

Requirements concerning the quality of natural gas for transmission

[See measurement points for quality parameters of gas fuel transmitted through the GAZ-SYSTEM S.A. transmission gas pipeline system on the Transmission System Map](#)

[See mapping of the exit points of the transmission system to measurement areas to determine quality parameters of gas - E and L gas](#)

[See average monthly gross calorific value \(GCV\) and Wobbe in dex at the entry/exit points to the transmission system](#)

[See average daily gross calorific value \(GCV\) and Wobbe index at the entry/exit points to the transmission system](#)

[See gas quality parameters \(measurement areas\)](#)

[See gas quality parameters \(entry / exit points\)](#)

[See average monthly gross calorific value \(GCV\) to recount ordered capacity after passing on balancing in energy unit](#)

Specification	Unit of measure	System	
		natural gas grade E	natural gas grade Lw
min. gross calorific value	MJ/m ³	38.0	30.0
	kWh/m ³	10.556	8.333
range of the Wobbe index variability for gaseous fuel	MJ/m ³	45.0 - 56.9	37.5 - 45.0
	kWh/m ³	12.500 - 15.806	10.417 - 12.500
hydrogen sulphide	mg/m ³	7.0	
oxygen	% (mole/mole)	0.2	
carbon dioxide	% (mole/mole)	3.0	
mercury vapours	µg/m ³	30.0	
water dew point at 5.5 MPa between 1 April and 30 September	°C	+3.7	
water dew point at 5.5 MPa between 1 October and 31 March	°C	-5.0	
hydrocarbon dew point	°C	0	
dust particles with diameter exceeding 5 µm	mg/m ³	1.0	
mercaptan sulphur	mg/m ³	16.0	
total sulphur	mg/m ³	40.0	
range of the			

temperature variability of gaseous fuels introduced to the transmission system	°C	0 - 50
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Except for the water dew point temperatures, all values in the table refer to normal conditions, i.e.:

- pressure at atmospheric pressure – 101.325 kPa
- temperature – 273,15 K (0°C)

According to point 3.3.4 of binding TNC gaseous fuel with a gross caloric value below of the following limits must not be introduced into the transmission system:

- GCV = 34 MJ/m³ (9,444 kWh/m³) for the group E high methane gas system,
- GCV = 30 MJ/m³ (8,333 kWh/m³) for the Lw subgroup low-methane gas system.