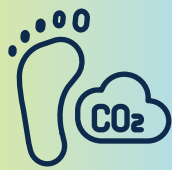


Climate Policy



50%

European fertilizer products have a climate footprint typically half of the global average.

Following the “Fit for 55” package issued by the European Commission in July 2021, the European Parliament and the European Council worked over the past 12 months on their respective approaches and are still negotiating to reach a final agreement.

Elements of the package that are most relevant for the fertilizer industry include the reform of the Emission Trading Scheme, the Carbon Border Adjustment Mechanism and the revision of the Renewable Energy Directive.

The European fertilizer industry supports the EU Green Deal objectives and has therefore been advocating for a responsible and coherent legislative framework that will balance climate ambitions with industry competitiveness.

ETS cost for the European fertilizer industry

	Ammonia	Nitric Acid	Total
ETS CO ₂ emissions	30.6 million tonnes	4.3 million tonnes	
ETS CO ₂ free allowances	24.0 million tonnes	4.6 million tonnes	
ETS CO ₂ emissions to be paid	6.6 million tonnes	-0.3 million tonnes	
Cost of ETS CO ₂ emissions	€530 million*	-€24 million*	€506 million

The European fertilizer industry pays around €500 million in ETS costs yearly for its ammonia and nitric acid production.

*Cost based on average price of €80/tonne CO₂

Source: European Commission 2021.

Numbers are rounded

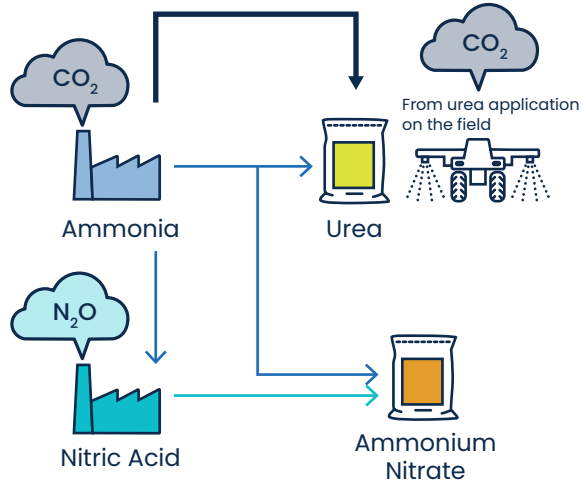
The EU Emissions Trading System (EU ETS) revision

The Emission Trading Scheme is the EU’s flagship instrument to reduce carbon emissions. The scheme works on the “cap and trade” principle. This means that there is a limit on the total amount of certain GHG emissions that can be emitted by the industry. With the revision, the EU aims to lower the overall emission cap even further and increase its annual rate of emission reduction.

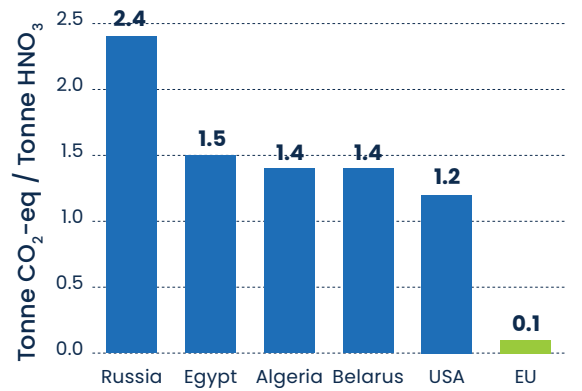
Under the EU Emissions Trading Scheme, an industry exposed to risk of carbon leakage is entitled to free CO₂ allowances up to a benchmark based on the average emissions of the best 10% of the industry’s installations. Fertilizers have two specific benchmarks: Ammonia and Nitric Acid. Free allocations only covers a part of the huge ETS costs faced by the fertilizers industry (cfr table). The exponential increase of ETS allowances price in the past two years, together with the increased ETS ambition, will result in an additional burden for the fertilizers industry.

The EU ETS has been driving the emission abatement of the fertilizer industry, leading to 95% reduction of N₂O emissions over the last ten years, resulting in almost half of the overall GHG direct emissions.

Fertilizers and GHG emissions

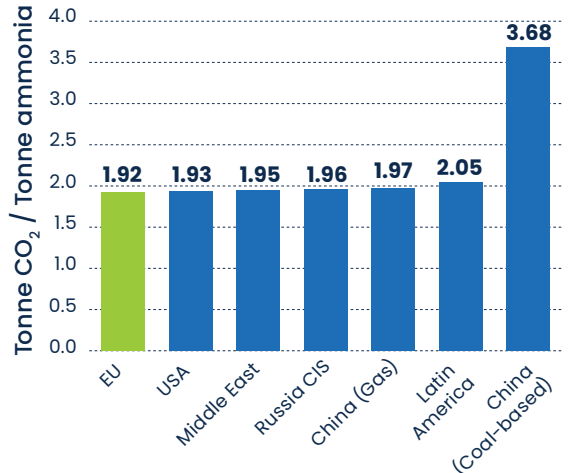


EU fertilizer industry’s excellent record in decreasing nitric acid GHG emissions



Source: Fertilizers Europe

Ammonia efficiency industry reaching technical limits



Source: Fertilizers Europe

To continue this positive path, the industry transition must be enhanced with the right framework and financial support. By avoiding drastic changes to the benchmarks at least until 2030, the industry will be offered a greater investment predictability. Redirecting all ETS revenues to hard-to-abate sectors and ensuring the possibility to access sector specific funds would guarantee a balanced decarbonization among different industrial sectors.

Fertilizers Europe has been advocating for an effective and balanced review of the EU ETS to enable the transformation of the European fertilizer industry without harming its competitiveness.

Carbon Border Adjustment Mechanism

The EU endeavours to maintain its leadership role in global action against climate change. However, if measures are unilateral, Europe risks having a limited impact on global reductions in GHG emission, while damaging the competitiveness of its domestic industrial base.

The introduction of the Carbon Border Adjustment Mechanism (CBAM) by the European Commission is aimed at preventing the risk of carbon leakage and supporting the EU’s increased ambition on climate mitigation.

The objective of this mechanism is to equalise the price of carbon between domestic products and imports while ensuring that the EU’s climate objectives are not undermined by production relocating to countries with less stringent policies.

Nitrogen fertilizer producers are among sectors at highest risk of carbon leakage due to the industry’s emission intensity and exposure to international trade. The European fertilizer industry therefore welcomed the European Commission’s initiative to establish a carbon border adjustment mechanism. , but, since the beginning, underlined that for the fertilizer sector CBAM would only work if EU ETS free allocations at full benchmark level

were maintained at least till 2030 and if CBAM would also foresee a solution for the export part of the production. A well-designed CBAM could be particularly important for the sector since **already today the main European fertilizer products have a climate footprint that is typically half of the global average.**

An effective and well-designed CBAM should aim at avoiding the replacement of ammonia, nitric acid and fertilizers produced in Europe with imports from countries with a worse carbon footprint while at the same time allowing the transformation of the industry toward a zero-carbon production. Fertilizers Europe is therefore advocating for the CBAM designed as a reinforcement of current carbon leakage measures with the stepped-up climate ambition.

Why do we need an equal treatment between the ETS and CBAM sectors

Achieving a higher level of emission reduction ambition, requires mechanisms to strengthen carbon leakage protection and minimise negative impact on exports.

Complementarity of CBAM with free allocation is key to protect value chains, mitigate the impact on trade flows and provide certainties for low-carbon investments.

CBAM, and the current system of ETS free allocations, should aim to effectively support the industry in meeting the increased climate targets. A higher level of climate ambition should correspond to a higher level of carbon leakage protection. ETS free allowances, although during a period with sensibly lower CO₂ costs, have proven effective against carbon leakage. Therefore, sectors covered by a CBAM, which is still not proven to be an effective instrument, should not be penalised under the ETS.

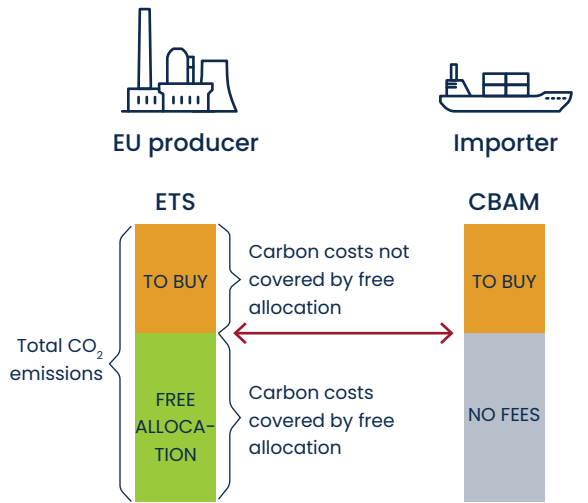
CBAM – what about exports?

The EU fertilizer industry is an exporter for specific fertilizer products and selected technical products that have a lower footprint than their international competitors. The industry calls for export safeguard provisions which are crucial to level the playing field in global markets. The lack of solution for exports in the proposed legislation will harm and put at serious risk the competitiveness of exporting industries. Already today, the European industries are faced with a competitive disadvantage compared to countries without an ETS scheme in place. The exports competitive disadvantage would become unbearable if the reduction of free allowances, due to the increase ambition of the ETS, will combine with a CBAM that also foresees a decrease in free allowances.

High trade exposure puts EU nitrogen fertilizers producers at risk of carbon leakage



Current carbon leakage framework must be ensured for CBAM sectors until 2030



Rock solid implementation

A proper monitoring and reporting mechanism must be in place as part of the CBAM to ensure full implementation. Only a system based on verified real emission declarations and certification of importer installations would help prevent circumvention and minimize the risk that spot checks after submission of the declaration fail to identify fraudulent carbon footprints. By using transparent and auditable criteria, the officials would be in a position to ensure a real level playing field between EU and non-EU producers.

Why keep free allowances for fertilizers ?

Key to maintain exports until CBAM is up and running

CBAM only addresses EU imports. Free allocation phase out to impair access to export markets for the EU industry

Limit impacts on strategic value chains

Smooth the impact on value chains, domestic supply security and trade flows

Key to successful decarbonisation

Staying competitive vis-à-vis non-EU producers key to be in a financial position to invest in low-carbon technologies

Positive impact on employment in Europe

Retaining free allocation results in a better impact on employment (see the Commission's Impact Assessment on CBAM)

Key to industry competitiveness during CBAM testing period








In the transitional period, no CBAM levy for non-EU producers
Testing period key to verify the effectiveness of the CBAM before phasing out of free allowances from 2030
Coexistence of free allocations and CBAM during a testing period is WTO compliant - the two would address different carbon costs

Renewable Energy Directive (RED)

The revision of the Renewable Energy Directive is set to increase a target to produce 40% of the EU's energy from renewable sources by 2030. The revised Directive now also includes a specific target for industry such as the fertilizer sector. More specifically, it proposes a 50% renewable hydrogen target by 2030 for all hydrogen used for final energy and non-energy purposes, including ammonia production. This is critical as the fertilizer sector produces and uses around 3 million tonnes of hydrogen, making it the sector most concerned by this target.

The negotiations in the European Parliament and the European Council are ongoing. Fertilizers Europe has been actively involved in presenting its priorities and putting forward proposals to MEPs and Member States.




Fertilizers Europe priorities:

-  Realistic target, in line with the actual share of the renewable energy available in the Member States.
-  Ensure technology neutrality to recognise regional differences across the EU.
-  Development of the framework to ensure production remains in the EU.
-  Extend the target to downstream products to ensure there is a market for Renewable Fuels of Non-Biological Origin.
-  Condition hydrogen target to actual share of EU-renewable production in 2030.
-  Have a gradual target phase in and/or potentially shift the 50% to 2035 to be more in line with other directives of the Fit-for-55 Package.
-  Certification: Ensure homogeneity to ensure ammonia certification is consistent with the EU's approach.

Industry's abatement potential

Fertilizers Europe commissioned DECHEMA with a study focusing on the pathway for abating ammonia production GHG emissions. The analysis concluded that the total abatement potential of the industry by 2030 was 13-19% (this is based on the current scenario and doesn't take into consideration the increasing level of ambition and linked increased support from Member States). This estimation demonstrates the magnitude of the challenge posed by the new targets proposed by EU officials and that these will require significant support for the industry in its decarbonisation efforts.

Decarbonising the fertilizer industry - DECHEMA study results:

-  Industry abatement potential is 13-19% by 2030.
-  Ammonia production using Carbon Capture and Storage (CCS) is a low hanging fruit and would be rapidly available and cost-effective in several EU regions.
-  By 2030, certain regions will have low enough forecasted renewable electricity prices for electrolysis-derived ammonia to be an attractive option. Due to the fast-moving environment and the geopolitical situation such a scenario could in some cases be reached much faster.

Engaging with stakeholders

Fertilizers Europe organised several public virtual events aiming to advance the dialogue with relevant policymakers and wider stakeholders on key legislative and policy topics on energy and climate.

Fertilizers Europe participated in the EU Industry Days event, this time with a local event entitled "All roads lead to low-carbon ammonia. Regional perspectives". The event aimed at raising awareness among policymakers and other stakeholders about different pathways across Europe for decarbonising ammonia, like electrolysis-driven hydrogen and the use of Carbon Capture and Storage and called for the Renewable Energy Directive (RED) to address the local complex variation in terms of renewable energy availability. The event also aimed to present and discuss the results of the DECHEMA study on the abatement potential of the European fertilizer industry.



www.youtube.com/watch?v=8elwljOh_pw

Under the umbrella of the EU Green Week organised by the European Commission on 2 June 2021, Fertilizers Europe organised an online event entitled "Green Ammonia: an enabler for Hydrogen Economy." The goal of the event was to showcase the role that the fertilizer industry can play in reaching the climate ambitions outlined in the European Green Deal, as well as highlighting the strategic role of green ammonia in developing a hydrogen economy. The conference saw the participation of high-level speakers from EU institutions, industry and NGOs, and attracted 170 live attendees and many more on demand.



www.fertilizerseurope.com/green-ammonia-an-enabler-for-hydrogen-economy



From top left to right: Sonja van Renssen, Journalist, Energy Monitor; Peter Handley, Head of the Energy-Intensive Industries and Raw Materials Unit, DG GROW; Petr Bihnack, Energy attaché, Permanent Representation of the Czech Republic to the EU; Branislav Brezny Managing Director, R&D organisation VUCHT; Klazien Ebbens Manager Sustainability, OCI; Michał Wondolowski Climate Technology and Policy Manager, Bellona



From top left to right: Ruth Sharpe, Group Editor, Raw Materials, Argus Media; Trevor Brown, Executive Director, Ammonia Energy Association; Morten Petersen, MEP, Vice-Chair ITRE Committee; Theodora Kouloura, Kavala's Fertilizers COO, Fertilizers Europe Board Member; Wouter Demenint, Business Manager, Port of Rotterdam International; Jonas Helseth, Director, Bellona Europa

Ammonia certification

With increased EU climate targets, the fertilizer industry is advancing its efforts in low-carbon ammonia production. One of the first emerging needs in this process was the development of a certification system for ammonia products which otherwise appear identical regardless of the technological pathway used in production. Fertilizers Europe has started the process of developing an ammonia certification scheme. The first phase of the project which implied the inception and the exploratory study for the development of an ammonia certification has been successfully completed with a clear identification of the technological pathways and the regulatory context. The second phase of the project, dedicated to the development of the certification system, was launched at the end of 2021 and will lead to the first pilot certification project at the end of 2022.