May 2017

Eurogas views on the Proposal for a Directive of the European Parliament and of the Council on the Promotion of the Use of Energy from Renewable Sources (Recast)

Eurogas is the association representing the European gas wholesale, retail and distribution sectors. Founded in 1990, its members are 44 companies and associations from 22 countries.

Eurogas represents the sectors towards the EU institutions and, as such, participates in the Madrid Gas Regulatory Forum, the Gas Coordination Group, the Citizens Energy Forum and other stakeholder groups.

Its members work together, analysing the impact of EU political and legislative initiatives on their business and communicating their findings and suggestions to the EU stakeholders.

The association also provides statistics and forecasts on gas consumption. For this, the association can draw on national data supplied by its member companies and associations.

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Introduction

Eurogas welcomes the new Renewable Directive proposals as a timely and necessary recast of the legal framework for renewable energy in Europe. We support the definition of a future market outset able to produce undistorted and competitive price signals, encourage adequate investment levels, guarantee the security of the energy system, and proceed on the decarbonisation path towards the EU objectives to 2030 and the Paris Agreement - all this without affecting the competitive nature of the offers to consumers.

The growth in the deployment of renewables in the form of variable electricity production has been up until today a partial solution to reach the 2020 EU target, while its challenges become more important as an even more ambitious renewables target is pursued to 2030. Those challenges include ensuring that the future energy system continues to be technically reliable and sustainable from an environmental and economic point of view. It is therefore essential for European policy makers and stakeholders to make it a priority that the **deployment of variable renewable energy is coupled with reliable and flexible generation and energy storage** so as to adequately account for the stresses on the system and the burdens on the consumers. It has been estimated that if we are to achieve upwards of 80% carbon reductions with the technology currently available, Europe will need 10 times the amount of storage it has today.[1] Batteries alone, however, cannot cope with this challenge, especially considering seasonal variability[2], due to limitations with regard to quantity and duration of electricity storage (toxicity and resource limitations are other concerns), not to mention the cost dimension. **Energy storage is, and will continue to be, a crucial element in energy policy, and gas stands ready to provide the needed storage.**

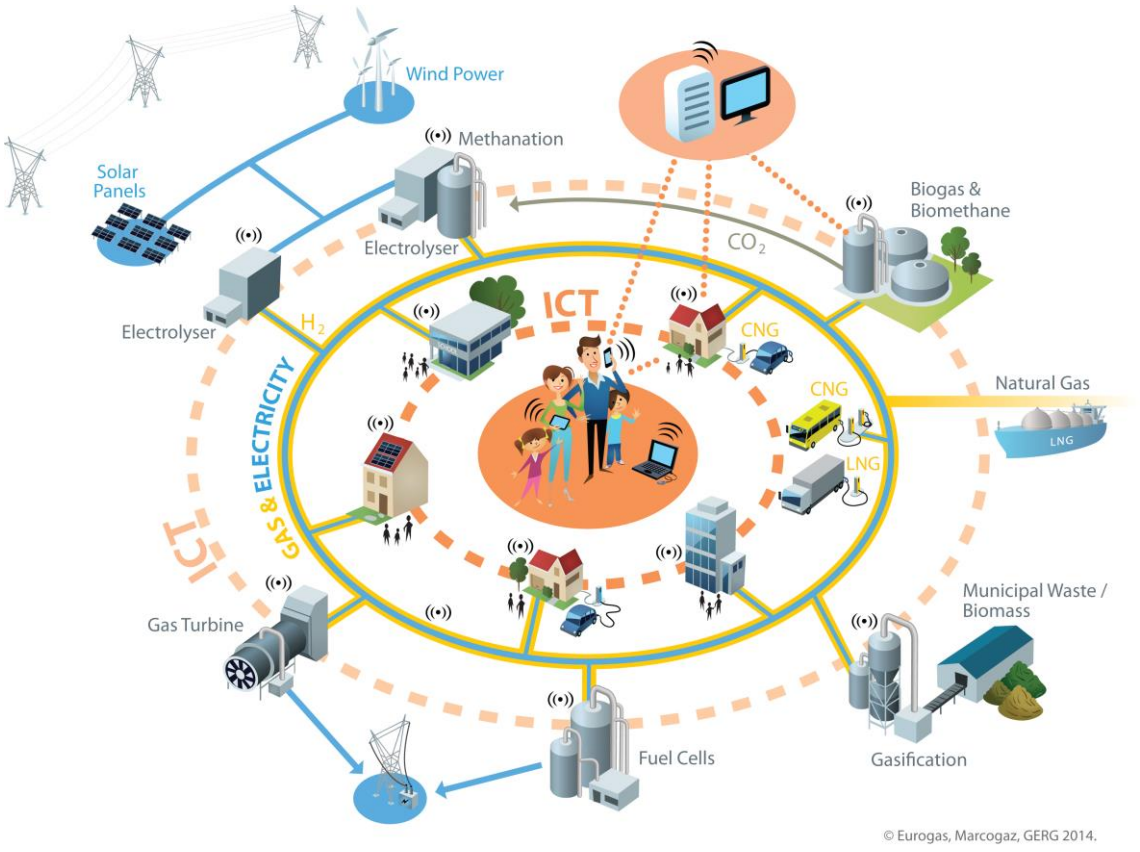
While electrons cannot be stored in wires, molecules of gas are easily stored in pipes. Further, those electrons can be converted to molecules in a process of what is referred to as **power-to-gas**. Those molecules can also be converted to electrons via various **gas-to-power** technologies (combined heat and power (CHP), micro-CHP, fuel cells, dual-fuelled appliances, etc.). Gas can come from an array of sources, from the traditional natural gas to the renewable forms, such as biogas, bio-methane, synthetic gas, and hydrogen.

The gas grids then become reservoirs of sustainable energy for intake and throughput in a continuous, flexible manner, able to handle short and long-term intervals (for daily and seasonal variations), as well as geographic transfer. These technical characteristics must be borne in mind when considering legislation that undergirds renewable energy deployment. **Gaseous energy becomes a basis for sector coupling in a sustainable energy system.** Taking these technologies into consideration in a holistic way, it is clear that gas is needed not just as a flexible and reliable supporter, but as an integral part of the transition towards a decarbonised energy system where the renewable energy deployment happens within a diversified and sustainable energy mix.

[1] FCH JU Commercialization of Energy Storage in Europe, March 2015

[2] In countries experiencing cold winters, the energy demand in winter is a multiple of that in the summer.

Moving forward, the electricity, heat, gas, transport and information and communication technology (ICT) networks will become increasingly integrated to form a more seamless system in which energy can flow freely in whatever vector is best suited for a given moment, in consideration of varying supply and demand. The different vectors provide complementarity for the system, which is **key both in terms of cost and convenience for the consumer,** as well as technical feasibility and reliability of the system.



Eurogas welcomes the recast of the Renewable Energy Directive as a timely occasion to recognise these opportunities. With the role of gaseous energy in a future energy mix fully taken on board, the Renewable Energy Directive can shape the evolution of the energy system in such a way that consumer costs are minimised, energy security is maximised, and sustainability is realised.

Renewable Energy Directive

The following points highlight matters that Eurogas sees as relevant topics of consideration for the review of the Proposal:

- Gas is, and will represent in the future, a crucial complementary vector to ensure the necessary flexibility and reliability of an increasingly renewables-based energy system. Natural gas infrastructures offer the most cost-competitive source of flexibility among the energy carriers (by using storage and the 'lung capacity' of the gas grids to store energy), and its use in a complementary fashion with other heating and cooling sources will only increase this potential.

  Gas networks offer the underlying infrastructure and flexibility that the energy system needs, thanks to gas pipelines, liquefied natural gas (LNG) terminals and storage. The EU energy strategy should therefore seek to extract the maximum value from this immense asset, which can already harness and store energy, and take full stock of these synergies, bearing in mind the intrinsic value in gas networks, also for future infrastructure planning and R&I.

- Gas can itself be renewable and can be produced from various feedstocks, such as excess electricity from variable renewable sources, agricultural residues, municipal waste, sewage, etc. either as biomethane or as synthetic gas.

New Paragraphs 4-7: Overall Renewable Target

- Necessary flexibility should be ensured for Member States in achieving the new 27% renewables target to 2030. Any possibility of extending the 27% target to 30% should be considered in light of its impact e.g. it should not, by favouring the use of coal over gas, compromise the primary objective of achieving the GHG emissions reduction target and the Paris Agreement goals.

Article 2: Definitions

The definition of renewable energy should include hydrogen produced from electrolysis from renewable electricity, as well as synthetic methane produced from renewable sources.

Article 19: Guarantees of Origin (GOs)

- GOs are important for energy customers to be certain about the origin of the energy consumed. We therefore support the development of European transferable GOs as a means to provide transparency and prove the origin of energy to final consumers. Moreover, we welcome the new proposals aimed at extending and promoting the use of GOs for renewable energy to include renewable gas.

- Eurogas further supports that GOs are issued for each unit of renewable energy to create transparency, independently from the question of whether or not the installation is benefitting from an existing support scheme.

- If GOs start to have a considerable value in the future, solutions need to be found to avoid double remuneration. In any case, changes to existing support schemes or to the issuance of GOs should not be retroactive and should only apply to new installations after 2021, to ensure the security necessary to attract investment.

Article 23: Renewables in Heating and Cooling

- The heating, cooling and transport sectors have a large potential to decarbonise. However, an increase in the share of renewable electricity here, in particular through the introduction of binding targets, might come at the expense of cost-effectiveness. The potential for natural gas and renewable gas on the other hand, as both primary energy vectors and complementary elements for the uptake of renewable energy sources (RES), should be taken in consideration, having in mind the overall impact on the costs for the final consumers. The main barrier to deploying RES heating in fact is still the cost of this option. The low rate of rebuild and renovation (see also the Eurogas paper on the new Energy Performance of Buildings Directive) means that all avenues to improve the environmental performance and the efficiency of the heating and cooling sector should be explored. Affordability must play an important role in this since energy customers will otherwise be deterred from taking any measures at all. Therefore we believe that the proposed obligation to increase renewable energy sources in heating and cooling by 1% per annum should be non-binding and subject to national circumstances.

- Innovative solutions such as micro-CHP, fuel cells and gas heat pumps, which can run increasingly on renewable gas, in heating should be adequately recognised as options and should be included as renewable technologies. So should be combinations of technologies increasingly using renewable electricity and renewable gas, e. g. an air heat pump and a gas condensing boiler. (To note that a conventional air heat pump starts being less efficient and relying on the main electricity system with its current energy mix when temperatures fall below 8°C.)

Article 26: Sustainability Criteria

- Common, clear and transparent sustainability criteria for biomass across all Member States can help to ensure sound environmental profiles. At the same time, it should be recognised that greenhouse gas emissions reduction requirements should take the full energy system into account. For example, biogas can provide system benefits which go well beyond greenhouse gas reductions (see introduction), and they should be reflected in sustainability criteria.

Support Schemes for Bio-methane

- Financial support for RES, if needed, should be transparent, market-based and non-discriminatory. Entrenchment of specific technologies should be avoided, when other technologies in a specific context could be more favourable, given system implications (such as flexibility and energy storage, which go beyond kWh pricing). We find that this proposal does not yet fully clarify the post-2020 framework. Market-based approaches should be the guiding principle as to ensure stability, transparency and predictability of the

investment climate for the entire energy market. Therefore, the framework for renewables should be designed in such a way as to minimise any distortive overall impact on the market. We furthermore welcome the new provisions aimed at avoiding retroactive measures.

- The principle of ensuring technology diversification should fully apply. In certain cases, the possibility to make a technology-specific call for tender can contribute to the implementation of this principle. Renewable gases, such as biomethane, hydrogen or synthetic methane (e.g. from power-to-gas production), should be regarded as non-mature technologies eligible for support that rewards benefits beyond the units of energy produced and internalises externalities such as flexible supply, energy storage, waste management, agricultural performance enhancement etc.

- There should be no obligation for Member States to introduce support schemes. Where they are applied, they should take account of national circumstances whilst not distorting the market.

- Bilateral cooperation agreements between Member States should set appropriate rules for the disbursement of funding for support schemes as well as the allocation of other energy-associated cost and the RES capacity target that can be accommodated within the system.

Balancing Responsibilities

- We welcome the new provisions extending balancing responsibilities to RES producers. However, the creation of markets which enable participation at short notice before actual delivery ("intraday" or "balancing" markets) is a crucial condition, and fully integrated short-term power markets which reward such flexibility are still missing.

Administrative Streamlining

We welcome the simplification and streamlining of administrative and permitting procedures, in particular for whole reconstruction and repowering activities, as this would allow a more efficient use of the existing RES generation park.

Eurogas is available to its stakeholders for any questions or comments, and looks forward to fruitful dialogue.