

The Annual Report of Estonian Energy Market Inspectorate to the CEER

1 Summary \ Major Developments in the last year

The Energy Market Inspectorate (EMI) is the energy market regulator in Estonia. EMI is an independent regulatory authority: both in decision-making procedures and in accountability. The regulatory authority reports to the minister of economic affairs, the director general is nominated by the minister of economic affairs with no fixed terms.

The main tasks of EMI are as follows:

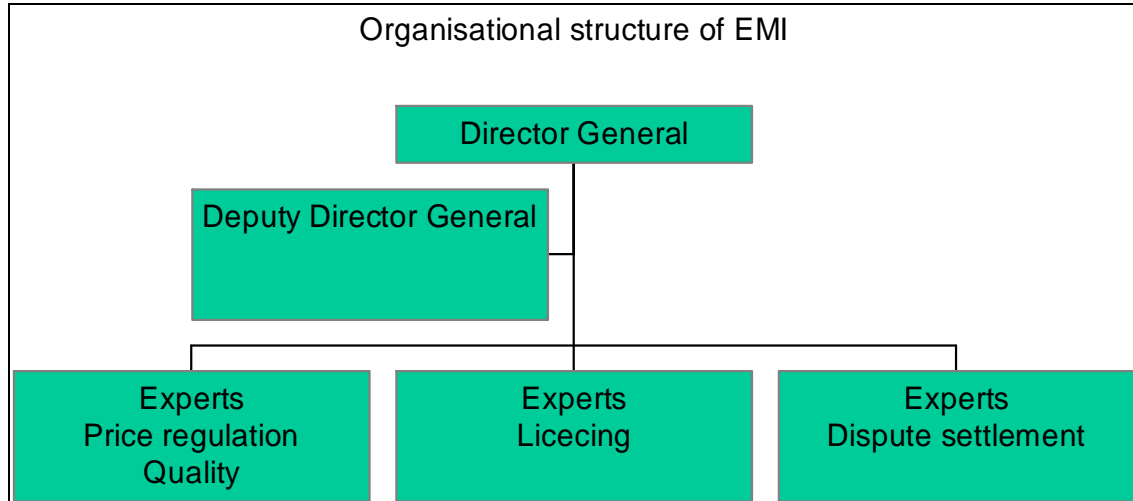
- Price control,
- Quality control
- Licensing,
- Disputes settlement

EMI is regulating the electricity, gas and district heating sectors.

The tasks related to competition (promotion of competition, etc.) are not under regulators responsibility in Estonia. The Competition authority is responsible for competition issues and the Ministry of Economic Affairs and Communications for security of supply issues.

The regulatory authority is lead by the Director General. Since the number of employees is limited (10 persons), the one level organisational structure is used. There are no separate departments within the organisation. All employees are directly respondent to the director general and by his absence to the deputy director general.

Basic organisational structure of the EMI is presented on the chart.



The main power of the regulatory authority is to issue the regulatory decisions on prices, licences and disputes settlement. The authority is fully independent on its decision making process. The decisions can be appealed at the administrative court only. The decisions cannot be cancelled by the minister or by the government.

The authority is financed from the state budget, the annual budget for 2005 is 326 000 €

Main developments in the gas and electricity sectors are the introduction of RPI-x type of regulation in gas and electricity network tariffs. The regulator decides the length of the regulatory period and it's started with 3-year period now. The plan is to prolong the regulatory period to 5 year in the future.

2 Regulation and Performance of the Electricity Market

2.1 Regulatory Issues [Article 23(1) except “h”]

3.1.1 General

The market opening degree today is 12%. The threshold of eligibility is 40 GWh. The market opening is fixed by the Electricity Market Act. Since Estonia has the transitional period for opening of the electricity market, the next steps of market opening will be as follows:

35% by 2009

100% by 2013

3.1.2 Management and Allocation of interconnection capacity and mechanisms to deal with congestion

There are no congestions. Estonia has the connection to Latvia and Russia. The capacities to Latvia and Russia are exceeding the actual loads. Since there are no congestions, there are no rules to be applied under the Regulation on cross border electricity exchanges.

3.1.3 The regulation of the tasks of transmission and distribution companies

There is one single TSO, responsible for system operation and power transmission. There are 42 distribution companies (DSO-s). The DSO-s are in very different size.

The TSO and the largest DSO with annual sales 6000 GWh and with 500 000 connected customers is owned by *Eesti Energia AS*. 10 companies are in middle size - annual sales from 50 to 300 GWh. The rest of 30 companies are small and very small with annual sales up to 50 GWh.

The term of making of repairs (quality norms) is regulated by the decree of the Minister of Economic Affairs. The connection to the TSO by unplanned interruption shall be repaired within 12 hours. The total duration of unplanned interruption shall not exceed 240 hours per annum

The connection to the DSO by unplanned interruption shall be repaired within 20 hours during the summer period (from April until September) and within 24 hours during the winter period (from October until March). The total duration of unplanned interruption shall not exceed 240 hours per annum.

In Estonia the planned interruptions are regulated as well. The planned interruption in TSO or DSO cannot exceed 10 hours during the summer period (from April until September) and 8 hours during the winter period (from October until March).

The regulator is making control over the fulfilling of the quality norms (repairs and duration of interruptions. The regulator is measuring the performance of networks in terms of continuity of supply, indicators SAIDI, CAIDI, etc).

All companies have to fulfil the quality norms stated by the degree of the Minister of Economic Affairs. If the quality standard is not fulfilled (the repair of the connections) the network operators have to pay compensation to the customers. The level of compensation paid, is regulated by the degree of the Minister of Economic Affairs as well. The regulators role is to control, whether the companies are fulfilling the quality norms, in terms of repair of the connections and compensations paid to the customers.

The electricity supply quality is not used in price control, but the companies are obligated to supply the customers according to the quality norms. The regulation of quality norms started by 2004. **The statistical data are not available yet.**

Concerning connections of the new customers, the term of making connection is not regulated. The TSO is obligated to issue the conditions (incl. Connection fee) to the new customers within 90 days and the DSO within 30 days.

The ex-ante type of regulation of network tariffs is used. The regulator fixes every single distribution or transmission tariff prior entry into force. For the regulation transmission and distribution the 3-years RPI-x model is used, where the entire network tariff are changed once per year according to the formula fixed by the regulator.

For calculation of connection fees the ex-ante type of regulation is used. The companies are obligated to approve the methodology by the regulator.

In general, according to the energy act, the regulator is preparing the network tariffs regulation methodology, which is published on the regulators website. The network tariffs are calculated in accordance to the methodology. The first 3-years regulatory period started in 2005 and will end by 2007. The regulator decides the length of the regulatory period. The next period starts at 2008 and it is considered to introduce a 5-years regulatory period.

The regulator has prepared a data collection system (called regulatory accounting database). The regulated enterprises are obligated to present those databases one-year prior of the start of the regulatory period. The obligation to give any kind of information, which is necessary for price control, is set by the law.

The regulator is fixing all single network tariffs. The tariffs are fixed by the decision of the director general of the regulatory authority. There is no involvement of the governmental institutions (ministries or other agencies) to the price regulation process. The minister of economic affairs or the government has no right to cancel or to change the decision made by the regulator. The regulated company can appeal the decision at the administrative court (for example if the regulator doesn't fix the tariffs applied by the company).

The main regulatory tools are:

- Benchmarking of costs of distribution operators
- Analysing of trends of the costs
- Analysing specific cost elements (labour, maintenance, IT, price of electricity purchased for compensation of energy losses, network tariffs purchased from TSO, etc)
- Analysing of efficiency parameters (energy losses, annual utilisation of pick load, etc)
- Using of regulatory depreciation (different from the book-depreciation)
- Setting of regulatory asset base (RAB) for calculation of return and regulatory depreciation
- Using the principle where the return on RAB equals to WACC

The TSO and the DSO-s are obligated to publish all network tariffs, connection charges and the standard contract condition on their website. The regulator is obligated to publish all network tariffs on its website. If the network tariffs are changed, the operators are obligated to publish all amended tariffs in newspaper, three-month prior the validity.

Estimated national average network charges¹ for the most recently available period are provided corresponding to the following Eurostat definitions of “typical customers”:

- Dc: household customer with annual consumption of 3 500 kWh/ year 3,95 eurcent/kWh
- lb: commercial customer with annual consumption of 50 MWh / year, subscribed maximum power 50 KW 3,09 eurcent/kWh
- lg: industrial customer with annual consumption of 24 GWh/ year, subscribed maximum power 4000 KW 1,41 eurcent/kWh

According to the Energy Market Act all generators (excl. wind generators) and customers are balance responsible. For the non-eligible customers the network company is balance responsible. The balancing interval is 60 min and there is one balancing area.

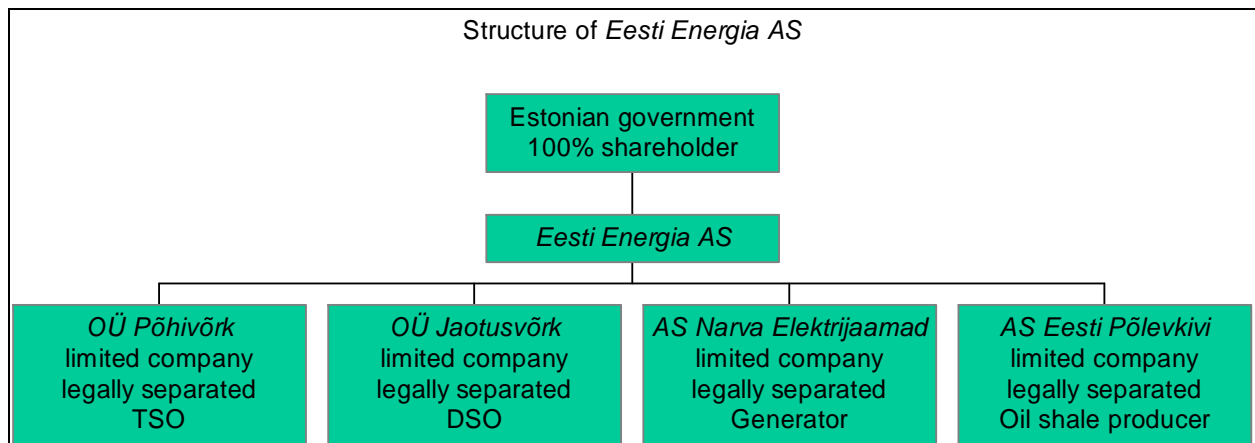
The TSO is responsible for the balancing of the entire energy system and selling or purchasing balancing energy from market actors. The TSO is obligated to publish the price of balancing energy (both selling and purchasing price) on the website. The regulator is preparing the price regulation methodology for balancing energy, which is published on the TSO's and on the regulators website. The TSO is obligated to calculate the balancing energy price according to the methodology. The regulator is controlling (ex-post) the price of the balancing energy.

According to the Electricity Act the TSO is obligated to treat all market participants on an equal and non-discriminatory manner. The balancing energy shall be purchased with best-offered price and conditions.

3.1.4 Effective unbundling

Concerning the unbundling, Estonia is fulfilling the requirement of the directive. The market dominating company *Eesti Energia AS* is the owner of TSO and the largest DSO (with market share of 90%). The structure of the company is presented on the graph above.

¹ This estimate should include both transmission and distribution charges



The TSO is legally unbundled (a limited company). *Eesti Energia AS* owns 100% of the shares of the TSO. According to the law the TSO shall be strictly separated from generation and supply facilities.

The DSO of *Eesti Energia AS* is legally unbundled (a limited company). *Eesti Energia AS* owns 100% of the shares of the DSO. According to the law the DSO shall be strictly separated from generation facilities, but it's allowed the power supply under public service obligation (PSO). In fact the supply is legally unbundled from the DSO of *Eesti Energia AS*, which means, that the DSO is selling the network services only.

Concerning to which extent the TSO's and DSO's present themselves to customers as separate entities, the TSO and every DSO shall have separate web page. The TSO and DSO have different web pages, company names and they present to the customers as different companies. Concerning the logo, they use the logo of *Eesti Energia*, indicating that they are belonging to the group.

For example:



The logo of the Eesti Energia group



The logo of TSO

Concerning the cost sharing with affiliated companies, the TSO and DSO are very independent to decide from which sources to buy the services. For example the book keeping of all companies of the *Eesti Energia* group is consolidated and the daughter companies are buying some services from the group like renting the office rooms and buying some other services. The total amount of purchased services from the group is rather limited, not exceeding 1-2% of total cost of the companies. The regulator is checking very carefully, whether the services are purchased from the affiliated companies with adjusted and reasonable prices.

If the DSO has less than 100 000 customers, legal unbundling is not required. The rest of DSO-s (41 companies) have all less than 100 000 customers. The unbundling of accounts is required in that case. A number of DSO has voluntarily implemented the legal unbundling.

If the DSO-s is legally not unbundled, they are obligated to publish the separated accounts for distribution, supply and for other activities in their annual report. The auditor's opinion shall be added to the annual report.

Concerning the ownership, the rest of 41 DSO-s are mostly privately owned, some of those municipal owned.

The regulator has prepared the guidelines and databases (questionnaires) for unbundling of accounts. The accounts are unbundled as follows: distribution, supply and non-core activities. The avoidance of cross subsidising of non-core activities is an important issue in unbundling procedures. The regulator is making cost allocation control, checking whether the costs are allocated in accordance to the activities. Since there is a big number of small-size DSO's, with less than 100 000 customers and which are not legally unbundled, the benchmarking is a powerful tool to check the proper level of cost and effective unbundling of accounts.

If the company is not fulfilling the requirements of effective unbundling, the regulator may impose the company to fulfil the requirements by issuing a decision.

a. Competition Issues [Article 23(8) and 23(1)(h)]

3.2.1 Description of the wholesale market

The size of Estonian power market is very limited. The total annual end-user's consumptions in 2004 was 6 TWh. Adding the power purchased for compensation of energy losses of TSO and DSO's, the total consumption is 7 TWh. The forecast of total annual consumption for 2005 is 6,2 TWh excl. losses, the maximum demand is 1475 MW.

The market opening degree at the moment is 12% (the customers with annual consumption more than 40 GWh are eligible). The Electricity Market Act fixes the further steps of market opening. Since Estonia has the transitional period for opening of the electricity market, the next steps of market opening will be as follows: 35% by 2009; 100% by 2013.

The amount of installed available generation capacity is 2,2 GW. The installed capacity is exceeding the actual demand and Estonia is a net exporter of electricity. The state owned company *Eesti Energia AS* is playing a significant role on the power market. The proportion of installed capacity of the company is 95% The Company is the owner of Narva Power Plants (main producer) and a number of CHP plants. Estonia is connected to the Russian power system; therefore the trading inside of EU market with Latvia and Lithuania only is possible.

According to the Electricity Market Act all non-eligible customers are supplied by the DSO-s. The DSO's are obligated to purchase electricity for non-eligible customers and for power losses from Narva Power Plants (oil-shale operated) or from CHP-s. The regulator is setting price cap on the generation price of Narva Power Plants and on the end consumer's power price.

The market size of eligible customers is 0,72 TWh. The eligible customers are trading, based on bilateral contracts. The biggest trader on the market is *Eesti Energia AS*. A number of eligible customers have installed own generation capacity. One eligible customer is supplied by a competing trader *AS Narva Elektrivõrk*, which is importing electricity from Lithuania.

In this year the construction of Estonian-Finland connection has started. The connections shall be ready by the end of 2006. After that the Finnish companies might be interested to start power trading in Estonia.

In conclusion, it can be remarked, that there exist no real power market in Estonia or in the Baltic region. In Estonia the company *Eesti Energia AS* is the main supplier on the Estonia market and is supplying the majority of eligible customers.

3.2.2 Description of the retail market

Since the market opening degree is 12% only and the rest of customers are non-eligible, there exists no competitive retail market in Estonia.

The structure of retail market is described below:

- the households and small commercial sector (e.g 50MWh/year and under) 33%
- in the medium sized industrial and commercial sector (e.g. up to 2GWh/year) 42%
- large and very large industrial customers (above 2GWh/year) 25%

3.2.3 Measures to avoid abuses of dominance

The Ministry of Economic Affairs will submit detailed information on that topic. The regulators tool to avoid abuses of dominance is to control whether the criteria's on TPA to the networks are fulfilled. The regulators tools is also to issue the generation and supply license to the new supplier and generators in efficient and in non-bureaucratic manner.

61 Regulation and Performance of the Natural Gas market

a. Regulatory Issues [Article 25(1)]

4.1.1 General

The market opening degree today is 95%. The threshold of eligibility is 200 000 m³ (1800 MWh) per annum. The government has approved the amended Natural Gas Act. According to the amended Natural Gas Act all customers will be eligible by 1. July 2007.

4.1.2 Management and allocation of interconnection capacity and mechanisms to deal with congestion

There are no congestions. Estonia has the connection to Latvia and Russia. The capacities to Latvia and Russia are exceeding the actual loads.

Since there are no congestions, there are no rules to be applied under the Regulation on cross border electricity exchanges.

4.1.3 The regulation of the tasks of transmission and distribution companies

There is one single TSO, responsible for system operation and power transmission and 20 separate DSO-s. The distribution companies are in very different size.

The TSO and the largest DSO are owned by *AS Eesti Gaas*. The rest of DSO-s are small size. The number of customers of the small-size DSO's is not exceeding 1000.

There are no quality standards for gas supply. The average interruption time per customer is not measured and the gas supply quality is not used in price control.

Concerning connections of the new customers, the term of making connection is not regulated. The network companies (both TSO and DSO-s) are obligated to issue the conditions (incl. connection fee) to the new customers within 30 days.

The ex-ante type of regulation of network tariffs is used. The regulator fixes every single distribution or transmission tariff prior entry into force. For the regulation of transmission and distribution the cost plus method is used today. The regulator is preparing the price regulation methodology, which is published on the regulators website. It is planned to start with RPI-x regulation by 2006. The regulator decides the length of the regulatory period. The first regulatory period is expected to be 3 year.

The connection fees are ex-post (after their entry into force) regulated today. According to the amendment of The Natural Gas Act, the ex-ante regulation will be used, where for calculation of connection fees, the companies are obligated to approve the methodology by the regulator.

The regulator has prepared a data collection system (called regulatory accounting database). The regulated enterprises are obligated to present those databases one year from the start

of the regulatory period. The obligation to give any kind of information, which is necessary for price control, is set by the law.

The regulator is fixing all single network tariffs. The tariffs are fixed by the decision of the director general of the regulatory authority. There is no involvement of the governmental institutions (ministries or other agencies) to the price regulation process. The minister of economic affairs or the government has no right to cancel or to change the decision made by the regulator. The regulated company can appeal the decision at the administrative court.

The main regulatory tools are:

- Benchmarking of costs of distribution operators
- Analysing of trends of the costs
- Analysing specific cost elements (labour, maintenance, IT, price of electricity purchased for compensation of energy losses, network tariffs purchased from TSO, etc)
- Using of regulatory depreciation (different from the book-depreciation)
- Setting of regulatory asset base (RAB) for calculation of return and regulatory depreciation
- Using the principle where the return on RAB equals to WACC

The TSO and the DSO-s are obligated to publish all network tariffs, connection charges and standard contract condition on their website. The regulator is obligated to publish all network tariffs on its website. If the network tariffs are changed, the operators are obligated to publish all amended tariffs in newspaper three-month prior the validity.

There exist no transit contracts concluded pursuant to Article 3(1) of Directive 91/296.

Estimated national average network charges for the most recently available period corresponding to the following Eurostat definitions of “typical customers:

I4-1	116 300 MWh	load factor 250 days, 4000 hours	1,41 €/MWh
I1	116.3 MWh	no load factor specified, if necessary 115-200 days	5,12 €/MWh
D3	23 260 KWh	no load factor specified	5,12 €/MWh

The TSO is responsible for balancing arrangement. The balancing arrangements shall be arranged on a transparent and non-discriminatory manner. The regulators role is to control, whether that obligation is fulfilled. Since there is a single gas importer on the market, which is in the same company as the TSO, there is no actual balancing at the moment. The balancing interval is stated in The Natural Gas Act and it is 24 h.

4.1.4 Access to Storage, Linepack and other ancilliary services

There are no storages in Estonia.

4.1.5 Effective Unbundling

There is no legal separation of TSO, DSO and supply. The separation of accounts for network operations and supply has been implemented. The TSO and the largest DSO (with market share of 90%) are within the company *AS Eesti Gaas*. The accounts for network operations and supply has been separated.

AS Eesti Gaas is a private owned company. The majority shareholders of the company are Gazprom, Ruhrgas and Fortum. The number of customers of the company is less than 100 000.

The rest of 20 DSO-s are privately owned as well. The majority of the customers of those DSO's are non-eligible. As mentioned before those DSO's are rather small size, with a limited number of customers (less than 1 000). The accounts (distribution and supply) of those have been separated.

For the customers *AS Eesti Gaas* is presented as one single company, the unbundled accounts are not published. There is no obligation to certify the separated accounts by the auditor. The regulator may require the company to submit an audit certified by the auditor.

The regulator has prepared the guidelines and databases (questionnaires) for unbundling of accounts. The regulator is making cost allocation control, checking whether the costs are allocated in accordance to the activities. In control of the cost level the benchmarking is used.

If the company is not fulfilling the requirements of effective unbundling, the regulator may impose the company to fulfil the requirements by issuing a decision.

According to the proposed amended Natural Gas Act there will be new requirements for unbundling. If the TSO and DSO are within one company, the supply shall be legally unbundled. If the DSO has more than 100 000 customers, the legal unbundling of distribution and supply is required. The amended Natural Gas Act is approved by the government.

b. Competition Issues [Article 25(1)(h)]

4.2.1 Description of the wholesale market²

The size of Estonian national gas market is 1 000 bcm/year. There is no domestic gas production, 100% of gas is imported from Russia. According to the national regulations there are no restrictions for gas import. Every eligible gas customer or gas trader may get the license for gas import. In fact at the moment *AS Eesti Gaas* is the single gas importer in Estonia.

4.2.2 Description of the retail market

The retail supply market is as follows:

Large industrial customers up to 100 bcm/year 10%

Power generation, CHP, district heating, larger gas customers (more than 200 000 m³/year) 85%

Non-eligible, mainly households' customers (less than 200 000 m³/year) 5%

AS Eesti Gaas is the main actor on the market. 100% of the gas is imported by *AS Eesti Gaas*, which is selling gas to all DSO-s. According to the regulations the DSO's may import directly gas from Russia. Since the sales capacities of the DSO's outside of *AS Eesti Gaas* are very limited, the direct import from Russia is unrealistic.

² Defined as covering any transaction of gas between market participants other than final end use customers.

62Security of Supply

a. Electricity [Article 4]

Estonia is self-covering the supply demand and is a net exporter of electricity. The maximum demand in 2004 was 1475 MW, the available installed capacity is 2 200 MW. The futures pick demand depends heavily on weather conditions (the Estonian pick demand is in winter) and it's expected to be 1600 MW in 2006-2008. There are no concrete forthcoming plans for generation investments for the next three years period.

The Ministry of Economic Affairs is responsible for security of supply issues. The regulatory authority has a rather limited role in planning of new generation capacities. The role of the TSO is to present the capacity forecast plan in 7-years perspective.

The regulator is responsible for the authorisation (the licensing according to the Electricity Act). According to the law the regulator has to make the decision within 60 days. The licence will be issued before construction of the generation facility. To get a licence for building of new capacity is not a bureaucratic or long-lasting procedure.

The main developments in major infrastructure projects are the signing of contract for building of the Estonian-Finnish sea cable with capacity of 350 MW. The expected commissioning of the new line is the end of 2006. The exemption from the provisions of Article 6(6) of the Regulation 1228/2003 and Articles 20 and 23(2), (3) and (4) of Directive 2003/54/EC was granted by the relevant Finnish and Estonian authorities.

b. Gas [Article 5]

Estonia is totally depending on gas import from Russia. The annual consumption in 2004 was 966 bcm/year. The forecast for futures demand is as follows:

2005 980 bcm/year

2006 1 003 bcm/year

2007 1 013 bcm/year

There are no forthcoming investments to new infrastructure planned yet.

6 Public Service Issues [Article 3(9) electricity and 3(6) gas]

Electricity sector.

The network operator is obligated to supply electricity to all non-eligible and eligible customers. For non-eligible customers price the regulator is setting the price cap on the weighted average tariff. If the eligible customer has no alternative supplier, it may purchase power from the network operator with price, which is valid for non-eligible customers.

For setting the price cap, the regulator is using the common methodology published on the web side. There is no fixed time period (eg 3-years RPI-x) for the price cap. The company may apply to approve the revised price cap on any time. The regulator has a time limit (maximum 180 days) to accept or to reject the application. The company shall publish new tariff at least 90 days prior their entry into force. The regulator is also approving the standard contract condition for selling of electricity under PSO. The current price cap on electricity sold under the PSO is 2,67 eurocent/kWh.

On exceptional cases (if there are unexpected changes on the generation market) the supplier may change the electricity tariffs prior their approval by the regulator. In this case the ex-post type of regulation is used, where the regulator is controlling, whether the change of electricity price was adjusted or not.

Concerning the regulation of disconnection of household's customers for non-payment, there are rather strict rules regulated by the Electricity Act. The company may disconnect the customers not before 30 days, after sending of relevant notice,. If the customer is using electrical heating, than during the heating season (from October to April) the notice shall be send at least 90 days prior disconnecting of customer.

Gas sector.

The gas network operator is obligated to sell gas to all customers connected to the grid. The gas price for non-eligible customers is regulated by the regulator. The regulator is setting price cap. The gas price for eligible customers is based on the bilateral contracts and not regulated. In case of non-payment the gas supply can be disconnected within 7 days.