Meeting with Eurogas 29/01/2020

ENER B3/C2 joint contribution to Basis on Digitalisation in General and Gas in particular

Introduction

- As stated by the new **President of the European Commission**, Ursula von der Leyen, the European Green Deal is our new growth strategy. It will help us cut emissions while boosting the economy and creating jobs.
- The challenge is to move towards and achieve **2050 ambition cost- effectively** by mobilising all synergies of the energy system, including via the smart integration of the electricity, decarbonised and renewable gases, heating, transport and industry sectors.
- Energy transition across Europe is a huge challenge and this is why we need to use all available synergies and energy carriers to achieve it.
- **Digitalisation of energy** can contribute to deliver the President-elect's twin objectives of the European Green Deal and the Digital Age, through synergies between instruments in both policy domains. We can only be successful if we contribute to the policies in both areas in a coordinated way.

Natural gas

- Natural gas will be part of the picture in the medium-term, as it is less carbon-intensive than either coal in the power sector or oil in the heating and cooling sector and because it can be a source of flexibility for the energy system.
- Looking beyond, in a 2050 carbon-neutral economy, natural gas consumption will go down significantly, and will represent only a few percentage points of our energy consumption1.
- The gas market needs to be more responsive to the short-term functioning of the electricity market to be consistent with the 2050 ambition and the Clean Energy Package. To match the flexibility of the electricity market, to

¹ 3-4% of gross inland consumption in the 1.5TECH and 1.5LIFE scenarios of the Long Term Strategy.

- provide respective price signals and to respond to the changes in the energy mix gas market needs to be more integrated across the EU and liquid and focus on short-term supply rather than long-term obligations.
- But above all, the gas market rules need to encourage and foster decarbonisation of the gas sector and facilitate entry of the clean types of gases to play an increasing role in the cost-efficient transition towards a climate-neutral economy by 2050.

Renewable and low-carbon gases

- Renewable and low-carbon gases (in particular biomethane and hydrogen)
 will increasingly contribute to decarbonisation. Especially the production of
 hydrogen from renewable electricity offers a key opportunity for fostering
 smart sector integration, and in particular the coupling the electricity and
 gas sectors.
- The Long Term Strategy (LTS) scenarios which achieve GHG neutrality by 2050 (the 1.5 scenarios) project between 200 and 250 Mtoe of gaseous fuels consumption (which represents between 50% and 62.5% of today's consumption of gases), including an important contribution from carbonfree gases such as biogases but also from hydrogen (produced from RES electricity or with CCS/U) and synthetic gases as well as a - relatively more minor - role for natural gas.
- Renewable and low-carbon gases are covered and promoted under the revised Renewables Directive for the period 2021 to 2030 (REDII). This is done through a number of measures including a 14 % renewables target for the transport sector and a specific sub-target of 3.5% on advanced biofuels for which biogases from certain residue and waste-based feedstock can count. Furthermore, Member States will also be able to use gaseous recycled carbon fuels (including renewable hydrogen) towards the 14 % transport target.

Smart sector integration

- To achieve decarbonisation, the EU regulatory framework must enable the smart integration of the electricity, heating and cooling, transport, and industry and agriculture sectors. This will allow at the same time achieving higher levels of decarbonisation in the electricity sector and decarbonising sectors that are more difficult to decarbonise.
- Sector integration will boost the direct electrification of other sectors and a better use of waste resources but also facilitate the decarbonisation of certain end-uses via gaseous fuels produced from renewable electricity.
- Our regulatory framework should enable and facilitate the substitution process from natural gas to renewable and low-carbon gases such as hydrogen and biomethane and synthetic methane. The gas market rules would need to be fit-for-purpose to contribute to the objectives of competitiveness, sustainability and consumer protection.
- The Commission will present a smart sector integration strategy in Q2 of 2020 including an action plan and a timeline with relevant actions (legislative and non-legislative) that might be brought forward.

Digitalisation in the gas sector

- The Clean Energy Package has already set an ambitious regulatory framework when it comes to data protection, data management and cybersecurity. It will enable a European data-driven energy services market of direct interest to consumers, such as electro-mobility and smart homes. This however covered so far electricity.
- Over the next five years the Commission will focus on the implementation of this for electricity, at the same time we will also need to step up our efforts to drive investments in digitalisation of the whole energy system covering also the gas sector. This could further facilitate flexibility, consumer information and sector integration.
- Digitisation of the gas grids is essential for the secure monitoring and control the gas conditions in the pipelines and billing of various gas composition.

This is particularly relevant when the green hydrogen will be blended in natural gas pipelines to a certain percentage.

- We expect also pure hydrogen also be used in the heavy-duty road transport and in industrial sectors, for example to replace coal in the primary production of steel. As for R&D during the last five years, the Horizon2020 Program has supported smart grid projects with almost 400 million euros in issues related to digital technology, such as cybersecurity, IoT, interoperability and Big Data for energy.
- While our focus has been around Smart Grids, in the new Horizon Europe R&I Program we will look at digitalization as a tool to accelerate and optimize the sector coupling & integration and go beyond electricity (i.e. through better modelling and infrastructure need analysis).
- Moreover, under the next Multiannual Financial Framework, the LIFE programme will include a new sub-programme dedicated to the Clean Energy Transition with a proposed budget of EUR 1 billion. This subprogramme funding will aim at accelerating technology roll-out, digitalisation, new services and business models through capacity building and market uptake actions among the relevant market actors.

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