

# ENERGY

## GAS PRICES

### METHODOLOGICAL NOTES

National Statistical Institute carries out a regular half-yearly survey for natural gas prices charged to household and final non-household<sup>1</sup> customers in compliance with the requirements of Regulation (EC) 2016/1952 of the European Parliament and of the Council of 26 October 2016 on European statistics on natural gas and electricity prices and repealing Directive 2008/92 / EC.

The survey aims to provide representative national average gas prices for the household and final non-household customers.

Data are submitted by all gas suppliers through mains and licensed by EWRC. Prices shall be those charged to household and final non-household customers buying natural gas for their own use that is transported and distributed through mains. The survey excludes customers who use natural gas only for:

- electricity generation in power plants or in combined heat and power (CHP) plants; or
- non-energy purposes (e.g. in the chemical industry).

According to the requirements of REGULATION (EU) 2016/1952 natural gas prices are collected on the basis of a system of standard annual natural gas consumption bands:

● Household customers

Consumption band	Annual gas consumption in GJ	
	Minimum	Maximum
Band - D1	< 20	
Band – D2	20	< 200
Band – D3	>=200	

● Final non-household customers

Consumption band	Annual gas consumption in GJ	
	Minimum	Maximum
Band - I1	< 1 000	
Band – I2	1 000	< 10 000
Band – I3	10 000	< 100 000
Band – I4	100 000	< 1 000 000
Band – I5	1 000 000	<= 4 000 000
Band – I6	>= 4 000 000	

The criterion for customers' assigning to the relevant groups is range of their annual gas consumption (supply).

Since October 2017 due to the changes in the Rules for Natural Gas Trading, the Natural Gas Balancing Rules and the introduction of an input / output model by the National Combined Gas Operator, the latter has switched to the reporting of natural gas by volume units - cubic meter in energy - megawatt hour (MWh).

In this connection, for the purposes of statistical survey "Natural gas prices for household and final non-nonhousehold customers" the following features should be considered:

- In case of invoicing the supplied natural gas to final customers in megawatt hour, the following conversion factors for the different units of measurement are used:

$$1 \text{ MWh} = 3,6 * 1 \text{ GJ}$$

$$\text{Price for 1 GJ} = \text{Price for 1 MWh} / 3,6$$

$$1000 \text{ cubic meters} = 1 \text{ MWh} / \text{average representative calorific value}$$

$$\text{Price for 1000 cubic meters} = \text{Price for 1 MWh} * \text{average representative calorific value.}$$

- In case of invoicing the supplied natural gas to final customers in 1000 cubic meters, the bands of household and final non-household customers are recalculated from GJ in 1000 cubic meters under standard conditions of measurement - temperature 200 C and pressure 760 mm Hg, by an average gross calorific value of the natural gas as follows:

● Household customers

Consumption band	Annual gas consumption in 1000 cubic meters*	
	Minimum	Maximum
Band - D1	< 0.535	
Band – D2	0.535	< 5.350
Band – D3	>=5.350	

● Final non-household customers

Consumption band	Annual gas consumption in 1000 cubic meters*	
	Minimum	Maximum
Band - I1	< 27	
Band – I2	27	< 270
Band – I3	270	< 2 700
Band – I4	2 700	< 27 000
Band – I5	27 000	<= 110 000
Band – I6	>= 110 000	

\* at temperature 20<sup>0</sup> C and pressure 760 mm Hg

Recalculation of average prices per 1000 cm to average prices per 1 GJ is made using average gross calorific value of supplied gas for the reference period by following formula:

**Price for 1 GJ = Price for 1000 cm / Average gross calorific value**

The prices are calculated as weighted average prices, using as weighting factors the market shares of the gas supply undertakings surveyed for the relevant six months' period in the following two directions:

A) Components and sub-components

The natural gas price including all taxes is the sum of the three main components and separate sub-components:

**1. Component "Energy and supply"**

This component shall include the commodity price for natural gas paid by the supplier or the price of natural gas at the point of entry into the transmission system, including, if applicable, the following end-user costs: storage costs plus costs relating to the sale of natural gas to final customers. It includes also the components for obligations imposed to society and for the activity "public supply" of natural gas. They are part of the natural gas price on which Public supplier sells to end suppliers and clients connected to the natural gas transmission system according to the Ordinance regulating the prices of natural gas in Bulgaria, article 19 (4).

**2. Component "Network"**

The network price shall include the following end-user costs: transmission and distribution tariffs, transmission and distribution losses, network costs, after-sale service costs, system service costs and meter rental and metering costs.

2.1. Sub-component "Transmission network costs" – average relative share of transmission costs for household customers and for final non-household customers, expressed as a percentage of total network costs.

2.2. Sub-component "Distribution network costs" – average relative share of distribution costs for household customers and for final non-household customers, expressed as a percentage of total network costs.

**3. Component "Taxes, fees, levies and charges"**

3.1. Sub-component – Value added tax as defined in Council Directive 2006/112/EC.

3.2. Sub-component – Taxes, fees, levies or charges relating to the promotion of renewable energy sources, energy efficiency and CHP generation.

3.3. Sub-component – Taxes, fees levies or charges relating to strategic stockpiles, capacity payments and energy security; taxes on natural gas distribution; stranded costs and levies on financing energy regulatory authorities or market and system operators.

3.4. Sub-component – Taxes, fees, levies or charges relating to air quality and for other environmental purposes; taxes on emissions of CO<sub>2</sub> or other greenhouse gases.

3.5. Sub-component – All other taxes, fees, levies or charges not covered by any of the previous four categories: support for district heating; local or regional fiscal charges; island compensation; concession fees relating to licences and fees for the occupation of land and public or private property by networks or other devices.

These data are collected every semester, but are reported annually as an arithmetic average prices.

B) Taxation

Prices shall be broken down into the following three levels:

- ✓ Prices excluding all taxes, fees, levies and charges – This price level shall include only the energy and supply component and the network component.
- ✓ Prices excluding value added tax (VAT) and other recoverable taxes – This price level shall include the energy and supply component, the network component and taxes, fees, levies and charges considered as non-recoverable for final non-household customers. For household customers this price level shall include the energy and network components and taxes, fees, levies and charges but excludes VAT.
- ✓ Prices including all taxes – This price level shall include the energy and supply component, the network component, and all recoverable and non-recoverable taxes, fees, levies and charges, including VAT.

These data are collected and reported twice per year - for the periods January to June and July to December.