



ENGIE's views on the Revision of Directive (EU) 2018/2001 on the Promotion of the Use of Energy from Renewable Sources

The European Commission proposes to raise the greenhouse gas (GHG) reduction target for 2030 to at least 55%. ENGIE supports this highly ambitious objective which requires a strong acceleration of decarbonisation and activation of all levers.

In particular, energy efficiency and a strong increase of all types of renewable energies is required. Electrification will play a key role but will not be sufficient. Development of renewable electricity will have to be complemented by renewable and low-carbon gases and liquid fuels as well as renewable (district) heating and cooling solutions.

Moreover, to integrate large volumes of renewable electricity in the system, massive investment will be needed in power lines, flexibility and back-up solutions. It is therefore crucial to efficiently plan and utilize new and existing infrastructure both for electrons and molecules. Making use of existing gas assets to use, transport and store renewable and low-carbon gases can partly relieve the investment pressure on the power side. This way, a more integrated energy system can be created, which is indispensable to achieve decarbonisation objectives in the most cost-efficient way while ensuring security of supply.

ENGIE invests massively in renewable energies: We have added additional 3 GW in our portfolio over the last year in spite of the particular conditions of the sanitary crisis, and have set ourselves the target to increase, by 2030, the share of renewables in our power generation mix to 58%. We have great ambitions in the development of renewable gases, primarily biomethane and hydrogen. Biomethane is a fast-growing sector in Europe (+15% year on year) with ambitions to double its production by 2030¹. And it is a true "all-rounder": not only does it provide stable and dispatchable energy and substantial GHG emission reduction, it also brings a variety of positive externalities for agriculture, waste management, rural and circular economy, municipalities, etc.

Regarding the different ways of producing hydrogen, ENGIE is convinced that both renewable and non-renewable, low-carbon hydrogen are needed to achieve Europe's ambitious climate targets towards a full decarbonisation. Hydrogen from renewable sources should be the ultimate solution due to its specific benefits (its renewable/inexhaustible character, role as storage and flexibility option to integrate wind and solar, its limited environmental impact/no need for CO2 storage, other positive externalities). It is expected to realize major cost reductions and become the cheapest technology in the future, if allowed to reach scale. Non-renewable, low-carbon hydrogen has an important role to play as well, as confirmed in the EU Commission's Hydrogen Strategy²: For instance, CCUS can decarbonise grey hydrogen currently used in industry and will help to kickstart the hydrogen market, paving the way for future large-scale deployment of renewable hydrogen. However, dedicated (technology-specific) policies adapted to both types have to be put in place to allow each of them to advance its development.

¹ EBA Statistical Report 2020; The potential biogas/biomethane production for 2030 could reach up to 44 bcm, equivalent to 467 TWh

² Communication (COM/2020/301 final): A hydrogen strategy for a climate-neutral Europe, 8/7/2020



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A holistic and pragmatic approach, through dedicated pieces of legislation, is needed to develop the right framework to promote key decarbonisation solutions.

The Renewable Energy Directive (RED) is a fundamental pillar of the European legislative framework to implement energy and climate targets and a more integrated energy system, but it is not the only one and should not be looked at in an isolated manner. It is fundamental to consider the revision of the RED as part of a holistic political and regulatory agenda together with complementary legislation, notably the announced initiative to "regulate competitive decarbonised gas markets" (called "decarbonised gas package" hereafter), as well as the revision of the EU ETS and Effort Sharing Directives, the introduction of a CBAM, the revision of State Aid Guidelines, Energy Efficiency and Energy Taxation Directives. Such a holistic approach is key to reach decarbonisation objectives for 2030 and 2050 on the basis of a level-playing field for different technologies and players, providing clear incentives to decarbonise, notably through carbon price signals and markets – while avoiding carbon leakage.

It is essential to ensure coherence and complementarity of different legislative pieces. While most initiatives mentioned above are announced to be tabled together with the RED in Q2 2021, the "decarbonised gas package" is only foreseen by the end of this year. ENGIE considers it particularly important that the revision of the RED and the "decarbonised gas package" are developed and negotiated in parallel or – at the very least – that the intentions of the EU Commission regarding this package are clearly communicated in order to provide visibility for the private sector and help the programming of investments.

Scope of a revised RED: Keep the integrity of the RED as a well-proven tool to foster renewable energies while promoting low-carbon gases through a fully-fledged "decarbonised gas package"

The RED as a key piece of European legislation implementing the ambitions stressed in Article 194 TFEU has proven to be an **effective tool to support in particular the development of renewable electricity and, to some extent, renewable gases**. Wind and solar have realized impressive cost reduction thanks to support mechanisms and favourable regulatory frameworks. These measures need to be continued and improved by further facilitating permitting and administration, also with a view to repowering, by continuing market-based support mechanisms – where needed, by strengthening market tools that can foster investment in renewable projects including PPAs, Guarantees of Origin, etc.

At the same time, to set Europe on track to realize 55% GHG reduction by 2030, we need urgently very clear signals and specific measures to promote even more renewable and low-carbon gases. However, to preserve the integrity of the RED as a tool to achieve renewable energy targets specifically (which contribute to decarbonisation targets but are not identical), we consider that as a general principle (and since it is in our opinion the most pragmatic and logical approach to defend the inclusion of the whole

³ Annexes to the EU Commission Work Programme 2021 (COM(2020) 690 final): Revision of the Third Energy Package for gas (Directive 2009/73/EU and Regulation 715/2009/EU) to regulate competitive decarbonised gas markets (legislative, incl. impact assessment, Article 194 TFEU, Q4 2021)



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range of gases contributing to decarbonisation in the European regulatory agenda), renewable gases should be promoted through the RED while non-renewable, low-carbon gases should be promoted via a fully-fledged "decarbonised gas package" (complemented through the revision of the EU ETS, State aid framework, energy taxation etc.).

Revision of targets in the RED

ENGIE supports an increase of the overall RES target of 32% to the level that is aligned with a 55% GHG reduction target, i.e. 38 – 40% RES by 2030 as well as a corresponding increase of existing sub-targets in heating, cooling and transport.

In order to trigger the fundamental change needed to decarbonise the gas sector, it is necessary to provide clear signals and long-term visibility to all players along the value chain, complementing the role of carbon pricing. Therefore an economy-wide renewable gas target should be introduced in the RED, covering both renewable methane and renewable hydrogen. It could be quantified at minimum 11% of gas consumption by 2030 and should be binding on European level. Indeed, Member States should have some flexibility to contribute to the EU target for renewable gases: They should define their national contribution in their NECPs, while being free to focus on certain types of renewable gases (renewable hydrogen, biomethane, etc.), depending also on their national assets and features in terms of physical potential (e.g. resource access), economics (e.g. local production costs), positive externalities (e.g. circular economy).

This economy-wide renewable gas target should incentivize the production and consumption of renewable gases by lowering their cost so that they will **gradually replace fossil alternatives in existing uses** (e.g. replacing natural gas through biomethane in heating, industries and mobility, unabated hydrogen through renewable hydrogen in certain industrial processes, kerosene through synthetic fuels for aviation etc.).

However, **renewable gases will also play a role in new use cases**, for instance by replacing oil-based products in transport or carbon-intensive industrial procedures. **Therefore we propose to complement the economy-wide renewable gas target by sectoral approaches, where most needed** (while at the same time, bearing in mind the need to avoid over-complexity of targets):

① The existing 14% RES-T target (i.e. the obligation on transport fuel suppliers) should be revised upwards to match the 55% GHG reduction ambition and further provisions in the relevant articles (mass balancing, LCA, multipliers) should be simplified and reviewed. A sub-target for hydrogen, next to the sub-target for advanced biofuels and biogas should be included.

② A specific target for renewable gases, notably hydrogen in industry or specific industrial sectors (such as steel) should be added as well.

The "decarbonised gas package" should promote investment and create a market for low-carbon gases

The EU ETS is an important policy tool to drive decarbonisation solutions (be they renewable or non-renewable). It should be strengthened through several measures and extended to other sectors in a phased approach.



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However, the reform of the EU ETS and higher carbon price signals to the full extend needed to trigger investment in decarbonisation solutions might not come fast enough. To accelerate the uptake of low-carbon gases, additional measures are needed, including for instance, financial aid to CCS and CCU, Carbon Contracts for Difference to top up the carbon price, etc. The "decarbonised gas package" should facilitate such instruments, and create the necessary conditions to kickstart the market for low-carbon gases including through a clear terminology and certification, guarantees of origin, etc. (see below). ENGIE is currently developing a more detailed position on the "decarbonised gas package" and will contribute to upcoming consultations on the topic.

Certification and verification of renewable and low-carbon gases, guarantees of origin

Clear definitions and certification of different renewable and low-carbon gases are the basis on which market arrangements and support schemes can be developed. While the carbon footprint (established on a life-cycle basis and based on common and shared methodology/or standards) is a key criterion (it needs to remain below a certain threshold), a clear distinction between renewable and non-renewable gases must also be possible. The most important gases from ENGIE's point of view include biogas and biomethane, syngas (i.e. gasification of biomass and waste), renewable hydrogen and non-renewable lowcarbon hydrogen as well as synthetic methane on the basis of renewable hydrogen. Relevant gases in liquified form should also be considered (e.g. BioLNG, liquified hydrogen, liquified synthetic methane). ENGIE considers that Guarantees of Origin (GOs) are the instrument to "implement" the terminology, creating transparency, serving as proof and allowing tradability. Framing a proper market design for GOs is key to empower customers, raise awareness and incentivize demand for accelerating the decarbonisation wave. Current provisions make the issuing of GOs mandatory for renewable energy (electricity, gas, hydrogen, heating & cooling), although with some leeway regarding supported RES. ENGIE considers that all producers (including the ones receiving financial support) should have the right to receive GOs. GOs should also be issued for non-renewable, low-carbon gases in a standardized way (i.e. it should no longer be optional for Member States to do so or not) in order to design a pan-European market for all types of GOs. Moreover, the information available through GOs should be enhanced including also information about compliance with GHG reduction and sustainability criteria. This is relevant, for instance, in the context of the EU ETS where consumers of renewable and low-carbon gases should be able to claim a zero-emission factor on the basis of GOs.

For the sake of a clear separation and integrity of the RED, GOs for renewables could continue to be regulated in the RED, while **equivalent provisions for low-carbon gases should be introduced in the "decarbonised gas package"** — which appears as the logical place. Some risks in terms of timing and inconsistencies remain, as this package is currently planned to be published a bit later than RED, which leads us to **stress one more time the need to publish and treat both pieces of legislation in parallel**. If this can't be guaranteed, and clearly only as a second best option, provisions for low-carbon gases (but limited to definitions and GOs, no opening of targets) could be introduced in the RED.