

Protected customers

In Bulgaria, protected customers shall be those described in Regulation 2017/1938, namely:

- household customers connected to a gas distribution network, small and medium-sized enterprises, any district heating system, insofar as it supplies heating to household customers, provided that such installation is not able to completely switch to fuels other than gas (e.g., heat and power cogeneration producers using gas turbines and/or piston engines);
- all household customers, all public service activities, including hospitals, retirement homes, prisons, schools and other public infrastructure, public and private, that carry out accredited nursing care and activities, as well as residential and non-residential customers with lower consumption up to 50,000 standard cubic meters per year shall be considered protected...". This broadly means distribution network users together with some basic social services directly connected to the transmission network.

An estimate of the total consumption of protected customers is shown in the table below:

Customers	2018	2019	2020	2021
Households, <i>mcm</i>	98.850	101.048		
Non-households protected customers *, <i>mcm</i>	420.486	403.584		
Total protected, <i>mcm</i>	519.336	504.632		
Total annual natural gas consumption in Bulgaria, <i>bcm</i>	3.073	2.786		

* consumption related to activities referred to in Art. 2, item 5, (a), (b) and 9.3. of Regulation (EU) No. 2017/1938

Customers	2018, number of customers	2019, number of customers	2020, number of customers	2021, number of customers
Household	91,784	101,050		
Non-households protected customers*	6,101	6,894		
Total protected	97,885	107,944		

According to the approach adopted by the Republic of Bulgaria, district heating companies whose main fuel is natural gas, but only part of their facilities are able to switch to an alternative fuel, shall not be included in the scope of protected customers. Minimum natural gas quantities shall be envisaged for them according to the Preventive Plan to ensure the secure and reliable operation of the heat generation and transmission facilities. The envisaged minimum natural gas quantities for the district heating companies with alternative fuel shall represent only approximately 8% of the total natural gas consumption in normal

operation and are technologically necessary as the alternative fuel used in the Republic of Bulgaria for district heating companies is fuel oil (heavy fuel oil).

The technological process of switching to and operating with this type of fuel requires the use of certain minimum natural gas quantities, which are necessary to ignite the alternative fuel and to stabilise the combustion process in order to fully burn the alternative fuel oil. The presence of certain minimum amounts of natural gas in the combustion process results in a more efficient combustion of the alternative fuel used. This in turn significantly reduces the release of harmful emissions into the atmosphere, which contributes to the protection of the environment, including the population's life and health.

In accordance with the environmental legislation (Directive 2004/35/EC of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage and, accordingly, the Environmental Protection Act in force in the Republic of Bulgaria), for large combustion plants with an installed capacity of more than 50 MW, such as the majority of the district heating installations in the country, there is a time limit on the operation of alternative fuel oil, namely no more than 10 calendar days within 12 months.

In addition, there are district (local) heating installations in the Republic of Bulgaria for the production of heat only, which supply mainly household customers. The technological scheme of these installations includes gas boiler installations for the production of steam necessary for the heating of the back-up fuel - fuel oil. Thus, the respective minimum natural gas quantities are also provided for these installations. A complete disruption of the natural gas supply to these installations would inevitably lead to a disruption of the installation's production regime and the cessation of heat production for household consumers. In this respect, the Bulgarian Emergency Plan foresees heating companies to switch to alternative fuels, explicitly indicating that the restriction of gas supply shall be done without jeopardising the safe and reliable operation of the heat production and transmission facilities, i.e. the heat supply service for protected household consumers, including children, health and educational establishments. The Plan requires all district heating companies to declare the timing of their switchover to alternative fuels and the minimum quantities of natural gas they require to ensure the operational reliability and security of their production installations.

Heat production installations, including cogeneration, are of strategic importance for energy security in Bulgaria and their decommissioning would lead to an energy crisis in the country. In the event that the gas supply to these companies is completely cut off and they cease operation, their customers (predominantly households) will, for objective reasons, have to switch to another alternative source of heating, which will in practice be electricity. This is confirmed by the fact that a large part of the panel residential buildings in the country (built in the largest Bulgarian cities) are designed to be heated by district heating and not all residential premises have chimney outlets). Excessive consumption of electricity will lead to an imbalance of the electricity system, which may lead to its collapse.