

A Clean Industrial Deal for Ammonia

Ammonia Europe welcomes the **European Commission's Communication on the Clean Industrial Deal** and its potential to provide the necessary support for industrial decarbonisation while maintaining global competitiveness, as called for by more than 1300 European organisations in the **Antwerp Declaration** and reaffirmed at the 2025 Summit.¹ However, a lack of viable business cases and more concrete and targeted proposals are missing, hampering investments, so further support is required if ammonia production is to remain in Europe.

Ammonia production is an Energy-Intensive Industry (EII) and **ammonia is a key strategic molecule**² for food, chemicals, industry and domestic applications. In addition, ammonia is a pivotal component of the clean technology sector, where it can play a role as a decarbonised marine fuel, an enabler of hydrogen transport and trade, and long-term energy storage.

Summary of main policy asks

- Ascertain ammonia as a key strategic molecule at EU level as part of an EU Critical Chemicals Act² in order to strengthen the EU's food, chemical and energy security
- Decrease cost of production by reducing gas and electricity prices to safeguard the competitiveness of the European ammonia industry
- Provide further incentives on the demand side, like targets for renewable and low-carbon ammonia consumption, particularly within the maritime sector
- Provide dedicated funding for ammonia, for example, by targeting the use of the Industrial Decarbonisation Bank pilot for ammonia production via all decarbonisation pathways and especially CCS
- Adopt a Clean Industrial State Aid Framework that simplifies the process, upholds technology neutrality, considers dedicated resources for ammonia as a strategic molecule and allows for funding cumulation
- Within the Decarbonisation Accelerator Act, recognise industry led sustainability criteria schemes for the purpose of developing lead markets and European resilience, set mandates within maritime, energy and agricultural sector for using decarbonised products and prioritise RED RFNBO industry targeted sectors for permitting procedure time reductions
- Urgently adopt the Low-Carbon Delegated Act to provide regulatory certainty and include a grandfathering clause for CCS projects which have already taken FID before the act was adopted.
- Bring forward the review of the RED RFNBO Delegated Act to realign political vision with project realities
- Ensure that CBAM and ETS provide protection from carbon and investment leakage and deindustrialisation

1 https://antwerp-declaration.eu/

Ammonia Europe Square de Mêeus 37 1000 Brussels | Belgium Contact info@ammoniaeurope.com www.ammoniaeurope.com

Transparency Register 255318194242-02

² <u>https://data.consilium.europa.eu/doc/document/ST-6901-2025-INIT/x/pdf</u>

Decrease costs of production

Energy costs remain a critical challenge for ammonia production, given the sector's reliance on natural gas **which can account for up to 80% of the production cost**. The recent volatility in gas prices, peaking at 190 EUR/MWh in EU in 2022 and still remaining elevated in 2024 at around 35 EUR/MWh compared to 8 EUR/MWh in the US and 5 EUR/MWh in Russia, has severely impacted competitiveness, making targeted support for ammonia industry imperative.³

We welcome the Clean Industrial Deal's focus on reducing energy costs through the accompanying **Affordable Energy Action Plan** but believe it does not go far enough to relieve the strain from high natural gas prices for the ammonia sector.

Affordable Energy Action Plan: reducing short-term gas costs

The Affordable Energy Action Plan needs further attention on lowering gas prices, which can cost x5 as much as competitors in the US, so as not to lose European domestic production. **The Action Plan needs to go further than setting up a Gas Market Task Force**.

While increasing renewable energy deployment is a necessary step, the provisions are too focussed on electrification without giving enough attention to the pressing need for cheaper gas for industries. A balanced approach that ensures affordable and stable gas prices while supporting the transition to cleaner alternatives is essential for maintaining competitiveness.

Affordable Energy Action Plan: reducing medium term electricity prices

While electricity currently does not represent a huge cost for ammonia production, it could increasingly become relevant as one of the pathways for decarbonisation of ammonia is through electrolysis to produce hydrogen. However, most green ammonia projects will have a direct connection to the renewable electricity production, so reduction of network costs will not provide the reductions required for green ammonia to become competitive.

For renewable ammonia production to scale-up, reducing permitting times is more pressing as ammonia projects will likely employ direct electricity. **Priority for reducing permitting times for renewable energy projects with an off-taker subjected to the RED RFNBO industry targets should be given**.

Targeted funding for European ammonia production

The Clean Industrial Deal acknowledges the need for targeted financial support to accelerate the decarbonisation of key industrial assets. For reference, the CAPEX for fully decarbonising European ammonia assets through electrolytic hydrogen for the production of fertilisers alone is estimated at 17 billion⁴. As a

Ammonia Europe Square de Mêeus 37 1000 Brussels | Belgium **Contact** info@ammoniaeurope.com www.ammoniaeurope.com Transparency Register 255318194242-02

³ Energy.ec.europa.eu – energy prices and costs Europe

⁴ Roadmap for the European Fertilizers Sector, Fertilizers Europe, 2023



April 2025

result, to ensure that ammonia remains a key strategic molecule produced in Europe, substantial and dedicated funding should be provided cumulatively at EU and Member State levels.

Hydrogen Bank 3rd auction should prioritise RED III targeted sectors

The next auction of the Hydrogen Bank under the Innovation Fund has earmarked another 1 billion of funding. We believe that the hydrogen production supported under the calls should **require an off-taker in a sector subject to the RED III industry targets** to use RFNBO hydrogen where it will make the most effective decarbonisation impact, like the ammonia sector which currently uses over 30% of all hydrogen produced in Europe⁵.

Industrial decarbonisation bank should prioritise CBAM/ETS sectors in a technology neutral way

The Industrial Decarbonisation Bank and it's earmarked 100 billion budget, 1 billion of which for a pilot in 2025, is needed to bridge the gap for decarbonisation project financing. Since the ETS revenues have been generated from the same industries that require the support for decarbonisation and will need significant investment to reach the EU climate objectives, we believe that **targeted use of those revenues towards the ammonia sector is warranted**, **as part of the bank's pilot**. We also believe that, in light of the Commission's new focus on technology neutrality and the soon implementation of the delegated act on low-carbon fuels that **the Industrial Decarbonisation Bank should be open to both renewable and low-carbon decarbonisation pathways**.

Clean Industrial Deal State Aid Framework cumulation and flexibility

Given the huge investments required to decarbonise, EU funding alone will not be sufficient. As a result, EU funding needs to be supplemented with state aid in a flexible manner.

The new State Aid Framework needs to ensure that tender processes are as simple as possible to accelerate the roll out and should maintain technology neutrality, ensuring that the best decarbonisation pathway can be employed. Funding for ammonia production and related technologies should be envisaged in Member States' State Aid schemes due to its strategic applications for industrial decarbonisation and renewable energy stabilisation. Additionally, **State Aid should allow cumulation with other funding mechanisms to bridge financial gaps, particularly for large-scale projects where public support remains essential**.

Creating lead markets and stimulating demand for low-carbon ammonia

Much of the emphasis at EU level has been on the decarbonisation of production assets with very few incentives creating demand for renewable and low-carbon ammonia products. The IEA forecasts that, to meet net-zero ambition, global ammonia demand (by mass of nitrogen) will be 119 Mt for fertiliser and 50

Ammonia Europe Square de Mêeus 37 1000 Brussels | Belgium Transparency Register 255318194242-02

⁵ Fuel Cells and Hydrogen Observatory, 2022



April 2025

Mt for industrial (non-fertiliser) application in 2030 and rising to 130 Mt and 57 Mt, respectively, in 2050 plus an **additional 203 Mt for marine fuel and 70 Mt for power generation**⁶.

In this regard the Decarbonisation Accelerator Act will be needed to foster economically viable downstream ammonia markets in sectors such as maritime, energy, and fertilisers. Additionally, the Low-carbon Fuels DA under the gas package is needed to provide regulatory certainty and the review of the RFNBO DA under RED III is needed more urgently to address the too restrictive criteria that is hampering project realisation.

> Decarbonisation Accelerator Act should create demand for low-carbon ammonia products

Acknowledged in the Act is the necessity to create lead markets for decarbonised products to stimulate demand. Indeed, for the purpose of developing lead markets, **Ammonia Europe recently launched its own voluntary carbon footprint certification scheme**⁷, and we call for the recognition of existing industry-led certification schemes, like Ammonia Europe's, for the purposes of the envisaged sustainability labelling criteria.

The resilience criteria, also mentioned in the Act, will be necessary to support European production. Ammonia is a strategic molecule for food, chemicals and, in the future, energy resilience as a renewable energy store. Therefore, we call for the resilience criteria to prioritise European production of ammonia for the purposes of food and energy security.

On top of measures put forward in the Act, we believe that further incentives on the demand side, like targets for renewable and low-carbon ammonia consumption in the downstream sectors, are necessary for consumers to be pushed towards buying sustainable ammonia products, particularly within the maritime sector, where alternatives like LNG are being considered first⁸. While this will reduce emissions in the short-term, it will not meet the long-term decarbonisation goals of the FuelEUMaritime and IMO. This would also be in line with the aim of the proposed Sustainable Transport Investment Plan to support the use of renewable and low-carbon fuels for waterborne transport.

> The Delegated Act on low-carbon must be delivered urgently to give regulatory certainty

The forthcoming **delegated act on low-carbon fuels under the Gas Package is urgently needed to provide regulatory certainty**, a view shared by other industry stakeholders⁹. Ammonia production can be readily decarbonised this way by employing carbon capture and storage, or by using nuclear energy for electrolysisbased hydrogen production. For the DA to be conducive to low-carbon project investments, **a grandfathering clause for CCS projects which have already taken FID before the act was adopted should be included. For the purposes of sourcing methane and electricity, ammonia producers should be able to use certified**

Transparency Register 255318194242-02

⁶ Ammonia Technology Roadmap - IEA

⁷ <u>https://www.ammoniaeurope.com/certification/</u>

⁸ <u>https://www.dnv.com/news/Ing-powers-unprecedented-year-for-orders-of-alternative-fuelled-vesselss/</u>

⁹ Joint Statement on Low-Carbon Fuels Delegated Act



April 2025

upstream gas emissions data to highlight best practices and drive emission reductions and clear compliance and verification requirements for third-country methane intensity data and CO₂ storage sites are necessary to ensure a level playing field and hydrogen produced by electrolysis using low-carbon electricity should be able to use PPAs for that low-carbon electricity. Further, any regulatory changes to methane accounting should be carefully planned to avoid uncertainty that could deter investment. In addition, when sourcing natural gas from the grid, Guarantees of Origin or natural gas Purchase Agreements should be deemed sufficient, aligning with the RFNBO Delegated Act.

The RFNBO Delegated Act requires urgent review

We are glad to see in The Clean Industrial Deal that the Commission is starting to prepare for the review of the delegated act on RFNBO by launching a "study to assess the effectiveness of the hydrogen framework and identify possible barriers to the upscaling of renewable hydrogen." The **current strict requirements on additionality and temporal correlation, artificially raise the price of RFNBO hydrogen production** and have already caused projects to fail¹⁰. We believe, along with other industry stakeholders¹¹, **that this study and the RFNBO review should be conducted as swiftly as possible in view of the large gap between strategic and political vision** and market reality for RFNBO projects.

Ensuring a level playing field

> A Carbon price level playing field with third countries is essentially to avoid deindustrialisation Currently, European producers face an uneven playing field compared to third countries both in terms of energy price and carbon price. This combined with the phase-out of ETS Free Allocations, risks EU ammonia producers being unable to compete on the global market. This undermines existing decarbonisation investments and disadvantages EU industries. As a result, **policy instruments such as the CBAM and ETS need careful attention to ensure that their implementation protects EU producers against unfair competition from third countries whilst enabling investments in decarbonisation** to take place in Europe in line with the Draghi report. Additionally, the low-carbon route is essential for the co-production of hydrogen and CO₂ for urea and also enables the production of many other essential chemicals via the utilisation of that CO₂¹². Therefore, the DA on permanent CCU under ETS needs to review the list of CCU applications, which is currently restricted to long-lived building materials.

Transparency Register 255318194242-02

¹⁰ Press release on Achema decarbonisation project

¹¹ Joint Statement on RFNBO reality check

¹² Fig 11. Chemical transformation of CO 2 into commodity chemicals and market volumes – Florin et Al. (2010). An overview of CO 2 capture technologies. Energy & Environmental Science. 3. 1645-1669.