

Energy Regulatory Office

<https://www.ure.gov.pl/en/markets/gas/characteristics/322,Gas-Market-Characteristics.html>
2022-12-07, 01:18

Gas Market Characteristics

Wholesale market

Gas purchases from abroad, in the amount of 190.4 TWh, were supplemented with gas from domestic sources in the amount of 40.7 TWh. Total gas supplies from abroad in 2021 included imports and intra Community acquisitions.

In 2021, 490.5 TWh of high-methane gas and 8.2 TWh of nitrogenous gas flew through the Polish transmission system. Most of the high-methane gas was transported in transit using the Yamal pipeline.

As at the end of 2021, 180 entities held a licence for trade in gaseous fuels, as compared to 185 entities as at the end of 2020, while 87 undertakings actively participated in the trade in natural gas. The group GK PGNiG acquired 376.6 TWh of gas, while gas trading undertakings from outside the group GK PGNiG S.A. group acquired 99.9 TWh of natural gas. This value does not incorporate acquisition for own needs by trading companies under monitoring and gas acquisition by energy companies which are large final customers at the same time.

The sale and purchase of gaseous fuels on the Polish wholesale market takes place primarily on the commodity exchange operated by TGE S.A.

In 2021 TGE S.A operated the following gas markets: Intra-day Market (IDMg), Day-Ahead Market (DAMg) and Gas Forwards Market of the Organized Trading Facility (GFM OTF).

In 2021, as a result of contracts concluded on TGE S.A., in the entire period of listing a given type of contract, 173,198,809 MWh of natural gas were delivered at an average price of 130.62 PLN/MWh (21,696,044 MWh were delivered on the DAMg market at the average price of 222.69 PLN/MWh; 6,771,099 MWh on the IDMg market at the average price of 234.58 PLN/MWh and 144,731,666 MWh on the forwards market at the average price of 111.96 PLN/MWh).

As a result of performance of contracts executed in the virtual point on the Over-the-Counter (OTC) market, regardless of the contract conclusion date, a total of 16.4 TWh of natural gas was delivered at an average price of 128.47 PLN/MWh.

Retail market

Customers of network gas are connected to the network of the TSO (Gaz-System S.A.), PSG Sp. z o.o. (the largest DSO) or one of the so-called "small" DSOs (52 - at the end of 2021).

In 2021, a survey was carried out on 27 trading companies and the 11 largest DSOs. In 2021, the number of customers connected to network of surveyed DSOs was 6,750,806 (including 6,721,891 households) in the field of high-methane gas and 372,701 in the field of nitrogenous gas (including 369,444 households). The data shows that in 2021, 94% of customers purchased natural gas at regulated prices, and sales under tariff prices to this group of recipients covered 59% of the volume of gas supplied to customers.

Total sales of high-methane and nitrogenous gaseous fuel to final customers in 2021 amounted to 206.6 TWh, of which the most, as much as 61%, went to industrial customers, and 28.7% to households. In general, the total sales increased by 2.75%. The largest increase in sales was recorded in the utilities, services and trade (45.6%), households (18.8% and in the agriculture sector (14.9%).

Structure of natural gas sales to final customers in 2021 [MWh]

Sales of high-methane and nitrogenous gas to final customers			
	Alternative suppliers	GK PGNiG	Total
Gas sales to final customers by trading companies operating in the country	23,260,482	183,366,207	206,626,689
including: industry	14,113,340	112,023,786	126,137,126
agriculture	155,557	478,931	634,488
trade and services	4,984,123	10,655,189	15,639,312
public utility	1,140,150	3,810,395	4,950,545
households	2,867,312	56,397,906	59,265,218
Own use	99,288	1,900,000	1,999,288
TOTAL	23,359,770	185,266,207	208,625,977

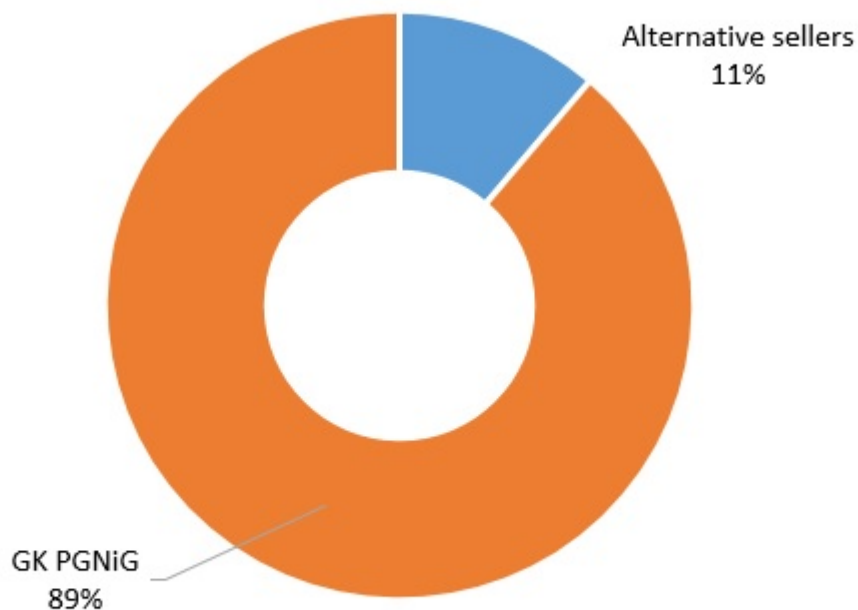
Source: URE on the basis of data obtained in a survey.

In 2021, the total volume of LNG sales by the surveyed sellers to end users amounted to 1,614,767 MWh, which in comparison to the data for 2020 means an increase in volume by 66.5%. In the structure of LNG consumption in individual branches of the economy, industry dominates (68.4%), and the lowest sales were recorded in relation to the utility sector (0.6%) and agriculture (3.3%).

The retail market for natural gas (high-methane and nitrogenous) is characterized by strong concentration. The share of the PGNiG Group entities in the sale of gas to final customers connected to distribution network was 88.74% (88.4% high methane and 93.1% nitrogenous gaseous fuel) and increased by over 3 percentage points year on year. The share of PGNiG Group's entities in LNG retail market also increased to 19.25%. The most significant increase was observed in the field of utilities, services sector and households. The observed increase of PGNiG Group's share in sales to final customers persists since 2017. It should be borne in mind that the supplier PGNiG OD Sp. z o.o. (from the PGNiG Capital Group) acts as a default supplier within the network of PSG Sp. z o.o. and Gaz-System S.A. and the function of a last resort supplier in situations provided for by law or by indicating the recipient.. Therefore, this company played a crucial role in energy price hikes in the 2Q 2021, which also contributed to the increase in the market share of this seller,

following the cessation of activities and/or the termination of contracts by other trading companies. The remaining 11.26 % of gas sales to final customers was performed by alternative suppliers selling to final customers. The value of the share of other suppliers varies by economic sector from 31.87 % in the services and trade sector to 4.84% in the household group. The Herfindahl-Hirschman index for the high-methane natural gas market was 9,440 counting by the number of customers and 7 831 - by the volume of gas sold.

The share in sales of high-methane and nitrogenous gas in 2021



Source: URE on the basis of data survey

In the field of the transmission networks there was only one back up supplier - PGNiG OD Sp. z o.o., while in the distribution networks there were several back up suppliers. Between the 1st January and 31st December 2021 the DSO launched back up sales (or sales conducted in pursuant to the Article 5ab of the Energy Law Act) for 3,468 gas customers, among which nearly 94%. (3,253) were qualified to the W 1-4 group (contacted capacity not above than 110 kWh/h, households). In this group of customers, back up sales in 2021 covered 0.05% of the population, while in the W5-13 group (other customers) the share accounted for 0.75 proc. of customers. All cases of launching backup sales concerned the high-methane gas system, there were no back up sales in other gas systems.

In 2021, supplies were suspended to 64,322 customers of high-methane natural gas (of which 64,115 - 99.68% are customers from tariff groups W 1-4) and 1,699 customers of nitrogenous gas (of which 1,688 - 99.35% are household customers). In each of the customer groups, the suspension of deliveries concerned no more than 1% of customers.

The reason for the majority of cases of suspension of supplies (77.8 % - high-methane gas

and 97.8 % - nitrogenous gas) was the lack of timely payment for the received natural gas.

09.06.2022