

## **GasNaturally's feedback on the Roadmap for the Strategy for long-term EU greenhouse gas emissions reductions**

The natural gas industry supports the EU's efforts to meet its commitments under the UN Paris Agreement and will contribute positively and constructively to help do so in an affordable manner for its citizens, businesses and governments. We welcome the launch of the public consultation on the Strategy for long-term EU greenhouse gas emissions reductions and acknowledge that designing such a strategy is highly complicated.

GasNaturally particularly welcomes the Commission's holistic approach to the analysis of various transition options outlined in the Roadmap. Affordability and technology leadership need to be at the centre of the new 2050 GHG reduction Strategy. This will allow the EU to retain the support of its citizens for significant emission cuts and inspire other countries to follow its leadership.

Natural, renewable and decarbonised gas can significantly contribute to delivering EU climate and energy policy goals. We strongly encourage that the gas sector's positive potential to offer affordable and reliable low-carbon solutions in both the short-term and the long-term is reflected in further stages of preparation of the Strategy:

1. Natural gas enables fast and cost-efficient emission reductions in the power generation, heating and transport sectors;

The International Renewable Energy Agency (IRENA) REmap Scenario, under which the share of renewables in the power sector increases to 50% by 2030, and the IEA<sup>1</sup>, which in its most ambitious medium-term scenarios regarding deployment of renewables, both confirm a key role for natural gas in the short-to-medium-term. Gas power plants offer dispatchable capacity capable of covering production gaps inherent to variable renewables.

2. Gas infrastructure is the backbone for a reliable energy system, supporting increasing amounts of variable renewables;

An economy-wide decarbonisation in line with the Paris Agreement will require more than just electrification based on renewable power generation. Using the virtues of both electricity and gas is the best and fastest way to create a sustainable low-carbon economy. For example, the smart combination of the electricity, gas and heat systems can deliver early emissions cuts, allow the integration of more renewables, lower costs, and increase system resilience. Today, only 20% of our total energy needs are currently met by electricity. Increasing this, as recent studies ([Ecofys](#), [Primes](#))

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<sup>1</sup> IEA, World Energy Outlook 2017

show, requires large investments in new electricity infrastructure compared to the large savings available from making use of existing gas infrastructure.

- Natural gas remains approximately 4 times cheaper than electricity for the same energy value<sup>2</sup>;
- Gas infrastructure, supplemented by investments in missing links enabling access to extensive EU/EEA gas resources<sup>3</sup>, can carry efficient and affordable energy source with growing potential to decrease GHG emissions. It is also the only option to store energy at large scale and long term (when excess electricity from variable renewables is converted into hydrogen or synthetic gas), thus complementing both variable renewable energy sources and batteries;
- G-mobility offers affordable, efficient and immediate solutions to decrease GHG emissions from road and marine transport, as well as to increase public health.

Gas need to be considered in the Strategy as a low-hanging fruit in a transition towards a cleaner future, and the development of innovative gas projects should remain one of the priorities of EU climate and environment policy.

3. Natural gas systems can decarbonize. Renewable and low-carbon gas (,) can leverage existing infrastructure, support circular economy, lower the energy transition costs and provide a credible carbon emission reduction pathway for hard-to-electrify sectors

A credible deep GHG emission reduction strategy needs to include solutions for the hard-to-electrify and hard-to-decarbonize sectors – namely heating, industrial processes, heavy-duty transport, seasonal storage and system balancing, which together account more than half of Europe’s energy consumption. The recently adopted 2030 energy and climate framework does not sufficiently address the emissions reduction challenge in these economically crucial sectors.

Potent long-term, low-carbon solutions for these sectors include producing biomethane from anaerobic digestion of waste, hydrogen from Power-to-Gas (‘green’ hydrogen) and steam methane reformed hydrogen (how most of hydrogen is produced today) combined with capture and permanent storage of CO<sub>2</sub> (resulting in ‘blue’ hydrogen). When CCS technologies are combined to the use of biomethane, this creates negative emissions which will be instrumental for Europe in particular if carbon neutrality is pursued.

Moreover, renewable gas produced on the European territory could play an important role in a modern circular economy. In addition to municipal and agricultural waste also sewage, forestry and organic industrial residues can be used to produce gas, which also produces bi-products that enhance agricultural yield, while providing positive economic returns for local territories and populations, and reducing the dependency on imports. This circular effect needs to be factored in when assessing long-

<sup>2</sup> Eurostat (2018), Energy Prices in 2017, < <http://ec.europa.eu/eurostat/documents/2995521/8489679/8-29112017-AP-EN.pdf/600c794f-c0d8-4b33-b6d9-69e0489409b7> >

<sup>3</sup> IOGP (International Association of Oil & Gas Producers) (2017), fact sheet based on Wood MacKenzie European Gas Resources Report <[www.iogp.org/wp-content/uploads/2017/11/IOGP-Woodmac-Factsheet.pdf](http://www.iogp.org/wp-content/uploads/2017/11/IOGP-Woodmac-Factsheet.pdf)>



term viability of gas grids which can provide the future backbone for a circular-economy approach to energy.

4. The reduction of the GHG footprint of the gas value chain, including through determined efforts to minimise methane emissions from our operations.

Reduction of methane emissions from natural gas value chain has been a priority for the natural gas industry for decades. Between 1990 and 2015, fugitive methane emissions from natural gas activities decreased by 46%,<sup>4</sup> and they can be reduced further. Our industry has a clear commercial incentive to pursue its efforts: the less methane is lost, the more there is to sell for use in households, industry or power generation. Every leak is a missed opportunity. According to the IEA, three quarters of oil and gas methane emissions are technically avoidable.<sup>5</sup> Best practices (eg. North Sea platforms, distribution procedures) demonstrate that methane emissions can be reduced to negligible levels with existing technology. GasNaturally members are actively addressing the issue and contribute to transparency via [studies](#) and [initiatives](#) to overcome uncertainty about total methane emissions from the entire gas value chain and to work towards minimising its impacts.

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More information on the role of gas in reducing GHG emissions can be found in the GasNaturally Long-Term Vision [here](#) and in GasNaturally Factsheet on Methane Emissions [here](#).

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<sup>4</sup> Annual European Union greenhouse gas inventory 1990–2015 and inventory report 2017: <https://www.eea.europa.eu/publications/european-union-greenhouse-gas-inventory-2017>

<sup>5</sup> IEA (2017) Commentary 'The environmental case for natural gas' < <https://www.iea.org/newsroom/news/2017/october/commentary-the-environmental-case-for-natural-gas.html> >