Energy Management Programs

TGI
GrupoEnergíaBogotá

Energy Management Programs

At TGI S.A. ESP, we have an Energy Management System certified under ISO 14001 and ISO 50001 standards. This system undergoes regular internal and external audits conducted by independent and qualified entities, allowing us to verify regulatory compliance, assess the system's effectiveness, and drive continuous improvement.

In 2024, we conducted an external audit with Bureau Veritas, through which we achieved the expansion of the ISO 50001 certification scope, now covering a total of 15 work centers. This milestone reflects our commitment to energy efficiency and the ongoing development of a more sustainable operation.
Our **Climate Change and Energy Efficiency Program** aims to establish and strengthen the goals, indicators, and baseline for the Energy Management System. Within this framework, we focus our targets on the energy performance of our various work centers according to the specific activities carried out in each.

These are relative targets that allow us to demonstrate the efficiency with which we manage our natural gas transportation operations.

The defined targets are presented below:

Work Center	Target	Formula
Centrifugal ECGs	0.0010 GJ/KPC	Total Energy Consumption (GJ) / Gas Delivered (KPC)
Reciprocating ECGs	0.0080 GJ/KPC	Total Energy Consumption (GJ) / Gas Delivered (KPC)
COG	0.0061 GJ/KPC	Total Energy Consumption (GJ) / Gas Delivered (KPC)
Administrative HQ	0.1300 GJ/person	Total Energy Consumption (GJ) / Number of Staff

We conduct quarterly evaluations of the energy performance of the work centers included in the scope of our Energy Management System. These evaluations enable us to identify deviations from established indicators, generate early warnings, and promptly detect opportunities for improvement related to energy consumption, efficient use, and control. This approach enhances data-driven decision-making and supports the achievement of the objectives defined in our Climate Change and Energy Efficiency Program.

As part of our decarbonization pathway, in 2024 we implemented various initiatives aimed at improving efficiency and reducing energy consumption, particularly in significant operational uses. The following initiatives were carried out:

- TEAs shutdown procedure.
- Optimization of the hydraulic model through the implementation of a Digital Twin.
- Launch of the construction phase for two Gas Compression Stations (ECGs) in Pradera and Venadillo, incorporating electric motors to replace gas combustion engines.

These new ECGs are designed not only to reduce greenhouse gas emissions as part of our climate change mitigation efforts, but also to minimize the environmental impact associated with noise.

Additionally, we have advanced in the integration of renewable energy sources by installing solar panels in various system facilities, such as City Gates, valve stations, and compression stations, with the aim of

supplying part of our energy needs from clean sources.

Throughout the year, we allocated resources and made investments in the following key actions:

- TEAs shutdown procedure.
- Hydraulic model optimization – Digital Twin.
- Construction of Pradera and Venadillo ECGs with electric motors.
- Expansion of the Energy Management System scope – 15 certified sites in energy efficiency.
- Installation of solar panels in operational facilities.

As part of our commitment to internal capacity building, we have implemented a Training Program that includes both internal and external sessions, featuring a thematic line focused on energy efficiency and climate change. Through this component, we strengthen the knowledge and technical skills of our employees and contractors, promoting the rational use of energy, efficient operational control, and the identification of energy improvement opportunities across our work centers.