

Joint Industry Reaction Paper to the Electrification Action Plan



On 17 July 2026, the European Commission presented its Communication on the “Electrification Action Plan” (EAP) defining a list of specific actions to secure Europe’s resilience and security while supporting EU competitiveness. The signatories of this declaration support these goals and recognise the role of electrification in the process.

Between 2010 and 2025, the EU’s electrification rate increased from 21% to 23%. The Action Plan envisages raising this share to 46% by 2040, implying more than a tenfold acceleration of the historical pace of electrification over a comparable timeframe¹. Renewable and low-carbon gases are widely recognised in European energy transition scenarios as an integral part of the future energy mix, particularly in sectors that cannot be efficiently electrified. Consequently, the discussion on increasing the rate of electrification cannot be separated from the discussion on the development of gas infrastructure, its transformation to accommodate renewable and low-carbon gases, and the related investments required for repurposing and further network development.

A successful decarbonisation strategy should be based on the most efficient combination of energy carriers and technologies, considering the full costs and benefits for the energy system and consumers. Renewable and low carbon molecules will be necessary to achieve a timely, inclusive, secure and cost-effective decarbonisation, while also growing the Union’s strategic autonomy. Hence, we urge the Commission to:

1. Enhance energy security by leveraging renewable and low-carbon fuel potential and existing infrastructure.

Achieving a higher degree of energy security while decarbonising can only be achieved by exploiting the sources of renewable and low carbon molecules, as they are defined by the Renewable Energy Directive (EU/2018/2001). They can be domestically sourced, stored at scale and used at the time and place where needed, thanks to the extensive delivery infrastructure, including capillary transmission and distribution gas grids, and ample underground storage capacities. Accordingly, the Commission should:

¹ ACER’s 2026 Monitoring Report “[Decarbonisation of the EU’s natural gas market](#)” confirms that to achieve the electrification target, although only indicative, the “*required pace is three times faster than the highest consecutive-year growth the EU has achieved at any point this century. To put the scale of this challenge into perspective, even China - despite its rapidly surging energy demand and large electricity supply expansion - has only managed to achieve a 1.5% annual jump once, between 2016 and 2017.*”

- Create the regulatory and market conditions for a rapid ramp up of the production of renewable and low carbon molecules, such as biomethane, hydrogen and renewable liquid gases etc.
- Include renewable and low carbon molecules in upcoming calls and support schemes.
- Continue to recognise renewable molecules as part of the zero-emission rating system under the EU ETS and under the review of the Renewable Energy Directive.
- Technology neutrality should be guaranteed also at infrastructure level, enabling continued use of the gas distribution, large-volume underground storage and transmission networks for renewable and low-carbon molecules and guaranteeing a cost effective and secure energy transition.

2. Energy security through complementarity & flexibility before substitution. As stated in the EAP, the electrification of certain end uses – be it heating, industry or transport – can lead to important energy savings, and potentially to GHG savings, however, each case needs to be evaluated separately. This is particularly relevant for the electrification target, under assessment for the post-2030 Energy Union package. A higher electrification rate does not automatically mean a cleaner energy supply. The EU Regulatory framework should not hinder the use of renewable and low-carbon alternatives, where they bring cost effective greenhouse gas reductions, and help ensure a stable and secure source of energy. The Plan also highlights important limitations to rapid electrification, with bottlenecks at infrastructure level and price differentials. The broader energy system infrastructure remains a primary point of concern as, according to the Commission’s data, electric grids require around €730 billion for distribution and €477 billion for transmission grid upgrades,² whilst renewable and low carbon molecules can take advantage of the already existing gas infrastructure. For this reason, the upgrade and extension of the electricity grid should go together with the decarbonisation of the gas grid. Reducing overall costs would create room for additional investment. This can be incentivised through the following measures:

- Facilitate long term off-take agreements and support the integration of renewable/low-carbon molecules into the existing regulatory framework and energy infrastructure. For example, this could be further supported by the full implementation of the Biomethane Tripartite Agreement, led by the Commission and facilitated by industry players and Member States.
- Recognise so-called “*Green Contracts*” for individual and industrial customers, allowing them to opt for renewable gas deliveries through their suppliers.
- Encourage leveraging on the existing infrastructure with condensing boilers powered with renewable gases and hybrid systems, especially in areas with congested or weak power networks, and/or high peak energy demand, taking advantage of flexible solutions like hybrid heat pumps and cogeneration. This allows consumers switching fuels at need while responding to market and local grid congestion signals. Moreover, where district heating systems are available, high efficiency cogeneration based on natural gas (which is progressively decarbonised through the use of renewable and low-carbon gases) can

² European Commission, “[EU guidance on ensuring electricity grids are fit for the future](#)”, 2025.

complement power-to-heat solutions by providing dispatchable electricity and heat during periods of low renewable generation, supporting system adequacy and security of supply.

3. Pursue tailored solutions, effective local cross-sector planning, and consumer empowerment to ensure cost-efficient decarbonisation. Adapting and optimising investment decisions to local needs saves resources for additional investments. This is key especially for the buildings sector, which make up for 40% of all energy used in a year in the EU. Considering the direct impact on consumers, balanced and realistic planning are vital for a success story under an environmental, energetic and social acceptance aspect. Heat pumps offer a valid solution for certain dwellings in specific environmental conditions, however, existing technical and economic restrictions to their installation demand alternative solutions. Renewable liquid and gaseous fuels, district heating and hybrid systems provide robust alternatives for the Commission to achieve its decarbonisation goal, whilst sidestepping the existing electrification constraints. The need for effective local planning, becomes evident when considering the heterogeneity of Member States, in terms of residential stock and industrial geography. Thus, the most effective decarbonisation strategy will require analysing the different conditions across the Union, identifying the constraints to electrification, and the conditions in which alternatives such as renewable and low carbon molecules can provide the most effective decarbonisation strategy. Moreover, the EAP fails to explain the forthcoming economic burden that the strategy will bring to consumers that do not have the option to fully electrify. Where full electrification is not feasible, users remain reliant on the gas grid even as the number of connected users declines. Evolution of the latter has therefore an impact on infrastructure tariffs being paid by end users, whose contribution to system cost recovery varies according to their degree of network utilisation.

- Ensure the upcoming “*Cooling and Heating Action Plan*” takes a genuinely integrated approach across electricity, gas and heat networks, and off-grid fuels, with a level playing field for all technologies, leaving investment decisions to the most efficient and cost-effective decarbonisation solution (including through network charges and hybrid heating system). Using multiple energy vectors and energy systems can provide the necessary flexibility during electricity peak demand.
- Refrain from introducing a “*Clean Heat Market Mechanism*”. Establishing a supply-side mechanism will penalise consumers (residential, services, SMEs) that can’t electrify their heating demand for technical or economic reasons, even when using renewable gases. It will add unnecessary burdens and overregulate.
- While the Commission examines heat pump deployment in public buildings through public procurement, the future EU framework should ensure technology-neutrality – including in areas served by, or planned for, district heating. The most efficient, economical and sustainable solution should determine the choice, not a procurement default favouring one technology.

4. Reconcile competitiveness and the energy transition: Industries with medium to high temperature production processes, such as in the ceramics, chemicals, steel, food & beverage, refining, glass or paper industry cannot further wait. Member States need to create the right conditions for them to compete on international markets while also progressing on their decarbonisation journey. For many of them, electrification is not an option at current market conditions or is technically difficult or impossible to achieve. Offering alternative solutions like

renewable and low-carbon molecules can deliver a fast and effective decarbonisation solution, leveraging existing infrastructure as a strategic asset. The same issue is true in other end use sectors, such as the heating or the transport sectors, which include many users (i.e. households, SMEs, etc.) with limited financial means to make the required investments. Having access to diverse technologies which offer different performances and being able to choose technologies according to technical and economic needs, plays a fundamental role. To allow companies to comply with EU legislation and to support them in their decarbonisation journey, it is important to make these fuels available and to offer economic incentives for their uptake.

- Price signals for individual energy carriers should reflect total system costs (including capacities required to meet peak and seasonal demand and ensure security of supply), and life cycle GHG intensity.
- Network charges should be allocated transparently, be cost-reflective and avoid cross-subsidisation between energy carriers or sectors.
- A differentiated energy taxation regime should apply to energy carriers based on their GHG characteristics at the time of use, to support the energy transition, not solely on the type of energy carrier.

5. Ensure security of supply to all European citizens. Security of supply should be a key consideration in the design of future energy policies. Europe faces growing risks from extreme weather events, geopolitical instability, fossil fuel supply disruptions, cyber and hybrid attacks, as well as challenges linked to the scale of the energy transition. The electricity sector is also experiencing recurring episodes of stress driven by external factors³ to a large extent resolved through the flexibility and reliability of the gas system. A resilient energy system therefore requires diversified and decentralised energy sources to ensure that households, namely heating systems, critical services and essential industries can maintain access to energy during crises. To face these challenges, these measures must be considered:

- Diversify energy sources and supply to reduce dependence on individual fuels, suppliers and import routes.
- Ensure energy availability for protected consumers, including households, district heating, critical services and essential industries, during crises. For example, support decentralised and locally produced energy to strengthen resilience and reduce vulnerabilities in centralised systems.
- Recognise the role of renewable gases as storable at scale, flexible and locally produced energy sources that can complement renewable electrification.
- Decarbonisation policies should be assessed based on the total societal cost, including infrastructure investments, customer conversion costs, network reinforcement needs, energy affordability and security of supply considerations.

³ Hydropower shortages & nuclear fleet outage in 2022, regional blackout in 2025, problems during heatwaves and prolonged droughts in 2025 and 2026.