

## Response to the consultation on the Hydrogen and Gas markets Decarbonisation Package

Total welcomes the initiative of the European Commission to update the European Directive and Regulation on the natural gas market and transmission networks as a contribution to the deployment of low-carbon hydrogen and biogas/biomethane, which are important new energy products on the route to carbon neutrality, while maintaining the necessary infrastructure to allow natural gas to play its essential role in the energy transition, as a quick win in replacing coal for power generation, liquid fuels for heavy road and maritime transport and as a natural ally for the intermittent renewable electricity generation.

We ask the Commission to take into account the following recommendations:

### Hydrogen infrastructure and hydrogen markets

Scaling up clean hydrogen production is an opportunity to demonstrate Europe's commitment to decarbonising the economy. The EU's support should cover all forms of renewable and decarbonised hydrogen, which would ensure the competitiveness of Europe's industrial sector and secure high-quality jobs for Europeans.

- All technologies contributing to GHG reduction should be considered. Hydrogen from natural gas, coupled with CCS, offers a cost-effective way to reduce GHG emissions and will be needed as an enabler to build scale for the development of renewable hydrogen. This is also valid for hydrogen produced from biogas (with or without CCUS) or from low carbon electricity.
- Build scale for clean hydrogen projects through funding and financial incentives according to their decarbonization potential. This could allow an accelerated learning curve that will significantly decrease the production cost.
- Incentivise market development and support deployment, including through setting EU-wide targets for injection of hydrogen in the natural gas grid and lift legal and administrative barriers. Studies have shown the technical feasibility of such injection: Marcogaz<sup>1</sup> for EU, GRTGaz for France<sup>2</sup>.
- Regulate and incentivize investments in hydrogen infrastructure : dedicated pipelines in areas with high potential of production and consumption, enabling the repurposing of natural gas infrastructure for hydrogen (with a non-discriminatory access for third parties), support for deployment of hydrogen service stations (until demand sufficiently picks up).

### Access of renewable and low-carbon gases to the infrastructure and the market

Total emphasizes the central role of gas in the transition towards the EU's objective of climate neutrality by 2050. Capitalizing on the existing gas infrastructure, with the progressive integration of renewable and low-carbon gases, will allow European citizens to enjoy the benefit of a cleaner, secure, stable and affordable energy system and to integrate a growing share of renewable electricity.

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<sup>1</sup> Overview of available test results and regulatory limits for hydrogen admission into existing natural gas infrastructure and end use – Marcogaz octobre 2019 :

[https://www.marcogaz.org/app/download/8105290863/TF\\_H2-427.pdf?t=1574766383](https://www.marcogaz.org/app/download/8105290863/TF_H2-427.pdf?t=1574766383)

<sup>2</sup> Rapport sur les conditions techniques et économiques d'injection d'hydrogène dans les réseaux de gaz naturel <http://www.grtgaz.com/fileadmin/plaquettes/fr/2019/Conditions-techniques-economiques-injection-hydrogene-reseaux-gaz-rapport-2019.pdf> publié en juin 2019 par les opérateurs gaziers français.

- Establish a comprehensive terminology including all renewable and low-carbon gases (including RFNBO<sup>3</sup>, RCF<sup>4</sup>, e-fuels...), based on life cycle GHG emissions and being technologically neutral.
- Impose a binding 2030 EU target to reduce the greenhouse gas intensity of gas consumed in Europe.
- Impose a binding 2030 EU target of renewable gas (by energy content) in the natural gas grid, to provide predictability for investors and help develop the respective value chains.
- For the two targets above, Eurogas proposes an intensity reduction of at least 20% compared to 2018 and a binding target of at least 11% of renewable gas.

### **Integrated energy market**

- We support a robust common EU-wide system of certification and acceptance of Guarantees of Origin for renewable and low-carbon gas and clean hydrogen, with a decoupling of the emission benefits from the physical molecules. This book-and-claim approach would enable a common market for trading of certificates and enable consumers to contribute to decarbonisation without being physically connected to a source of renewable or low-carbon gas or hydrogen.
- Such a common market would be an alternative for the cooperation mechanism set out in the current REDII and enable renewable and low-carbon projects in one Member State to be used in another Member State, with certificates.
- European and national legislation should be adjusted in order to use these certificates:
  - To contribute to the realization of mobility objectives
  - To valorise clean hydrogen in natural gas grids for the production of RFNBO
  - To valorise renewable and low-carbon gas in natural gas grids as zero emission fuels for ETS obligations

### **Role of natural gas – methane emissions**

- Total is present throughout the entire gas value chain, from production to end customer, as it recognizes the significant advantages offered by natural gas to reduce greenhouse gas emissions. Natural gas emits half the greenhouse gases of coal in power generation and is a natural partner to renewable energies, to both offset their intermittent nature and handle seasonal demand fluctuations. But to preserve these advantages, we must strictly control methane emissions. This is also valid for biogas/biomethane production.
- Our methane emissions are already among the lowest in the industry and we fully support emission reduction initiatives such as the OGMP2.0, to improve the measurement, reporting and consolidation of methane emissions. Total will contribute to the Commission's consultation on new rules to prevent methane leakage in the energy sector.

### **Various**

- We ask to eliminate the uncertainty in the ETS Directive about the treatment of biogas as raw material.
  - The rules to consider an emission factor of biogas equal to zero when used for combustion are clear with direct reference to the biomass criteria of RED II regulation on sustainability and GHG reduction.
  - However, for the use of biogas as a raw material, there should be confirmation whether any RED II criteria need to be met.
- In the development of dedicated hydrogen pipeline networks, we ask to consider possible synergies between hydrogen and CO2 infrastructure to achieve low-carbon hydrogen

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<sup>3</sup> RFNBO = Renewable Fuels of Non-Biological Origin

<sup>4</sup> RCF = Recycled Carbon Fuels

production at large scale while tackling hard-to-abate emissions (e.g. in port areas and industrial clusters).

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