

Protected customers

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

- household customers connected to a gas distribution network, small and medium-sized enterprises, the entire central heating system to the extent that it supplies heating to household customers, on the condition that the installation is not able to fully switch to fuels other than gas (for example producers of electricity and heat in combination, use of gas turbines and/or reciprocating engines);

- all household customers, all public activities, including hospitals, homes for the elderly, prisons, schools and other public infrastructures, public and private, providing accredited nursing services and activities, and civil and non-civil sector clients with consumption that does not exceed 0.05 mcm/year shall be considered as protected ...' This essentially means the users of a distribution network together with some basic social services directly connected to the transmission network.

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

Customers	Year 2018	Year 2019
Households, <i>mcm</i>	98 850	101 048
Non-household protected customers*, <i>mcm</i>	420 486	403 584
All protected customers, <i>mcm</i>	519 336	504 632
Total annual natural gas consumption for Bulgaria, <i>billion cubic metres</i>	3 073	2 786

* use connected to the activities referred to in Article 2(5)(a) and (b) and 9.3 of Regulation (EU) No 2017/1938.

Customers	Year 2018 Number of customers	Year 2019 Number of customers
Households	91 784	101 050
Non-household protected customers *	6 101	6 894
All protected customers	97 885	107 944

In keeping with the approach adopted by Bulgaria, heating utilities using natural gas as the main fuel, but comprising components not able to switch to an alternative fuel, are excluded from the definition of protected customers. Minimum quantities of natural gas sufficient to ensure the safe and reliable operation of heat generation and transmission installations of such facilities are envisaged in the Preventive Action Plan. The minimum quantities of natural gas envisaged for heating utilities using alternative fuels account for only 8 % of total domestic consumption of natural gas in normal operating mode. These are necessary for technological reasons, and more specifically because the alternative fuel used by heating utilities in Bulgaria is (heavy) fuel oil.

The technological process of switching to and operating plants relying on this type of fuel requires the use of certain minimum quantities of natural gas necessary to ignite the alternative fuel and stabilise the combustion process to ensure full alternative fuel combustion. The use of certain minimum quantities of natural gas improves the efficiency of this process. It significantly reduces the release of harmful emissions into the air and thus contributes to the protection of the environment and of the life and health of the population.

In accordance with environmental legislation (Directive 2004/35/EC of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damages, respectively the Bulgarian Environmental Protection Act), most large combustion installations with an installed capacity of more than 50 MW, i.e. most heating utilities in Bulgaria, are subject to limitations in terms of the time they are allowed to operate using fuel oil (this period may not exceed 10 calendar days within any 12-month period).

In addition, there are district (local) heating installations in Bulgaria, which generate and supply heat to mostly to household customers. The technological map of the plants concerned includes steam generators (boilers), supplying the steam necessary to warm up the fuel oil used as a reserve fuel. For this reason, minimum quantities of natural gas have also been envisaged for these installations. Halting the gas supply required for these installations to remain in operation will inevitably cause disruptions in production and lead to suspension of the supply of heat to household customers. This is the reason why Bulgaria's Emergency Plan envisages that heating utilities switch to an alternative fuel and further states that any limitations to gas supply must not jeopardise the safe and reliable operation of heat generation and transmission facilities to ensure that heat continues to be supplied to protected household customers, including childcare facilities, hospitals and educational institutions. Furthermore, the Plan envisages the introduction of a requirement for all heating utilities to declare the time they need to switch to an alternative fuel and the minimum quantities of natural gas needed to ensure the safe and reliable operation of their installations.

Heat installations, including cogeneration plants, have strategic importance for Bulgaria's energy security and a scenario in which their operation is disrupted could trigger a domestic energy crisis. A total suspension of gas supply to these plants will force them to shut down their operations, leaving their clients (mostly households) no option but to switch to an

alternative source of heating, which for practical reasons is likely to be electricity. This is corroborated by the fact that most precast reinforced concrete residential buildings (such as those built in the largest cities in Bulgaria) were designed to be heated by district heating utilities, which is why some rooms in the apartment units do not have chimney openings. A sharp rise in electricity consumption will jeopardise the balance of the electricity system and may trigger its collapse.