

# **Gas prices – Price systems 2006**



2007 edition



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Luxembourg: Office for Official Publications of the European Communities, 2007

ISBN 978-92-79-07036-5 ISSN 1830-8732 Cat. No. KS-EQ-07-001-EN-N

Theme: Environment and energy Collection: Statistical books

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# INTRODUCTION

Since 1 July 1991, a Community procedure has been in force, under Council Directive 90/377/EEC, for improving the transparency of gas and electricity prices charged to industrial end-users

In Accordance with Article 1(2) of that Directive, this note sets out a summary of the price systems applying in 2006 and supplements information provided in the half-yearly "Statistics in Focus".

The survey on which the study is based was conducted by the Statistical Office of the European Communities and would not have been possible without the cooperation of the administrations, institutes, companies and associations responsible for the gas sector, to whom we express our sincere thanks.



# SYMBOLS AND ABBREVIATIONS

m<sup>3</sup> Cubic metre

**MW** Megawatt (10<sup>3</sup> kW)

**kWh** Kilowatthour

**MWh** Megawatthour (10<sup>3</sup> kW) **GWh** Gigawatthour (10<sup>6</sup> kWh)

MJ MegajouleGJ GigajouleTJ TerajoulekPa KilopascalMPa Megapascal

GCV Gross calorific value
NCV Net calorific value

**EUR** Euro €

Cent Euro cent (1/100 EUR)

CZK Czech Crown

**DKK – ore** Danish Crown – ore = 1/100 DKK

LVL Latvian Lats
HUF Hungarian Forint
PLN Polish Zloty
SIT Slovenian Tolar
SEK Swedish Crown
GBP Pound Sterling

**USD** US Dollar



## **BELGIUM**

#### 1. General framework

The Federal Minister for Economic Affairs is responsible for setting the maximum prices for the supply of natural gas pursuant to the law of 12 April 1965 on the transmission of gaseous and other products by pipeline and the law of 22 January 1945 on economic regulation and prices. The Minister may intervene in relation to prices for sale to final customers, but only after the Electricity and Gas Regulation Committee (*Commission de Régulation de l'Electricité et du Gaz* – CREG) has expressed its opinion. Furthermore, there is a system of specific maximum prices for protected residential customers on low incomes or in precarious situations.

Network operators submit their tariffs for connection to transmission and distribution networks and use thereof to the CREG for approval. These tariffs must be in line with the general price structures set by the Royal Decrees of 15 April 2002 (transmission) and 29 February 2004 (distribution).

Since 1 July 2004, the gas market has been completely liberalised for all non-residential customers. In the Flemish Region, residential customers are also eligible. In the Walloon Region and Brussels Capital Region, residential customers became eligible on 1 January 2007.

# 2. Pricing of gas

## 2.1. Industrial customers

Natural gas prices for industrial customers are made up of the following elements:

- energy price;
- transmission price;
- distribution price.

Sales of natural gas to industrial customers are governed by bilateral contracts or by suppliers' tariffs. Prices include a standing charge and a commodity charge. Prices can be affected by a number of factors including amounts used, regularity of use, etc.

The transmission price includes:

- transmission of natural gas using primary and secondary transmission pipes, including compression and pressure reduction on the network, throughput and pressure regulation systems and all connecting pipelines and the upkeep and utilisation of these systems;
- the flexibility service for the transmission network;
- basic services linked to the integrated operation of the transmission network:
  - administration and marketing of the various activities relating to gas transmission, liquefied natural gas terminals and storage;
  - technical management of the network;
  - connection;
  - access to the system of general data;
  - · emergency balancing of the network.

# The distribution price covers:

- charges for basic services:
  - the periodic charge for transmission, which covers reception stations, substations, pipelines, connections and metering facilities;
  - the periodic charge for the management of the network system, which covers:
    - administrative and commercial management of access to the network;
    - dispatching, flow management, odourisation and network balancing
  - the periodic metering charge;
- charges for supplementary services including pressure reduction for customers.



#### 2.2. Domestic customers

The pricing system for eligible residential customers (Flemish Region) is similar to that described for industrial customers, except that the energy pricing is simplified (fixed charge where applicable and a unit price per kWh).

For non-eligible residential customers (Walloon Region and Brussels Capital Region), prices are regulated until 31 December 2006 (ministerial decree of 12 December 2001) and are as follows.

There are several types of domestic customer tariff:

- Tariff A, generally applicable, which includes a fixed charge and a two-instalment commodity charge based on consumption.
- Tariff B, applicable to comprehensive natural-gas heating; the conditions cover heating, cooking and domestic hot water; immediately applicable when annual consumption exceeds 19 444 kWh, or 2 000 m³/Slochteren gas; includes a fixed charge and a commodity charge.
- Tariff C, applicable to the communal heating of blocks of not less than 10 apartments and all consumption recorded on the same meter; this is also a two-instalment tariff.

Moreover, certain specific categories of customer (recipients of the "integration income", disability allowance, etc.) may benefit from the A, B or C social tariffs, which involve the granting of free kWhs, a tax exemption and/or a reduced commodity charge (ministerial decree of 23 December 2003).

## 3. Taxes on gas

Sales of natural gas are subject to 21% VAT.

An energy levy, introduced by a law of 22 July 1993 and amounting to 0.11589 cent per kWh in 2006, is applied to sales to domestic customers apart from those eligible for specific social tariffs.

A federal levy, 0.01252 cent per kWh in 2006, is applied to cover the running costs of the CREG and certain federal public service obligations. A surcharge to finance the social tariffs, 0.00878 cent per kWh in 2006, is also applied.

Fixed charges are collected at the regional level so as to guarantee the financing of public service obligations (social measures and measures to encourage the rational use of energy).

## **BULGARIA**

## 1. General framework

The legal rights of the authorities to regulate and control the production, import, export, transport, transit, distribution and trading of natural gas are governed by the "Energy Law", in force since 09.12.2003.

Final user gas prices are determined by an independent state agency — the "State Energy and Water Regulatory Commission" (SEWRC).

In exercising its regulatory powers, the SEWRC is guided by the following general principles:

- preventing and precluding the limitation or distortion of competition on the energy market;
- balancing the interests of energy companies and customers;
- ensuring non-discrimination between the various categories of energy companies and between groups of customers;
- providing incentives for the efficient operation of regulated energy companies;
- providing incentives for the development of a competitive market for energy sector activities, where conditions so permit.



The SEWRC determines the prices at which:

- the public provider sells gas to public suppliers and end consumers connected to the transmission network.
- the public provider sells gas to end consumers connected to the distribution network.
- a public supplier sells gas to end consumers connected to the distribution network.

There are 39 companies on the gas market, with one public provider and 12 public suppliers. For each company, the SEWRC determines and periodically (usually every three months) revises a tariff of maximum natural gas prices for final users. The tariff has separate price structures for:

- industrial consumers
- public, administrative and business consumers
- households.

## 2. Pricing of natural gas

The prices in the tariff are per 1000 m3 measured at 200 C and 101 325 Pa and do not include VAT.

#### 2.1. Domestic customers

The maximum natural gas price is different for each public supplier. The price is independent of annual volume consumption.

#### 2.2. Industrial customers

For industrial, public, administrative and business consumers, the gas price depends on annual consumption. The maximum natural gas prices are single-component prices, different for each regional company and for the following user categories:

- annual consumption up to 10 000 m<sup>3</sup>
- annual consumption from 10 001 to 100 000 m<sup>3</sup>
- annual consumption from 100 001 to 1 000 000 m<sup>3</sup>
- annual consumption from 1 000 001 to 10 000 000 m<sup>3</sup>
- annual consumption over 10 000 000 m<sup>3</sup>.

Users with an annual consumption of over 20 000 000 m³ are defined as 'eligible consumers' under the Energy Law and have the legal right to choose the supplier and negotiate their gas prices. These users account for approximately 80% of national consumption.

## 3. Taxes on natural gas

Sales of natural gas are subject to 20% VAT.

# **CZECH REPUBLIC**

#### 1. General framework

The joint stock company RWE-Transgas imports natural gas and sells it to eight distribution companies covering the whole area of the Czech Republic. Domestic gas production accounts for approximately 0.5% of domestic consumption.

Act No. 458/2000 Coll., also called the 'Energy Act', sets the main legal conditions for electricity and natural gas business. On 1 January 2001, the Energy Regulatory Office (ERO) set up under the Energy Act took over the regulation of electricity and natural gas prices from the Ministry of Finance.



Gas prices are calculated quarterly and published in the 'Energy Regulatory Bulletin'.

From 1<sup>st</sup> April 2007 the price regulation for eligible consumers ends. The regulation was established temporarily on 1<sup>st</sup> January 2006 for the natural gas market in the Czech Republic.

The reasons to continue in the regulation cease to exist with regard to the readjustment of the organization system of natural gas market from 1<sup>st</sup> January 2007 and with regard to the readjustment of contractual relations among individual market participants.

Thus the authority will not determine the prices quarterly, but yearly and concerning the regulated activities only.

The commodity prices are already subject to business policy of trade licensees.

The Energy Act also defines the progress of gas market liberalisation and specifies the 'eligible' consumers. An eligible consumer is a natural or legal person who is entitled to choose the natural gas supplier and to have regulated access to the transmission, distribution, line-pack and upstream pipeline network, and negotiated access to underground gas storage.

The process of unbundling in the Czech Republic started at 1<sup>st</sup> January 2006, when RWE Transgas, split into RWE Transgas, which stores and trades in gas, and its subsidiary RWE Transgas Net, which transports gas. The unbundling of the distribution system operators continued and in accordance with the Energy Act was completed by the end of the year 2006.

Opening of the gas market

1<sup>st</sup> January 2005: eligible consumers are all end-consumers with consumption of more than 15 million m<sup>3</sup> of natural gas for one point of supply in the year 2003, and all electricity generation licence holders burning gas in thermal power stations or using gas for combined production of electricity and heat.

1<sup>st</sup> January 2006, eligible consumers will be all end-consumers except households, but the Energy Regulatory Office still calculated maximum prices for these eligible consumers.

1<sup>st</sup> January 2007, eligible consumers will be all end-consumers but maximum prices will be finished from 1<sup>st</sup> April 2007.

## 2. Pricing of gas

# 2.1. Industrial consumers

Regulation involves setting the maximum natural gas prices both for supplies from Transgas to the traders and for supplies from distribution companies to end-consumers.

Natural gas prices are set as two-component maximum prices: the price of natural gas (CZK/MWh) and the capacity charge — an annual payment for maximum daily consumption (CZK/MWh) or a monthly standing charge (CZK per point of supply). The two-component maximum prices are set for each regional distribution company and for the following categories of consumers:

- annual consumption of up to 630 MWh commercial (this category has the same system and pricing as households, since 2006 more detailed ranges),
- annual consumption from 630 to 4 200 MWh medium-scale,
- annual consumption of more than 4 200 MWh large industrial consumers.

Since 2002, these categories of consumers have been broken down into more detailed ranges, which are different for the individual distribution companies. Since 1 January 2002, maximum natural gas prices have been different for each regional distribution company.

Since 1 January 2006 large industrial consumers were divided into three ranges:

- annual consumption from 4 200 to 52 500 MWh
- annual consumption from 52 500 to 157 500 MWh
- annual consumption of more than 157 500 MWh



Changes in regulated gas prices are made on 1 January of each year. In the event of significant changes in the import price of natural gas, every trader can have the different terms for the changes of natural gas prices (monthly, quarterly, etc.).

#### 2.2. Domestic consumers

Maximum natural gas prices consist of two components:

the price of natural gas (CZK per MWh) and a monthly standing charge (CZK per point of supply).

Since 1 January 2006 annual consumption range from 9.45 to 63.00 MWh has been broken down into more detailed ranges

- annual consumption from 9.45 to 15.00 MWh
- annual consumption from 15.00 to 20.00 MWh
- annual consumption from 20.00 to 25.00 MWh
- annual consumption from 25.00 to 30.00 MWh
- annual consumption from 30.00 to 35.00 MWh
- annual consumption from 35.00 to 40.00 MWh
- annual consumption from 40.00 to 45.00 MWh
- annual consumption from 45.00 to 50.00 MWh
- annual consumption from 50.00 to 55.00 MWh
- annual consumption from 55.00 to 63.00 MWh

Since 1 January 2002, maximum natural gas prices for households have been different for each regional distribution company.

# 3. Taxes on gas

VAT is 19% since 1 May 2004.

## **DENMARK**

#### 1. General framework

Regulation of gas prices and state of play in liberalisation process: The Danish natural gas market has been fully liberalised since 1 January 2004. Thus, domestic consumers can buy their natural gas freely on the market. The legal status is described in the Act on natural gas supply.

The actual gas price depends on the Rotterdam (as well as other North European price indices) gas and fuel oil spot price. The price of natural gas for both industrial consumers and domestic consumers consists of three elements.

The first is an energy charge, which depends on the amount of consumption as well as consumption profile. The second element is distribution costs, which also depend on the amount of consumption.

Finally, there is a standing charge, which depends on the size of the gas meter.

## 2. Pricing of gas

## 2.1. Industrial consumers

Tariff/price components including rebates (energy charge, standing charge, transmission and distribution costs, etc): The price systems for both industrial and domestic consumers are basically the same. Set out below are some factors which affect price.

Factors affecting tariffs/prices (demand levels, interruptibility clauses, peak/off-peak periods, etc.): Rebates are negotiable on the basis of an individual contract stating conditions with respect to warnings in case of



interruptions. Industrial consumers can choose between different schemes. For example, there is a scheme whereby the price can be fixed for a specific period

#### 2.2. Domestic tariff

Tariff/price components including rebates.

The price systems for both industrial and domestic consumers are basically the same.

Factors affecting tariffs/prices.

Domestic consumers can choose between different schemes. For example, there is scheme whereby the price can be fixed for a specific period.

## 3. Taxes on gas

The tax on natural gas is  $0.27412 \in (204.2 \text{ øre})$  per Nm<sup>3</sup> (Normal cubic meter), which is supplemented by a carbon dioxide tax of  $\in 0.02658 \in (19.8 \text{ øre})$  per Nm<sup>3</sup>. The natural gas tax is refundable for Companies registered for VAT that use natural gas in processes and for process heating as well as for power generation. This does however not include space or water heating for non-process issues. The Carbon - Dioxide tax is refundable for companies which use natural gas for heavy process.

Natural gas is subject to 25 % VAT.

## 4. Price collection methodology

The collection methodology is at present undergoing a revision and will be centered on price data collected from a range of gas suppliers as well as weighting of gas suppliers' portfolios. Further information will be available no later than 1. January 2008.

## **GERMANY**

## 1. General framework

The implementation of the EU Directive 2003/55/EC for a gas single market occurred with the second Act reorganising the Energy Industry Act (*Energiewirtschaftsgesetz* – EnWG) of 7 July 2005. It includes farreaching competences for the newly-established regulatory authority and foresees the transition towards an incentive-based regulation. This is intended to ensure that progress in network productivity is passed on to transportation customers over the course of time via network charges.

Two regulations specifying the economic and technical framework for access to the system for gas – the gas network access regulation (*Gasnetzzugangsverordnung* – GasNZV) and the access charges regulation (*Gasnetzentgeltverordnung* - GasNEV) of 25 July 2005 – are in force. The gas network access regulation makes provision for the introduction of entry/exit terms for supra-regional and regional pipelines. The gas access charges regulation contains provisions concerning the cost basis for system charges at distribution level and for comparative procedures. With regard to transmission pipelines, the regulatory authority is to be empowered to conduct a comparison based on the comparative market principle.

# 2. Pricing of gas

The market behaviour of gas supply companies is influenced by gas-to-gas competition and by inter-fuel competition generated by the market presence of other forms of energy.

Gas suppliers compete with other gas companies for customers as well as with other sources of energy such as heavy fuel oil, gas oil, coal, electricity and district heat. With such tough competition, the price of gas in the marketplace has to be competitive for each application. The prices users pay for gas are negotiated



between the supplier and the consumer on the basis of a common evaluation of the criteria relevant to an assessment of the competitive position.

For the consumer, the competitive price is determined from all the costs one has to pay for the conversion of the particular feedstock into useful energy, i.e. the cost of the fuel and the cost of converting a source of energy into useful energy (capital charges and other running costs). In addition to these quantifiable cost parameters, a consumer's choice of energy also depends on qualitative criteria such as security of supply, environmentally sound use of energy and convenience of use.

#### 2.1. Industrial consumers

In the industrial sector, the prices at which major users receive gas are negotiated by the parties to the particular contract on a case-by-case basis. Standard rates do not exist in Germany, given that inter-fuel competition differs for each individual industrial customer.

Two-part pricing. As a rule, the gas price comprises a demand charge and a commodity charge:

- The demand charge represents the amount payable by the consumer for specific rights to the agreed capacity: the consumer acquires these rights for an unlimited period of time. Industrial consumers with interruptible supply contracts must operate dual-fuel plant and must store fuel oil whenever it is not possible to reduce the volume of gas taken by technical measures. In return, these customers either do not pay a demand charge or only pay a reduced demand charge, determined for example by the term of the interruptible agreement.
- The commodity charge is the charge for the gas taken.

Competition with heavy fuel oil and gas oil. Gas companies throughout Germany face similar competitive environments for the different industrial consumer categories. In the case of the I1 (116 000 kWh) through I3 (11.63 million kWh) categories, gas oil is the main competitor. In the case of I4 (116.3 million kWh) consumers, gas competes with both gas oil and heavy fuel oil. For the largest industrial users (I5, 1.163 billion kWh), heavy fuel oil is the most important competitor.

*Price adjustment clauses.* In the industrial sector, the gas prices agreed during contract negotiations only reflect the competitive situation at the time the contract is concluded. These prices are adjusted to market changes on the basis of price adjustment clauses where the parameters and reference periods are individually negotiated. In Germany, the "fuel oil clause" is often used, reflecting the competitive situation. Under the fuel oil clause, the price of gas is geared to the price of oil.

Gas prices are automatically adjusted at intervals agreed in the gas contracts. For example, there may be quarterly or monthly adjustments. On each adjustment date the price of gas is adjusted to reflect average fuel oil prices during an earlier, contractually agreed reference period. In Germany, the oil prices used in the price adjustment formulae are the prices published each month by the Federal Statistics Office.

#### 2.2. Domestic consumers

In the residential and commercial sector, individual gas pricing is not practicable because of the large number of consumers. Uniform tariffs for the different customer groups are determined by each gas supplier (about 730). Nationwide tariffs do not exist in Germany, given the differences in competitive situation.

Two-part pricing. The gas price comprises a standing charge and a commodity charge:

- The standing charge represents the amount payable by the consumer for specific rights to supply facilities and services: the consumer acquires these rights for an unlimited period of time.
- The commodity charge is the charge for the gas taken.

*Price adjustment clauses.* The principle of the fuel oil price indexation formulae (Point 2.1) pegging the price of gas to the price of gas oil also applies for residential and commercial users. Rates fixed for residential and commercial users are not usually adjusted via price adjustment clauses. They are generally modified as and when changes in market conditions necessitate such a modification.



#### 3. Taxes on gas

The tax rate for natural gas when used as a heating fuel is € 5.50/MWh, that for light heating oil € 61.35/1 000 I, for heavy heating oil € 25/1 000 kg and for liquid gas € 60.60/1 000 kg.

Tax reductions for the manufacturing sector

The manufacturing industry in Germany has been granted a special tax reduction, namely 40% tax relief on ecological tax, i.e. for natural gas this means 40% of € 3.66/MWh. The figure of € 3.66/MWh is made up of the increases in the tax on natural gas since 1 April 1999. In relation to the tax rate for natural gas (€ 5.50/MWh) tax relief amounts to € 1.464/MWh. This tax reduction also affects gas, water, power and district heat suppliers as undertakings in the manufacturing sector. Undertakings in the manufacturing sector can also benefit from further tax relief under what is known as "peak adjustment".

# **ESTONIA**

## 1. General framework

The main legal act regulating the Estonian gas market is the Natural Gas Act (as from 1 July 2003). This Act regulates activities related to the import, distribution and sale of natural gas by means of gas networks, and connection to networks. Under the Act, a seller of gas must obtain the approval of the Energy Market Inspectorate for the maximum prices of gas to be sold to non-eligible final customers.

A seller of gas may sell gas within its licensed territory at a price which does not exceed the maximum price approved by the Inspectorate. Maximum prices are approved on the basis of the quantity of gas consumed per calendar year and have to be applied uniformly over the entire licensed territory of a seller of gas. Sellers of gas are obliged to publish the maximum prices set within their licensed territory in a daily national newspaper at least three months before the date as of which such prices apply.

A network operator has to submit network services prices and the bases for setting such prices to the Inspectorate for approval, except in the case of gas transit.

The Inspectorate has the right to:

- approve the maximum prices for gas sold to the domestic customers and the prices for network services,
- establish temporary prices for the transmission or distribution of gas for no longer than two months in situations where the transmission or distribution prices are not justified or the gas undertaking does not comply with a precept issued by the Inspectorate.

The Gas Market Act provides the necessary framework for opening up the market and implementing EU principles. At the moment, the gas market has been opened up to the extent of 95 % in Estonia.

The eligible customers are all non-domestic customers. An eligible customer has the right to purchase gas from any provider within the technical limits of the network.

## 2. Pricing of gas

The approved price is calculated on the basis of the price cap and consumer price index which applied before the period, and on the basis of the efficiency factor, i.e. the cost reduction factor (x) determined by the regulator.

Prices subject to ex-ante regulation by the Inspectorate comprise a price cap for small users of natural gas and for network services.



Charges for services related to the main activity of the company which are subject to ex-post regulation comprise connection charges reviewed by the regulator, natural gas prices for eligible customers, charges for changing the technical conditions of gas consumption and charges for other services.

There is only one importer of gas, and 16 or so distribution companies.

## 2.1. Industrial consumers

In the industrial sector, prices are negotiated by the parties to a particular contract on a case-by-case basis.

#### 2.2. Domestic consumers

The tariff rates depend only on the annual consumption volume and are grouped as follows:

- up to 200 m³ per year,
- 201 750 m³ per year.
- above 750 m³ per year.

There are no specific social tariffs for gas.

## 3. Taxes on gas

Natural gas sales are subject to 18% VAT.

## **IRELAND**

#### 1. General framework

The Gas (Interim Regulation) Act 2002 established responsibility for the regulation of the Irish Gas Market under the Commission for Energy Regulation (CER). All Industrial or Commercial customers are currently eligible for Third Party Access in the Irish Gas Market. The CER expects that the rest of the market will be liberalised by 2007 when the necessary legislation is put in place.

Competition in the gas market for industrial and commercial customers has been in place since 2004 with three suppliers active in this segment. The CER has been working with industry participants to develop market processes to support full market opening and the development of competition for the benefit of all customers. Full market opening in the Irish natural gas market is due to take place by 1st July 2007.

By July 2007 Ireland's retail gas market will open to competition and all gas customers will be eligible to switch their gas supplier. This represents over half a million domestic customers. Increased competition in the natural gas market can potentially offer a number of important benefits to consumers, including increased choice, greater efficiency, lower prices and higher standards of service.

# 2. Pricing of gas

## 2.1. Industrial consumers

**Unregulated Consumers**: Very large gas users (over 264 GWh per annum) are free to choose their supplier or to purchase their own gas on the wholesale market.

**Regulated Tariff Formula (RTF) Consumers:** RTF customers are those industrial and commercial gas customers that consume between 5.3 GWh and 264 GWh of gas per annum (circa 181,000 and 9m therms). These are medium to large customers and generally can chose alternative suppliers, where such suppliers



serve their area. In this segment of the market, the CER regulates the charges of BGS in accordance with a pre-set formula.

The formula takes into account the costs to BGS of supplying this particular group of customers and it is calculated each year based on the CER's finding as to the allowed revenue that BGS can recover from this customer group.

**Non-Daily Metered Conusmers:** These customers use less than 5.3 GWh of gas per annum and this category includes all domestic customers who currently do not have the freedom to chose an alternative supplier to BGS. The tariffs that BGS can charge this category of customer are approved by the CER each year. There are three published tariffs available to Non Daily Metered Industrial/Commercial Customers.

#### Standard Industrial/Commercial Tariff

This tariff consists of four decreasing rate blocks and a monthly standing charge. It is generally suitable for customers consuming less than 450,000 kWh per annum

I/C Blocked Rate Tariff Profile		
Supply Charge	€ 145.44 per year	Applied monthly per meter installed
Band 1 (0-3,000 kWh)	€ 0.05376 per kWh	
Band 2 (3,001-7,500 kWh)	€ 0.04963 per kWh	Banding is applied on a monthly
Band 3 (7,501-15,000 kWh)	€ 0.04548 per kWh	basis
Band 4 (15,001+ kWh)	€ 0.04136 per kWh	
Prices exclude VAT	-	

#### Demand & Commodity 1 Tariff

This tariff is generally suitable for customers consuming between 450,000 and 2,400,000 kWh per annum. It consists of an annual standing charge with a single flat rate for all gas used.

Demand & Commodity 1 Profile				
Supply Charge	€ 2,909 per year	Applied monthly		
Meter Charge	€ 145.47 per additional meter per year	Applied monthly		
Commodity rate	€ 0.03641 per kWh			
Prices exclude VAT				

#### Demand & Commodity 2 Tariff

This tariff is generally suitable for customers using more than 2,400,000 kWh per annum. It consists of an annual standing charge with a single flat rate for all gas used.

Demand & Commodity 2 Profile				
Supply Charge	€ 8726 per year Applied monthly			
Meter Charge	€ 145.47 per additional meter per year	Applied monthly		
Commodity Charge	€ 0.03389 per kWh			
Prices exclude VAT				

#### 2.2. Domestic consumers

Customers have a choice of 4 tariff rates as follows.

Standard Rate Profile		
Supply Charge	€ 308.58 per year	Applied bi-monthly
Commodity Charge	€ 0.04091 per kWh	
Prices include VAT @ 1	13.5%	



High User Commitment Profile				
Supply Charge None				
Minimum Take	16000 kWh per year			
Commodity Charge   € 0.05385 per kWh				
Prices include VAT @	Prices include VAT @ 13.5%			

Low User Commitment				
Supply Charge	None			
Minimum Take	8750 kWh per year			
Commodity Charge	€ 0.07089 per kWh			
Prices include VAT @	13.5%			

Reducing Rate Profile				
Supply Charge	€ 57.30 per year	Applied bi-monthly		
Band 1 (0-585 kWh)	€ 0.10771 per kWh	Banding is applied on a bi-monthly		
Band 2 (586-1170 kWh)	€ 0.08074 per kWh	basis		
Band 3 (1171+ kWh)	€ 0.05709 per kWh			
Prices include VAT @ 13.5%				

## 3. Taxes on gas

VAT is charged at a rate of 13.5 % on gas in Ireland. There are no other taxes currently applying to natural gas.

# **GREECE**

Information for the gas price systems in Greece is not available.

## **SPAIN**

Spain has not provided an update of gas price systems referring to year 2006.

## **FRANCE**

#### 1. General framework

Law No 2003-8, as amended, on the gas and electricity markets and public service energy was an important step for the gas sector as it introduced new operating rules. The main provisions are as follows:

- Network operators must guarantee the right of eligible customers, their suppliers and their representatives to access the natural gas transmission and distribution infrastructure and tanker terminals:
- All customers will be eligible with effect from 1 July 2007 and will be free to choose their supplier;
- So as to prevent cross-subsidies and distortions of competition, operators carrying out more than one
  activity within a single undertaking must prepare separate accounts for each activity carried out in the
  natural gas sector;
- The setting up of an independent regulatory authority for the natural gas sector, the Energy Regulation Commission (*Commission de Régulation de l'Energie* CRE);



- Public service obligations are laid down.

Furthermore, Law No 2004-803 on public service electricity and gas and electricity and gas companies, as amended, extended this law by introducing a negotiated system of third party access to stocks. In consequence, the French gas market is organised as follows:

- Two operators of natural gas transmission networks: GRTgaz and Total Infrastructure Gaz France (TIGF);
- One distribution network operator, Gaz de France Réseau Distribution, which allows all suppliers to
  access the distribution network to transport natural gas to their customers. It is responsible for all
  tasks concerning the distribution of natural gas and guarantees non-discriminatory, transparent and
  equitable access to the network. Revenue levels and transmission tariffs are set by the CRE and the
  public authorities;
- 22 operators of local public natural gas distribution networks with their own tariffs for use of their network, represented by local distribution companies (semi-public and public companies);

Law No 2006-1537 of 7 December 2006 on the energy sector provided for the legal separation of the largest operators of distribution networks (+ 100 000 customers). This affects GDF, Gaz de Strasbourg and Gaz de Bordeaux.

 Around 40 authorised gas suppliers including Gaz de France, Total, EDF, Statoil, ENI, Gaselys, Rhodia Energy, Electrabel, E.ON Ruhrgas, Gas Natural Commercialisation France, Distrigaz, Nosrk Hydro, Wingas GmbH, BP, Gazprom, Exxon Mobil, Iberdrola and Altergaz.

Alongside these regulatory issues, Gaz de France and the State signed, on 10 June 2005, a public service contract for the 2005-2007 period. This mainly deals with the safety and continuity of supply to the whole of France, improvements of infrastructure in line with increased demand for gas, inspections by Gaz de France to ensure the safety of customers and third parties, refurbishment of distribution pipelines and measures to combat the greenhouse effect.

Since 1 July 2004, the gas market for professional customers has been open to competition. The market for domestic customers will be open to competition from 1 July 2007.

## 2. Pricing of gas

The tariffs shown below are tariffs for the sale of gas to eligible customers and eligible customers who have not exercised their eligibility and therefore continue to receive the regulated tariffs.

The sale price of gas to eligible customers who have exercised their eligibility is unrestricted. Eligible customers enter into a contract to purchase natural gas with a supplier authorised by the Minister for Energy. As well as the energy charge, customers pay a transmission charge (covering transmission, distribution and tanker terminals) which is regulated on the proposal of the CRE, and any cost of access to stocks under the commercial offers published by the operators (Gaz de France and TIGF).

As at 1 January 2006, 52% of eligible customers by consumption (68 400 sites and 198 TWh out of a total of 640 000 eligible sites and 380 TWh) had exercised their eligibility. These figures cover renegotiated contracts and changes in supplier: around 800 sites changed supplier (17% of volume consumed).

## 2.1 Gas sales tariffs

Gas pricing is based on two main principles:

 cost-based pricing, under which price changes are linked to changes in costs, with the margin being set exogenously. More precisely, it is a pricing system based on the marginal cost of development and which aims to optimise the geographical spread of gas availability in the country and ensure the development of the network;



• **equal treatment of customers**, which means that pricing is based on their profile and consumption volume rather than on the use made of the gas or the value gained from it.

In accordance with these general principles, gas tariffs in France are fixed using two intervention methods:

- the price regulation system for gas, which requires that all gas tariffs for non-eligible customers be subject to a joint decision of the Minister for the Economy, Finance and Industry and the Minister for Energy following an opinion delivered by the CRE pursuant to Article 7 of Law No 2003-8 of 3 January 2003. For customers connected to the distribution network (including domestic customers), such decisions take the form of ministerial orders, while for customers connected to the transmission network or similar they take the form of tacit approval.
- under the contract between the State and Gaz de France, a tariff formula provides a framework for price changes affecting customers connected to the distribution network. This formula enables natural gas distributors' final price for customers to fully reflect variations in the cost of importing gas. Over time, this has a smoothing effect which alleviates the volatility in the price of oil products.

These formulae reflect developments in:

- supply costs, i.e. the purchase of gas and directly related costs. Almost all French supply is covered by long term "take or pay" purchase contracts which include indexation clauses for oil products based on the international price in dollars;
- o internal charges not linked to supply costs, so that consumers benefit from any gains in productivity on the part of distribution companies.

## 2.1.1 So-called "subscription" tariffs for manufacturing companies

These tariffs are mainly offered to customers connected to natural gas transmission networks.

These tariffs change in line with supply costs and inflation.

In the event of any tariff change, a price schedule must be filed with the Ministry of the Economy, Finance and Industry, which has the right to oppose the change.

#### • Gaz de France

There are two possible types of contract with Gaz de France, depending on whether:

- consumption is less than 300 000 kWh per year (standard contract);
- consumption is greater than 2 GWh per year (direct delivery contract).

If annual consumption is between 300 000 kWh and 2 GWh, customers may choose either type of contract, according to their needs.

- □ **the GDF STS** tariff is applied to customers in the Gaz de France transmission network. It comprises four elements:
- an annual standing charge which is the same at any point in the network;
- an annual premium for the winter daily throughput requested by the customer. Paying this premium guarantees the customer this daily supply throughout the year;
- a fixed annual premium for any supplementary throughput requested during the seven months of the summer period only;
- commodity charges which differ according to the season (winter/summer) and three consumption bands:
  - Band 1: 0-24 GWh per year
  - Band 2: 24-200 GWh per year
  - Band 3: > 200 GWh per year
- Summer prices are lower than winter prices.



The elements of the STS tariff are the same on the main pipelines which link the different gas supply sources. On network spurs, the tariff elements other than the standing charge are supplemented by charges specific to each spur (toll method).

- □ the Gaz de France S2S tariff, which was introduced on 1 November 1998, is aimed at public distribution customers and is suitable for all types of use: heating, processing and cogeneration. It comprises:
- a standing charge;
- a fixed premium for the daily winter throughput, expressed in kWh/day;
- a reduced fixed premium for summer for any additional throughput requested by the customer during the seven months in question (April to October);
- commodity charges which differ according to the season and include three consumption bands: from 0 to 3 GWh/year, from 3 to 200 GWh/year and over 200 GWh/year.

The S2S is more economical than the B2S for consumption exceeding around 5 million kWh/year.

#### • TEGAZ (Total group)

With TEGAZ, eligible customers can choose between three types of contract; the "made to measure" (*sur mesure*) contract which enables them to chose their own price formulae, indices and coverage products, while adapting consumption levels to production constraints, the "flexibility" (*souplesse*) contract which is based on real needs so as to enable customers to manage their energy purchases in a flexible manner, and the "serenity" (*sérénité*) contract.

- □ TEGAZ's "regularity" (régularité) or R tariff comprises the following five elements:
- an annual standing charge per delivery point;
- a fixed annual premium based on a maximum daily throughput specified by the customer, which TEGAZ undertakes to supply throughout the year;
- a reduced fixed annual premium for any consumption in addition to the daily specified throughput in summer (April to October inclusive);
- a premium proportional to the number of kWh actually delivered. Seasonal commodity charges (winter prices, reduced summer prices), with three consumption bands:
  - Band 1: 0-24 GWh per year
  - Band 2: 24-75 GWh per year
  - Band 3: > 75 GWh per year
- o a load-matching discount based on the customer's annual modulation rate.

The modulation rate is a good indicator of consumption regularity. It is expressed in terms of the number of days per year and is defined by the ratio "annual consumption/maximum daily throughput". The load-matching discount is granted for any modulation rate greater than 100 days per year.

the S tariff on TEGAZ's transmission network consists of a standing charge, two throughput brackets, commodity charges which differ according to the season (winter/summer) and a consumption band. There is no reduced fixed annual premium.

Contracts are signed for a period of three years.

#### 2.1.2. Gaz de France's public distribution prices for domestic and professional customers

Public distribution prices are regulated and the average rate of change is set by order of the Ministry of Economic Affairs, Finance and Industry.

Prices for such customers are made up of the following:

- an annual standing charge;
- one or more prices for consumption.

There are six tariffs depending on annual consumption and, in certain cases, depending on the seasonality of consumption, thus enabling tariffs to be better suited to different profiles (communal boilers, SMIs, SMEs, etc.):



- the basic tariff for annual consumption less than 1 000 kWh which usually means customers who use gas only for cooking;
- the B0 tariff for annual consumption between 1 000 and 6 000 kWh/year (usually cooking and hot water);
- the **B1 tariff** for annual consumption between 6 000 and 30 000 kWh/year, usually for individual heating, which may or may not include cooking and hot water;
- the B2I tariff for annual consumption between 30 000 and 150 000-350 000 kWh/year, usually for heating which may or may not include the production of hot water in medium-sized steam plants;
- the **B2S** tariff for annual consumption higher than 150 000-350 000 kWh/year. The B2S tariff is seasonal: winter consumption (November-March) is charged at a higher price than summer consumption (April-October);
- the **B2M standby tariff** for supplementary supplies or gas used to boost other energy sources (ratio between annual quantities/daily throughput of less than 60 days).
- **the TEL tariff**, which was created in 1992, is intended for very large boiler rooms. It comprises an annual standing charge and commodity charges differentiated between winter (from November to March) and summer (from April to October). It also includes reductions when the consumption thresholds (4 million kWh in winter and 2 million kWh in summer) are surpassed.

In the 150 000-350 000 kWh range, the question of whether the B2I or the B2S tariff is cheaper depends on customers' seasonal consumption. The calculation has to be made on a case-by-case basis.

Standing charges are applied to the whole of GDF's public gas supply, as are the gas charges of the basic and B0 tariffs. In contrast, the gas charges of the B1, B2I and B2S tariffs are grouped into six levels according to the costs of delivering gas for public distribution.

#### 2.1.3. Individual contracts

Gas companies may offer interruptible-supply contracts to high-consumption customers (those consuming more than 20 GWh/year). Such customers thus undertake to stop consuming gas should the supplier so request. In the event of supply crises or (where the contract so allows) at times of peak demand, gas companies can give customers notice that their supply will be cut off. The period of interruption is not fixed.

Customers with interruptible-supply contracts must therefore be able to switch to another energy source at any time. As a result, they must keep back-up equipment in working order. They must also undertake to consume at least 80% of the annual quantities which they have agreed.

Gas companies incentivise customers to enter into such contracts either through fixed rate reductions or by quaranteeing prices in comparison with oil products.

# 2.2. Tariffs for third-party access to gas infrastructure (transmission and distribution networks and tanker terminals)

In the gas sector, there are three different types of tariff for the use of infrastructure, i.e. for the use of transmission networks, distribution networks and liquefied natural gas facilities. These tariffs are regulated on the proposal of the CRE.

Pursuant to Article 7 of the law of 3 January 2003, each of these tariffs is set using published, objective and non-discriminatory criteria on the basis of the costs incurred by the operators. These costs include operating costs and capital charges (depreciation and compensation for use of capital). These costs are assessed by the CRE and recovered through tariffs.



#### 2.2.1 Tariffs for the use of natural gas transmission networks

Decree No 2005-607 of 27 May 2005 established the pricing rules for the use of natural gas transmission networks.

The third set of tariffs for the use of these transmission networks was adopted by means of an order of 27 December 2006. It will apply with effect from 1 January 2007 for a duration of two years.

#### 2.2.2. Tariffs for the use of public natural gas distribution networks

Decree No 2005-22 of 11 January 2005 set the tariff principles for the use of distribution networks.

The tariffs in force result from the decision of 27 December 2005 approving the tariffs for the use of public natural gas distribution networks, which ratified the CRE proposal These tariffs have been in force since 1 January 2006 for a theoretical duration of two years.

## 2.2.3 Tariffs for the use of liquefied natural gas facilities

Following a proposal from the CRE, the tariffs for the use of methane terminals were adopted by the Ministers responsible for economic affairs and energy by non-opposition in accordance with the provisions of Decree No 2005-1616 of 20 December 2005 concerning the pricing rules for the use of liquefied natural gas facilities. After the pricing principles had been established, a decision by the Ministers dated 27 December 2005 approved the CRE's pricing proposal. These new tariffs have been in force since 1 January 2006 and were devised in line with the decree of 20 December.

# 3. Taxes on gas

Sales of gas are subject to value-added tax. Industrial and service-sector customers may claim back VAT. Since 1 January 1999, the rate of VAT on standing charges (5.5%) has been different from that on commodity charges (19.6% since 1 April 2000).

A specific tax on the use of natural gas as an industrial fuel, the Domestic Tax on Natural Gas Consumption (*Taxe Intérieure à la Consommation de Gaz Naturel* - TICGN), was introduced on 1 January 1986. The rate of this tax is EUR 1.19/MWh. The use of gas for heating residential buildings or as a raw material is exempt. TICGN is payable by non-exempt customers whose annual consumption exceeds 5 GWh per year, with an allowance on the first 4.8 GWh per year used.

## **ITALY**

## 1. General framework.

Following the European Gas Directive 98/30/01, the legislative Decree No 164/2000 was issued, which came into force on 21 June 2000. The main features of this Decree are:

market opening (eligible customers)

- up to 31 December 2002:

final customers over 200,000 m³/year including consortia of companies (individual consumption greater than 50,000 m³/year) all gas-fired power generators gas producers located in Italy wholesalers and local distribution companies

- as from 1 January 2003: all customers.



#### Separation of activities

- Each activity of the gas sector related to gas infrastructures is legally separated from production, import, and sales (wholesale and final customers) activities. It is only possible for a company to perform transport and storage activities, with unbundling of accounts.
- Gas can only be sold by companies with no other activities within the gas sector, except import, export and wholesale customer activities.
- The activities of distribution and sales to end-users must be legally separated.
- o Storage must be legally separated or can be part of the network company but unbundled.

#### Antitrust ceilings

- As of 1 January 2002: input into the national transmission system gas (imported or produced) is restricted to 75% of the annual domestic gas consumption (- 2% each year up to 61%).
- As of 1 January 2003: supply to the final market is restricted to 50% of annual domestic gas consumption.

# 2. Pricing of gas

#### 2.1. Industrial customers

Before the liberalisation of the gas market in Italy, prices for natural gas sales were calculated in accordance with national agreements established between SNAM (dominant supply company) and the most representative industrial association (*Confindustria* and *Confapi*).

Prices for firm supply were composed of:

- an annual subscription based on the cost of service
- a standing charge based on the capacity at the customer's disposal
- a commodity charge based on the quantity of gas consumed.

The commodity charge was updated each month with reference to the average quotations of diesel-oil, low sulphur fuel oil (LSFO) and high sulphur fuel oil (HSFO) of the 12 months preceding the month of supply.

Prices for interruptible supplies, related to LSFO international quotation, were different in relation to the period of interruptibility (4, 8, 12 or 16 weeks per year).

At the end of 2001, the above charges were the most widely applied.

As a result of the liberalisation, new prices negotiated between the different sellers and buyers are replacing the old price methodology. Pricing systems are different for each seller (competitive market) but it is important to point out that access to public facilities (transmission networks, storages, LNG plants and local distribution networks) is regulated by tariffs determined with reference to criteria given by the Energy Regulator (*Autorità per l'Energia Elettrica e il Gas*). New industrial prices are communicated to the Energy regulator every three months, in accordance with the categories listed by Eurostat.

#### 2.2. Domestic customers

As far as the tariffs to domestic consumers are concerned, the tariffs charged by local distribution companies (LDCs) to companies that sell gas to domestic customers are determined on the basis of a conventional procedure settled by the Energy Regulator and have to be published by the LDCs. These tariffs differ for each LCD and gas distribution area.

The commodity charge is updated every three months with reference to the average quotations of gas-oil, LSFO and crude oil of the six months preceding the month of supply.

As of January 2003, since all customers will be eligible, the gas prices for domestic consumers can be renegotiated. The Energy Regulator established a reference price that the selling company previously acting



as part of the local distribution company must continue to offer to local civil customers until they change their supplier.

## 3. Taxes on gas

#### Residential sector

There is a national excise tax on natural gas consumption. The rates applied during 2006 are shown in the following table, which shows standard consumer prices reported to Eurostat.

	€/m³		
Standard consumers	Middle-North	South	
T1	0.04140	0.0386516	
T2 (<250 m <sup>3</sup> /year)	0.04140	0.0386516	
T2 (>250 m <sup>3</sup> /year)	0.17320	0.1242182	
T3	0.17320	0.1242182	

In addition, there is a regional tax of up to  $\in$  0.031 per m<sup>3</sup> depending on the region and on the consumption. In any case, this additional tax cannot exceed 50% of the value of national excise tax. Regional administrations establish their own values.

#### Industrial sector

Natural gas used for industrial purposes is subject to an excise tax amounting to € 0.012498 per  $m^3$  for consumption up to 1 200 000  $m^3$ /year and € 0.0074988 per  $m^3$  above that consumption. In addition, there is a regional tax between € 0.00516 and € 0.031 per  $m^3$  depending on the region. In any case, this additional tax cannot exceed 50% of the value of national excise tax.

#### Value added tax

For domestic consumers VAT rate is 10% if the gas is used only for cooking and hot water up to 250 m<sup>3</sup> per year, otherwise, it is 20%. For industrial consumers, the general rate is 20%.

The provisions of the new Directive 2003/55/CE have been largely implemented by the legislative decree No 164/2000 and, with reference to article 22, by Law No 239/2004. Only the provision of Article 9 on unbundling related to the organisation and the decision-making of a separate legal transport or distribution company has not been implemented.

## **CYPRUS**

Information for the gas price systems in Cyprus is not available.

# **LATVIA**

## 1. General framework

In conformity with the Energy Law and Law on the Regulators of Public Services of the Republic of Latvia, natural gas tariffs for all users and the methods for calculating tariffs are determined by the Public Utilities Commission (the Regulator).



# 2. Gas pricing

## System since 1 May 2006

The methods for calculating tariffs are determined for the following types of services: transmission of natural gas, storage, distribution and sales. Under the methodology used, the tariffs for transmission, storage and distribution services and the final sales tariffs are approved for all users of natural gas. The final sales tariffs are approved in relation to the volume of gas consumed by users annually and are tied to 1% residual fuel oil quotations on the Rotterdam stock exchange, BARGES FOB ARA.

Based on the final consumption of natural gas, users are divided into eight groups. Users in the first two groups with an annual gas consumption of up to 500 m3 and from 500 to 25 000 m3 are theoretically considered to be populations using gas for their everyday needs plus heating, while the others are regarded as industrial and commercial users. The tariffs are tied to the residual fuel oil quotation in USD/t, divided into 26 groups.

Separate tariffs are approved for gas used in transport. As regards sales tariffs, a constant monthly subscription fee is set for all gas users.

**Tariff structure**Final sales tariffs for natural gas in LVL/thsd m<sup>3</sup> having a calorific value of 7900 ccal/m<sup>3</sup> excluding VAT:

User groups according to yearly consumption, thsd.m <sup>3</sup>								
Fuel oil	1	2	3	4	5	6	7	8
quotation, USD/t	Under 0,5	from 0,5 to 25	from 25 to 126	from 126 to 1 260	from 1 260 to 12 600	from 12 600 to 20 000	from 20 000 to 100 000	Above 100 000
Up to 100	110,91	109,84	92,29	87,54	82,79	78,62	70,91	64,09
Up to110	112,62	111,55	94,01	89,25	84,50	81,33	72,62	65,81
Up to 120	114,33	113,26	95,72	90,97	86,22	83,05	74,33	67,52
Up to 130	116,05	114,98	97,44	92,68	87,93	84,76	76,05	69,24
Up to 140	117,76	116,69	99,15	94,40	89,64	86,48	77,76	70,95
Up to 150	119,48	118,41	100,86	96,11	91,36	88,19	79,48	72,66
Up to 160	121,19	120,12	102,58	97,82	93,07	89,90	81,19	74,38
Up to170	122,90	121,83	104,29	99,54	94,79	91,62	82,90	76,09
Up to 180	124,62	123,55	106,01	101,25	96,50	93,33	84,62	77,81
Up to 190	126,33	125,26	107,72	102,97	98,21	95,05	86,33	79,52
Up to 200	128,05	126,98	109,43	104,68	99,93	96,76	88,05	81,23
Up to 210	129,76	128,69	111,15	106,39	101,64	98,47	89,76	82,95
Up to 220	131,47	130,40	112,86	108,11	103,36	100,19	91,47	84,66
Up to 230	133,19	132,12	114,58	109,82	105,07	101,90	93,19	86,38
Up to 240	134,90	133,83	116,29	111,54	106,78	103,62	94,90	88,09
Up to 250	136,62	135,55	118,00	113,25	108,50	105,33	96,62	89,80
Up to 260	138,33	137,26	119,72	114,97	110,21	107,04	98,33	91,52
Up to 270	140,04	138,97	121,43	116,68	111,93	108,76	100,04	93,23
Up to 280	141,76	140,69	123,15	118,39	113,64	110,47	101,76	94,95
Up to 290	143,47	142,40	124,86	120,11	115,35	112,19	103,47	96,66
Up to 300	145,19	144,12	126,57	121,82	117,07	113,90	105,19	98,37
Up to 310	146,90	145,83	128,29	123,54	118,78	115,61	106,90	100,09
Up to 320	148,62	147,55	130,00	125,25	120,50	117,33	108,61	101,80
Up to 330	150,33	149,26	131,72	126,96	122,21	119,04	110,33	103,52
Up to 340	152,04	150,97	133,43	128,68	123,92	120,76	112,04	105,23
Up to 350	153,76	152,69	135,14	130,39	125,64	122,47	113,76	106,94



The residual fuel oil quotation is calculated by the gas provider, Latvijas Gāze (a joint stock company), based on the average BARGES FOB ARA price quoted for residual fuel oil in the previous six months.

The tariffs for natural gas from Latvijas Gāze are determined as follows:

For domestic customers, tariffs are determined twice a year, on 1 January and on 1 June for the fallowing six months, and depend on the average residual fuel oil quotation in previous six months.

For users with a natural gas consumption of more than 25 000 m<sup>3</sup>, tariffs are determined each month, taking into account the average residual fuel oil quotation in the previous six months before the reference period.

#### Rebates

For customers paying their bills on time, Latvijas Gāze offers discounts to industrial and commercial users of up to LVL 0.60 per 1000 m3 excluding VAT.

Customers who make an advance payment for 12 months receive one month's discount.

Latvijas Gāze offers a monthly discount of LVL 0.30 excluding VAT to families with three or more young children who are recognised as indigent and to category 1 and 2 disabled persons living alone or with young children, under Regulation No 97 of 25.05.2003 of the Cabinet of Ministers of the Republic of Latvia.

## Taxes on gas

In addition to the approved tariffs a VAT of 18 % is applied to users. No excise duties or other specific taxes are levied in Latvia for natural gas.

# **LITHUANIA**

#### 1. General framework

The following legal acts of the Republic of Lithuania regulate gas prices:

Law on Energy (2002, No. IX-884),

Law on Natural Gas (2000, No. VIII-1973),

Methodology for Setting Natural Gas Maximum Price Thresholds approved by the National Control Commission for Prices and Energy on 12 April 2005,

Natural gas transmission, distribution, storage and supplying rules, approved by Order of the Minister of the Economy No 43 on 5 February 2002.

The general principles governing the natural gas sector and the operations of natural gas enterprises and relations with customers in the supply, distribution, transmission and storage of natural gas are set out in the Natural Gas Law. This Law regulates the following: transmission service prices, distribution service prices, storage service prices, and the maximum price thresholds for regulated customers. The setting of these prices has been delegated to the National Control Commission for Prices and Energy.

The liberalisation of the natural gas market started in 1992 when the Government of the Republic of Lithuania liberalised the procedure for the supply of energy resources to consumers. Both state and private companies were allowed to supply natural gas freely within Lithuania without any quantitative limitations. Moreover, entities and individuals supplying natural gas were allowed to use the transmission and distribution pipelines belonging to the main supplier of natural gas, the joint-stock company *AB "Lietuvos dujos"* ("Lithuanian Gas"), on a contractual basis. A new draft of the Law on Natural Gas has been submitted to the Seimas (parliament) of the Republic of Lithuania for consideration. This draft is intended to implement all the provisions of Directive 2003/55/EC within the Lithuanian legal system, including the requirement to open the gas market to all consumers as from 1 July 2007.



Under the Law on Natural Gas, the Government of the Republic of Lithuania or an institution authorised by it decides on the degree of market openness. Gas consumers are classified into regulated and unregulated (or eligible) customers. The criteria for eligible customers are determined by the Government of the Republic of Lithuania or its authorised institution. Eligible customers have the right to conclude supply contracts with any natural gas supplier for the consumption of a given amount of gas. Applications to become eligible customers are submitted to the National Control Commission together with data on natural gas consumption. The following customers are eligible to choose their natural gas supplier:

#### power stations.

customers with an annual consumption of over 1 million m<sup>3</sup>, customers whose systems are directly connected to transmission pipelines, distribution enterprises whose systems are directly connected to transmission pipelines.

Regulated customers are all customers who do not have the status of an eligible customer. In contrast to eligible customers, regulated customers are not entitled to choose their gas supplier. Almost all regulated customers in Lithuania purchase gas from *AB "Lietuvos dujos"*.

## 2. Gas pricing

In principle, the same pricing methodology is used for both industrial and domestic (residential) consumers. Prices in the gas sector may be contracted and state regulated. The National Control Commission for Prices and Energy sets the maximum price thresholds for gas transmission and distribution as well as maximum price thresholds for the regulated consumers for a three-year-term. The maximum price thresholds revised annually in line with inflation, productivity coefficients set by the National Control Commission for Prices and Energy, changes in the volume of gas consumption and other factors that are independent of the enterprise. Every year gas companies set specific transmission, distribution and storage prices as well as on a half year basis prices for regulated customers not exceeding the maximum price thresholds. The prices are applied following the "post stamp" principle irrespective of the transmission and distribution distance. Maximum price thresholds are subject to the changes in the prices of gas purchased from foreign suppliers, and once a year, caps.

According to their annual gas consumption volumes, all regulated non-residential consumers are split into six customer groups (the first group is split into two subgroups):

Customer Groups and Subgroups	Amount Q of gas consumed per year
1	
1 a	$Q \le 90 \text{ m}^3$
1 b	$90 \text{ m}^3 < Q \le 800 \text{ m}^3$
2	800 m $^3$ < Q $\leq$ 20 thousand m $^3$
3	20 thousand m <sup>3</sup> <q 0.1="" m<sup="" million="" ≤="">3</q>
4	$0.1 \text{ million m}^3 < Q \le 1.0 \text{ million m}^3$
5	1.0 million $m^3 < Q \le 5.0$ million $m^3$
6	5.0 million $m^3 < Q \le 15.0$ million $m^3$

According to their annual gas consumption volumes, all residential consumers are split into four customer subgroups:

Customer Subgroups	Amount Q of gas consumed per year
1	Q ≤ 90 m <sup>3</sup>
2	$90 \text{ m}^3 < Q \le 800 \text{ m}^3$
3	$800 \text{ m}^3 < Q \le 20 \text{ thousand m}^3$
4	Q > 20 thousand m <sup>3</sup>

Maximum price thresholds for natural gas transmission and distribution as well as for natural gas prices for regulated customers are determined according to the "Methodology for Setting Natural Gas Maximum price thresholds", prepared according to the Law on Natural Gas of the Republic of Lithuania and in accordance with the requirements of EU directives.



#### Tariffs/prices components

The gas price cap for regulated customers (T<sub>reg</sub>) is calculated according to the following formula:

$$T_{reg}$$
=  $T_{av.purchase}$  +  $T_{transm}$  +  $T_{distrib}$  +  $T_{av.supply}$  , where

 $\begin{array}{ll} T_{av.purchase} - the \ average \ gas \ purchase \ price, \\ T_{transm} & - \ the \ gas \ transmission \ price \ cap, \\ T_{distrib} & - \ the \ gas \ distribution \ price \ cap, \\ T_{av.supply} & - \ the \ average \ gas \ supply \ price. \end{array}$ 

The price is calculated exclusive of VAT. Following approval by the National Control Commission for Prices and Energy, VAT is added. The new natural gas prices come into force not earlier than 30 days of their official publication.

For regulated customers, a one-component or two-component natural gas price is set. The one-component natural gas price is set for customers consuming less than 90 m³ of natural gas, and covers only the price per m³. The two-component natural gas price covers the fixed price component, which is payable every month independent whether gas was consumed or not, and the variable price component, depending on the amount of gas consumed. The variable price component consists of the transmission, distribution and supply service price and the natural gas price. The price components are the same for industrial and domestic consumers.

Eligible customers pay for the transmission and distribution services (according to the determinate tariffs) and the natural gas contract price to the gas company. The transmission price is a two-component price consisting of the constant part reflecting a specific customers' capacity (i. e. his demand during the peak of the system) and the variable part dependent on the volume of gas consumption. The distribution price is varying. The difference among distribution prices depends on the category of a customer.

Natural gas consumption in Lithuania is accounted for each customer individually, by means of a meter installed by the gas company. The meter installation charge is included in the gas price.

## Factors affecting tariffs/prices

Natural gas prices for customers are set according to their declared planned annual natural gas consumption. The amount of gas transmitted and distributed or supplied to the customers, as well as the stated (ordered) capacity is laid down in a contract with the gas company. Customers are categorised into customer groups by their planned consumption of natural gas. If on expiration of the year their consumption has exceeded or fallen below that planned, payment for gas is recalculated according to the prices set for the appropriate customer group.

Eligible customers may choose between two gas supply companies: AB "Lietuvos dujos" and UAB "Dujotekana".

Interruptions and seasonal variations in the gas supply are not taken into account when calculating natural gas prices.

#### 2.1. Industrial consumers

AB "Lietuvos dujos" is the main supplier of natural gas for regulated customers. Natural gas for eligible customers is supplied by AB "Lietuvos dujos" and UAB "Dujotekana". Data for standard consumers  $I_1$ ,  $I_2$ ,  $I_{3-1}$ ,  $I_{3-2}$  are submitted only by AB "Lietuvos dujos", and for the standard consumer  $I_5$  – only by UAB "Dujotekana". Data on prices for standard consumers  $I_{4-1}$  and  $I_{4-2}$  are submitted by these two enterprises.

#### 2.2. Domestic consumers

Data on prices for the standard consumer groups (D<sub>1</sub>-D<sub>4</sub>) are submitted only by AB "Lietuvos dujos".

These groups of customers use gas for cooking, water heating and central heating. The price of gas depends only on volume of annual gas consumption.



## 3. Taxes on gas

The only tax levied on natural gas is VAT, currently fixed at a rate of 18 %.

## **LUXEMBOURG**

Luxembourg has not provided an update of gas price systems referring to year 2006.

# **HUNGARY**

#### 1. General framework

## Legal basis:

- principles of gas price setting: Ministerial Decree
- actual prices: Ministerial Decree

## Status of liberalisation process:

 Non-household consumers are all eligible. Eligibility means that consumers have the right to purchase gas from the free market.

## 2. Gas pricing

## 2.1. Industrial consumers

#### Tariff/price components including rebates

- industrial consumers on the public market have a regulated two-component (standing charge + energy charge) tariff system. Transmission and distribution costs are included,
- industrial consumers on the free market pay a regulated two-component transmission (standing charge + quantity charge) tariff and, if applicable, a four-component storage tariff (injection fee + withdrawal fee + peak fee + mobile fee).

#### Factors affecting tariffs/prices

- capacity,
- interruptions (depending on the rate of interruptions, the standing charge may be reduced by 60%/100%),
- incentive to consume during off-peak periods if capacity is higher than peak-period capacity.

## 2.2. Domestic consumers

Factors affecting tariffs/prices: consumed quantity + capacity where household consumers have a capacity demand of over 20 m<sup>3</sup>/h in some cases. Normally, household consumers have a capacity demand below 20 m<sup>3</sup>/h.

## 3. Taxes on gas

VAT is levied at a rate of 20%, and an energy tax is applied to non-household consumers at a rate of 56 HUF/GJ.



## **MALTA**

Information for the gas price systems in Malta is not available.

## **NETHERLANDS**

#### 1. General framework

Under the June 2000 Gas Act (Gaswet), gas market was liberalised in several stages.

The stages in which liberalisation actually took place were:

- Major consumers, with effect from 1 January 2001. These are users with an annual consumption of more than 10 million cubic metres.
- Intermediate users, with an annual consumption of between 1 million and 10 million cubic metres, with effect from 1 January 2002.
- Small consumers, with an annual consumption of up to 1 million cubic metres, with effect from 1 July 2004.

Since 1 July 2004 the gas companies were split into a transport company, a supply company and a meter company. These companies charge the consumer for the services they provide. The transport part of the charge is, according to the Gas act, regulated by the Office of Energy Regulation (DTe), whereas the supply and meter part are not regulated. As part of its regulation of the transport element, maximum charges are determined. This regulation applies to all kinds of consumer.

In addition to the transport, supply and meter charges, the consumer is also required to pay duties and VAT.

The provisions of the Gas Act cover gas which primarily comprises methane or other comparable substances. Given that natural gas comprises mainly methane, the supply of natural gas is also covered by the Act.

After the adoption of the Gas Act, it was amended a number of times, including in relation to the liberalisation stages planned and the further implementation of the various regulatory tasks. Moreover, the Implementation and Supervision Service for Energy (Dte) was also assigned supervisory functions with relation to gas, including the transport charges.

## 2. Gas pricing

## Transport tariffs

For each transport company, the Dte establishes maximum charges for each market segment. Within each market segment, the transport charge comprises a fixed rate and a rate per cubic meter. The rate per cubic metre is dependent on the annual volume of consumption. Examples of market segments are major users, market gardeners, combined heat and power (CHP) plants and small consumers.

Tariffs related to metering are not subject to regulation.

#### Supply tariffs

With effect from 1 July 2004, supply tariffs are not regulated for any consumer

## Meter tariffs

With effect from 1 July 2004, Meter tariffs, including standing charges, are not regulated for any consumer. The meter company component of the charge is to cover the cost of providing and reading meters.



## 3. Taxes on gas

#### **Duties**

The duty on natural gas is known as the energy tax (energiebelasting). The tax complies with the requirements of the EU directive on energy taxation (2003/96/EC).

In 2006, the following energy tax was payable:

	<= 5 000 m <sup>3</sup>	0.1507 €/ m <sup>3</sup>
	> 5 000 – <= 170 000 m <sup>3</sup>	0.1238 €/ m <sup>3</sup>
	> 170 000 - <= 1 mio m <sup>3</sup>	0.0340 €/ m <sup>3</sup>
•	> 1 mio - <= 10 mio m <sup>3</sup>	0.0116 €/ m <sup>3</sup>
	> 10 mio m <sup>3</sup> , non-business	0.0108 <b>€</b> / m <sup>3</sup>
•	> 10 mio m <sup>3</sup> , business	0.0077 €/ m <sup>3</sup>

With effect from 1 January 2003, lower energy tax rates were charged on so-called "green gas". These lower charges ceased to apply on 1 January 2005.

For each connection, there is a rebate on the duty to be paid. This is a fixed amount for each 12-month consumption period. This rebate has been accorded since 2001 and replaced the zero-duty rating used up to 2000 for the first 800 cubic metres of annual gas consumption

#### VAT

19% VAT is charged on the entire amount of the gas bill.

## **AUSTRIA**

## 1. General framework

Austria's Energy Liberalisation Act (*Energieliberalisierungsgesetz*) (Gas Act (*Gaswirtschaftsgesetz*) in the version published in *BGBI I* under No 106/2006) concerns the distribution and sale of natural gas, customer access to the network and the construction, modification and operation of gas pipelines. Since 1 October 2002 Austria's gas market has been fully liberalised and all customers are free to choose their suppliers.

## 2. Gas pricing

With liberalisation, the two components that used to be charged for jointly – energy and network use – have been separated, the energy price being arrived at on the basis of supply and demand on the market, while a fixed price for use of the network is laid down by the competent authority using a regulation as the legislative instrument.

When deciding on energy prices, companies generally distinguish between small and special contract customers (in Austria known as "Tarifkunden" and "Sondervertragskunden" respectively). Small "tariff" customers conclude agreements at uniform published prices (price sheets (Preisblätter)). This group includes both households and commercial customers. It has the opportunity to reduce energy costs by changing gas supplier.

Large customers (larger commercial customers and industrial companies) may negotiate prices directly with the energy companies. An annual consumption limit of approximately 100 000 Nm³ may be set, above which a cost allocation is laid down, in order to ensure that the amounts invoiced correspond as closely as possible to the amounts actually consumed.



#### Tariff customers

Many of the local operators offer only all-inclusive prices in their own catchment area. Energy and network costs are charged and presented jointly, and in most cases the prices are zoned. Offering all-inclusive prices can, however, sometimes lead to higher energy prices if large quantities are purchased, since the network tariffs are also zoned and decrease as the amounts purchased increase. If the zones do not correspond (network tariff and energy price), there are sometimes price increases despite a higher level of annual consumption.

Energy prices to small customers differ widely from one local operator to another. The cheapest supplier can offer savings of as much as 35% (the average being around 13%). There are also substantial differences in network prices from one area to another, with these being determined by the authorities on the basis of cost.

It is also noteworthy that energy prices are low in areas where the network price is high and *vice versa*. Due to the cost orientation of network prices, owners of network operators only have the possibility of disposing freely of the financing costs granted in accordance with the Gas System Access Tariffs Order (GSNT-VO (Gas-Systemnutzungstarife-Verordnung)) for interest on equity and liabilities.

## Large customers

Network charges to large customers also take the form of prices for given zones, which fall as the amount purchased rises.

On the basis of the industrial price surveys on gas carried out by E-Control GmbH (January and July 2006), energy prices have been divided into three categories. Average prices (in cent/kWh) for category A are around 12% lower than for category C. Prices in categories B and C are also more volatile than those in category A. For instance, the standard deviation for pure energy prices in categories B and C is around 18% of the arithmetical average and for major consumers only 12%. There is therefore greater scope for negotiation among smaller customers. The average length of contract also increases in line with size (A: 38 months; B: 25 months; C: 22 months). Price-fixing for category C customers is still based in equal proportions on fixed prices and price adjustment clauses. In the higher-consumption groups, price adjustment clauses are more frequently agreed. With regard to readiness to change, it was found that around half of the undertakings asked had received alternative offers, with the proportion of higher-consumption undertakings being higher.

## 3. Taxes on gas

Since 1 June 1996 there has been a tax on the supply and consumption of natural gas (*Erdgasabgabe*). It is calculated on the basis of the volume of gas supplied/consumed. Up to the end of 2003 this tax was charged at the rate of 0.0436 €/m³ (0.6 ATS/m³). This rate was raised to 0.066 €/m³ as from 1 January 2004. Use of natural gas for purposes other than energy is exempt from this tax.

Up to the end of 2003, companies were reimbursed the proportion of the energy taxes on natural gas and electricity that exceeded 0.35% of the net value of production. Until the end of 2001, this reimbursement had been granted only to companies that primarily manufactured goods. As from January 2002 the possibility of reimbursement was extended to all companies.

As from 1 January 2004 the reimbursement was modified as a consequence of the implementation of Directive 2003/96/EC (taxation of energy products): on the one hand, the threshold for reimbursement was raised to 0.5% of the net value of production, and on the other, the reimbursement system was extended to include all energy sources used for heating (coal, oil etc.), in addition to natural gas and electricity. The minimum levels of taxation laid down in the Directive must also be complied with (0.15 €/GJ, corresponding to around 0.00598 €/m³, in the case of natural gas).

The gas tax forms part of VAT (20%), which is calculated on the basis of network use, levies, and surcharges etc., as well as energy supply.

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<sup>&</sup>lt;sup>1</sup> Category A: more than 100 Mio. kWh; category B: 10-100 Mio. kWh; category C: 1-10 Mio. kWh



# **POLAND**

#### 1. General framework

Under the Energy Law, the institution responsible for regulating the activities of the energy sector is the Energy Regulatory Office (Urząd Regulacji Energetyki, URE). Regulation mainly comprises licensing the operations of entities participating in the energy and gas markets and approval of the tariffs for the prices of various forms of energy.

The basic legislation governing the actions of gas-market participants includes:

- European Law
  - Directive 2003/55/EC (repealing Directives 98/30/EC and 91/296/EEC),
  - Directive 2004/67/EC.
  - Regulation (EC) No 1775/2005,
- The national Energy Law and its secondary legislation, the most important being the ordinances of the Minister of Economy on:
  - Rules on the methodology of tariffs for natural gas,
  - Specifications laying down the terms and conditions of connection to the gas network.
- The Law on Business Activities,
- The Code of Commercial Companies,
- The Civil Code.
- The Law on Protection of Competition and Consumers.

The share of natural gas in primary fuels is currently over 13%. Natural gas consumption in Poland is approx. 14 billion cubic metres annually. In total, the natural gas market has approx. 7 million users. The market structure is diversified. Households consume almost 30% of natural gas and constitute 97% of the total number of users, whereas industrial users consume about 60% and account for only 1% of total gas users. The rest is consumed by the trade and services sector.

Poland's natural gas market has entities engaged in:

- gas exploration and production,
- transmission,
- distribution.
- trading,
- storage.

Apart from transmission, all core activities in the gas sector are carried out by one dominant entity, the Polish Oil and Gas Capital Group – POGC CG (PGNiG – Polskie Górnictwo Naftowe i Gazownictwo). In addition, there are many relatively small companies operating on the Polish gas market, e.g. MOW, GEN GAZ Energia.

The transmission system is operated by OGP Gaz-System Joint-Stock Company (100% owned by the Treasury), which is the transmission system operator. Gaz-System operates a gas pipeline transmission network with total length of 15 500 km.

Gas distribution is carried out by 6 regional companies, which were hived off on 1 July 2004 from other POGC activities. By decision of the President of the Energy Regulatory Office, these gas distribution companies have been functioning since 1 January 2007 as distribution system operators.

Following the implementation of the EU Gas Directive, trade and technical activities in distribution will be fully separated as of 1 July 2007.

In Poland, non-household consumers have had the right since 1 July 2004 to freely choose their supplier. This right will be available to all customers from 1 July 2007.

In 2006, there were 145 licences approved for the provision of gas under the Energy Law: 3 for production, 64 for transmission and distribution, 77 for gas trade and 1 for gas storage.



Due to barriers still existing in the transmission system (e.g. monopolistic structure of this sector, lack of measuring equipment, shortage of available transmission capacity due to physical congestion, capacity shortage of interconnections), no eligible customers have made use of the third-party access principle.

## 2. Pricing of gas

In general, under the Energy Law and the ordinance on detailed rules governing the establishment and computation of tariffs and rules governing financial settlements in gas fuel trading, gas tariffs should take the following factors into consideration:

coverage of the justified expenses of energy enterprises related to the generation, transformation, transmission, distribution and trading of gas, the storage of gas and the liquefaction or regasification of gas, including a justifiable return on investment from such activities, and coverage of the justified expenses borne by the transmission and distribution system operators in the execution of their tasks; protection of customers against unjustified prices and fees; elimination of cross-subsidies;

equal treatment of all consumers.

Each tariff devised by a company should comprise, depending on its business activities, the following elements:

consumer groups,

types and levels of prices and fees as well as the conditions for their applicability, with

- rebates for failure to meet the quality standards of gaseous fuels,
- charges for illegal uptake of gaseous fuel,
- charges for failure to meet the quality standards for customer service.

The prices and charges set out in a tariff are different for each tariff group and correspond to the justified costs for the group in question. Tariffs apply to the following three grades of natural gas sold in Poland:

- high-methane natural gas, symbol E (GZ-50) tariff groups "W" (GCV 39.5 MJ/m<sup>3</sup>),
- low-methane natural gas, symbol Lw (GZ-41,5) tariff groups "S" (GCV 32.8 MJ/m<sup>3</sup>),
- low-methane natural gas, symbol Ls (GZ-35) tariff groups "Z" (GCV 28.8 MJ/m<sup>3</sup>).

As high-methane natural gas dominates sales, the following sections will be confined to this particular product.

#### 2.1. Industrial consumers

In general, gas tariffs for industrial consumers supplied from the distribution network are broken down by the following user groups:

Tariff category	Contracted capacity			
	b [m <sup>3</sup> /h]			
Gas network with pressure up to 0.5 MPa				
W-5	10 <b<=65< td=""><td></td></b<=65<>			
W-6	65 <b<=600< td=""><td></td></b<=600<>			
W-6A	65 <b<=600< td=""><td></td></b<=600<>			
W-6B	65 <b<=600< td=""><td></td></b<=600<>			
W-7	b>600			
W-7A	b>600			
	(600 <b<=5000< td=""><td></td></b<=5000<>			
W-7B	b>5000			
Gas network with pressure over 0.5 MPa				
W-8	0 <b<=3300< td=""><td></td></b<=3300<>			
W-9	3300 <b<=10000< td=""><td></td></b<=10000<>			
W-10	b>10000			



For large industrial consumers supplied from the transmission network (operated by the transmission system operator Gaz\_System SA), the supplier, the Polish Oil and Gas Company (Polskie Górnictwo Naftowe i Gazownictwo, PGNiG), has developed a breakdown into tariff categories based on the grade of gas supplied and on the contracted capacity set out in the contract. There are four tariff categories for each type of gas, including high methane natural gas, identified by the symbol "E".

#### Industrial consumers

Tariff category	Contracted capacity a[m³/h]
E1	0 <a<=1500< td=""></a<=1500<>
E2	1500 <a<=3300< td=""></a<=3300<>
E3	3300 <a<=20000< td=""></a<=20000<>
E4	a>20000

The charge for gas fuel offtake during the accounting period is calculated by multiplying the quantity of fuel as metered by its tariff price.

Regardless of the length of the accounting cycle, all users of gas fuel are also obliged to pay the monthly subscription fee. Exemptions from the fee are granted in the case of high-methane gas for motor vehicles. The subscription fee is based on the provision of customer services (meter readings, invoicing, computation and collection of payments for gas, inspection of measuring equipment). Subscription fees apply to all measuring systems.

#### Fee rates for network connection

Fees for connection to the transmission grid are based on one quarter of the annual average investment costs for installing new segments of grids to which customers request connection.

According to the ordinance on detailed rules governing the establishment and computation of tariffs and rules governing financial settlements in gas fuel trading, fixed amounts are to be charged for the first pipeline segments of 5 and 30 metres, with further segments being charged for by the metre.

The total connection fee is calculated according to the following formula:

## Op=Or+Sp\*Lp

## Where:

Op – total connection fee, expressed in PLN,

Or – fee for construction of distribution grid segments up to 5 metres or construction of transmission grid segments up to 30 metres, expressed in PLN,

Sp – fee rate charged for connecting of every metre of distribution grid segments over 5 metres or transmission grid segments over 30 metres, expressed in PLN/m,

Lp – length of the distance over 5 metres to the distribution grid or over 30 metres to the transmission grid, expressed in metres.

Rates for transmission services are calculated separately for the transmission and distribution grids. For the transmission grids, rates can be divided into distance-related rates and rates not related to distance. These two transmission service rates are calculated as a fixed rate and a variable rate based on the justified costs of supplying gaseous fuels to customers in each tariff group.



The total fee for transmission services (here: group rates for customers receiving high methane gas over 10 m³/h, W-8 to W-10 and E1 to E4) is calculated using the following formula:

$$Og = Szg*Q + Ssg*Mp*T$$

where:

Og – total fee for transmission services, expressed in PLN,

Szg – variable group rate for transmitted gas, expressed in PLN/m<sup>3</sup>,

Q – quantity of gas transmitted, expressed in m<sup>3</sup>,

Ssg – fixed group rate [PLN/m<sup>3</sup>/h per hour during the accounting period],

Mp – contracted capacity [m³/h or m³/day],

T – number of hours or days during the accounting period, according to the fixed unit of contracted capacity.

The total fee for transmission services for distance-related rates is calculated using the following formula:

where:

Od – total fee for transmission services, expressed in PLN,

Szd – variable distance-related rate, expressed in PLN /m<sup>3</sup>,

Q – quantity of gas transmitted, expressed in m<sup>3</sup>.

Ssd – fixed distance-related rate during the accounting period, expressed in PLN for the unit of contracted capacity and the unit of distance of gaseous fuel transmission,

Mp – contracted capacity [m³/h or m³/day],

L – distance of gaseous fuel transmission, computed as the shortest possible distance between the point of purchase and the point of offtake, calculated for the transmission grids described in the energy company's transmission grid scheme and expressed in metres.

T – number of hours or days during the accounting period, according to the fixed unit of contracted capacity.

In the event of supply capacity limitations or when a break in gas supply occurs, caused by system outages, maintenance or new connections, the fee for transmission services is decreased in proportion to the capacity reduction and the time during which gas was not supplied or the supply was limited.

Fee rates for distribution services

For consumers in the tariff groups W-5 to W-7B, the charge for distribution services is calculated according to the same formula as for transmission service fees not related to distance:

$$Og = Szg*Q + Ssg*Mp*T$$

where:

Og – charge for distribution services, expressed in PLN,

Szg – rate of variable payment for the supplied gas, expressed in PLN/m<sup>3</sup>,

Q - volume of the supplied gas, expressed in m3,

Ssg – rate of constant payment [PLN/m3/h for every hour of settlement period],

Mp - capacity subscription [m3/h],

T – the number of hours in a given settlement period.

#### 2.2. Domestic consumers

Poland's household consumers purchase two types of gas: high-methane natural gas (88%) and low-methane natural gas (12%). In the tariffs offered by individual distribution companies, household users are broken down into four tariff groups depending on the contracted capacity and the volume of annual gas offtake.

For high-methane natural gas:

GROUP	Contracted capacity b[m³/h]	Annual quantity a[m³/year]				
W1	b<=10	a<=300				
W2	b<=10	300 <a<=1200< th=""><th></th></a<=1200<>				
W3	b<=10	1200 <a<=8000< th=""><th></th></a<=8000<>				
W4	b<=10	a>8000				

Gross calorific value: 39.5 MJ/m<sup>3</sup>



The charge for gas fuel offtake during the accounting period is calculated by multiplying the quantity of fuel metered by its tariff price.

Regardless of the length of the accounting cycle, all gas fuel users are also obliged to pay the monthly subscription fee. However, exemptions are granted in the case of high-methane gas for motor vehicles. The subscription fee relates to the provision of customer services (meter readings, invoicing, computation and collection of payments for the gas, inspection of measuring equipment). Subscription fees apply to all measuring systems.

The fee for connection to a distribution network (pressure of up to 0.5 MPa) is a one-off payment, comprising a lump-sum payment for the construction of the required network segment for connections of up to 5 metres plus a charge for each metre over 5 metres. This charge is calculated according to the formula described in 2.1 above (industrial consumers).

For the distribution grids, rates are calculated as group rates. These rates comprise a fixed rate and a variable rate based on the justified costs of supplying gas to customers in each tariff group. The total fee for distribution services (here: group rates for customers receiving high-methane gas up to  $10 \text{ m}^3/h - W-1$  to W-4) is calculated using the following formula:

Og = Szg\*Q + Qsg

where:

Og – total fee for transmission services, expressed in PLN,

Szg – variable group rate for transmitted gas, expressed in PLN/m<sup>3</sup>,

Q – quantity of transmitted gas, expressed in m<sup>3</sup>,

Qsg – fixed group rate, based on the accounting period, applied for a given tariff category and expressed in PLN/month.

Rebates are granted to consumers if the gas supplied fails to match the quality standards. The rebates are calculated as follows:

 $B = (1-Hs\acute{s}r/Hsn)*I*C$ 

where:

B – amount of rebate (PLN),

Hsśr – gross calorific value of the gas actually supplied (MJ/m<sup>3</sup>),

Hsn – standard gross calorific value (MJ/m<sup>3</sup>),

I – quantity of consumed gas with sub-standard calorific value,

C – price of gas in the appropriate tariff group (PLN/m<sup>3</sup>).

Consumers also receive rebates for failures by the supplier to meet service quality standards.

## 3. Taxes on gas

The only tax charged on all components of gas payments is VAT, at a rate of 22%.



## **PORTUGAL**

#### 1. General framework

The Portuguese market is in the middle of a significant process of liberalization. In September 2006, some relevant infrastructures belonging to Transgas (high pressure network, LNG Terminal and most of the Underground Storage) were transferred to REN – Redes Energéticas Nacionais, which already was the operator of the Power Transmission System, , to assure TPA to market players. REN established three wholly owned subsidiaries for the infrastructures operation: REN-Gasodutos (high pressure network), REN-Atlântico (LNG Terminal in Sines), and REN-Armazenagem (Underground Storage in Salt Caverns, in Carriço).

The schedule for market opening establishes that the Power Production is opened from 1<sup>st</sup> January, the Industrial consumers (above 1 mcm/y) from 1<sup>st</sup> January 2008, medium-sized commercial (above 10.000 m³/y) from 1<sup>st</sup> January 2009, and the remaining market from 1<sup>st</sup> January 2010.

The dominant player in the gas market is Galp Energia, through its subsidiaries, Transgás and Gás de Portugal Distribuição (GDPd).

Transgás is the supply company, selling gas to the existing Power Producers. It may also sell gas to customers in the liberalized market according to the market opening schedule. Both the regulated industrial market and the distribution market are performed under a Last Resort Supply Licenses, given to a subsidiary of Transgás, and to the already existing LDC's. A wholly owned subsidiary of Transgás, will sell gas to the regulated market: industrial consumers exceeding 2 mcm/y, and also to the LDC's. Transgás was also granted with a 40 years concession contract for gas storage (underground storage in salt caverns in Carriço-Pombal), through its subsidiary Transgás Armazenagem.

GDPd runs Galp's distribution businesses. It has a stake in five regional distribution companies, namely: Lisboagás distributing natural gas in Lisbon area, Lusitaniagás in Aveiro, Coimbra and Leiria districts, Setgás in Setúbal area, Tagusgás in Portalegre, Santarém and Leiria districts, and Beiragás in Castelo Branco, Viseu and Guarda disctricts. A sixth LDCs operates in the Porto, Braga and Viana do Castelo districts - Portgás (owned by EDP and GDF).

In addition, GDPd, has set up four autonomous gas distribution units, called Unidades Autónomas de Distribuição (UADs), namely Duriensegás, Dianagás, Paxgás and Medigás companies. In the north interior an independent company (Dourogás) also operates its UADs. These units are supplied by LNG by truck, coming from the LNG Sines Terminal.

#### 2. Pricing of gas

#### 2.1. Industrial consumers

Presently, customers pay a variable term per unit of gas consumed and a monthly standing charge, which varies depending on the yearly consumption and respective modulation.

For the industrial sector, there are different prices depending on the type of final use of gas (industrial or cogeneration). The price formulas are based on energetic indexes and exchange rates.

#### 2.2. Domestic consumers

Natural gas tariffs (Fixed Term and Variable Term) for the domestic sector are proposed every quarter by the regional and local distribution companies, for the approval of the DGGE - Directorate-General for Geology and Energy.



## 2.3. Regulated tariffs

From 2008 the tariffs for the regulated markets, supplied under the Last Resort Supply Licenses, will be established by ERSE – Entidade Reguladora dos Serviços Energéticos, for both the access to the networks and gas prices for clients.

## 3. Taxes on gas

VAT at 5 % is applied to the price of gas and the monthly Fixed Term.

## **ROMANIA**

## 1. General framework

The competent authority in the natural gas sector is the National Regulatory Authority in the Natural Gas Sector (ANRGN), an autonomous public institution coordinated by the Prime Minister. In accordance with the provisions of Article 8(1) of Law No 351/2004 on gases, ANRGN draws up, endorses and applies criteria and methods for the approval of regulated prices and the establishment of regulated tariffs in the natural gas sector.

In the course of 2003, ANRGN drew up a new methodology for the calculation of regulated prices and tariffs in this sector. These "Criteria and methods for the approval of regulated prices and the establishment of regulated tariffs in the natural gas sector" were endorsed by Decision No 1078 of the ANRGN President of 18 December 2003, published in the Official Journal of Romania, Part I, No 40 of 19 January 2004, with changes and additional explanations.

The mechanisms for calculating regulated prices and tariffs are of the revenue cap type for regulated underground storage and transport activities and of the price cap type for regulated distribution and supply activities.

## 2. Natural gas prices

Differentiation by distribution tariffs:

- by operators, taking into account the specific costs registered by each company;
- by connection systems and depending on consumption (the differentiation depending on the use of natural gas having being dropped). There are 11 categories of consumers:

## A. Final consumers directly connected to the transport system:

- A.1. final consumers with an annual consumption of up to 124 000 m<sup>3</sup>;
- A.2. final consumers with an annual consumption between 124 000 m<sup>3</sup> and 1 240 000 m<sup>3</sup>;
- A.3. final consumers with an annual consumption between 1 240 000 m<sup>3</sup> and 12 400 000 m<sup>3</sup>;
- A.4. final consumers with an annual consumption between 12 400 000 m<sup>3</sup> and 124 000 000 m<sup>3</sup>;
- A.5. final consumers with an annual consumption of over 124 000 000 m<sup>3</sup>.

## B. Final consumers connected to the distribution system:

- B.1. final consumers with an annual consumption of up to 2 400 m<sup>3</sup>;
- B.2. final consumers with an annual consumption between 2 400 m<sup>3</sup> and 12 400 m<sup>3</sup>;
- B.3. final consumers with an annual consumption between 12 400 m<sup>3</sup> and 124 000 m<sup>3</sup>;
- B.4. final consumers with an annual consumption between 124 000 m<sup>3</sup> and 1 240 000 m<sup>3</sup>;
- B.5. final consumers with an annual consumption between 1 240 000 m<sup>3</sup> and 12 400 000 m<sup>3</sup>;
- B.6. final consumers with an annual consumption of over 12 400 000 m<sup>3</sup>.

New storage tariffs entered into force in April 2004. They have three components, namely a fixed component for capacity reservation, a variable component for gas injection in deposits, and a variable component for natural gas extraction from deposits.

At present, each operator has its own storage tariff.



The final price is in turn the sum of the distribution tariffs, the supply margin and the purchase price of natural gas, differentiated for each operator and for each category of consumers (A1-A5, B1-B6). The purchase price of natural gas is calculated depending on the price of domestic production, the import price and the transport costs.

On 1 July 2004, a tariff with two components was established for the transport activity, namely a fixed component for capacity reservation in the NTS (National Transport System) and a variable component for gas circulation through the NTS.

## 2.1. Industrial consumers

The final price for captive industrial consumers differs depending on the connection system, i.e. for industrial consumers directly connected to the national transport system and for industrial consumers connected to the distribution system. In general, industrial consumers belong to the B4-B6 categories.

The final price to be paid by captive industrial consumers includes:

- natural gas purchase price (domestic and imported gas combined);
- transport tariff;
- storage tariff;
- distribution tariff (only for consumers connected to the distribution system) and supply margin.

For eligible industrial consumers, ANRGN has no competence to establish the final purchase price, this being freely negotiated between the parties. However, in accordance with the legal provisions, eligible consumers are bound to pay the tariffs regulated by ANRGN to transport, storage and distribution service providers.

#### 2.2. Domestic consumers

Household consumers are the consumers that purchase natural gas for their own household consumption. These consumers belong to the B1-B3 categories.

The final price to be paid by household consumers includes:

- purchase price of natural gas (domestic and imported gas combined);
- transport tariff;
- storage tariff;
- distribution tariff (only for consumers connected to the distribution system) and supply margin.

## 3. Value Added Tax

The prices calculated by ANRGN do not include VAT, which is applied at a rate of 19% in accordance with the regulations of the Ministry of Public Finance.

## 4. Taxation

Romania has established timetables for gradually increasing taxes in the period 2007-2010, in accordance with Annex 1, Title VII – Special Taxes of the Fiscal Code, as modified by Law No 343/2006.



## **SLOVENIA**

#### 1. General framework

In the gas market, Slovenia only has one major supplier supplying gas to industrial consumers on the transmission network and to distribution companies. The distribution companies supply gas to industrial consumers on the distribution network and to households.

In 2003, gas consumers with an annual gas consumption of more than 25 million Sm³ (standard cubic metre) and electricity producers received eligibility status. Under Directive 2003/55/EC, all non-household consumers became eligible from 1 July 2004. The degree of market opening at the end of 2006 was 90%, but full opening is required under the Energy Act by July 2007.

The Energy Agency was established in 2000. It is an independent organisation that carries out specific tasks under the Energy Act, with the purpose of ensuring the transparent and non-discriminatory operation of the electricity and natural gas markets in the interests of all participants. It is responsible for setting the prices for the use of electricity and natural gas networks, taking decisions in the case of disputes and granting licenses for performing energy-related activities.

At the end of the 2006, there were 10 licence holders for the transmission of natural gas and the operation of transmission networks, but in reality only one company acts as the transmission operator and provider.

At the end of the 2006, there were 33 licence holders for the distribution of natural gas and the operation of distribution networks, but only 17 companies had the status of distribution system operator. The distribution system operators provide the optional public service of operating individual distribution networks. There are distribution networks for natural gas in more than sixty Slovenian municipalities.

The operation of the gas distribution system and the supply of natural gas to tariff customers are optional local public services, which have to be regulated with a concession act between the concessionaire and the local community acting as the awarding authority or have to be organised through a public company established by the local community. In 2006, 49 local communities organised these activities as a concession between a concessionaire and the local community, while in 13 local communities these activities were undertaken by public companies. In two local communities, these services were provided in a different way. I

## 2. Pricing of gas

## 2.1. Eligible consumers

Eligible customers of natural gas are those customers that can freely choose their suppliers. In accordance with the Act Amending the Energy Act that came into force on 8 May 2004, eligible customers are, from 1 July 2004 onwards, all the customers of natural gas with the exception of households. To receive natural gas, an eligible customer has to agree on the supply of gas with a supplier and on access to the natural gas network with the system operator. Access to the network can also be arranged by the supplier. For this reason, the price for natural gas is separate from the price for the use of the gas networks.

With regard to eligible customers, the price for natural gas is set by the market and is the subject of negotiations or agreements between the natural gas suppliers and eligible customers.

The price paid by the customer of natural gas for access to the network consists of the network charge and supplements to the network charge. The Energy Agency regulates the network charge by determining the methodologies for setting and calculating the network charge. The supplements that are part of the price for the use of the network are determined by the Government of the Republic of Slovenia. These supplements cover the operating costs of the Energy Agency, the release of long-term transmission capacities for natural gas, and the costs of suppliers relating to continuity of the energy supply.



On the basis of the methodologies established by the Energy Agency, the operators of the transmission and distribution networks set the network charges and submit them to the Energy Agency for its approval.

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

the price for the transmission of natural gas,

the price for a company's own use,

the price for making measurements,

and is set on the basis of the system operator's eligible costs arising from the transmission of natural gas, own use and the making of measurements.

The network charge for the gas transmission network for 2006 was published in the Official Gazette of the Republic of Slovenia. The customers connected to the gas transmission network pay this charge on the basis of their capacity charge.

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

the price for the distribution of natural gas

the price of metering

and is set on the basis of the eligible costs incurred by the system operator for natural gas distribution, metering and making connections.

The network charge is calculated on the basis of the Act Determining the Methodology for Setting the Network Charge and the Criteria for Establishing Eligible Costs for the Gas Distribution Network, and the Act Determining the Methodology for Calculating the Network Charge for the Gas Distribution Network. The network charges for individual local community areas are published in the acts of the system operators.

The Act Determining the Methodology for Calculating the Network Charge for the Gas Distribution Network determines the mode of calculating the network charge and the classification of customers on the distribution network into different customer groups. The Act Determining the Methodology for Setting the Network Charge and the Criteria for Establishing Eligible Costs for the Gas Distribution Network determines the mode, conditions and method for the calculation of the network charge as well as the criteria for establishing eligible costs.

The network charge for the gas distribution network had not yet been defined in 2006. For this reason, eligible customers connected to the distribution network were in 2006 still tariff customers and were supplied under the regulated tariff in the same way as household customers.

## 2.2. Household consumers

In 2006, natural gas distribution companies carried out the tasks of the system operators of natural gas distribution networks as an optional, local public service.

The number of local distributors is 17. Some of the public companies are directly owned by the municipality that they supply. In 2006, the regulation of these distribution companies was still entirely the responsibility of the local authorities, which set the basic rules and obligations with concessionary acts. Therefore, not only the prices of natural gas but also the structure and elements of the tariff systems differed between suppliers.

In 2006, the prices for the use of the gas distribution network were not yet presented separately. At the end of 2006, 18 acts for 34 municipalities were published in the Official Gazette of the Republic of Slovenia. These are valid from 1 January 2007. Other acts will be published at the beginning of 2007.

Households, i.e. tariff customers, were supplied under the tariff systems of the distribution suppliers. They will remain tariff customers until 1 July 2007.

Tariff/price components including rebates

In 2006, gas price rebates were offered by gas suppliers to their contracting customers on a discretionary basis.



## 3. Taxes on gas

The natural gas price is subject to excise duty (only for gas used for heating and transport purposes),  $CO_2$  tax (for customers not included in the emission trading system) and value added tax. The excise duty is 1.5 SIT/Sm<sup>3</sup> (0.6 cent/Sm<sup>3</sup>) and the  $CO_2$  tax is 5.7 SIT/Sm<sup>3</sup> (2.3 cent/Sm<sup>3</sup>). VAT is set at 20%, and is recoverable for VAT-registered companies.

## **SLOVAKIA**

#### 1. General framework

The Regulatory Office for Network Industries (RONI) has been regulating gas prices in Slovakia since 1 January 2003. The resulting prices are fair, ensuring a justified and adequate profit from regulated operations and eliminating cross-subsidies among the individual consumer groups.

For the various entities involved, RONI issues decisions stipulating:

- 1/ tariffs for access to the gas transmission network system and gas transmission
- 2/ a) tariffs for access to the distribution network system and gas distribution
  - b) tariffs for the connection of end-users to the distribution network system
- 3/ tariffs for the supply of gas to households.

## 2. Pricing of gas - 2006

#### 2.1. Distribution

Consumers are divided into categories according to annual consumption:

#### Price components:

Tariff	Fixed charge/ year	Variable charge for real consumption/m³	Performance charge for 1 m³ of contractual day maximum/ m³
Ma <sub>d</sub>	yes	yes	no
Mb <sub>d</sub>	yes	yes	no
Mc <sub>d</sub>	yes	yes	no
Md <sub>d</sub>	yes	yes	no
S <sub>d</sub>	yes	yes	no
Va <sub>d</sub>	yes	yes	yes
Vb <sub>d</sub>	yes	yes	yes
Vc <sub>d</sub>	yes	yes	yes



The normal form for a domestic tariff is a fixed charge and a variable charge for real consumption (both according to volume of consumption) and is identical to the Ma<sub>d</sub>-Md<sub>d</sub> tariffs.

#### 2.2. Transmission

Tariffs for transmission have been based on the entry-exit tariff system since 2005 and there is no difference with respect to domestic and foreign consumers.

## 2.3. Supply

The supply of gas to consumers other than households is not subject to regulation in compliance with the EU and national primary legislation.

## 3. Taxes on gas

Gas is subject to 19% VAT.

## **FINLAND**

## 1. General framework

In the year 2006, the size of the Finnish natural gas market was 4.7 bcm, which was all imported from Russia. The retail supply of natural gas covers about 5 per cent of the total amount of natural gas used in Finland.

Finland has availed itself of the possibility of an exemption allowed by the Natural Gas Market Directive. The Directive allows Finland to deviate from the regulations concerning the deregulation of the natural gas market as long as the country has only one principal supplier of natural gas, because Finland has not been connected to the natural gas network of any other EU Member State. Due to this, the Finnish natural gas market has not been deregulated in the literal sense of the word. Only the so-called secondary market in natural gas has been deregulated, and the deregulation concerns only users or retailers of natural gas, who purchase over five million cubic metres of natural gas per year. The amount of gas sold in the secondary market consists of about one percent of natural gas demand in Finland.

Natural gas companies set the tariffs and other conditions for natural gas themselves. Network tariffs and retail tariffs have to be published. The Energy Market Authority may intervene and ensure adjustments to ensure compliance with the natural gas market legislation.

According to the amendment to the Natural Gas Market Act, which regulates the natural gas market, and entered into force at the start of 2005, the regulator issue a decision confirming the methods that the network operator must follow when determining the level of return for network services and the connection charges in advance. Gasum Ltd – Finland's gas wholesaler – has revised its pricing system accordingly. The new tariff, where transmission and sales of energy will be clearly unbundled, was introduced in 2006.

## 2. Pricing of gas

In Finland there are separate tariffs for gas network services and natural gas. There is only one importer and wholesaler of gas (Gasum Ltd). There was about 32 local distribution companies (LDC) at the beginning of the year 2006. Of the gas supplied on the market, 95% is supplied directly to end-customers based on Gasum's tariffs or old long-term contracts. Only 5% is supplied through LDCs. Each LDC has its own distribution tariffs.



Wholesale gas is sold based on bilateral contracts between importer/wholesaler and

- final customers (95% of total sales)
- LDCs (5% of total sales)

New wholesale contracts have to be based on public tariffs, but the old long-term contracts may include negotiated prices.

In the year 2006, the share of wholesale supply sold under public tariffs increased to some 70 per cent.

#### 2.1. Industrial consumers

Gasum Ltd's current public natural gas pricing system is called M2006, and is applied to Gasum Ltd's delivery contracts for natural gas in Finland

## **Natural Gas Transmission and Pricing**

The General Tariff of natural gas transmission price comprises the following charges:

- Delivery point charge (EUR/month, delivery point)
- Transmission capacity charge (EUR/MW, month, delivery contract)
- Delivery point transmission charge (EUR/MWh, month, delivery point)
   Summer season 1.4. 31.10.
   Winter season 1.11. 31.3.

For consumers using 50 GWh or less it is possible to choose Small Consumer Tariff:

- Delivery point charge (EUR/month, delivery point)
- Delivery point transmission charge (EUR,MWh, month, delivery point)
   Summer season 1.4. 31.10.
   Winter season 1.11. 31.3.

The delivery point charge is a monthly charge, which covers the fixed maintenance and operating charges arising from maintenance, use, control and administration at the delivery points. It depends on the delivery point transmission capacity.

The transmission capacity charge is defined on contractual level and is a monthly charge. It covers the capital costs of the natural gas transmission system and transmission operation, control, maintenance and investment costs. It is determined according to the annual transmission capacity.

The delivery point transmission charges cover the capital costs of the natural gas transmission system and transmission operation, control, maintenance and investment costs.

For small customers it is possible to have more simple transmission tariff excluding Transmission capacity charge.

Additional transmission is needed if transmit volumes of gas exceed the delivery point annual transmission capacity. The additional transmission charge is applied in the General Tariff. In the Small Consumer Tariff all gas is transmitted in accordance with the transmission charge.

Additional transmission charge (EUR/MWh)

## **Natural Gas Energy Trade and Pricing:**

In the General Tariff the natural gas contract-specific energy price consists of the following charges:

Energy trade capacity charge (EUR/MW) Energy charge (EUR/MWh)



#### **Small Consumer Tariff**

Energy charge (EUR/MWh)

In the General Tariff the buyer reserves a monthly energy trade capacity (MW) for use of each contract and provides an estimate of monthly gas volume required (MWh). In the Small Consumer Tariff, the buyer only provides an estimate of the volume required.

The volume of gas delivered to the buyer's delivery point that exceeds the buyer's energy trade capacity volume during the balancing is termed extra gas. It is applicable only in the General Tariff.

Extra gas charge (EUR/MWh)

#### 2.2. Domestic consumers

Domestic consumers in Finland use only a minor part of the gas supplied on the market.

## 3. Taxes on gas

The excise tax for natural gas is 1.82 cent/m³ (NCV). There is also a Precautionary Stock Fee of 0.084 cent/m³ (NCV).

Value added tax on gas has been in effect in Finland since August 1986. The current rate is 22% and is recoverable by industrial customers.

## **SWEDEN**

## 1. General framework

The Swedish natural gas market was reformed on 1 August 2000. Competition was introduced for the trading of natural gas. Eligible consumers were consumers producing electricity from combustion of natural gas, and other consumers consuming more than 25 million cubic meters of natural gas annually. Eligible consumers covered approximately 47% of the Swedish market, in terms of volume. The law was changed in 2003 making those consumers, with an annual natural gas consumption over 15 million m³, eligible. Thus, for 2004 the threshold for eligible consumers was 15 million m³.

A new natural gas act was proposed by the Government in early 2005 allowing all non-household consumers to choose suppliers from 1 July 2005. By 1 July 2007 the last step will be taken in the reformation of the Swedish natural gas market. All consumers will then be eligible.

The transportation tariffs are supervised ex-post by the Energy Markets Inspectorate. The price for transport of natural gas should be reasonable and based on facts. As of 1 July 2005, the Energy Markets Inspectorate will approve ex-ante methodology underlying the calculation of transportation tariffs, on the basis of a proposal by transmission and distribution companies.

## 2. Pricing of gas

#### 2.1. Industrial consumers

Trading of gas is settled by bilateral contracts or by tariffs of traders. In contracts the price is divided into different components (e.g. transmission/distribution charge and energy charge) and affected by different factors.

The price of natural gas for industrial consumers is divided into one fixed component and one variable component depending on the amount of natural gas used.



#### 2.2. Domestic consumers

Trading of gas is settled by tariffs of traders.

The price of natural gas for domestic consumers is divided into one fixed component and one variable component depending on the amount of natural gas used.

## 3. Taxes on gas

In 2006, industrial consumers paid 413 SEK/1 000  $\text{m}^3$  in CO $_2$  tax on natural gas consumption. Industry is exempt from energy tax and VAT. Domestic consumers paid 239 SEK/1 000  $\text{m}^3$  in energy tax, 1 965 SEK/1 000  $\text{m}^3$  in CO $_2$  tax and VAT of 25%.

## UNITED KINGDOM

## 1. General framework

#### Structure of the market

Gas supplies for the market in Great Britain (England, Wales and Scotland) come from indigenous (mainly offshore) production and from imports. The majority comes from the United Kingdom sector of the North Sea; net imports of gas accounted for 12.5 per cent of gas input into the transmission system.

There has been significant new import infrastructure, in the form of pipelines and LNG facilities and new storage sites, The Bacton-Zeebrugge interconnector has had enhanced import flows available from October 2006, the Langeled pipeline from Norway started flowing gas on 1 October 2006, the BBL (Bacton – Balgzand) pipeline from the Netherlands was commissioned on 1 December 2006, and the Teesside LNG (Liquefied Natural Gas) importation project was commissioned in February 2007.

The GB downstream gas market consists of Gas Transporters who operate the pipe-lines (eg National Grid, who own/operate the high pressure national transportation system, the owners/operators of eight regional gas distribution networks, plus some other companies); shippers (wholesalers), who buy gas from off-shore producers or international markets and arrange with the Gas Transporters for it to be conveyed through pipelines; and the suppliers, who market it to final consumers. Transporters, shippers and suppliers must be licensed by the Regulator (OFGEM), and a Gas Transporter is forbidden from holding a shipper or supplier licence in order to ensure access for all to the pipeline on a non-discriminatory basis.

### Regulation of the industry

The Gas Act 1986 established a regulatory regime for the supply of gas through pipes. One of its principal features was the setting up of the Office of Gas Supply (OFGAS). OFGAS was an independent regulatory body headed by the Director General of Gas Supply who was appointed by the Secretary of State for Trade and Industry. Its main function was to promote competition. OFGAS merged with OFFER (the office of electricity regulation) in 1999 to form the Office of Gas and Electricity Markets (OFGEM).

In 2000 the Government transferred the functions of the individual Director-General of Gas Supply (and the functions of the Director-General of Electricity Supply) to the Gas and Electricity Markets Authority (GEMA). The Authority comprises a Chairman, Chief Executive and board with executive and non-executive members. The Utilities Act gave GEMA a primary responsibility to protect the interests of consumers, wherever appropriate by promoting effective competition. GEMA operates through OFGEM, which is its "public face".



## Regulation of gas prices

OFGEM (ie GEMA operating through OFGEM) regulates the level and structure of the prices charged for using the monopoly networks and the quality of service provided by these networks. National Grid currently operates the high pressure National Transmission System (NTS) and some of the eight lower pressure distribution networks (DNs). In 2005 National Grid sold some of its DNs to three other companies. The separate ownership and management of the gas distribution networks will enable Ofgem to apply "comparative yardstick regulation" — to compare and contrast the performance of the gas distribution companies, and to take into account the standards set by the most efficient when setting future price controls for each of the separate DNs' transportation charges, so enabling all gas consumers to benefit in future price control periods. The NTS transports gas from the beach terminals and interconnectors to the DNs and large industrial consumers connected directly to the NTS. The DNs distribute gas from the NTS to consumers and to Connected System Exit Points (points where one gas network is connected to another gas network).

National Grid and the GDNs are subject to a regular price control review (typically once every five years) that determines the allowed revenue that can be recovered through its charges. National Grid Gas (formerly "Transco") is currently subject to the following arrangements: an NTS transmission asset owner (TO) price control; NTS system operator (SO) incentives. There are also separate price controls (from April 2004) for each of the eight DNs; and a separate price control for metering and meter reading.

In April 2000 price controls were lifted for British Gas Trading's domestic customers on direct debit tariffs. This was followed in April 2001 by a removal of price controls for remaining customers, but a special licence condition was introduced ensuring that relative differentials between payment methods were not increased. In April 2002 all remaining price controls were lifted including this licence condition. Thus the prices charged by suppliers to domestic customers in Britain are determined by competition in the market, and are no longer subject to regulatory price control.

## Liberalisation

The market is now 100% open, with all customers being able to choose a supplier since May 1998. To date, over 10 million customers have exercised their right to change supplier.

## 2. Pricing of gas

## 2.1. Industrial consumers

Industrial consumers negotiate individual contracts with their suppliers for either a firm supply of gas or an interruptible supply. The unit price for both supplies will include an element for the energy cost and the transmission and distribution costs. The cost of interruptible gas tends to be lower than for firm gas, however this depends on the level of consumption as large consumers tend to pay a lower unit cost.

#### 2.2. Domestic consumers

Competition was introduced for domestic and smaller industrial and commercial customers, i.e. those consuming up to 73 200 kWh (2,500 therms) a year, over a two year period from April 1996. By May 1998, all customers were able to choose their gas supplier from a list of suppliers licensed by the industry regulator, OFGEM. At that time, British Gas, as the dominant supplier, were still bound by supply price controls set by OFGEM. New entrant suppliers in the gas market were not subject to price controls; the prices they charge to customers are a matter for individual companies to set.

There are three main types of tariff: the credit tariff where customers receive quarterly bills in arrears; the direct debit tariff, where payments are usually made on a monthly basis, direct from the customer's bank account; and the domestic prepayment tariff, where customers pay in advance via a meter. In April 2002, OFGEM lifted price controls for all remaining British Gas customers.

Some companies still offer the traditional method of charging to customers, where a daily standing charge is charged separately from the unit charge for each kWh of gas consumed. Many companies have now moved



away from this system and now offer a two-rate unit charge without a separate daily standing charge. Effectively, a company will decide on the level at which the second unit rate will be applied. A customer will be charged one rate for the units used up to this level each quarter and will be charged the second unit price for all consumption over this level each quarter.

Since the liberalisation of the gas and electricity markets, many companies offer Dual Fuel tariffs, whereby customers who receive both gas and electricity from the same supplier benefit from a discount. This discount is usually a fixed amount per quarter or year, and is in addition to any direct debit or prompt-pay discounts that the customer may be receiving.

Over the last 2 years, many companies have introduced fixed or capped tariffs to help customers cope with increasing gas prices. These tariffs fix a price, or fix a limit that the price will not rise above, for a certain period, usually 2 years, Some suppliers also make particular tariff offers to low-income and vulnerable customers.

## 3. Taxes on gas

The Climate Change Levy came into effect on 1 April 2001 and applies to the non-domestic use of energy. The levy is one of a number of measures in the UK's Climate Change Programme to tackle climate change by encouraging energy efficiency across business as a whole, which will lead to lower greenhouse gas emissions. Energy intensive industries receive an 80% levy discount where they have committed to challenging energy saving targets in negotiated agreements with the Government. On average the Climate Change Levy increases the price of a unit of gas by 7%.

VAT is paid at a rate of 17.5% for non-domestic users and 5% for domestic users. VAT is deductible for industrial and commercial users subject to the general tax system.

The UK Government's key mechanism for promoting renewable energy is the Renewables Obligation. This requires electricity suppliers to supply an increasing proportion of their electricity from renewable sources. Suppliers can meet their obligation by presenting Renewable Obligation Certificates (ROCs); by paying a buy-out fund contribution equivalent to GBP 30/MWh (in 2002 rising each year with RPI); or a combination of the two. ROCs are issued to renewable generators for each 1 MWh of electricity generated; these are then bought by supply companies. Renewable electricity is exempt from the Climate Change Levy and along with the Renewables Obligation will provide £1bn of support to the renewables industry a year by 2010. The cost of the Obligation is expected to be equivalent to an increase of some 5% in electricity prices by 2010 over actual 1999 prices.

## **CROATIA**

#### 1. General framework

In the gas market, Croatia only has one major supplier supplying gas to industrial consumers on the transmission network and to distribution companies. The distribution companies supply gas to industrial consumers on the distribution network and to households. In 2001, gas consumers with an annual gas consumption of more than 100 million Sm³ (Standard cubic metre) and all electricity and heat producers (electricity generation in power plants or in CHP plants) received eligibility status. Under Directive 2003/55/EC, all non-household consumers will be eligible from August 2007. The degree of market opening is 30%, but full opening is required under the Gas Act by August 2008. The Energy Agency was established in 2004. It is an independent organisation that carries out specific tasks under the Energy Act, with the purpose of ensuring the transparent and non-discriminatory operation of the electricity and natural gas markets in the interests of all participants. It is responsible for setting the prices for the use of electricity and natural gas networks, taking decisions in the case of disputes and granting licenses for performing energy-related activities. There is 1 license holder for the transmission of natural gas and the operation of distribution networks, and 39 license holders for the distribution of natural gas and the operation of distribution networks.



## 2. Pricing of gas

#### 2.1. Industrial consumers

The tariff system for the supply of gas on the transmission network was adopted by the transmission system operator and approved by the Government of the Republic of Croatia in September 2002. For eligible consumers, the principle of negotiated third-party access and free choice of supplier will come into effect on 1 August 2007, giving them the right to negotiate the gas and network price and enter into a contract with a supplier. In practice, however, eligible customers will still be using the tariff system in 2008 for paying gas prices including network costs. At the same time, a methodology has been adopted for calculating the average selling price for tariff consumers on the transmission network. The framework of prices and conditions for the use of the transmission network was first published in September 2002, with government approval. Under the amended Energy Act of December 2004, and in line with Directive 2003/55/EC, the Energy Agency has published a methodology for defining eligible costs and calculating network tariffs for the transmission system. Network tariffs for 2006 were calculated and published by the Energy Agency at the beginning of 2006. The price elements defined by the methodology laid down by the Energy Agency in 2006 for the use of the network in 2007 are:

- price of transmission defined by contracted capacity based on maximum daily consumption,
- price for the balancing of allowed daily consumed gas deviations (surplus/deficit),
- price for the balancing of non-guaranteed daily consumed gas deviations (surplus/deficit),
- price for exceeding contracted transmission capacity,
- price for metering costs,
- price for system losses of gas.

The most important factor for setting the gas price is the maximum daily consumption (i.e. load factor). Under the network tariffs valid since 2005, the main price factor remains the daily capacity contracted and realised on a monthly basis.

#### 2.2. Domestic consumers

In 2002, natural gas distribution companies carried out the tasks of the system operators of natural gas distribution networks as a local public service. The number of local distributors has been increasing recently (now 39). Some of the public companies are directly owned by the municipality that they supply. In 2005, the regulation of these distribution companies was still entirely the responsibility of the local authorities, which set the basic rules and obligations with concessionary acts. Therefore, not only the prices of natural gas but also the structure and elements of the tariff systems differed between suppliers. Prices for the use of the gas distribution network are not yet presented separately. But work is currently underway — as required by Directive 2003/55/EC and led by the Energy Agency — to produce a common methodology for defining eligible costs and calculating network tariffs for distribution system operators by the middle of 2007.

## 3. Taxes on gas

The natural gas price is subject to value added tax and excise duty, but no  $CO_2$  tax is levied. VAT is set at 22%, and is recoverable for VAT-registered companies. Only one distributor (in the city of Zagreb) has an excise duty for network development. At distribution level, companies pay a concession fee to local government under their concession agreements.

## European Commission

## Gas prices - Price systems 2006

Luxembourg: Office for Official Publications of the European Communities

2007 — 52 pp. — 21 x 29.7 cm

ISBN 978-92-79-07036-5 ISSN 1830-8732

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# **Gas prices – Price systems 2006**

The publication *Gas prices*. *Price systems 2006* describes the gas markets in the 27 EU member states and Croatia. Details for the general market situation in each country are given as well as a description of the taxes and levies applied to natural gas, both for domestic and industrial consumers.

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