

RELEASE

Transgaz reached an historical minimum value of 0.49% of the share of the technological consumption of the circulated gas, similar to the top transmission system operators of the European Union

SNTGN Transgaz SA informs that, following the conclusion of the gas balance for 2019, the total gas consumption recorded in the NTS (Including both the technological consumption determined and not determined and the non-closures from the gas balance) was at the level of 65.2 million cm being thus the first time when such percentage decreases below 0.5% reaching an historical minimum value of 0.49% of the total circulated gas, comparable to the one of the top transmission system operators (TSO) of the European Union

In order to reach such performance, as of 2013, the company's private management has prepared, approved and implemented several programs of measures for reducing technological consumption, among which:

- *Transgaz' program of measures for reducing the technological consumption caused by the errors of the metering systems;*
- *Priority program for the reduction of the technological consumptions in the period 2013-2017 and respectively 2017-2021*

The implementation of such multiannual programs of SNTGN TRANSGAZ SA included the following measures:

For decreasing the technological consumption determined:	For decreasing the technological consumption not determined
<ul style="list-style-type: none"> ▪ Accelerating the NTS rehabilitation / repair plan, which includes the changing of the existing pipelines into piggable pipelines, their cleaning , inspection and repair; ▪ Implementation of modern means and technologies for surveillance and detection; ▪ Providing the staff of the operating sectors with high performance portable detectors; ▪ Using the mobile compressor gas pumping method; ▪ GIS program implementation completion for accurately locate / identify the position of the transmission pipelines; ▪ Replacement of non-compliant sealing materials; ▪ Replacement of existing worn and torn regulators (in particular those of the group of closure > 5%); ▪ Monitoring permanently the areas in which pipelines are prone to be affected by external factors; ▪ Intensification of verification in the periods with adverse weather conditions; ▪ Identifying the NTS areas with a high intervention time in case of a failure and establishing the necessary measures to limit gas loss; ▪ Advertising for informing the public on the non-authorized interventions risks in the areas crossed by gas pipelines and providing the emergency telephone number (free toll); ▪ Implementation of aerial surveillance of routes; ▪ Procurement of efficient manometers for all operational sectors and making their use mandatory in all cases of pipeline filling; 	<ul style="list-style-type: none"> ▪ Implementation Guidelines for Working IL 23 for sealing MRS valves; ▪ Metering systems bypass securing; ▪ Preparation and implementation of configuration and verification procedure for standardizing all methods of determining gas quantities; ▪ Compliance of metering systems with the best technological parameters for operation, taking into account the actual situation in each metering point; ▪ Ensuring the unique traceability of the working standards for differential pressure, the static pressure and temperature; ▪ Reducing the period between two consecutive metrological checks (at present this is maximum 1 year) for the PMRSs equipped with the electronic orifice metering systems according to the "as found" - "as left" principle and minimizing the errors obtained from checking metering systems; ▪ Staged replacement of metering systems with high uncertainty (orifice metering systems); ▪ Ensuring corresponding compliance of gas at entry into the metering system; ▪ Auditing all metering systems for identification and taking of efficient measures regarding metering systems which operate outside the limits imposed by the standard methods used and the recommendations of the manufacturers; ▪ Validation of quantities of gas delivered through the metering by analyzing configuration , events , alarms , etc logs, documents which need to stay at the basis of the signature of the monthly delivery/receipt reports; ▪ Preparation and implementation of the procedure for the sample taking and laboratory chromatograph analyses; ▪ Preparation and implementation of the procedures for the verification and calibration

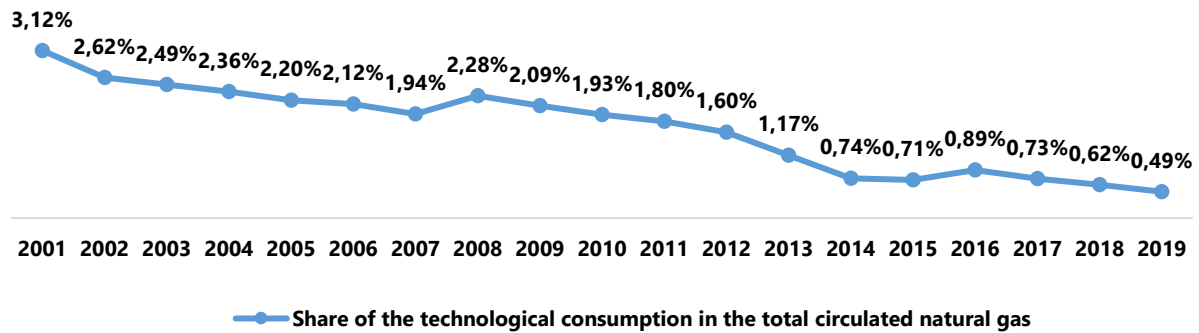
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| <ul style="list-style-type: none"> ▪ Use in all economically and technically justified cases of the special operation for obturation, hot tapping or other operations regarding pressurized pipelines; ▪ Complete automation of gas heating plants within the regulation-metering stations; ▪ Rational use of heating systems, only in the conditions in which this is strictly necessary, together with increasing the share of use of local MRS electrical heating systems (predominantly with Reiken cable) | <ul style="list-style-type: none"> of the inline chromatographs at the NTS entry points and at the SNTGN TRANSGAZ SA points; ▪ Preparation and implementation of a procedures for the use of a single chromatographic composition for a gas quality area in all metering systems belonging to the same area with a frequency of up to one month; ▪ Preparation of balances by balancing areas in between the technological nodes and the NTS entry and exit points; ▪ Measures for preventing the reverse flow through the unidirectional commercial gas metering systems at the NTS entry / exit point; ▪ Preparation and signature of technical operation agreements for the metering points at the NTS entry / exit; ▪ Running extensive education programmes for specialist staff. |
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The determined technological consumption includes: consumption in the compressor stations; consumption in facilities and processes; consumption of repairs, pipeline rehabilitation, NTS development; consumption of technical accidents – pipeline cracks and breaks;

The non-determined technological consumptions includes: the technological consumption related to the equipment of the technological installations (TN, MRS, etc.) – replacement, verification, regulating, evacuation of the safety valves, non-sealing in the joints of the pipelines and MRSs; technological consumption non-identified losses/flaws of the pipes; metering error technological consumption -operation of the meters under improper pressure conditions; improper gas quality, precision class of the metering devices and of the gas chromatographs.

The impact of the implementation of such measures consisted in the reduction in the total gas consumption of the NTS and the achievement of considerable savings to the company's budget, therefore in 2019 a saving in the amount of 16 million cm gas was recorded as compared to 2018 (65.2 million cm natural gas technological consumption in 2019 as compared to 81 million cm technological consumption in 2018).

Gas consumption in the NTS has been permanently reduced from 3.12% in 2001 to 0.49% in 2019, such level representing the historical minimum value being similar to the one registered by the top TSOs of the European Union.



The continuous reduction of the technological consumption was achieved by the implementation of the maintenance programs carried out (repairs, revisions, replacements of the parts and/or used equipment, maintenance activities) **programs ensuring the exploitation and maintenance under safety conditions of the NTS infrastructure, continuity of gas transmission under security conditions without special events (explosions, massive gas leaks) contrary to some opinions which emerged in the public space stating that over 70% of the pipelines are old and have to be replaced.**

SNTGN Transgaz SA continues to implement such measures in order to reduce technological consumption and is striving to identify other means which may contribute to the reduction in carbon emissions, pollution, ensuring people’s security and environmental protection.

The National Gas Transmission Company Transgaz SA Romania is the technical operator of the National Gas Transmission System (NTS) ensuring its operation under economic efficiency, quality and environmental protection. In the compliance with the undertaken mission the company carries out the gas transmission activity in line with the European and national laws related to gas transmission through pipelines.

COMMUNICATION DEPARTMENT