

RECOMMENDATIONS

Renewable Energy Legal Framework Post- 2030

Designing a Reality-Grounded yet Ambitious Energy Framework for a True Sectoral Transformation

PAPER'S EXECUTIVE SUMMARY

In the context of the ongoing public consultation on the post-2030 Energy Framework, EBA puts forward the following recommendations for the design of the future policy framework:

1. Ensure full **coherence across EU legislation** and the **highest level of harmonisation across national frameworks**
2. Adopt a **pragmatic approach** that **acknowledges the sector's key role in defossilization critical end-sectors**
3. **Ensure a true level playing field for all energy sources**
4. **Optimise the policy architecture** by introducing **EU-wide GHG emissions reduction targets and energy security targets**
5. Achieving a **single biomethane market by harmonising and simplifying the certification framework**
6. Maintain the **application of the cascading principle exclusively to woody biomass**, in line with its current scope under the RED III
7. **Close the funding gap with natural gas prices by stimulating demand** for renewable gases and **ensuring long-term offtake** agreements
8. **Accelerate investments into renewable energy, including renewable gases**

1. Introduction: A new geopolitical context

EBA welcomes the launch of the Commission's work on the post-2030 Energy Framework. This initiative is particularly important in light of the evolving geopolitical landscape, where both longstanding and emerging needs in the energy sector require substantial efforts to improve the EU legislative framework.

The ongoing conflict in Ukraine, along with the new conflict in Iran, is putting unprecedented pressure on the global energy markets. This is increasing risks for supply security, energy prices and inflation, while raising concerns about a potential global recession, as highlighted by financial institutions and world leaders.

In this context, the strategic importance of securing homegrown energy has become an existential issue for the stability and competitiveness of the EU, which can only be achieved by significantly scaling up renewable energy production across the EU.

2. The need for a pragmatic yet ambitious approach

Over the past decades, the EU has committed to unprecedented objectives in environmental and social sustainability. This ambition set a benchmark for the rest of the world, driving change in other countries, which sometimes acted with even greater determination, achieving better results. This new path seemed the inevitable way forward, until economic pressures, political tensions and commercial conflicts made some parts of the world revert to the old paradigm and announce a potential shift from this vision of the future.

The recent energy crises have unveiled the fragility of this ambitious plan and the extent to which it remains vulnerable to factors beyond our control. Yet these crises have also highlighted the complexity of the challenge and forced us to reconsider certain assumptions. To overcome the current situation, the energy sector must adopt a new approach—one that acknowledges reality while consciously leverages pragmatic possibilities, aiming at the most transformative solutions.

This begins with recognizing the EU's high dependence on fossil fuels.

As of 2024, petroleum products still represent the largest share of the EU energy mix: **fossil fuels account for almost 70% of energy consumption** (including 21% natural gas) **while renewables and nuclear together account for just 30%** (20% and 10%, respectively). **Energy independence remains limited: the EU produces only 43% of its energy**, relying on imports for the remaining 57%¹. Furthermore, overall energy consumption and fossil fuel demand continue to rise. For this reason, experts now speak of “*energy addition*” instead of “*energy transition*”, as new sources are not replacing existing fossil sources but rather supplementing them.

These facts cannot be ignored: our economy is still deeply rooted in fossil fuels and remains dependent on them. Faced with this reality, there is an urgent need to explore all feasible and pragmatic solutions for a rapid and effective transition, avoiding long term visions with uncertain outcomes. A grounded and practical EU transition plan should prioritize renewable sources that are:

- **Cheaper**
- **Safer**
- **Closer**
- **Compatible with existing technologies and infrastructure**

Historically, these factors have been the main drivers of rapid and effective energy transitions² and should remain the central criteria when choosing a pathway forward. Solutions diverting from

¹ Data from <https://ec.europa.eu/eurostat/web/interactive-publications/energy-2026#electricity-gas-prices>

² Consider the transition from wood to coal in the 1700s, and from whale oil to petroleum in the 1800s. In both cases, the shift was rapid because the new energy sources were cheaper, more abundant and easier to procure (see whales compared to oil) or distribute

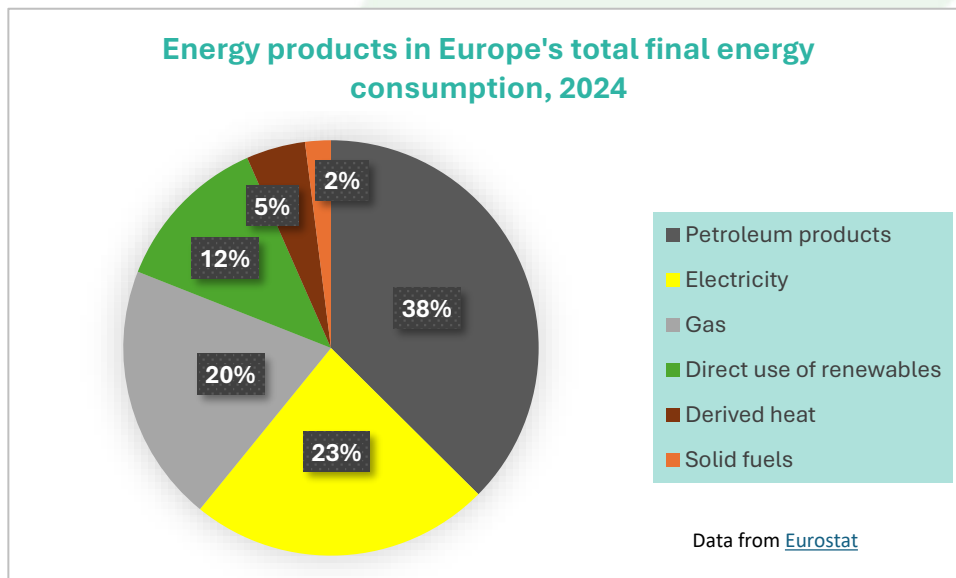
them, although relevant and promising, should be considered long-term possibilities, not immediate strategies.

Biogas and biomethane³ play a central role in this perspective, providing a local, renewable, dispatchable and storable energy carrier, fully compatible with existing gas infrastructures.

Although fossil-based natural gas is expected to decline in Europe over the coming decades, overall gas demand remains significant and continues to grow (by around 2% per year at the global level, with Europe registering a 1% increase in 2024⁴). This highlights the ongoing role of gas in Europe’s energy system. At the same time, a decisive shift toward renewable gas sources should be pursued, with production expected to scale up and progressively converge with fossil-based natural gas demand in the future. **The EU should acknowledge this fact and focus on promoting the most cost-effective and readily deployable solutions that reduce exposure to imported fossil fuels, such as biogas and biomethane.**

While the goal of an increasingly electrified economy remains critical, a fully electrified future is not realistic. Biogases do not aim to be an alternative to electrification but rather complementary to it. Indeed, Europe’s defossilization requires both large volumes of electricity and molecules, a strategic complementarity for the post-2030 framework to deliver defossilization, resilience and affordability.

The new policy framework should objectively reflect the current structure of energy demand, where **electricity still accounts for only about 24% of final energy consumption**, and it is not yet fully renewable, with around 28.2% still generated from fossil sources. EU policies should prioritize the complete defossilization of electricity production while recognising that a **large share of energy consumption remains linked to heat demand and hard-to-electrify industrial sectors**⁵.



(see coal compared to wood). In the case of lighting, petroleum also benefited from compatibility with existing lamps and infrastructure.

³ Whether produced via anaerobic digestion, pyrogasification or hydrothermal gasification.










⁴ Data from IEA, <https://www.iea.org/reports/global-energy-review-2025/natural-gas>

⁵ Data from https://ec.europa.eu/eurostat/databrowser/view/nrg_bal_s/default/table?lang=en

Moreover, it should be acknowledged that the **existing gas infrastructure and related technologies represent a significant asset** that cannot be dismissed without substantial capital expenditure. Any proposal to dismantle this infrastructure (comprising over 2 million of kilometres of transmission and distribution pipelines across the EU, connecting 40% of EU households, with a total investment value of approximately EUR 65 bn⁶) should be grounded in realism, and **reuse should be prioritised wherever possible. This further underscores the strategic rationale for upscaling biomethane production.**

All these aspects cannot be overlooked.

Renewable gases such as biogas and biomethane currently represent the most reliable and fastest deployable solutions to defossilize non electrifiable segments while leveraging existing infrastructure. Although production volumes are still low, they constitute the most cost-effective options available today and should therefore be recognised and supported at political level to enable rapid scaling. **Industrial actors from many different sectors have strongly emphasised this need, voicing their demand for higher volumes of biogas and biomethane** by joining the EBA initiative through the Joint Biomethane Declaration ([link](#)).

	Biomethane 	Green Hydrogen 	E-methane 
Current Volumes	54 TWh 5.2 bcm	3.4TWh 64 kt	Negligible
Technology Maturity	Mature 	Early commercial deployment 	Demonstration to early commercial 
Cost	70-120 EUR/MWh	130-283 EUR/MWh (Depends on specific technology)	87-590 EUR/MWh (Depends on specific technology)
Current infrastructure compatibility			

The figure shows data for Europe

Finally, in the light of the recently adopted EU Bioeconomy Strategy and the expected increase in biomass demand, it is important to recall that **additional factors such as feedstock type, environmental impacts, circularity and local context are crucial for prioritising biomass use efficiently.** Most feedstocks used for biogases production, as well as those used with pyrogasification and hydrothermal gasification⁷, do not compete with other sectors and are unsuitable for food, feed, or material applications. Additionally, biogases plants, unlike other renewable energy sectors, deliver more than renewable energy alone; they also produce

⁶ Data from <https://www.acer.europa.eu/gas-factsheet>

⁷ Pyrogasification and hydrothermal gasification enable the conversion of residual, wet or complex waste streams (such as contaminated biomass, industrial residues or wastewater sludges) that cannot be valorised otherwise.

digestate that can be processed into bio-based materials such as biofertilisers and biogenic CO₂ which can be used for multiple industrial uses including as a feedstock for bio-based polymers, for the manufacturing of e-fuels or certain bio-based materials.

The current geopolitical landscape underscores that energy security remains a critical priority that cannot be ignored. Domestically produced renewable energy is a cornerstone of the EU's industrial base. Framing energy and material uses as opposing objectives, in line with the cascading principle, risks creating ripple effects across the entire EU economy, undermining industrial viability and weakening the EU's broader ambitions to achieve climate neutrality.

3. The right role for the biogas sector

With the RePowerEU Initiative⁸, the Commission has already given political signals to industries to increase the production of biomethane in Europe. This signal has been further strengthened by Europe's objective under the RePowerEU Roadmap to phase out Russian fossil fuels and increase home-grown, indigenous renewable energy sources, including biogas and biomethane. The preparation of the post-2030 energy framework should give due recognition to the biogas and biomethane sector by significantly improving the regulatory landscape and providing clearer and more explicit political support.

EBA highlights that the **renewable energy framework is a critical piece of legislation to secure long-term investments and drive the transformative changes** required in the energy sector. In this context, EBA presents the following general recommendations:

- 1. Ensure full coherence across EU legislation and the highest level of harmonisation across national frameworks.** Given the sector's complexity⁹ and the multitude of EU legislative initiatives, EBA strongly advocates for establishing the renewable energy framework as the **exclusive legislative reference** for all sector-related provisions, particularly for biomass sustainability requirements and emissions calculation methodology, which should remain consistent across all EU initiatives. Additionally, EU legislation should ensure **full alignment and compatibility of national sectoral provisions, preventing market fragmentation** and enabling a single market for biomethane.
- 2. Adopt a pragmatic approach that acknowledges the sector's key role in decarbonising critical end-sectors.** Europe needs more affordable and efficient heating and cooling plans. Given the technical and operational difficulty in fully electrifying the residential and industrial heating sector, EBA asks for a **recognition of renewable gases as a key enabler of demand flexibility and security of supply across buildings and industry**. This recommendation provides a practical solution for hard-to-electrify dwellings by leveraging existing gas infrastructure and avoiding overly costly electrification pathway expansions. In parallel, EBA calls for **strengthening the use of renewable gases as a cost-effective and compatible solution to decarbonise hard-to-abate sectors**, including heavy industry, maritime, aviation and road transport.

⁸ Indicative target of 35 bcm of biomethane by 2030

⁹ Spanning energy, agriculture, waste, climate, gas infrastructure, sustainable finance, cross-border markets and more.

3. **Ensure a true level playing field for all energy sources**, particularly renewable gases, by guaranteeing equal treatment in legislation and the market, in full compliance with the principle of **technological neutrality**.
4. **Optimise the policy architecture by introducing both EU GHG emissions reduction and energy security targets**. The energy framework should be built around emission reduction targets to fully capture the decarbonisation potential on a life-cycle basis of each energy source and ensure technology neutrality. At the same time, the **framework should integrate EU resilience considerations and define clear energy security objectives**. In parallel, reporting and monitoring of national progress should be strengthened through KPIs and publicly accessible dashboards to enable tracking and comparison across Member States. Within this framework, particular attention should be given to renewable pathways delivering high greenhouse gas mitigation benefits, including those addressing methane emissions from waste streams.
5. **Achieving a single biomethane market by harmonising and simplifying the certification framework**. The continued market ramp-up of the sector relies upon the ability to trade biomethane, seamlessly across borders regardless of its end use case. **The Guarantee of Origin (GO) and the Proof of Sustainability (PoS)**, two currently separate certificates that serve distinct purposes, **should be functionally interlinked or re-designed into a single certificate, along with appropriate traceability systems. This should be complemented by an EU-wide harmonised feedstocks classification**, to ensure consistency among Member States. This would overcome market fragmentation, simplify the means through which market participants certify and trade biomethane, while enhancing safeguards against fraud and double counting.
6. **Maintain the application of the cascading principle exclusively to woody biomass, in line with its current scope under the Renewable Energy Directive III**. Extending the cascading principle to all forms of biomass would impose a disproportionate administrative burden, particularly on biogas producers. These operators typically rely on a **wide range of heterogeneous feedstocks** sourced from multiple suppliers. Requiring continuous documentation and verification of such inputs (the majority of which are waste streams not used by other sectors) would be highly impractical and add little value. This approach would also contradict broader EU objectives to simplify industrial and administrative requirements.
7. **Close the funding gap with natural gas prices by stimulating demand for renewable gases and ensuring long-term offtake agreements**. The new framework should promote an effective set of **policy measures and market-based instruments - such as blending obligations, GHG quotas and tripartite agreements** - to create demand pull, provide long-term price stability for producers and consumers, and ultimately support the business case for renewable gaseous and liquid fuels. This would further strengthen the framework's need for EU resilience considerations and energy security objectives.
8. **Accelerate investments into renewable energy, including renewable gases**, through a strategic use of EU funding instruments, notably the Innovation Fund, CEF, and an improved Union Renewable Energy Financing Mechanism. This includes supporting technology adoption in emerging markets, innovative technologies, and biomethane

production within heavy industries. In addition, the EU ETS carbon price should strengthen the competitiveness of renewable solutions relative to fossil-based alternatives, while ETS auction revenues should be deployed more strategically to accelerate investment in renewable gas projects.

Conclusions

EBA appreciates the opportunity to provide its feedback on the preparation of the post-2030 Renewable Energy Framework and remains fully committed to continuing the discussion with the European Commission on how to improve the legal framework to foster and support the development of the biogas and biomethane sector. EBA intends to submit more detailed recommendations in the coming months, within the context of the formal Public Consultation.

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About the European Biogas Association (EBA)

EBA fully believes in the future potential of renewable gas in Europe. Founded in 2009, the association is committed to the deployment of sustainable biogas and biomethane production and use throughout the continent. EBA counts today on a well-established network of over 300 national associations and other organisations covering the whole biogas and biomethane value chain across Europe and beyond.