

The future of the natural gas industry in a decarbonised economy.
Renewable Gas

3rd AIEE Energy Symposium

Milano, 10-12 December, 2018

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Gas in Transition and the Transition of Gas

- Increasing relevance of natural gas in the world (fracking and LNG)
- Natural gas enjoys environmental advantages over other fossil fuels
- It is, however, subject to the constrictions stemming from the 2015 Paris Agreement
- Is there a future to natural gas in an electrified energy system

The role of natural gas in energy transition

- Back-up to intermittent renewable energies (CCGT)
- Transport
- There are industries which can hardly be electrified (steel)

Renewable gas in the new Paradigm

- Bio-methane and Biogas
 - Residues: circular economy
 - To be injected in the grid
- Synthetic Natural Gas
 - Power-to-gas

BURDENS

- The technology is already available
- Cost burdens
- Estimation by 2050: 122 bcm (98 bio-methane and 24 green hydrogen)

EU regulation and policy over Renewable Gas

- 2009 Gas Directive: Its rules for natural gas apply in a non-discriminatory way to biogas and gas from biomass or other types of gas in so far as such gases can technically and safely be injected into, and transported through, the natural gas system
- 2009 Renewable Directive: ‘energy from renewable sources’ means also energy from biomass, landfill gas, sewage treatment plant gas and biogases

New Renewable Directive (2018)

- a) reinforces EU sustainability criteria for bioenergy, extending their scope to cover biogas for heating and cooling and electricity generation (Art. 26);
- b) clarification on the mass balance system and adapt it to cover biogas co-digestion and injection of bio-methane in the natural gas grid (Art. 27). The amended article includes the obligatory recognition of evidence from national schemes of other Member States that have been verified by the Commission.

THE NEED OF CLEARER AND HARMONISED LEGAL FRAMEWORK AT EU LEVEL

- Vague provisions on the use of bio-methane in existing networks at EU level: negative impact on innovation
- There aren't clear rules within the 2009 Gas Directive, the 2009 Gas Regulation, and the 2009 Renewable Directive (not even in the 2018 version): different legal national solutions on key issues (guarantee of origin, quality, sustainability, safety, and TPA)

OTHER LEGAL CHALLENGES

- Harmonised support schemes
- Re-definition of competences
- Administrative burdens
- A clear framework

SPAIN

- References to biogas within the Hydrocarbons Act 1998
- 2018 Draft Act for an Energy Transition: the Government becomes empowered to pass support schemes in favour of bio-methane, hydrogen and other synthetic fuels, whose production is solely based on renewable raw materials.
- They must be financed by regulated incomes of the gas sector, within future governmental limits.
- The Government is also empowered to pass support schemes allowing bio-methane injection in the grid.

ITALY

- Renewable energy sources are used in Italy mainly for the production of electricity and for the production of heat.
- There are solid, liquid or gaseous biomass plants in 4,114 Italian municipalities.
- The distribution of biogas plants is homogeneous in the Italian peninsula. However, the areas of greatest concentration are the Po Valley and Trentino Alto Adige.

LEGISLATIVE EVOLUTION

- The renewable energy regulation finds its basis in the legal regime established by the Constitution on environment and energy.
- The energy sector and its development is influenced by the Italian regional system, and the related distribution of competences between Regions and State (art. 117 Constitution).
- In 2003, legislative decree n. 387 implemented directive n. 2001/77/EC, on the promotion of electricity produced from renewable energy sources in the internal electricity market.

LEGISLATIVE EVOLUTION

- In 2010 the Ministry of the Economic Development started a new renewable energy policy: "Italian National Renewable Energy Action Plan".
 - The Plan prescribed that biogas should be integrated into the national natural gas network.
- Legislative decree n. 28/2011, which implemented directive 2009/28/EC, simplified the authorizing procedures for the installation of plants for the production of renewable energy and introduced new support schemes for the production of energy from renewable sources.

LEGISLATIVE EVOLUTION

- In 2013 the Ministry of Economic Development published the new “National Energy Strategy”. Italy intends to exceed the European renewable production targets:
 1. Reducing of emissions.
 2. Achieving the objective of energy security.
 3. Setting the level of incentives at European levels.
- In 2017 the Ministry of Economic Development approved the new “National Energy Strategy”:
 1. examines the experience of support schemes adopted in implementation of legislative decree 28/2011.
 2. tries to implement more efficient policies.

THE GROWTH POLICY FOR BIOMETHANE

- In 2018, the Ministry of the Economic Development approved a decree on the promotion of biomethane and of other advanced biofuels for the transport sector.
 - If biomethane complies with the technical requirements provided by the Authority for the Regulation of Energy, Networks and Environment (ARERA), it can have access to the grid.
- A favourable regime is granted to advanced biomethane that can be directly acquired by the GSE (Manager of energy services) for the maximum amount allowed by the Ministry of the Economic Development.