

In Torre de' Passeri (Pescara), not just natural gas. A hydrogen blend coming to the network soon

An innovative project set to launch in the coming weeks, accelerating the energy transition

Torre de' Passeri (PE), 16 June 2026 – The operational protocol between Italgas, the Ministry of Environment and Energy Security (MASE), the Italian Gas Committee (CIG) and Società Gasdotti Italia (SGI) was signed today for a new major decarbonisation project that makes strategic use of existing infrastructure. The initiative will cover a portion of the territory of Torre de' Passeri (PE), where a blend of natural gas and hydrogen will be injected into the gas distribution network, initially at 10% and subsequently at 20%.

More specifically, the project will involve approximately 5 kilometres of gas pipelines serving around 220 end users, who will face no additional costs on their bills and will not need to change their consumption habits. The natural gas-hydrogen blend is intended for standard domestic and civil uses such as cooking, heating and hot water production.

Any technical adjustments to internal systems and appliances will be covered by Italgas, while on the equipment side the project involves industrial partners Ariston, Glemgas and Baltur, leaders in their respective market segments. The project also benefits from the scientific contribution of the Politecnico di Milano and the Politecnico di Torino.

The initiative was developed through a gradual process: beginning with theoretical modelling and laboratory analysis, then moving to a "hydrogen house" model to assess real-scale operating conditions. Following validation of the results, the initiative was extended to the territory.

Throughout the project, Italgas will ensure continuous supervision, monitoring and oversight of all activities to guarantee full safety and to collect the data needed for a thorough and structured technical analysis of the findings.

Società Gasdotti Italia will be responsible for the blending of natural gas and hydrogen and for conveying the mixture to the distribution network, ensuring constant and centralised infrastructure monitoring through the deployment of state-of-the-art IoT (Internet of Things) communication systems.

"The Ministry has long promoted and supported projects for injecting hydrogen blends into isolated sections of distribution networks in Italy, in close collaboration with distribution operators and CIG," said **Marilena Barbaro, Director General of MASE**. "The first pilot project in Emilia-Romagna has already concluded with positive results. With the outcomes of the Sestu and Torre de' Passeri programmes, we could have a first comprehensive picture covering the different realities of Italian distribution networks."

"The Torre de' Passeri project is an example of research that is essential for any technological evolution in the sector," stressed **Stefano Cagnoli, Director General of CIG**. "Since its founding in 1953, CIG's mission has been to provide technical support for the evolution of the gas industry, with particular focus on safety, infrastructure efficiency and the innovations required by the decarbonisation of the energy sector. In this context, the framework agreement signed with MASE in November 2024 for the development of technical studies and research on natural gas and hydrogen blends for network injection has already enabled three operational projects to be launched, including Torre de' Passeri. The results will be shared with the relevant authorities and institutions, thereby supporting the evolution of national regulation, a fundamental step for the consolidation of the sector."

"We are proud that Torre de' Passeri has been chosen for a project of national significance that we hope will serve as a model for other communities. Injecting a natural gas and hydrogen

blend into the network allows our community to benefit directly from decarbonisation, reducing emissions with no impact on citizens' daily habits," said **Giovanni Mancini, Mayor of Torre de' Passeri**.

"In recent years, Italgas has developed significant expertise in the production and use of hydrogen," noted **Pier Lorenzo Dell'Orco, CEO of Italgas Reti**. "Injecting it into gas distribution networks delivers multiple benefits: a reduction in CO₂ emissions proportional to the share of hydrogen in the distributed blend, the enhancement of existing networks without the need for additional investment, and the assurance of energy continuity and security. Our experience demonstrates that the transformation of the energy system can be achieved by building on what already exists, innovating in a targeted way and laying the foundations for an increasingly sustainable, low-emission economy."

"This project represents one of the first initiatives in Italy involving blending up to 20% that engages the entire gas infrastructure chain, from transport to distribution through to end customers. This is a significant step because it allows us to assess not only how current infrastructure performs, but also how domestic appliances behave with a natural gas and hydrogen blend under real conditions. For SGI, the initiative is also part of the process of upgrading its own network to make it progressively compatible with the transport of hydrogen up to 100%," said **Raffaele Maiello, Chief Operating Officer of Società Gasdotti Italia**.

The initiative is part of a broader journey in which Italgas plays a leading role in the development and integration of highly sustainable energy vectors. Both Torre de' Passeri and Hyround fit within this journey: Hyround is Italy's first plant for the production of green hydrogen directly connected to an urban distribution network, inaugurated in recent months in Sestu (Cagliari). With the Abruzzo project, Italgas further expands its expertise in the use of hydrogen across different infrastructure contexts, consolidating a pragmatic and sustainable model of energy transition.