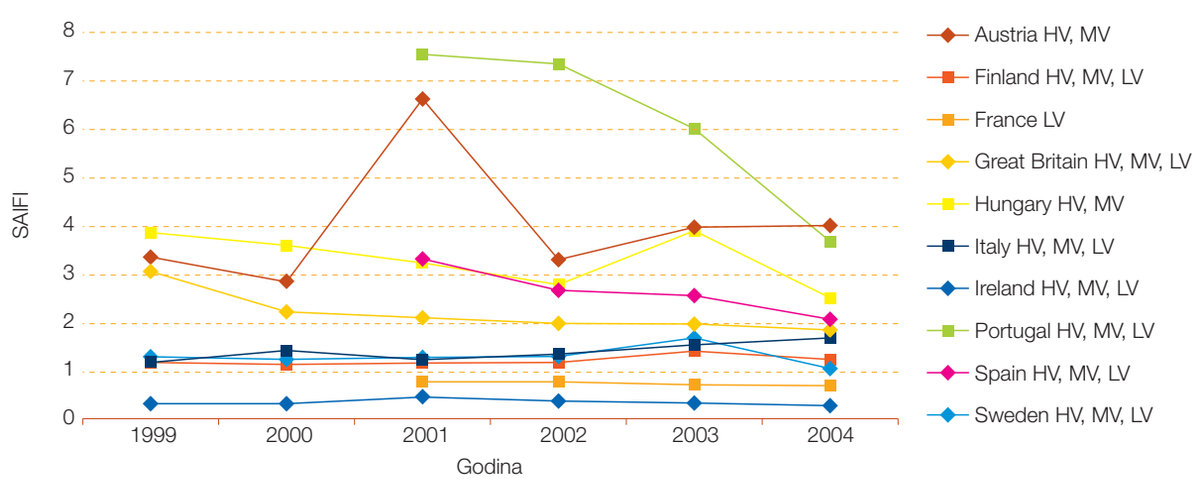
Particularly interesting are the so called long-term interruptions (over three 3 minutes). Interruptions are caused by either network faults or planned maintenance. That refers to SAIFI and SAIDI indicators. With regard to consequences for consumers, of special significance are the indicators that refer to interruptions due to network faults on medium voltage networks, especially 10(20) kV. Taking that into consideration, it is desirable to divide interruptions into planned (announced) and unplanned (unannounced) and monitor them by voltage levels.
In the Report on Quality of Electricity Supply there are parallel SAIFI indicators for planned interruptions (*Picture 16*) and unplanned interruptions (*Picture 17*) from 1999 until 2004 for EU countries. As shown in the picture, the usual values for planned SAIFI are up to 0.8 interruptions per customer per year. The values for unplanned SAIFI are in the range up to 7 interruptions per customer per year, the usual value being from 1 to 4 interruptions per customer per year.

Picture 16: Planned SAIFI in selected EU countries



Source: Report on Quality of Electricity Supply, CEER

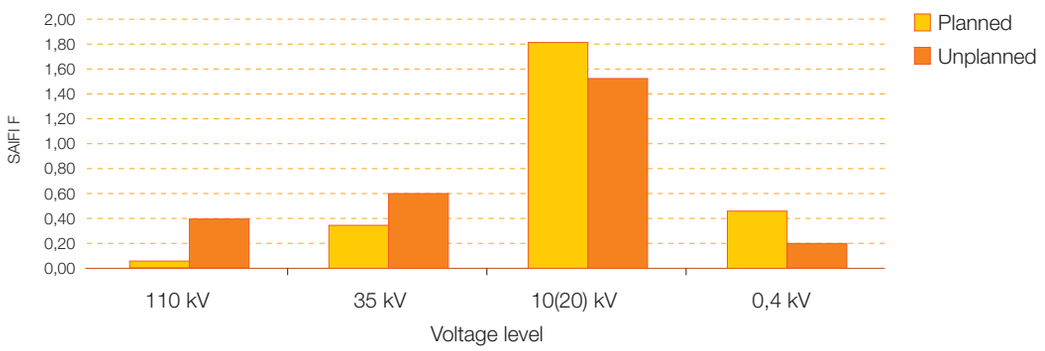
Picture 17: Unplanned SAIFI in selected EU countries



Source: Report on Quality of Electricity Supply, CEER

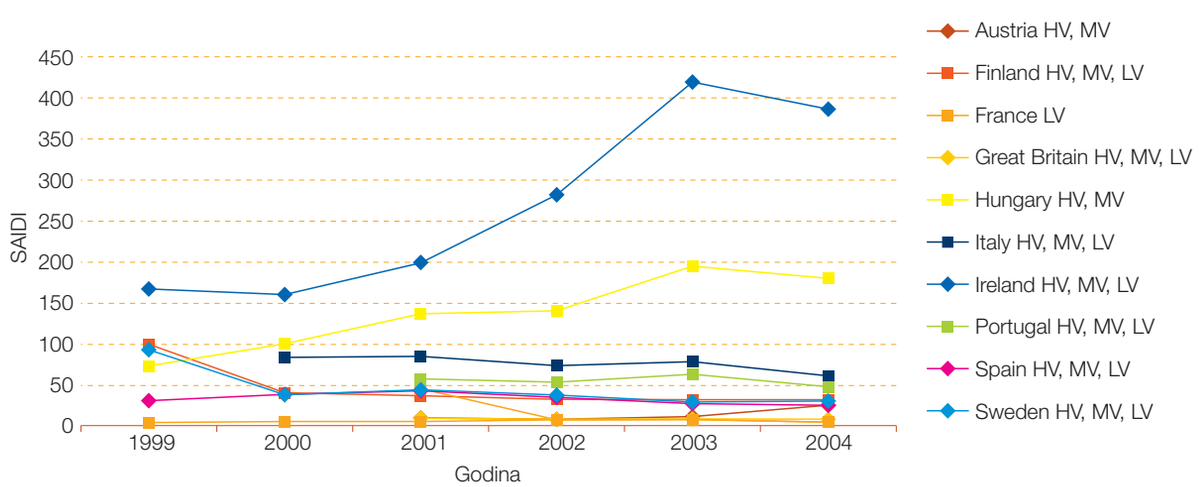
In HEP-ODS the maximum SAIFI indicator value is 1.82 on network voltage level 10(20) kV, while values for other voltage levels are significantly lower and are in the range from 0.06 on voltage level 110 kV to 0.46 on voltage level 35 kV (*Picture 18*).
SAIFI values for unplanned interruptions in HEP DSO are 1.54 on voltage level 10(20) kV. On other voltage levels SAIFI values for planned interruptions are 0.2 on 0.4 kV, 0.39 on 110kV and 0.6 on 35kV (*Picture 18*).

Picture 18: *SAIFI per voltage levels in HEP DSO for 2006*



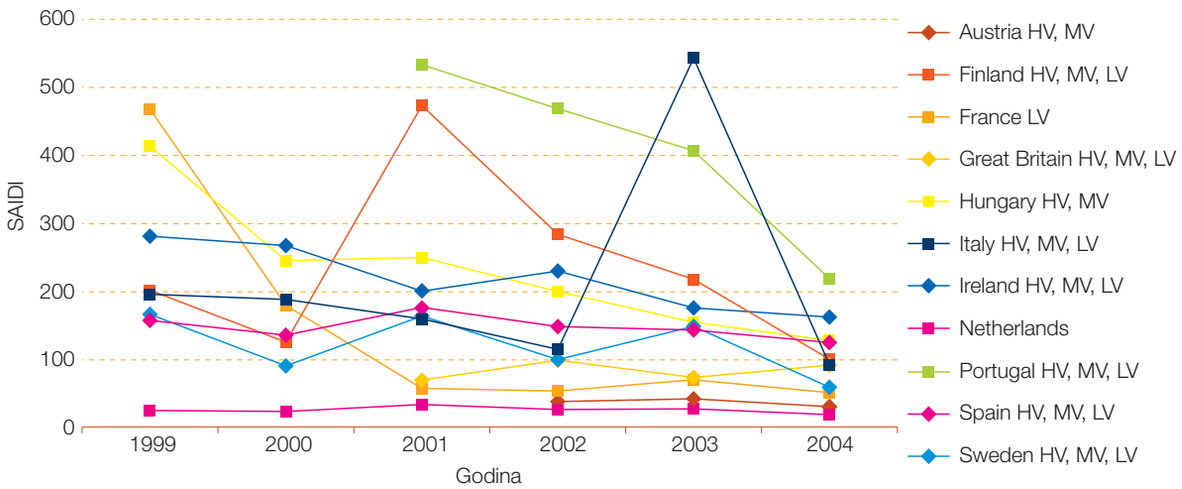
In the Report on Quality of Electricity Supply there are parallel SAIDI indicators for planned interruptions (*Picture 19*) and unplanned interruptions (*Picture 20*) from 1999 until 2004 for EU countries. The pictures show that usual values for planned SAIDI are from 50 to 200 minutes per customer per year, with the exception of Ireland, where they are up to 400 minutes. For unplanned SAIDI the values are within the range of 100 to 300 minutes per customer per year.

Picture 19: *Planned SAIDI in selected EU countries*



Source: Report on Quality of Electricity Supply, CEER

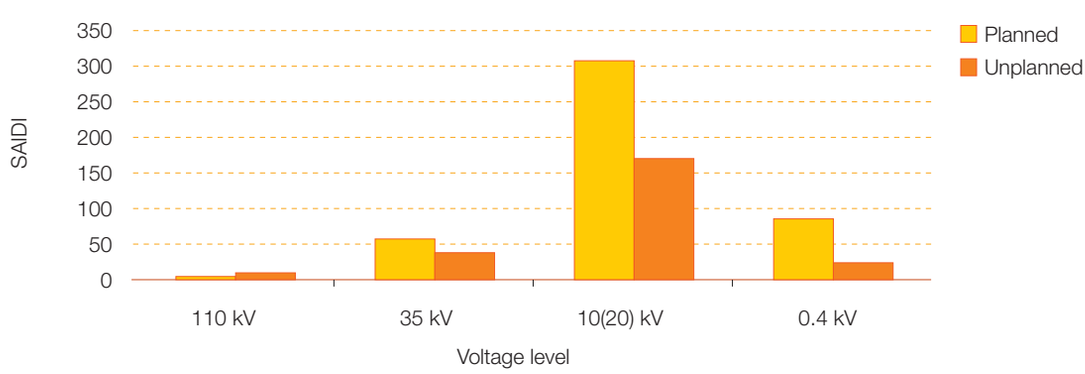
Picture 20: Unplanned SAIDI in selected EU countries



Source: Report on Quality of Electricity Supply, CEER

In HEP DSO the maximum value of SAIDI indicator for planned interruptions is 306.7 minutes per customer per year on network voltage level 10(20) kV, while on other voltage levels the values are much lower and fall within the range of 4.04 minutes per customer per year on the voltage level 110 kV to 86.2 minutes per customer per year on the voltage level 0.4 kV (*Picture 21*).
SAIDI values for unplanned interruptions in HEP DSO are 173.4 minutes per customer per year on the voltage level 10(20) kV. On other voltage levels SAIDI values for planned interruptions are 24.9 minutes per customer per year on 0.4 kV, 10.2 minutes per customer per year on 110 kV and 38.9 minutes per customer per year on 35 kV (*Picture 21*).

Picture 21: SAIDI per voltage levels in HEP DSO for 2006



The above listed indicators for HEP DSO show that interruptions in the networks 10(20) kV influence the greatest number of customers, with regards to low voltage and high voltage networks, which is understandable if the following facts are taken into account:

- High voltage networks are normally built respecting the criteria “n-1”. Therefore, in cases of single faults on network elements there should be no interruptions in supply of customers, especially since those networks usually are meshed;
- Medium voltage networks are generally radially operated. In addition to that, in rural networks there is often no possibility of reserve supply. In such situations faults result in the interruption of supply of a large number of customers with considerable duration and
- Low voltage networks supply relatively small number of customers from the side of the low voltage feeders. That means even in cases of frequent interruption a relatively small number of customers will be affected, that is, will not be supplied.

3.1.6.2 Quality of service

Quality of service as part of quality of electricity supply represents a system of service evaluation provided by the distribution system operator to electricity customers. In the deregulated energy sector those services are sometimes called commercial services. Monitoring the quality of service has become increasingly important but also more complex due to the fact that electricity supply and electricity distribution are separate energy activities.

According to the Report on Quality of Electricity Supply, the quality of service is classified as follows:

- Quality of service before conclusion of connection contract between an energy undertaking and a customer and
- Quality of service during the validity period of the contract on network supply and usage.

The first part refers to acquiring necessary information on network connection, deadline for connection and the fee for connection to the network. The second part includes all services related to effectuation of the network supply and usage contract (electricity amount per month, dynamics of electricity and power delivery, quality of service level, method of metering and billing, payment arrangement, response to customers' queries and complaints etc.)

In the following table (*Table 25*) there are the most frequently used service quality indicators.

Table 25: Most frequently used service quality indicators

Area	Indicator
Connections of customers	Estimating charge (simple work)
	Execution of simple works
	Execution of complex works
	Connection (supply and meter)
Restoration in case of fault related to single customer	Responding to failure of distributor's fuse
Solving problems related to voltage or meter	Voltage complaints
	Meter problems
Customer contact in person, in writing or by phone	Notice on interruption of supply
	Queries on charges and payments
	Response to customers' letters
	Response to customers claims
	Appointments scheduling
Meter reading and billing	Number of meter readings within a year
	Reconnection following repayment of debt

Source: Report on Quality of Electricity Supply, CEER

The Rules on Services in Electricity Distribution and Supply, HEP DSO, August 2006 (hereinafter: Rules) are the first step in the establishment of the system for monitoring the quality of service. The Rules define services (standard and non-standard) for which evaluation and assessment criteria have been defined. On July 1, 2006 HEP DSO established the system for monitoring the quality of service. For the beginning of the implementation of the system for monitoring the quality of service two quality assessments have been defined:

- Excellent
- Acceptable.

Also, in the very beginning a part of standard services shall be monitored and of non-standard services those that have the public service function. Monitoring of the quality of supply shall be carried out through three activities:

- Distribution,
- Distribution - metering service,
- Supply.

Following are (*Table 26*) the coefficients of quality of service evaluations for the activity of supply within HEP DSO. Blue-colored coefficient refers to the evaluation excellent, green-colored is the coefficient referring to the evaluation acceptable and red-colored coefficients deviate from the determined quality of service evaluations.

Table 26: Coefficients of evaluations for quality of service in the supply activity

Distribution areas	Billing	Response to customers' questions and complaints	Non-standard billing and issuing of bills	Non-standard billing procedure
	(%)	(%)	(%)	(%)
Elektroslavonija Osijek	2,17	98	0,01	0,01
Elektra Bjelovar	1,66	100	0,27	0,10
Elektra Virovitica	0,90	100	0,00	0,00
Elektra Požega	0,16	100	0,00	0,04
Elektra Sl.Brod	2,85	100	0,00	0,22
Elektra Vinkovci	0,51	100	1,72	0,29
Elektrolika Gospić	0,23	100	0,00	0,00
Elektroistra Pula	0,90	100	0,00	0,00
Elektroprimorje Rijeka	1,28	100	0,00	0,00
Elektrojug Dubrovnik	0,03	100	0,01	0,03
Elektrodalmacija Split	2,80	95	0,03	0,11
Elektra Šibenik	0,29	99	0,00	0,04
Elektra Zadar	2,42	99	0,00	0,12
Elektra Karlovac	0,58	100	0,44	0,26
Elektra Sisak	1,18	100	0,00	0,00
Elektra Čakovec	0,93	100	0,00	0,00
Elektra Koprivnica	0,17	100	0,00	0,00
Elektra Križ	0,22	100	0,00	0,33
Elektra Varaždin	0,77	100	0,00	0,02
Elektra Zabok	0,73	100	0,00	0,04
Elektra Zagreb	1,61	95	0,25	0,11
Evaluation				
excellent	< 0,2% households < 0,1% entrepreneurship	> 98%	< 0,1%	< 1%
acceptable	< 0,5% households < 0,3% entrepreneurship	> 90%	< 0,3% households < 0,2% entrepreneurship	< 3% for households < 2% for entrepreneurship

The column *Billing* shows the evaluation of the standard service of billing and issuing of bills.
The service includes the following:

- Acceptance of measured data and their processing for the purpose of the billing within prescribed billing periods,
- Writing, issuing and delivering of bills for a billing period and for monthly financial obligations,
- Processing of tariff customers' complaints referring to conclusion of contracts, metering equipment, meter reading, bills for billing periods, the amount of monthly financial obligation and other complaints filed in due time,
- Correction of bills for billing periods,
- Correction of bills for billing periods or monthly financial obligations in cases when a customer has filed a complaint in due time, copying of bills not received when a customer has submitted a request in due time.

The quality indicators for this service are the justified customers' complaints referring to bills for billing periods and monthly financial obligations. The quality evaluation is determined by the quality coefficient of the billing service:

Quality coefficient of the billing service

$$K_{sob} = \frac{\text{Number of justified complaints}}{\text{Number of bills issued}} \times 100\%$$

In the first phase of monitoring the quality of service provided to customers the household and entrepreneurship categories have not been separated, so the evaluation in the column Billing refers to general evaluation of the quality of service.
The column *Response to Customers' Questions and Complaints* shows the evaluation of the standard service of responding to customers' questions and complaints. The service includes the following:

- Sending written responses to written questions submitted by network users,
- Sending written responses to a network user's complaints,

- Sending notices as a response to different requests with the explanation of reasons for rejection.

The quality indicators for this service refer to the percentage of written responses to questions, requests and complaints submitted in due time or within 10 days in case there is no prescribed deadline. The quality evaluation is determined by the percentage of responses. The column Non-standard billing and issuing of bills shows the evaluation of the non-standard service of billing and issuing of bills, including the following:

- Extraordinary billing, billing according to the contract on self-meter reading,
- Issuing of bills duplicates and certified bills copies.

The quality indicators for this service are justified customers' complaints about providing non-standard services of billing and issuing of bills. The quality evaluation is determined by the quality coefficient of the non-standard billing service.

Quality coefficient of the non-standard billing service

$$K_{nob} = \frac{\text{Number of justified complaints}}{\text{Total number of non-standard billing procedures}} x100\%$$

The column *Non-standard billing procedure* shows the evaluation of the non-standard billing procedure including the following:

- Collection of outstanding debts from customers in form of sending reminders, suspension of supply, distraint procedure, installation of a subscription meter etc.

The quality evaluation is determined by the quality coefficient of the non-standard billing procedure:

Quality coefficient of the non-standard billing procedure

$$K_{nnp} = \frac{\text{Number of justified complaints about billing procedures}}{\text{Number of reminders due to lack of payment}} x100\%$$

3.1.7 The Work of Consumer Complaint Committees within Utilities

Consumer Complaint Committees within energy undertakings for electricity distribution and supply in the energy activities of electricity distribution and electricity supply have received a total of 101 customers' complaints in the course of 2006, which is a negligible amount, taking into consideration the total of 2,193,228 customers.

In the following table (*Table 27*) there is a review of electricity customers' complaints per type of complaint:

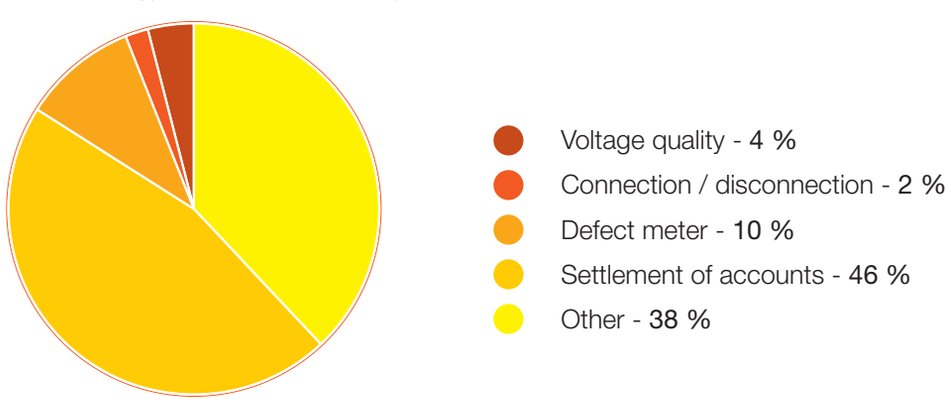
Table 27: Type of complaints submitted to consumer complaint committees within energy undertakings by distribution areas

Distribution areas	Basis for consumers' complaints															Total			
	Billing			Defect meter			Connection / Disconnection			Voltage quality			Other						
	total	recognized	rejected	total	recognized	rejected	total	recognized	rejected	total	recognized	rejected	total	recognized	rejected	Session held	Compliant	Recognized	Rejected
DP Elektra Zagreb	25	11	14	2	1	1	0	0	0	0	0	0	13	10	3	2	40	22	18
DP Elektra Zabok	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	3	2	1	1
DP Elektra Varaždin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
DP Elektra Čakovec	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DP Elektra Koprivnica	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	1	0	1
DP Elektra Bjelovar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
DP Elektra Križ	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
DP Elektroslavonija Osijek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DP Elektra Vinkovci	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
DP Elektra Sl. Brod	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
DP Elektroistra Pula	3	3	0	1	1	0	0	0	0	3	1	2	20	10	10	6	27	15	12
DP Elektroprimorje Rijeka	0	4	1	3	0	0	0	0	0	0	0	0	0	0	0	3	4	1	3
DP Elektrodalmacija Split	6	1	5	0	0	0	1	0	1	0	0	0	1	1	0	4	8	2	6
DP Elektra Zadar	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
DP Elektra Šibenik	4	0	4	1	0	1	0	0	0	0	0	0	0	0	0	2	5	0	5
DP Elektrojug Dubrovnik	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	3	2	1	1
DP Elektra Karlovac	1	0	1	0	0	0	0	0	0	0	0	0	2	1	1	3	3	1	2
DP Elektra Sisak	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	0
DP Elektrolika Gospić	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
DP Elektra Virovitica	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	4	6	6	0
DP Elektra Požega	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
Total	47	18	29	10	8	2	2	0	2	4	1	3	38	23	15	56	101	50	51

Out of 101 complaints, 50 were recognized and 51 were rejected.

The greatest number of complaints submitted referred to electricity billing - 46%, other reasons - 38%, defect meter - 10%, voltage quality - 4% and connection/disconnection - 2% (*Picture 22*).

Picture 22: Types of consumers' complaints



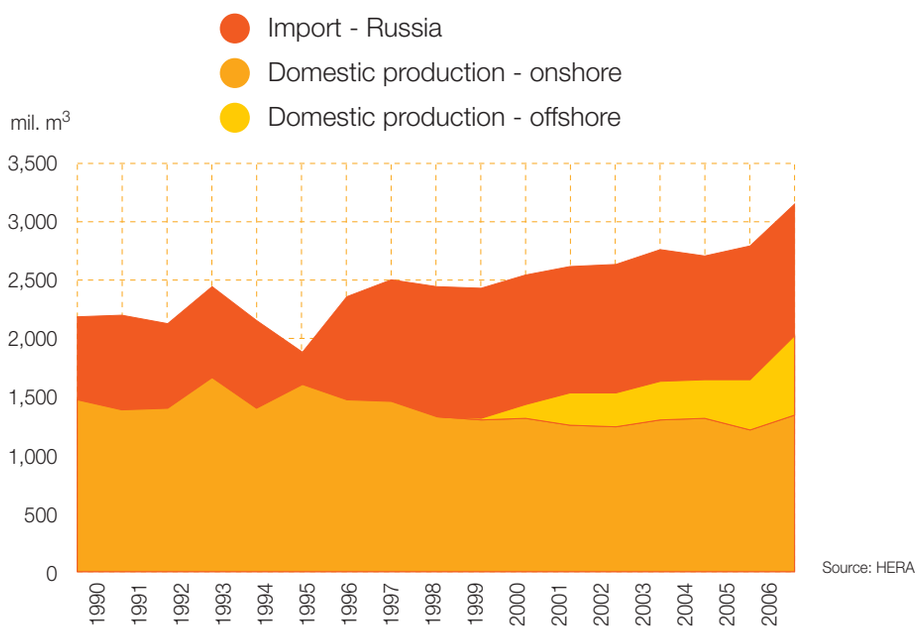
3.2 Gas

3.2.1 Natural Gas Market in the Republic of Croatia

3.2.1.1 Natural gas wholesale supply and consumption

In the Republic of Croatia the only wholesale supplier of natural gas is INA d.d. The total quantity of natural gas supplied in the Republic of Croatia in 2006 was 3,158 mil. m3. Natural gas for domestic market is partly supplied by the domestic production from the Panonian and Northern Adriatic fields (64.3% in 2006), and partly by importing from Russia (35.7% in 2006). In the following picture (*Picture 23*) there is the structure of natural gas wholesale supply in the Republic of Croatia for the period from 1990 until 2006.

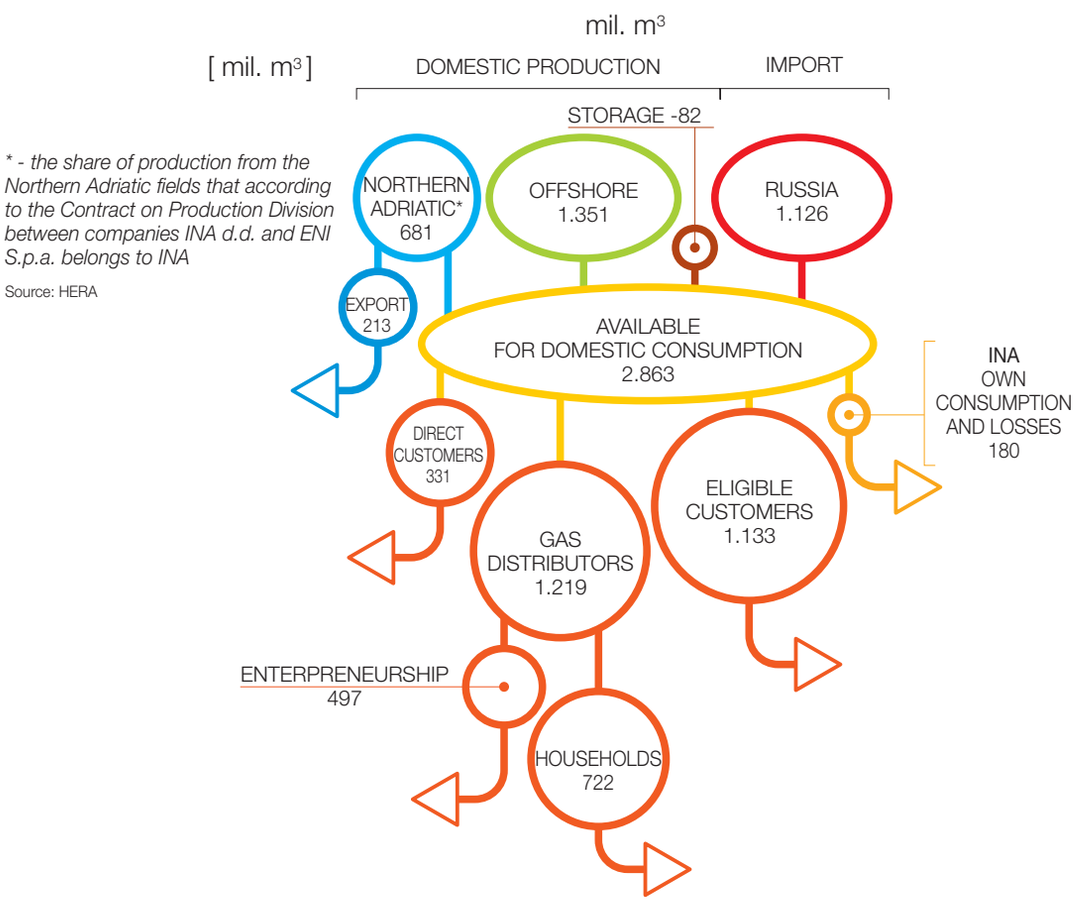
Picture 23: *Structure of Natural Gas Wholesale Supply in the Republic of Croatia from 1990 until 2006*



In 2006 the total natural gas domestic production has reached 2.032 mil. m^3. Out of that total, 681 mil. m^3 came from the Northern Adriatic fields (the share of production from the Northern Adriatic fields that according to the Contract on Production Division between companies INA d.d. and ENI S.p.A. belongs to INA), and 1.351 mil. m^3 from the Panonian Plain. 412 mil. m^3 was injected into the underground storage of Okoli, and 330 mil. m^3 were extracted. The natural gas import amounted to 1.126 mil. m^3, and 213 mil. m^3 were exported to Italy.

The natural gas balance for the Republic of Croatia in 2006 is shown in the following picture (*Picture 24*).

Picture 24: Natural gas balance for the Republic of Croatia in 2006

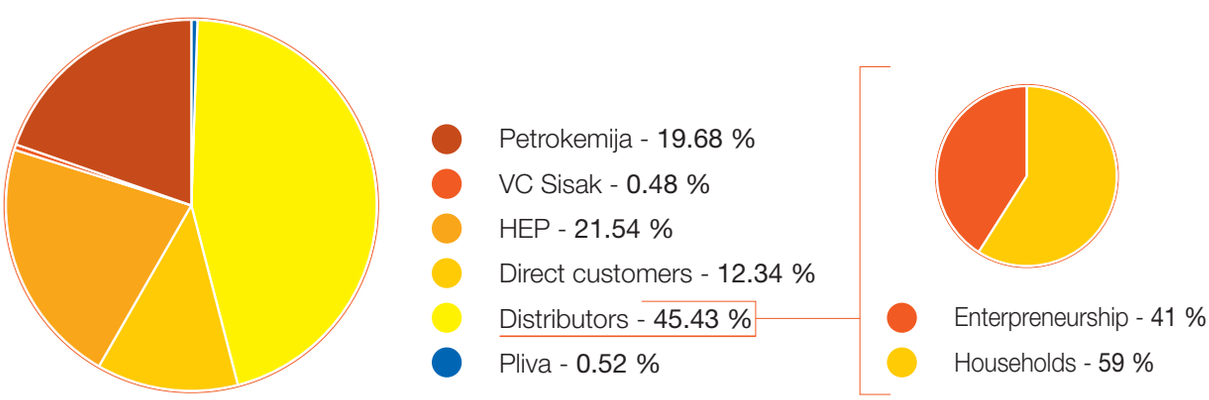


** - the share of production from the Northern Adriatic fields that according to the Contract on Production Division between companies INA d.d. and ENI S.p.a. belongs to INA*

Source: HERA

INA d.d. provides wholesale supply of natural gas to 35 natural gas distributors, 24 direct industrial customers and 4 eligible natural gas customers. The structure of natural gas consumption in 2006 was the following: 1.219 mil. m3 were delivered to natural gas distributors (4.1% less than in 2005), 331 mil. m3 to direct industrial customers (2.8% more than in 2005), and eligible customers received 1.133 mil. m3 (16.4% less than in 2005), out of which HEP Proizvodnja d.o.o. 578 mil. m3, Petrokemija d.d. Kutina 528 mil. m3, Pliva cogeneration facility in Novi Marof 14 mil. m3, and Valjaonica cijevi Sisak d.o.o. 13 mil. m3 (*Picture 25*).

Picture 25: Structure of natural gas consumption in the Republic of Croatia in 2006



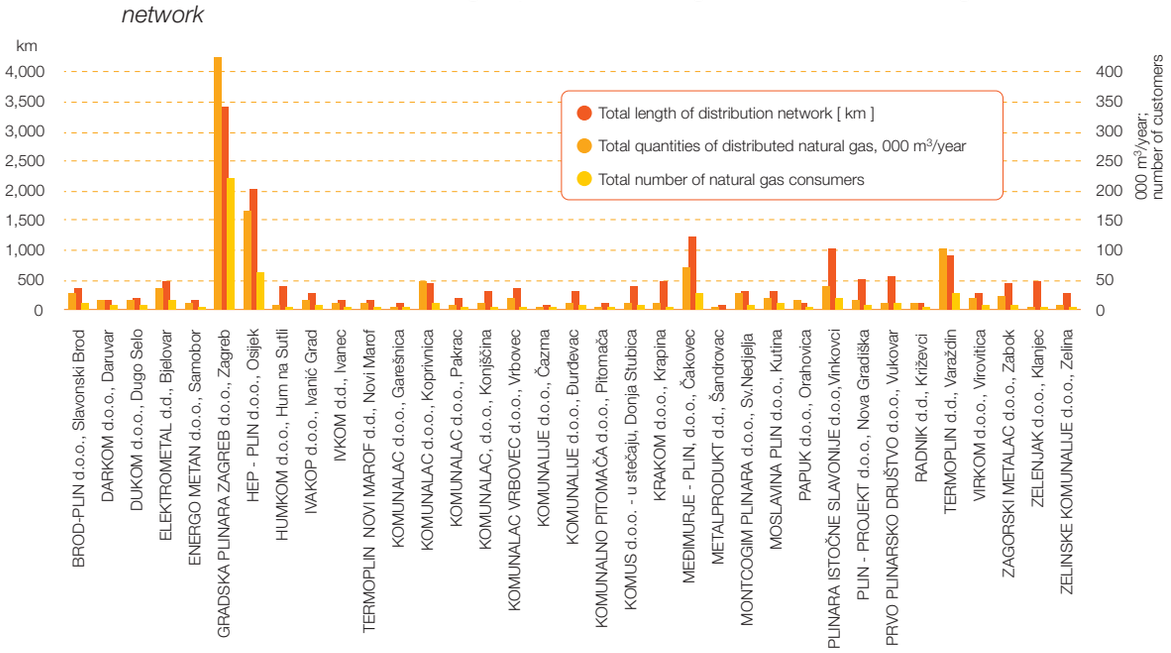
3.2.1.2 Infrastructure: transport and distribution systems, storage

Natural gas transporter in the Republic of Croatia is Plinacro d.o.o., a state-owned company. The transporter manages a network of main gas pipelines and regional gas pipelines, transporting natural gas from domestic production (Northern part of the Croatian mainland and Northern Adriatic) and from the import (supply transport route through Slovenia, Zabok - Rogatec, supplying Croatia with natural gas from Russia) to gas stations of the companies carrying out the activity of natural gas distribution to end consumers (*Picture 26*).

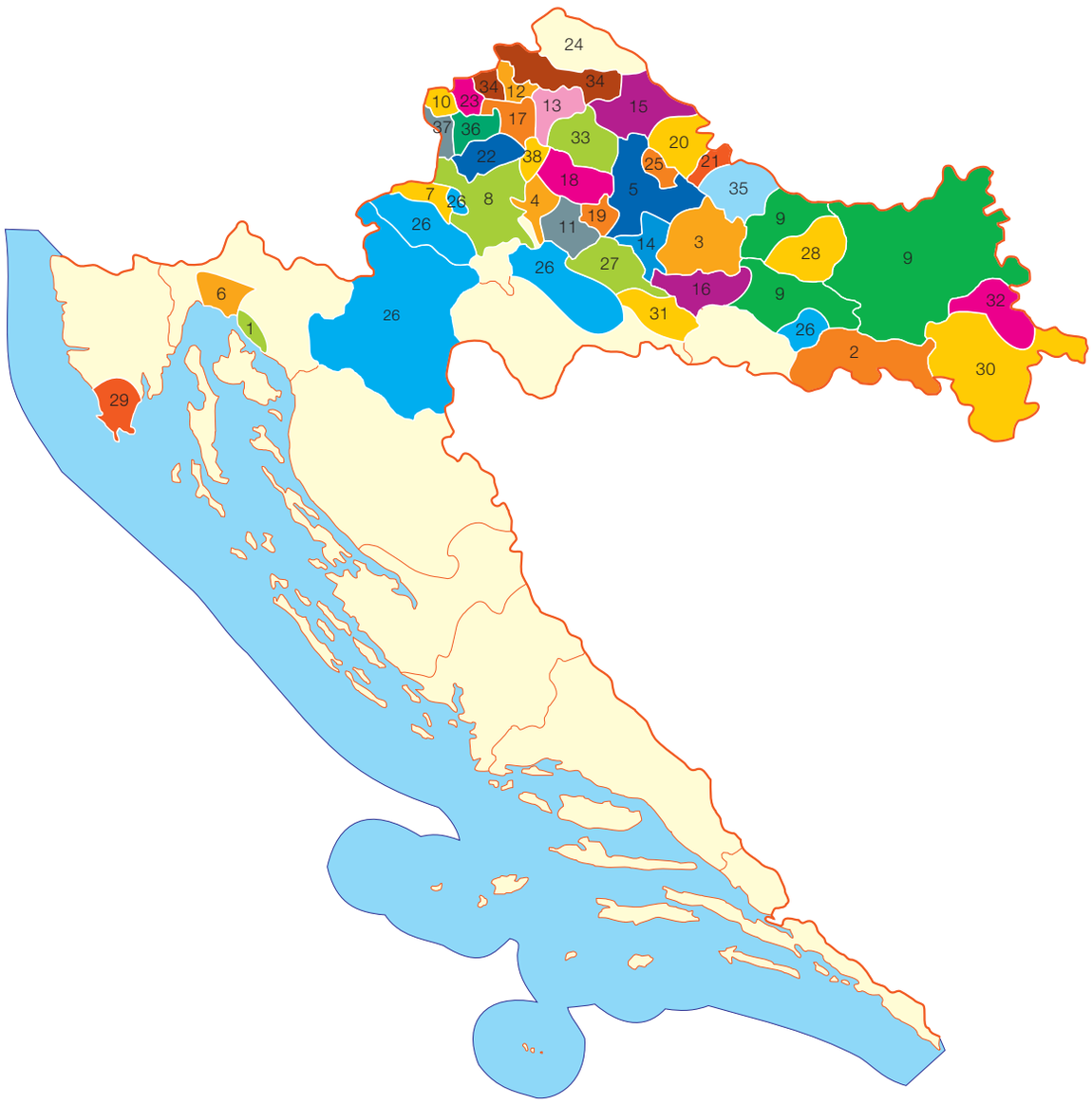
***Picture 26**: Croatia's natural gas transport system*

In the course of 2006 main gas pipelines Pula - Karlovac (with the capacity of up to 1.5 billion m³/year), the length of which is 191 km, Zagreb East - Kutina, the length of which is 68 km and Slavonski Brod-Kutina, the length 108 km have been completed and set in operation.
In addition to that, 480 km of new gas pipelines and a new National Dispatching Center, as well as the system of remote gas network monitoring and management and the optical fiber communication system were built and set in operation, which marked the end of the first phase of construction and modernization of natural gas transport system in Croatia.
The total length of the natural gas transport system in Croatia at the end of 2006 was 2,017 km (1,618 km of gas pipelines at 50 bar and 399 km at 75 bar). Out of that there are 1,321 km of main gas pipelines at 50 and 75 bar and of diameter from DN 250 to DN 700 and 696 km of regional gas pipelines at bar 50 and of diameter DN 80 to DN 300. In the natural gas transport system there are 138 measuring and reduction stations and 210 measuring lines. According to the data submitted by the company Plinacro d.o.o. the total quantity of natural gas transported in Croatia in 2006 was 2,700,793 mil. m³.
Natural gas in Croatia is stored in the underground natural gas storage PSP Okoli, owned by INA d.d. PSP Okoli is a partly exhausted gas field, that became operational in 1987. For the purpose of natural gas storage there are 17 injection production wells mounted on 5 injection production drilling platforms. The storage operation is monitored by six control and measuring wells.
Due to the increased needs of daily natural gas extraction capacities from the storage, two new wells were created in 2003 and three were redesigned. With that, the storage operating volume was increased to 558 mil. m³, and daily extraction capacity to 5,8 mil. m³. The maximum allowed bed pressure is 196 bar. The storage operation provides possibility for optimal production from domestic gas fields, a continuous import from Russia and regular natural gas supply to customers in Croatia.
The gas distribution in Croatia is carried out by 38 companies, out of which three distribute town/mixed gas and 35 natural gas.
The total amount of natural gas distributed in 2006 was 1,219,358,430 m³. The total length of the distribution network in Croatia at the end of 2006 was 17,134 km, and the average annual network losses were 7,5%. The total number of customers receiving the distributed natural gas in 2006 was 546,017, out of which 510,795 belong to the household category (4,5% more than in 2005), and 35,222 to the entrepreneurship category. The greatest natural gas distributors are Gradska plinara Zagreb (Zagreb Gas Board) (219,736 customers, 423,40 mil. m³ delivered in u 2006), HEP Plin d.o.o. (61,191 customers, 166,68 mil. m³ delivered in 2006), Termoplin Varaždin (27,285 customers, 100,86 mil. m³ delivered in 2006) and Međimurje-plin Čakovec
(26,040 customers, 69,57 mil. m³ delivered in 2006). The comparison of distributed quantities, natural gas customers and the length of the distribution network per individual natural gas distributors in Croatia in the course of 2006 is shown in the Picture 27, and the geographical distribution of particular natural gas distributors in 2006 in the Picture 28.

Picture 27: Comparison of distributed natural gas quantities, natural gas customers and the length of the distribution network



Picture 28: The geographical distribution of natural gas distributors in Croatia in 2006



1 AMGA ADRIA d.o.o.
2 BROD-PLIN d.o.o.
3 DARKOM d.o.o.
4 DUKOM d.o.o.
5 ELEKTROMETAL d.d.
6 ENERGO d.o.o.
7 ENERGOMETAN d.o.o.
8 GRADSKA PLINARA ZAGREB d.o.o.
9 HEP Plin d.o.o.
10 HUMKOM d.o.o.
11 IVAKOP d.o.o.
12 IVKOM d.o.o.
13 KOMUNALAC d.d. Novi Marof
14 KOMUNALAC d.o.o. Garešnica
15 KOMUNALAC d.o.o. Koprivnica
16 KOMUNALAC d.o.o. Pakrac
17 KOMUNALAC KONJŠČINA d.o.o.
18 KOMUNALAC VRBOVEC d.o.o.
19 KOMUNALIJE d.o.o. Čazma
20 KOMUNALIJE d.o.o. Đurđevac
21 KOMUNALNO PITOMAČA d.o.o.
22 KOMUS d.o.o. - u stečaju
23 KRAKOM d.o.o.
24 MEĐIMURJE PLIN d.o.o.
25 METALPRODUKT d.d.
26 MONTCOGIM - PLINARA d.o.o.
27 MOSLAVINA - PLIN d.o.o.
28 PAPUK d.o.o. Orahovica
29 PLINARA d.o.o.
30 PLINARA ISTOČNE SLAVONIJE d.o.o.
31 PLIN-PROJEKT d.o.o.
32 PRVO PLINARSKO DRUŠTVO d.o.o.
33 RADNIK d.o.o.
34 TERMOPLIN d.d Varaždin
35 VIRKOM d.o.o.
36 ZAGORSKI METALAC d.o.o.
37 ZELENJAK d.o.o.
38 ZELINSKE KOMUNALIJE d.o.o.

3.2.1.3 Development plans: transport and distribution systems, storages, LNG terminal

At the end of 2006 The Second Development and Investment Natural Gas Transport System Cycle of Croatia from 2007 to 2011 was adopted by the Ministry.

The most relevant facilities of the second investment cycle are the facilities of the gas pipeline system of Lika and Dalmatia. The central pillar of that gas pipeline system will be the main gas pipelines Bosiljevo - Split, Split - Ploče.

As far as Istria is concerned, there is a plan to build the gas pipeline from Vodnjan to Umag, the length of which should be 78 km, and the accompanying measuring and reduction stations. In the Primorsko-Goranska County a gas pipeline is to be built between Kukuljanovo and Omišalj. According to the existing draft, the gas pipeline at 75 bar would be 15 km long. In addition to that gas pipeline, a construction of measuring and reduction stations Urinj and Omišalj is planned.

In the central and eastern part of Croatia the main gas pipeline Zabok - Lučko is to be reconstructed and at the same time the international gas pipeline Rogatec - Zabok is to be built, in the corridor of the existing gas pipelines, which would significantly increase the capacity on that transport route. The next significant project group consists of main gas pipeline projects Slobodnica - Donji Miholjac and Slobodnica - Sotin. The main gas pipeline Slobodnica - Donji Miholjac will be multifunctional, since by connecting Posavina- and Podravina-gas pipeline transport route, it shall increase the reliability of natural gas wholesale supply of that part of Croatia. Its construction will also create conditions for opening of the new supply route from Hungary, by providing connection with the Hungarian natural gas transport system, that is, with the international gas pipeline Donji Miholjac - Dravaszerdahely, which will provide opportunity for supply of new and significant quantities of natural gas for the Croatian market and make possible its transit to Bosnia and Herzegovina.

Another significant group of projects are those related to supply routes and international connections - interconnections. The realization of these projects should ensure long-term conditions for reliable natural gas wholesale supply for the Croatian market, as well as transit possibilities for neighboring countries. They are all directly connected with the previously mentioned projects, so for example the international gas pipeline Donji Miholjac - Dravaszerdahely will be directly connected with the main gas pipeline Slobodnica - Donji Miholjac as well as the international gas pipeline Slobodnica - Bosanski Brod.

3.2.2 Analysis of Natural Gas Prices for End Customers in the Republic of Croatia and Comparisons with European Markets

Pursuant to the Gas Market Act the customers are defined as follows:

1. Eligible Customers - customers who acquire that status based on the law and can choose freely who they buy the gas from. The final price for this group of customers is determined by adding the fee for natural gas transport to the natural gas wholesale supply price. The eligible customer can choose whether he/she contracts the natural gas transport with the gas transporter directly or he/she will authorize his/her supplier to contract the gas transport on his/her behalf.
2. Direct customers - any legal or natural person who purchases gas and has it delivered directly from the gas pipeline transport system. The final price for this group of customers is determined by adding the fee for natural gas transport to the natural gas wholesale supply price. The gas supplier contracts the gas transport for a direct customer.
3. Gas distributors - any legal or natural person who purchases gas only for further sale. The final price for this group of customers is determined by adding the fee for natural gas transport to the natural gas wholesale supply price. The gas wholesale supplier contracts the gas transport for gas distributors.
4. End customers - any legal or natural person who purchases gas for own needs and whose gas supply comes from the distribution system. With regards to the price, there are two customer categories on the distribution system - households and entrepreneurship. In addition to the wholesale supply costs and natural gas transport costs, the distributor calculates the following elements into the price for end customers: distribution margin, concession fees, fees for municipal infrastructure and other fees and costs.

The natural gas wholesale supply price is determined by the implementation of the Tariff System for Natural Gas Supply for Tariff Customers (”Official Gazette”, No. 99/02), and it is equal for all tariff customers; in 2006 the price was 1.07 Kn/m^3. According to the Tariff System’s provisions, the above mentioned wholesale supply price is adjusted to the actual lower calorific value of the delivered natural gas. Apart from tariff customers, on the Croatian natural gas market there are also four eligible customers (HEP Proizvodnja d.o.o., Pliva Hrvatska d.o.o. (in Savski Marof), Petrokemija d.d. and Valjaonica cijevi Sisak d.o.o.). The average price of natural gas wholesale supply for eligible customers in 2006 was 0.799 Kn/m^3 (28.5% more than in 2005).

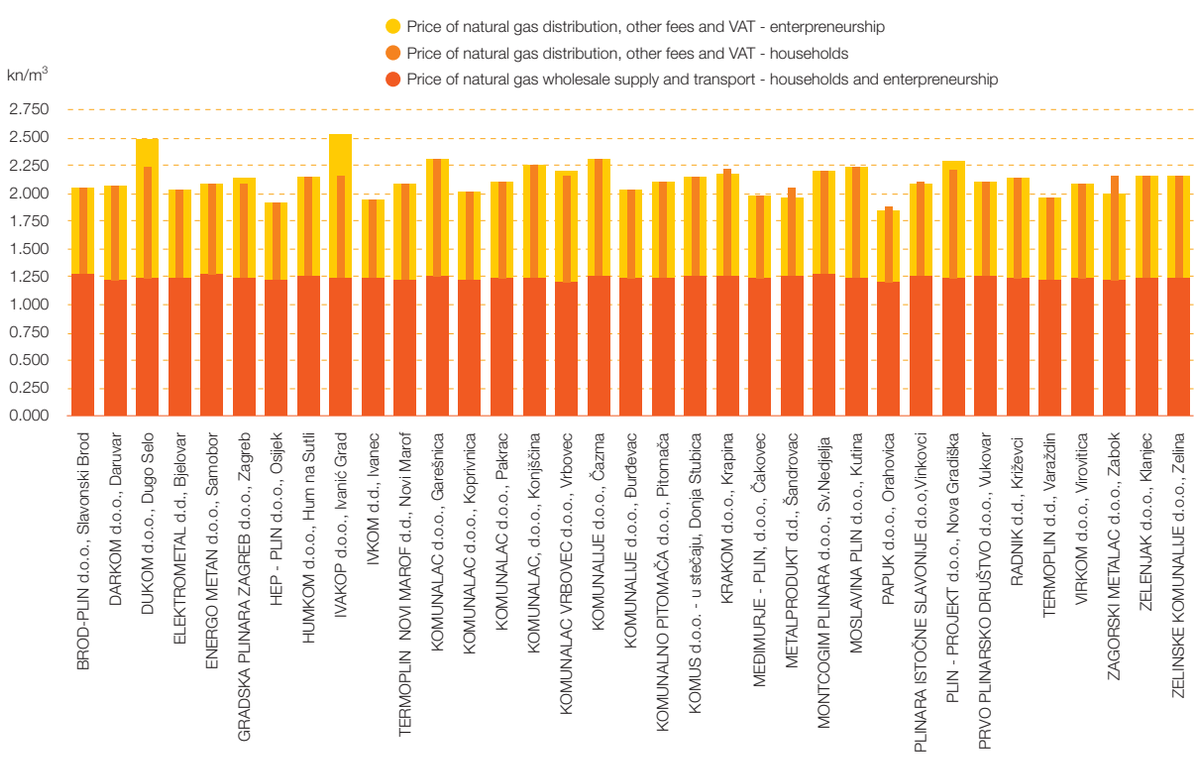
The fee for natural gas transport is determined by the Tariff System for Natural Gas Transport, without the Amounts of Tariff Items (”Official Gazette”, No. 32/06 and 3/07). The Tariff System determines three tariff items related to the natural gas transport in the months of peak, medium and basic load.

Tariffs for natural gas transport, determined by the Government of the Republic of Croatia in 2006 were the following:

Peak load months (January, February, November and December)	T_{peak} = 3.463 Kn per m^3 per day
Medium load months (March, April, May, June, September and October)	T_{medium} = 2.886 Kn per m^3 per day
Basic load months (July and August)	T_{basic} = 1.731 Kn per m^3 per day

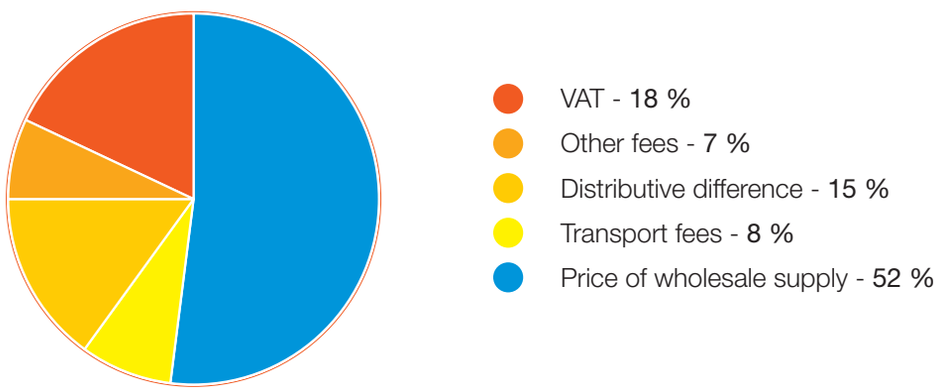
The average price for natural gas transport for distributors in 2006 was 0.155 Kn/m^3, for direct customers 0.117 Kn/m^3, and for eligible customers 0.119 Kn/m^3.
The natural gas price for tariff customers in 2006 was in the range from 1.88 to 2.30 Kn/m^3 for customers in the household category and from 1.84 to 2.53 Kn/m^3 for customers in the category entrepreneurship. At the same time the average price (weighted per distributed quantity of natural gas) for the household category was 1.946 Kn/m^3, and for the entrepreneurship category 2.006 Kn/m^3. In the following picture (*Picture 29*) there is a comparison of natural gas selling prices for customers in the households category and in the entrepreneurship category by natural gas distributors.

Picture 29: *Comparison of natural gas prices for customers in the categories households and entrepreneurship by natural gas distributors*



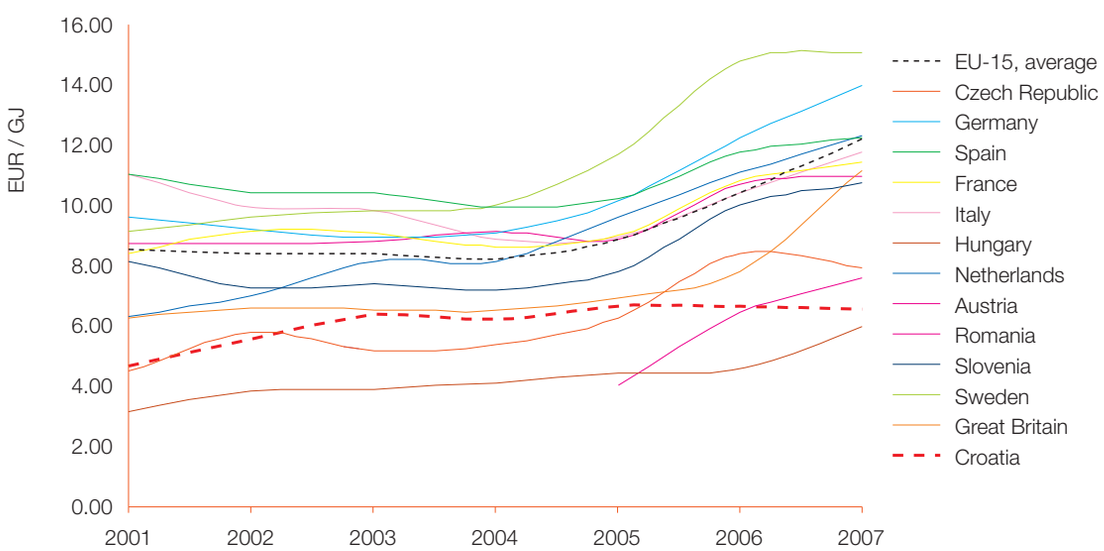
The Picture 30 shows the structure of the average natural gas price for tariff customers in Croatia in 2006.

Picture 30: Structure of the average natural gas price for tariff customers in Croatia in 2006



Picture 31 shows the trend of natural gas retail prices for customers in the households category D_3[6] in several European countries from January 1, 2001 until January 1, 2007. It is obvious that the natural gas price for customers in the category households has been constantly rising, especially since the beginning of 2004. Retail prices for the category households in Croatia have been rising slowly until the beginning of 2003, since when there has been no significant price corrections (except for a slight increase in the course of 2004). According to the Eurostat data, the natural gas prices in the EU countries have been increased by 20% for customers in the households category and by 29% in the category of industrial customers in the period from July 2005 until July 2006. In the category households in that period the most significant price increase was reported from Lithuania (43%), Latvia (38%) and Denmark (34%) and in the category of industrial customers in Great Britain (53%), Lithuania (51%) and Spain (43%).

Picture 31: Trend of natural gas prices for customers in the households category D_3 from 2001 (without tax) until the end of 2006 in EU countries

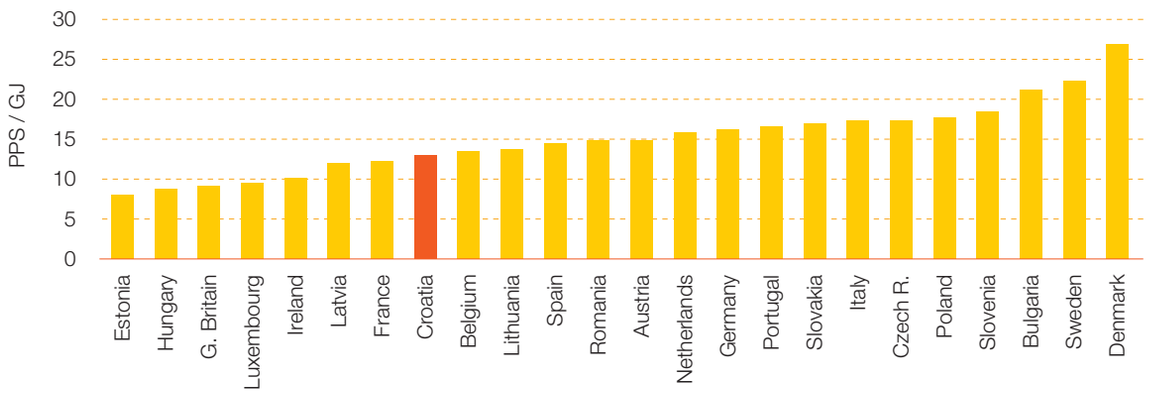


Source: Eurostat/Environment and Energy/Energy/Prices/Gas prices - households

[6] Sukladno metodologiji Eurostat-a, kupci kategorije kućanstvo se dijele na standardne kategorije D_1, D_2, D_3, $D_{3\text{-}b}$, D_4, a industrijski potrošači na standardne kategorije I_1, I_2, $I_{3\text{-}1}$, $I_{3\text{-}2}$, $I_{4\text{-}1}$, $I_{4\text{-}2}$, I_5. Standardna kategorija D_3 predstavlja kućanstva s godišnjom potrošnjom prirodnom plina od 83,70 GJ.

Picture 32 shows the comparison of European retail prices for customers in the category households D_3 with annual consumption of 83.70 GM (23.260 kWh) on July 1, 2006. The international unit PPS/GM, which eliminates the difference in price of goods/services in particular countries was used as a unit price. PPS (purchasing power standards) is a unit that can buy the same quantity of goods/services in all countries.

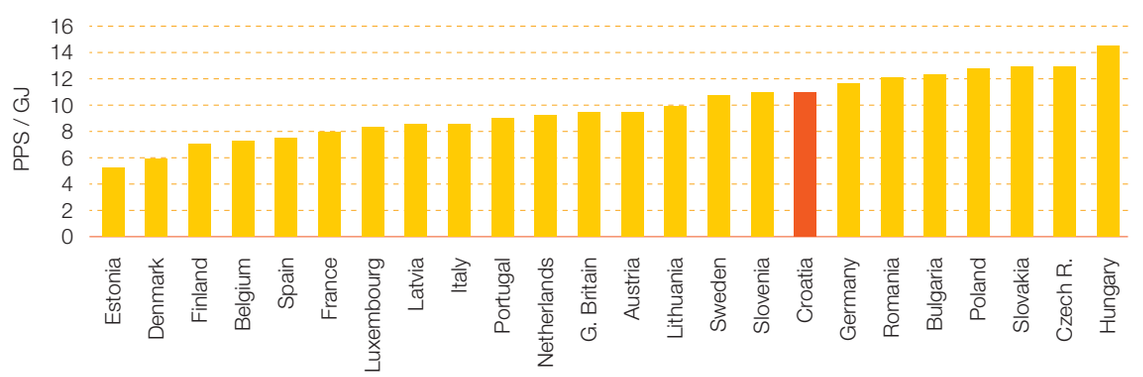
Picture 32: Natural gas price comparison (including taxes) with regards to the price of goods/services in other European countries for the households category D_3



Source: Eurostat, Statistics in focus, Environment and Energy, 19/2006, Gas prices for EU households and industrial consumers on 1 July 2006

The displayed comparison leads to the conclusion that, taking into consideration purchasing power standards in particular countries, the most expensive natural gas for customers in the category households is in Denmark, and then in Sweden and Bulgaria.
Picture 33 shows the comparison of the European retail prices for industrial customers of the standard category I_{3-1} with annual consumption of 41.860 GM (11.63 GWh) on July 1, 2006. It follows from that comparison that, taking into consideration the purchasing power standards in particular countries, the most expensive natural gas for industrial customers is in Hungary and then in the Czech Republic and Slovakia.

Picture 33: Comparison of the European retail prices (without tax) for industrial customers of the standard category I_{3-1} with regard to the price of goods/services



Source: Eurostat, Statistics in focus, Environment and Energy, 19/2006, Gas prices for EU households and industrial

3.2.3 *The Work of Energy Undertakings on Consumer Appeals and Complaints and the Work of Complaints Commissions within Energy Undertakings*

As far as the natural gas sector is concerned, energy undertakings for natural gas distribution have received in the course of 2006 a total of 3,014 customers' appeals and complaints, which is 0.55 % of the total of 546,017 customers.

Following (*Table 28*) is a review of natural gas customers' appeals and complaints, by content groups:

Table 28: Review of natural gas customers' appeals and complaints

Name of energy undertaking	Tariff System's implement.			Rejection of connection			Quality of service			Quality of delivered gas			Quality of delivery reliability			Other reasons			Total		
	No. of cases	Recognized	Rejected	No. of cases	Recognized	Rejected	No. of cases	Recognized	Rejected	No. of cases	Recognized	Rejected	No. of cases	Recognized	Rejected	No. of cases	Recognized	Rejected	Total	Recognized	Rejected
IVAKOP d.o.o.							9	9								1	1		10	10	0
PLINARA d.o.o.							55	15	40										55	15	40
							0	0	0										0	0	0
GRADSKA PLINARA							22	17	5				1		1	28	21	71	31	23	77
ZAGREB d.o.o.																7	6		0	3	
HUMKOM d.o.o.																			0	0	0
BROD - PLIN d.o.o.				2		2	52	43	9							27	3	24	81	46	35
IVKOM d.d							16	16											16	16	0
G.K.P. KOMUNALAC d.o.o.																					
Koprivnica							8	8											8	8	0
PLIN-PROJEKT d.o.o.																			0	0	0
KOMUNALAC VRBOVEC d.o.o																			0	0	0
MEĐMURJE PLIN d.o.o.																			0	0	0
DARKOM d.o.o.																			0	0	0
KOMUNALAC d.o.o. Garešnica							2	2											2	2	0
ELEKTROMETAL d.d.																			0	0	0
TERMOPLIN-NOVI MAROF d.d.																			0	0	0
ZELINSKE KOMUNALIJE d.o.o.																			0	0	0
ZAGORSKI METALAC d.o.o.							16	15	16				30						19	15	16
							8	2											8	2	
RADNIK d.o.o.																			0	0	0
MOSLAVINA - PLIN d.o.o.							31	31											31	31	0
							1	1											1	1	
MONTCOGIM - PLINARA d.o.o.							10	10											10	10	0
							0	0											0	0	
KOMUNALIJE d.o.o. Čazma																			0	0	0
HEP Plin d.o.o.							93	93											93	93	0
							2	2											2	2	
KOMUS d.o.o. - u stečaju																			0	0	0
ENERGO d.o.o.							3	1	2										3	1	2
TERMOPLIN d.d.																			0	0	0
PLINARA ISTOČNE							34	33								10			45	43	
SLAVONIJE d.o.o.							2	0	12	3	0	3	7	7		6	96	10	8	3	25
KRAKOM d.o.o.																			0	0	0
AMGA ADRIA d.o.o.																			0	0	0
KOMUNALAC d.o.o. Pakrac																			0	0	0
PRVO PLINARSKO																					
DRUŠTVO d.o.o.																3	3		3	3	0
VIRKOM d.o.o.																			0	0	0
PAPUK d.o.o.																			0	0	0
METALPRODUKT d.d.																			0	0	0
KOMUNALIJE d.o.o. Đurđevac							32	24	8										32	24	8
ZELENJAK d.o.o.																			0	0	0
KOMUNALAC KONJŠČINA d.o.o.																			0	0	0
Total	0	0	0	2	0	2	25	20	45	3	0	3	38	7	1	42	31	10	30	24	56
							47	95	2							4	9	5	14	21	3

Most of the appeals and complaints (84.5%) refer to the quality of service of the energy undertaking for natural gas distribution, and the most frequent reasons are customers' dissatisfaction with the metering service and billing of the delivered natural gas, (*Picture 34*). A negligible number of appeals refers to rejection of connection to the gas network (two appeals), and there are only a couple of complaints about the quality of delivered natural gas (three complaints), while there have been no complaints about the implementation of natural gas sector tariff systems.

Picture 34: Structure of natural gas customers' appeals and complaints

Out of the total number of received appeals and complaints in 2006, 2,421 cases (80.3%) were solved in the favor of natural gas customers and 563 (18.6%) were rejected. Other cases are still being processed. Consumer complaint committees within energy undertakings for natural gas distribution have processed a total of 24 customers' complaints in the course of 2006.
58% of all cases received by consumer complaint committees were solved in the favor of natural gas customers.

3.3 Oil and Oil Derivatives

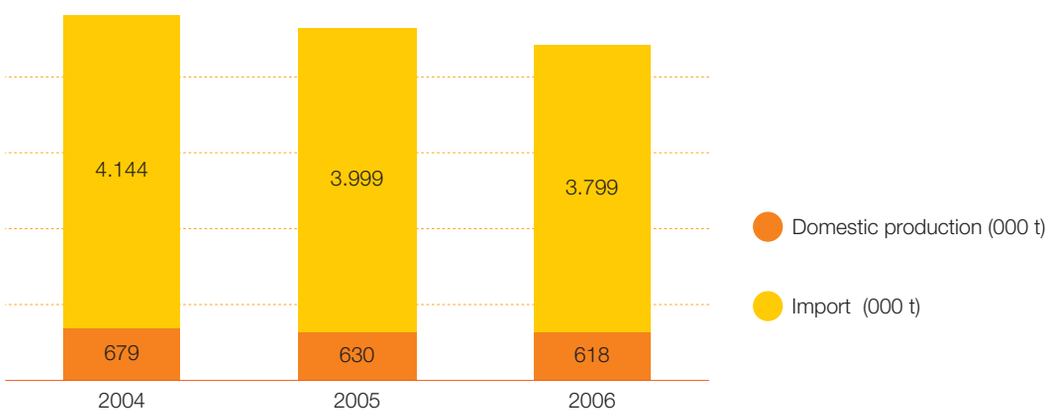
3.3.1 Oil and Oil Derivatives Market in the Republic of Croatia

Energy activities in the oil and oil derivatives sector are carried out according to rules determining market relations. The access to oil and oil derivatives transport systems is granted to all legal and natural persons who fulfill prescribed technical conditions, according to the negotiated third party access. Tariffs for transport of oil by oil pipelines and transport of oil derivatives by product pipelines are determined based on the Tariff System for Oil Transport by Oil Pipelines and Oil Derivatives Transport by Product Pipelines.

3.3.1.1 Crude oil - production, import, transport by oil pipeline

INA d.d., as the only oil producer and refiner in Croatia produced 618,000 tons of crude oil from domestic production fields (Podravina, Posavina and Slavonija) in 2006. In addition to that, 3,799,000 tons of crude oil (*Picture 35*) were imported. The oil is refined in the refineries in Sisak and Rijeka.

Picture 35: *Crude oil - domestic production and import in the Republic of Croatia*



Source: INA d.d.

Transport of imported crude oil is carried out by JANAF-a d.d. transport system from the tanker port and terminal in Omišalj to domestic and foreign refineries (*Picture 36*). In the course of 2006 a total of 52 tankers unloaded oil at the terminal in Omišalj and the total of 6.4 mil. tons of crude oil were transported, out of which 3.8 mil. tons of crude oil types REB and Syberian Lt. for domestic refineries and the rest for refineries in Bosnia and Herzegovina and Serbia.
In 2006 JANAF d.d. has modernized the metering system and the monitoring and management system. In addition to that, an optical fiber cable has been placed along all pipeline sections, tankers and the manipulative pipeline at the Omišalj terminal have been repaired and improved, preparations have started for storage expansion at the terminal in Sisak and a new technical protection system has been introduced at the Omišalj terminal.

Picture 36: JANAF d.d. transport system for supply of refineries in Croatia and in neighboring countries, with oil pipeline routes and tanker and storage capacities

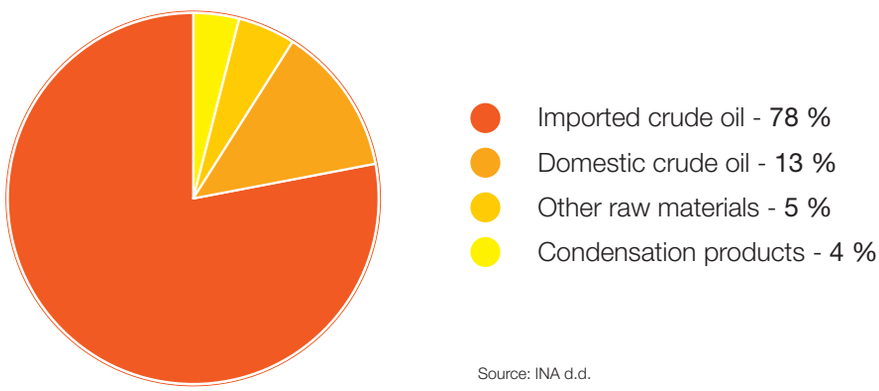
On November 7, 2005 the Agency determined the upper limit for oil transport by JANAF d.d. oil pipeline tariffs for legal and natural persons, by passing the Decision on Tariff Amounts for Transport of Oil by Oil Pipeline for 2006, as follows:

- For users of port and terminal in Omišalj and submarine oil pipeline Omišalj - Urinj, 7 km long, the tariff is 3.17 USD per ton (USD/t), that is, calculated in Kuna according to the middle exchange rate of the Croatian National Bank on the day the Decision was passed (1 USD = 6.193706 HRK), 19.63 Kuna per ton (HRK/t)
- For users of the entire JANAF-a d.d. route from Zagreb to Omišalj to refineries, from Virje to refineries and the port and terminal in Omišalj the tariff is 3.41 USD per ton per 100 km (USD/t/100 km), that is, calculated in Kuna according to the middle exchange rate of the Croatian National Bank on the day the Decision was passed (1 USD = 6.193706 HRK), 21.12 Kuna per ton per 100 km (HRK/t/100 km).

3.3.1.2 Oil derivatives - processing, import

Oil derivatives, according to the Act on the Oil and Oil Derivatives Market, are motor gasolines, aircraft gasolines, diesel fuels, gas oils, heating oils, fuels for big ship engines, jet engine fuel, paraffin oils, tar and crude petroleum, petroleum coke and liquefied petroleum gas (LPG).
In 2006 INA d.d. has refined 4.9 mil. tons of raw materials for the production of oil derivatives (*Picture 37*), which is a reduction of 5.3%, compared with 2005.

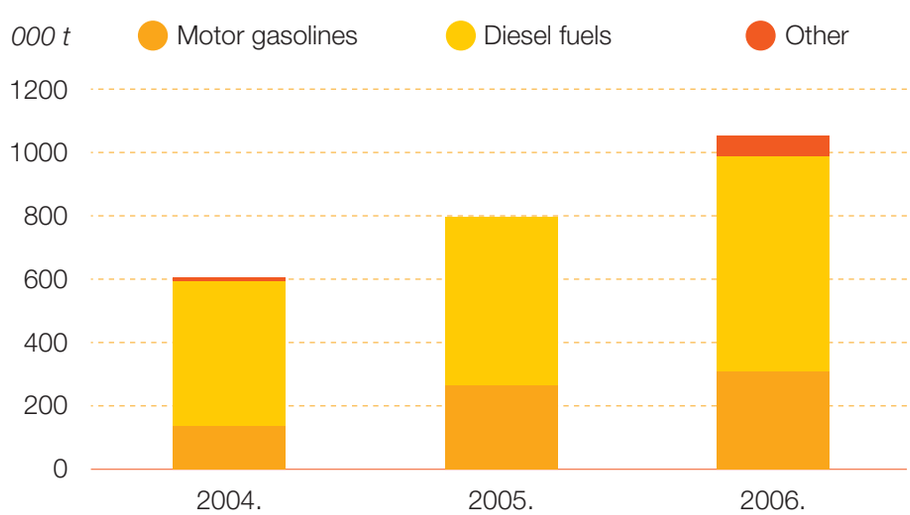
Picture 37: *Oil refining in 2006*



Source: INA d.d.

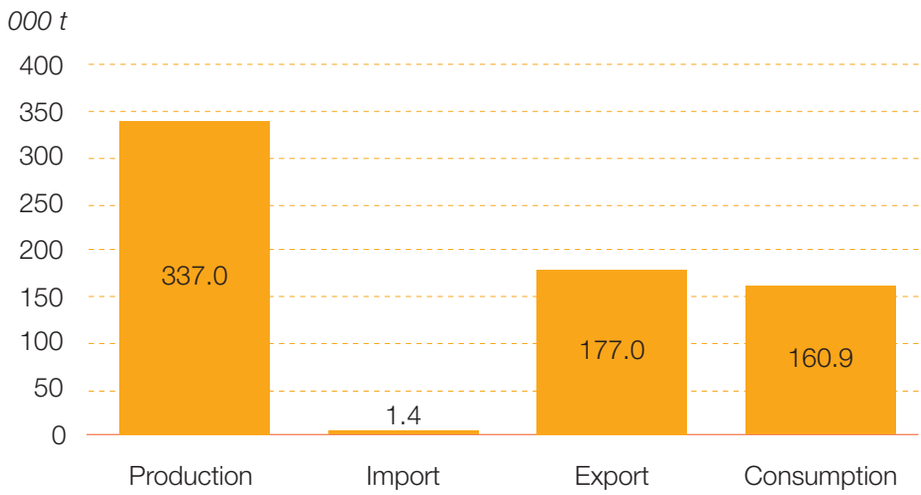
According to the data submitted by energy undertakings carrying out the energy activity of wholesale trade of oil derivatives, in 2006 a total of 1,039,000 tons of oil derivatives (*Picture 38*) have been imported to the Croatian market, which is an increase of 23.5%, compared with 2005.

Picture 38: *Import of oil derivatives to Croatia*

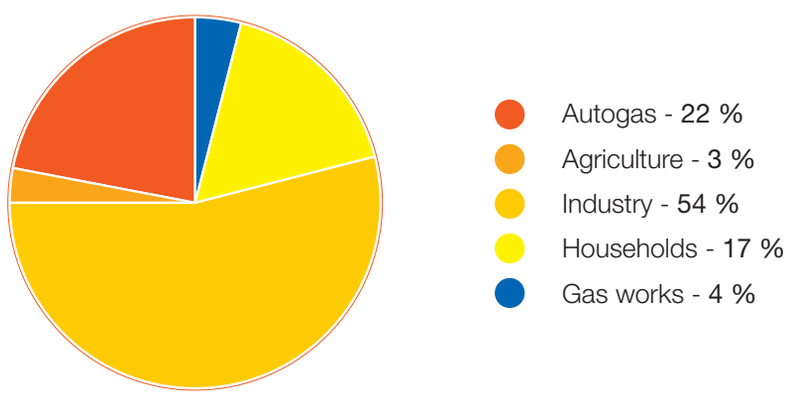


There is a significant increase of liquefied petroleum gas (LPG) usage in 2006, especially as fuel for motor vehicles (35,000 tons, that is, an increase of 19% with regards to 2005). The total consumption of LPG in 2006 was 160,900 tons, which is almost completely covered by domestic production in the amount of 337,000 tons. In addition to that, the total of 177,000 were exported. (*Picture 39*)

Picture 39: Liquefied petroleum gas production, import, export and consumption in 2006



Picture 40: Structure of liquefied petroleum gas consumption in 2006



3.4 Thermal energy

3.4.1 Sector review

Thermal energy supply from centralized heating systems exists in all bigger Croatian cities and thermal energy is produced either in cogeneration plants for bigger city districts or in block heating plants for particular city blocks and is distributed by the heat transmission network to thermal energy substations within buildings, where it is delivered to customers.

The centralized thermal energy systems with cogeneration power plants exist only in Zagreb, Osijek and Sisak, so in those cities there is production of both thermal energy intended for space heating and industrial steam.

Households' share in the total number of consumers of thermal energy produced in centralized thermal energy systems is more than 95%. Every year about 2.5 TWh of thermal energy are delivered to households through distribution thermal energy networks, the length of which is nearly 400 km.

In the Republic of Croatia more than 10% of all households are connected to district heating systems and about 15% of total energy used for household heating and preparation of sanitary hot water comes from the centralized thermal energy systems (*Table 29*).

Table 29: Households' share in the centralized thermal energy systems in larger Croatian cities

	Zagreb	Osijek	Sisak	Karlovac	Vukovar	Vinkovci	Varaždin	Sl. Brod	Rijeka	RH
District heating	37%	27%	17%	39%	18%	15%	18%	20%	19%	10%

Basic technical data on district heating systems in larger Croatian cities are shown in the following table (*Table 30*).

Table 30: Basic data on larger energy undertakings in the Croatian heating sector

	ENERGY UNDERTAKING	No. of customers	Network length km	Total installed power MWt	Energy delivered GWh/year	Heated space 000 m^2	Fuel**
1	HEP Toplinarstvo d.o.o*	115.760	348,2	2.102	1.721	8.966	PP, ELLU, LU
	Zagreb	104.364	296,8	1.766	1.539	7.870	PP, ELLU, LU
	Osijek	11.396	51,4	336	182	1.096	PP, LU
2	Toplinarstvo Sisak d.o.o, Sisak	3.557	16,3	192	52	199	PP, LU
3	Toplana d.o.o, Karlovac	7.982	21,0	118	100	459	PP, LU, LUEL
4	Energo d.o.o, Rijeka	9.713	16,0	112	88	609	PP, MP, LUEL
5	Toplina d.o.o, Sl. Brod	3.808	4,8	57	58	265	PP, LU
6	Termoplin d.d., Varaždin	2.976	2,1	41	40	170	PP
7	Hvidra d.o.o., Split	2.345	4,0	20	16	161	LU
8	Vinkovački vodovod i kanalizacija d.o.o.	1.700	1,6	17	16	86	PP, LU, LUEL
9	Tehnostan d.o.o, Vukovar	2.659	4,8	20	19	146	PP, LUS, LUEL
10	Virkom d.o.o., Virovitica	481	0,9	10	6	30	PP
11	Čakom d.o.o., Čakovec	145	0,3	3	1	10	PP
	TOTAL	151.126	421	2.693	2.117	11.101	

* Apart from the thermal energy for heating, HEP Toplinarstvo d.o.o. also produced 641,000 tons of industrial steam in 2006
** PP natural gas, MP mixed gas, LU heating oil, LUEL extra light heating oil

Companies engaged in production, distribution and supply of thermal energy supply are mostly owned by local government units or are state-owned. Apart from thermal energy activities they are mostly engaged in gas distribution and other municipal services.
HEP Toplinarstvo d.o.o. from Zagreb and Toplinarstvo d.o.o from Sisak, members of HEP Group, were among those companies engaged exclusively in thermal energy activity in 2006, supplying together more than 80% of district heating consumers in Zagreb, Osijek and Sisak, as well as Toplana d.o.o. from Karlovac and Toplina d.o.o from Slavonski Brod.
The following table (*Table 31*) shows the data on ownership and activities of energy undertakings dealing with thermal energy activity.

Table 31: Ownership of energy undertakings and their activities

Company / Seat	Ownership	Activity
Energo d.o.o., Rijeka	mixed, majority owned by the city	Gas and thermal energy production, distribution and supply
Termoplin d.d., Varaždin	stock corporation	Gas distribution and supply; thermal energy production, distribution and supply
Virkom d.o.o., Virovitica	city	Gas distribution and supply; thermal energy production, distribution and supply
Čakom d.o.o., Čakovec	city	Various municipal services; thermal energy production, distribution and supply
Tehnostan d.o.o., Vukovar	city	Thermal energy production, distribution and supply; chimney-sweeping trade; building management
Vinkovački vodovod i kanalizacija d.o.o., Vinkovci	city	Collection, purification and distribution of water, drainage, building of water-supply and sewage network; thermal energy production, distribution and supply; cemetery
Hvidra d.o.o, Split	private	Various public services; thermal energy production, distribution and supply
Toplana d.o.o., Karlovac	city	Thermal energy production, distribution and supply
Toplina d.o.o., Slavonski Brod	city	Thermal energy production, distribution and supply
Toplinarstvo Sisak d.o.o., Sisak	state	Thermal energy production, distribution and supply
HEP Toplinarstvo d.o.o., Zagreb	state	Thermal energy production, distribution and supply

The main problem of the heating sector in sense of business activity is the relation between market-determined fuel prices and thermal energy prices which do not follow the change of costs and the fuel price, as the main input cost, usually reaches the retail price level.
A comprehensive and well-founded legislative framework is designed to encourage development of new centralized thermal energy systems and opening of that activity towards thermal energy market in Croatia, which can be implemented in bigger districts and cities, where thermal energy consumption is large enough or where there is simultaneous need for thermal energy and electricity.
Under the precondition of legislative harmonization between acts regulating energy markets (gas market, for example), there is a possibility of the implementation of contemporary market organization methods, which would create conditions for a competition-based economy. In that way, that is, by ensuring favorable business environment, the growth and development of this sector can be achieved.

3.4.2 Thermal energy prices

The current thermal energy prices are based on tariffs, i.e., price lists approved by city councils of local government units, in line with the Act on Municipal Economy (*"Official Gazette", No. 36/95, 70/97,*

128/99, 57/00, 129/00, 59/01, 26/03 - final draft, 82/04 and 178/04).
According to the provisions of that Act, tariff items' amounts, billing and the payment method are determined by the service provider and for every change of price or tariff system the provider has to obtain the preliminary consent from the city council of the local government unit in the area supplied with thermal energy. The consequence is a variety of prices and billing methods for delivered thermal energy by different thermal energy companies in different cities.
Since most energy undertakings do not measure the quantities of delivered thermal energy, consumers normally pay a fixed monthly fee per square meter of apartment space (Kn/m^2). The exception is the biggest energy undertaking - HEP Toplinarstvo d.o.o., that started with the replacement of such one-component advance payment with meter-reading of actual monthly consumption of thermal energy for particular buildings equipped with thermal energy meters as early as in 1992. The existence of metering devices has opened the possibility of a dual-component tariff system, so that this energy undertaking's thermal energy price consists of the fee for permanent costs (Kn/MW) and the fee for energy costs (Kn/MWh) that depend on the thermal energy consumption.
The described methods of costs calculation for delivered thermal energy are in effect until the Government of the Republic of Croatia, upon the Ministry's proposal, determines new tariff items' amounts, based on the unitary Tariff System passed by the Agency in May 2006. Namely, energy undertaking carrying out the activities the Tariff System is applied to submits its proposal for change of tariff items' amounts to the Ministry, which requests the Agency's opinion. In the second half of 2006 the Ministry asked for the Agency's opinion on several submitted proposals by energy undertakings regarding change of tariff items' amounts. Given the current situation in the heating sector as described above, that is, without knowing the exact quantities of delivered thermal energy, due to the lack of metering devices, it is difficult to calculate the average price of a delivered MWh of thermal energy and compare it with others. Even when energy quantities delivered to customers are known, it is difficult to compare average prices, since they vary due to different fuels used, differences in production technology, climate conditions etc., so it is customary to show prices within certain range, as displayed in the (*Table 32*).

Table 32: Thermal energy prices from centralized heating systems and tax amounts in selected European countries (2005) and in Croatia (2006)

	WITHOUT TAX		CTS share on the heat market	TAX on thermal energy
	~Eur/MWh	kn/MWh		
Austria	38 69	279 511	16%	20%
Bulgaria	22	163	18%	-
Czech Republic	25 75	185 555	45%	5% for thermal energy (until 2008.) 22% for all other forms of energy
Denmark	51	379	48%	25%
Estonia	30	222	30%	5% for thermal energy 18% for all other forms of energy
Finland	42	311	49%	22%
Hungary	26 50	192 370	16%	12%
Netherlands	53	396	3%	19%
Germany	55	407	12%	16%
Norway	51	377		
Latvia	19 47	141 348	70%	9% households 18% for all other forms of energy
Lithuania	32 45	237 330	45%	9% for households (state subvention) 18% for other customers
Romania	19	141	31%	20%
Slovakia	48	355	40%	20%
Sweden	39 44	286 323	38% 25%	
United Kingdom	-	-	15%	5% for thermal energy 17,5% for all other forms of energy
Croatia	23 60	170 440	15%	22%

Source: Euroheat & Power, 2005 Survey;

3.4.3 The Work of Energy Undertakings on Consumer Appeals and Complaints and the Work of Complaints Commissions within Energy Undertakings

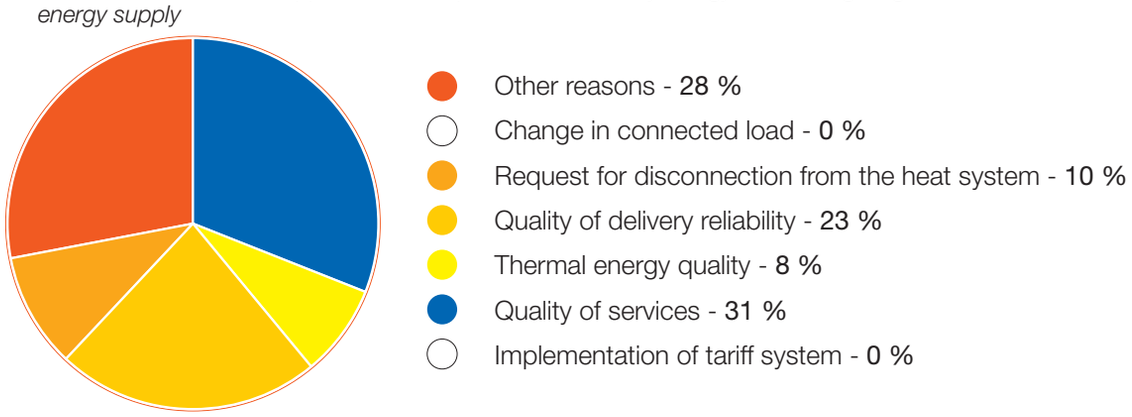
Energy undertakings dealing with thermal energy supply in the heating sector received a total of 719 customers' appeals and complaints in 2006, which is 0.54% out of the total number of customers - 133,802. In the following table (*Table 33*) there is a review of thermal energy customers' appeals and complaints, by groups:

Table 33: List of thermal energy customers' appeals and complaints

Name of energy undertaking	Tariff System's Implement.			Quality of services			Quality of thermal energy			Quality of supply reliability			Request for disconnection from the thermal system			Change of connected power			Other reasons			Total			No. of customers
	Total	Recognized	Rejected	Total	Recognized	Rejected	Total	Recognized	Rejected	Total	Recognized	Rejected	Total	Recognized	Rejected	Total	Recognized	Rejected	Total	Recognized	Rejected	Total	Recognized	Rejected	
TEHNOSTAN d.o.o.	1	1											2		2				26		26	29	1	28	2680
ZRAČNA LUKA																									
ZAGREB d.o.o.																						0	0	0	2
HVIDRA d.o.o.				1		1							6		6				2		2	9	0	9	2349
GKP ČAKOM d.o.o.																			3		3	3	0	3	145
VIRKOM d.o.o.																						0	0	0	478
ĐURO ĐAKOVIĆ Energetika i infrastruktura d.o.o.																					0	0	0	52	
TOPLINA d.o.o.				7		7							25	19	6				23	14	9	55	33	22	3612
VINKOVAČKI VODOVOD I KANALIZACIJA d.o.o.																						-	-	-	-
DIOKI d.d.																						0	0	0	4
INAS INVEST d.o.o.																						0	0	0	18
ENERGOREMONT d.d.																						0	0	0	5
TOPLANA d.o.o.				29	10	19	18	4	14	1	1		13		13				11	9	2	72	24	48	8095
HEP Toplinarstvo d.o.o.	1			162			29			165	127		14			2			135	2	4	508	129	4	103543
ENERGO d.o.o.				23	15	8	5	4	1				15	14	1							43	33	10	9846
TERMODIN d.o.o.																						-	-	-	-
TERMOPLIN d.d.																						0	0	0	2973
Total	2	1	0	215	25	28	59	8	22	166	128	0	75	33	28	2	0	0	200	25	46	719	220	124	133802

The most frequent type of appeals and complaints are cases related to quality of service - 31%, quality of supply reliability - 23%, there were 28% of other reasons, 10% of requests for disconnection from the heating system, quality of thermal energy 8% (*Picture 41*). There were only a couple of complaints about tariff system implementation and change in connected power.

Picture 41: Structure of customers' appeals and complaints submitted by energy undertakings registered for thermal energy supply



Out of the total number of received appeals and complaints in 2006, 220 cases (31%) were settled in favor of thermal energy customers, 124 (17%) were rejected, and others are still being processed.

3.5 Renewable energy sources and cogeneration

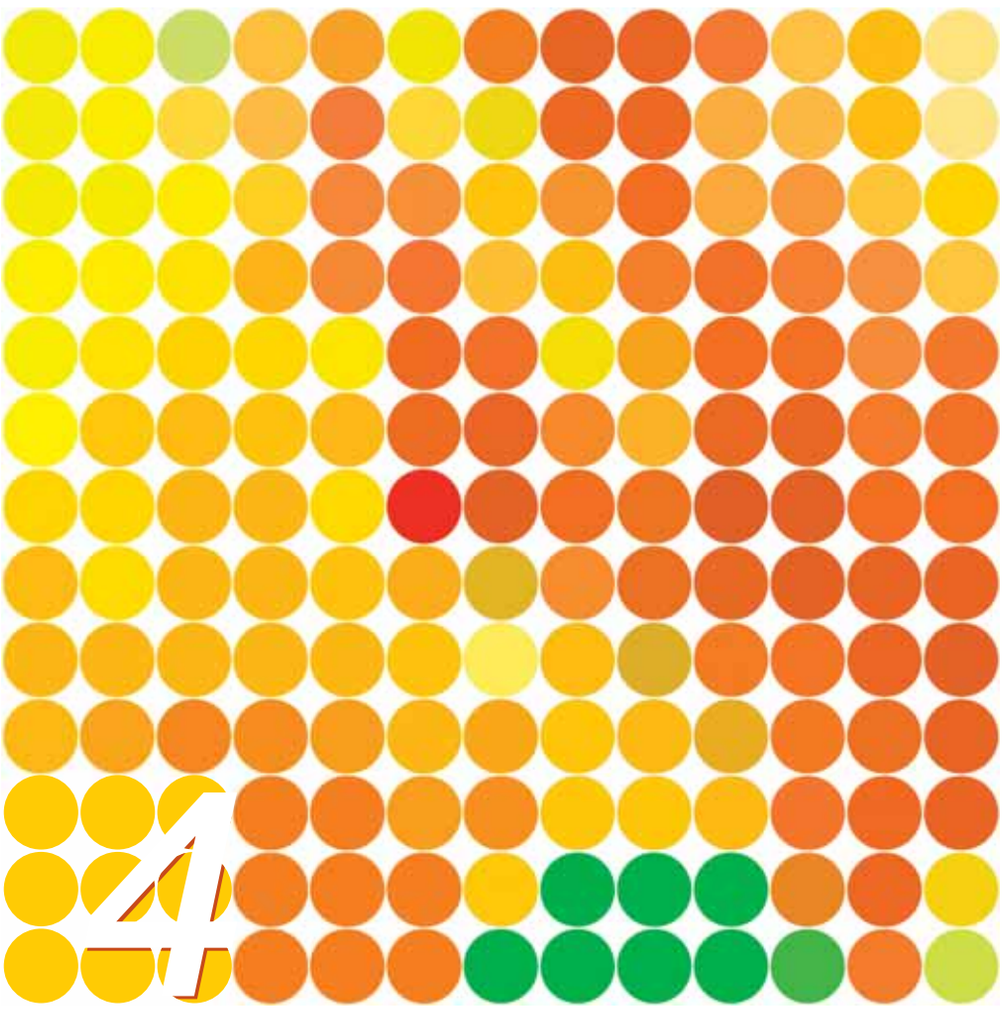
Croatia belongs to the group of European countries with a large share of electricity generation from renewable energy sources, thanks to the significant number of hydroelectric power plants. Electricity generation from hydroelectric power plants in 2006 was 6.070 GWh.
The share of hydroelectric power plants in the total electricity generation in Croatia (including NE Krško for Croatia) was 43%. There are only a couple of countries in Europe with a higher share of electricity generated in hydroelectric power plants, such as Norway and Albania, that receive almost all of their electricity from hydroelectric power plants, and Latvia, Austria, Switzerland and Bosnia and Herzegovina. The same goes for the entire production from renewable energy sources.
In the entire structure of electricity generation from renewable energy sources dominant are big hydroelectric power plants, with power over 10 MW. The hydroelectric power plants' installed powers in 2006 were the following:

- Run-of-river and reservoir-type hydroelectric power plants, with power over 10 MW: 2.039 MW
- Small hydroelectric power plants, up to 10 MW: 19 MW

With regards to other renewable electricity sources, in Croatia in the course of 2006 there were two wind farms of the total installed power 17.2 MW. The share of other renewable electricity sources is currently of minor significance.
After adoption of the secondary legislation package from the field of renewable energy sources it is expected that electricity share from the renewable energy sources will rise significantly, not taking into account big hydroelectric power plants. The goal is to reach electricity generation of 5.8% of annual electricity consumption in Croatia from the listed renewable energy sources (depending on consumption level, that will be about 1,000 GWh) by December 31, 2010.
It is worth mentioning that research is currently being carried out regarding potential building of wind farms of the total installed power of about 1,500 MW. In reality only some of those projects will be realized, since wind is a fluctuating energy source, so its usage in electricity generation is restricted.
Cogeneration is used primarily in thermoelectric power plants - heating plants of the HEP Group, as follows:

- TE-TO Zagreb, installed power of generators on electric-power network: 355 MW
- EL-TO Zagreb, installed power of generators on electric-power network: 92.5 MW
- TE-TO Osijek, installed power of generators on electric-power network: 42 MW

Apart from that, cogeneration systems for own purposes have been installed in several industrial facilities.



LIST OF TABLES AND PICTURES

LIST OF TABLES AND PICTURES

4.1 List of tables

4.2 List of pictures