







I would like to take this opportunity to recognise a fantastic effort of our member companies to ensure safe working environment and keeping production going during the COVID-19 outbreak, and I want to thank all colleagues across Europe for their dedication and professionalism that allowed our industry to play its part in ensuring food security for the next season.

Foreword - Director General

THE EUROPEAN GREEN DEAL POSES A MAJOR CHALLENGE FOR ALL ENERGY INTENSIVE INDUSTRIES, INCLUDING THE MINERAL FERTILIZER SECTOR. BUT IF WELL-ORCHESTRATED, THE GREEN DEAL CAN ALSO BECOME AN OPPORTUNITY TO POSITION THE FERTILIZER SECTOR IN THE CENTRE OF EUROPE'S LONG-TERM PLANS. FOCUSING ON NUTRIENT USE EFFICIENCY CAN HELP EU AGRICULTURE TO BECOME MORE SUSTAINABLE AND RESILIENT.

This review looks back over 2019 and early 2020, at the challenges of the association and the industry as well as the interaction with regulation and policy, capturing Fertilizers Europe's views and proposals for the upcoming policy developments in Europe.

COVID-19

The outbreak of the COVID-19 in the spring 2020 had an immense impact on the entire society, leading to important and necessary emergency measures taken by EU Member States.

However, this led to Single Market disruptions, including in the agri-food supply chain. Actions from the Secretariat helped to ensure that fertilizer products were recognised by the EU and Members States as an indispensable part of the food-chain. The introduction of Green Lanes and inclusion of 'agricultural inputs' among essential goods

resolved logistical issues our Members were facing when supplying fertilizer products to farmers across the EU.

I would like to take this opportunity to recognise a fantastic effort of our member companies to ensure safe working environment and keeping production going, and I want to thank all colleagues across Europe for their dedication and professionalism that allowed our industry to play its part in ensuring food security for the next season.

For an association based on communication, interaction and persuasion, COVID-19 has had its own challenges. We have continued to do our best, including responding to public consultations and making contacts with policymakers via the phone and e-mail, but we have had a number of important events cancelled with short notice, including two events in the European Parliament,

our participation at the Forum for the Future of Agriculture in Brussels, and our important annual Safety Seminar. Like everyone else, we had to organise our work from home, and use on-line tools to arrange meetings.

THE EUROPEAN GREEN DEAL

2019 was a year of change in Brussels with the election of the new Members of the European Parliament and the appointment of the Ursula von der Leyen's European Commission. Few days after taking the office, von der Leyen announced the European Green Deal, setting Europe on a path towards a low carbon future. For an energy intensive industry like the fertilizer industry, this will have major impacts on many fronts, including the carbon price, but it will also open opportunities. For Europe to become green in industry and agriculture, it needs an efficient and innovative European fertilizer industry.

INTERNATIONAL COMPETITIVENESS

The transition of our sector in line with the EU's ambitions can only be achieved if the level playing field will be preserved and the European industry will remain fit to compete internationally, as fertilizers are produced and traded globally in large amounts. Focus on the necessary economic framework in the EU and the correct international trade relations is part of the foundations for our industry.

The early autumn 2019 has brought important decisions in the trade area. The anti-dumping measures on UAN originating in Russia, US and Trinidad have been confirmed, and the EU Commission has decided to open a sunset review on antidumping duties on AN from Russia.

FARM TO FORK STRATEGY

In May 2020, the Commission unveiled the 'Farm to Fork' strategy designed to pave the way towards a more sustainable food policy by addressing all stages in the food chain. During the first quarter of 2020, the Secretariat put a strong effort into meeting policy makers with the aim of actively contributing to the development of the upcoming strategy. As an industry, we accept the challenge to reduce environmental impact of nutrient losses put forward by the Commission in the Farm to Fork strategy. However, the proposed targets, especially in the time frame are too ambitious given achievable farm practices. A thorough impact assessment is absolutely needed to understand the implications of such policies for both EU farmers and the entire agri-food value chain. Moreover, such policies need to be matched with an adequate level of support, e.g. to roll out best fertilization practices and ensure the farmers' access to supporting technologies and tools.

LOOKING AHEAD

Looking ahead, the issues in 2020 will include the implementation of the EU Fertilizing Products Regulations, the EU ETS phase IV implementation including new guidelines on state aid for indirect compensation and the works on the carbon border adjustment mechanism to fully address industry's exposure to carbon leakage. However, it is key that we move forward with the development of the European fertilizer industry's low-carbon roadmap, identifying priorities to advance the transition towards the low-carbon fertilizers, and solutions to limit the losses of nutrients to the environment in agriculture.





The future of the European fertilizer industry in the light of the EU Green Deal

On 11 December 2019 the European Commission presented the European Green Deal, setting Europe on a path towards a low carbon future. Fertilizers Europe considers the European Green Deal a priority and supports the development of policies that enable the transition to a climate-neutral economy by 2050, whilst keeping EU industry competitive. Under the right legislative framework, the European fertilizer industry can play a vital role in delivering on the EU's ambition to lead sustainable agricultural production as well as contribute to the transition towards low-carbon economy.

With the EU Green Deal, the European Commission hopes to unlock about a trillion-euro worth of investments needed for the European Union (EU) to set off on a thirty-year long journey of deep economic transformation and sustainable growth.

The Green Deal will have a profound impact on key areas of the economy, requiring all sectors to play their part in decarbonisation efforts. For the European fertilizers industry, the Green Deal brings many challenges but also opportunities if supported by the right policy solutions.

Avoiding carbon leakage by ensuring a level playing field

European fertilizer producers operate in a global market as fertilizers are traded in large amounts between continents. Today, the European fertilizer industry's competitiveness is already affected by the EU Emissions Trading System (ETS). Further decarbonisation will increasingly expose the industry to the risk of carbon leakage.

Current measures under EU ETS are not enough to limit European fertilizers sector's genuine exposure. Since 2014, the sector has had no surplus and is a net buyer of emission allowances. Investments in ammonia/fertilizer capacities are happening mostly outside the EU.

Imported fertilizers with a higher carbon footprint have increasingly substituted domestic EU product, resulting in an import penetration increasing from 20% to 30% of EU consumption over the last decade and a net increase of GHG emissions globally.

In order to address the risk of carbon leakage due to the asymmetry in climate ambitions between the EU and its trading partners, the European Commission introduced in the Green Deal communication a proposal for a Carbon Border Adjustment Mechanism to ensure that the price of imports reflects more accurately their carbon content.

Carbon border adjustment mechanism



Fertilizers Europe calls for a level playing field between EU producers who are subject to EU ETS carbon costs and importers who are not.

The proposed model is based on continuation of the present principle of EU ETS including free allowances:

The adjustment should be based on the difference between the product

benchmark set in EU ETS and the carbon intensity of imported products, thus giving foreign exporters an incentive to improve their production.

Planned carbon border adjustment mechanism needs to include equivalent measures to ensure competitiveness of EU-based exporters.

Paving the way to green ammonia and low-carbon fertilizers

Over the years, the European fertilizer industry has made huge improvements in the energy efficiency of its production. We are at the point where any future investment in current technology will only result in marginal efficiency improvements. Newly build plants are generally very efficient, but on average, Europe's ammonia plants despite their average age are still the most energy efficient in the world and have the lowest CO₂ emissions. As the only region in the world, European fertilizers producers have drastically reduced the emission of N₂O from its production.

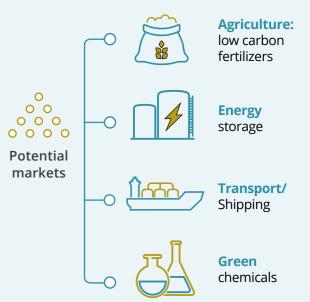
The European Green Deal and the ambition to decarbonise our economy means that fertilizer industry will need to reinvent itself and go beyond current production technology.

This is a challenging task, but it can be done under the right conditions.

Today's production of nitrogen fertilizers is energy intensive, mainly based on natural gas as a raw material and steam methane reforming (SMR) as the main technology. However, several low carbon technologies such as carbon capture and storage and the use of electrolysis are emerging that could allow for low-carbon ammonia production, ammonia being the building block of fertilizers. These technologies, however, are currently not economically justifiable. The Green Deal needs to give incentive to invest in large scale demonstration projects and knowledge build-up.

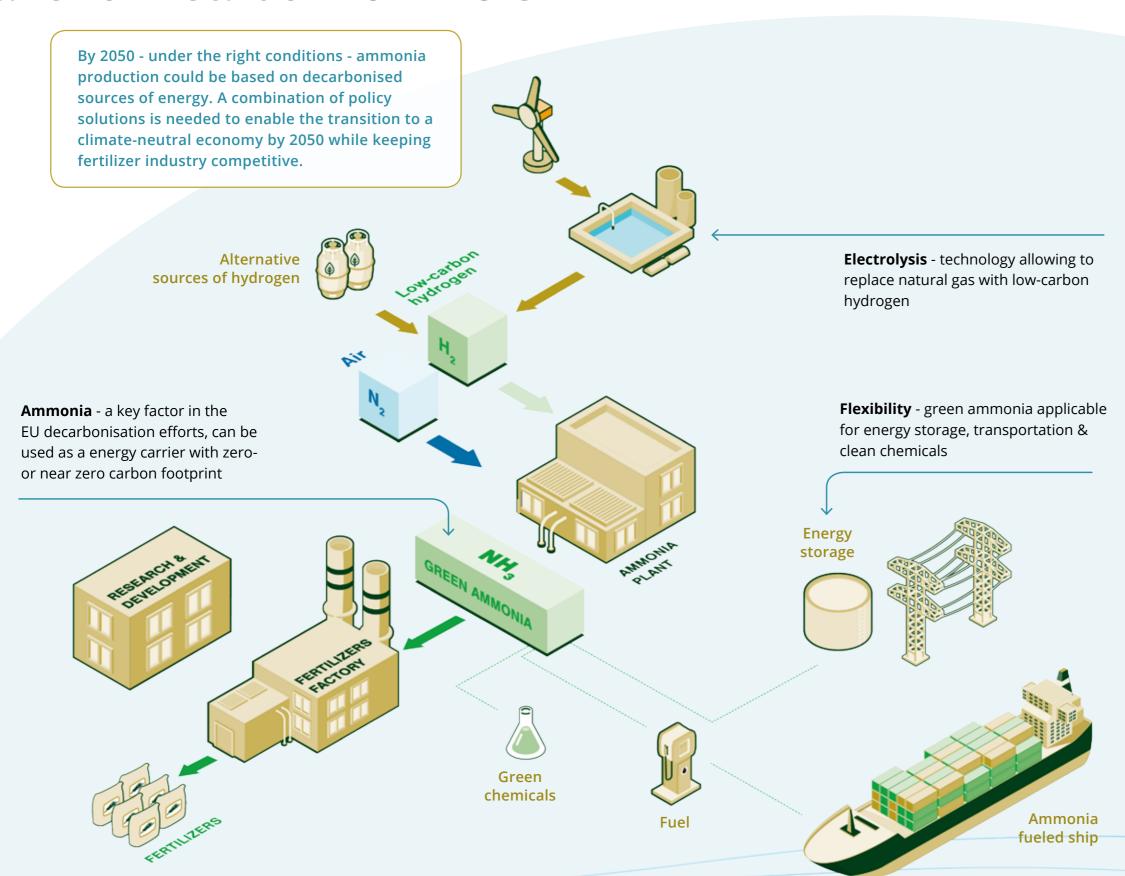
The policies stemming from the Green Deal might also result in opening new markets for ammonia, which today is mostly associated with fertilizer manufacturing. In the future, ammonia produced with zero or near-zero carbon footprint could also help decarbonise other sectors, like energy and transport. Due to its high energy density and ease of storage and transport, ammonia is a technologically superior and more energy efficient carrier of hydrogen than hydrogen itself. Therefore, it can be used as direct or indirect fuel for high temperature heating, for power generation and in long range maritime transport combustion engines and fuel cells drives.

Beyond fertilizers - creation of the market for green ammonia





Paving the way to green ammonia and low-carbon fertilizers



Low-carbon and competitively priced energy and feedstock Infrastructure for CO₂ management and avoidance Infrastructure to transport low-carbon resources Funds to finance the transition

Advantages of ammonia compared to hydrogen

1	ı
Ammonia	Hydrogen
None	High
Easy	Difficult
High	Low
Higher	Lower
	None Easy High

Reconciling agriculture with environment

As part of its flagship European Green Deal, the European Commission unveiled in spring 2020 the 'Farm to Fork' and 'Biodiversity' strategies meant to pave the way towards a more sustainable food production and reinforced food security in Europe. Fertilizers Europe accepts the challenge to reduce environmental impact of nutrients but calls for a thorough impact assessment to identify realistic objectives and understand the implications of such policies, as well as points at nutrient use efficiency and applying more knowledge per hectare as the main drivers of change.

'Farm to fork' and 'Biodiversity' strategies

On 20 May 2020, the European Commission unveiled the 'Farm to Fork' and 'Biodiversity' strategies. The strategies stand for a fair, healthy and environmentally-friendly food system while protecting nature and reversing the degradation of ecosystems. The Commission put forward an ambition to reduce nutrient losses by at least 50%, while ensuring no deterioration in soil fertility. This is expected to result in 20% reduction of fertilizer use.

While accepting the challenge to reduce nutrient losses, Fertilizers Europe called for an impact assessment to evaluate if the proposed target is too ambitious in the suggested time frame, given achievable farm practices. Moreover, the level of ambition will have to be matched by an adequate level of

The proposal to develop an Integrated Nutrient Management Action Plan is a step in the right direction, triggering more balanced fertilization and more sustainable nutrient management across Europe. The Nitrogen Use Efficiency (NUE) indicator developed by the EU Nitrogen Expert Panel offers ready-to-use solutions to ensure more efficient nitrogen use in food

production. European fertilizer industry is committed to working hand-in-hand with farmers and policy makers on this matter.

Fertilizers Europe underlined the importance of considering all sources of nutrients available (i.e. organic fertilizers such as slurry or processed manure and mineral fertilizers) and taking into account local farm conditions across Europe when designing long-term EU agricultural policy.

Future EU agriculture and environmental legislations should apply a broad approach on fertilizers, promoting best fertilization practices, the dissemination of supporting technologies and services like advanced fertilizing products, precisely targeted fertilizers to specific crops, combining their use with smart farming application methods as well as new tools and real-time data.

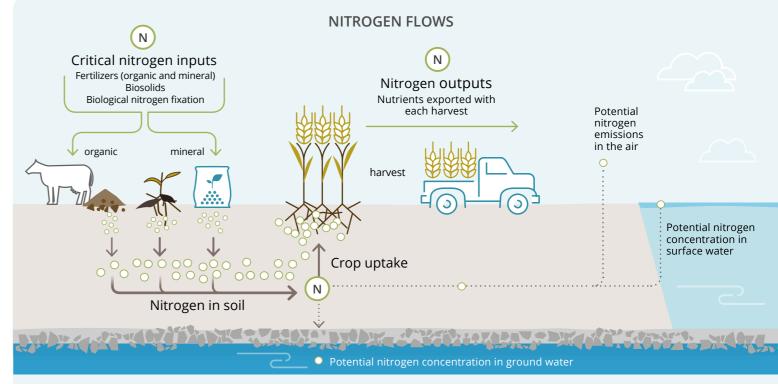
> To reconcile agriculture with environment, future EU legislation should focus on nutrient use efficiency and applying more knoweldge per hectare. Such approach will allow to minimise environmental impacts and achieve better crop yields while ensuring food security in Europe.



Nitrogen Use Efficiency Indicator

Nitrogen (N) is essential for life and is a main nutrient for plants. However, surplus nutrient application affects air and water

quality and has an impact on biodiversity. The illustration below shows nitrogen flows and the role of Nitrogen Use Efficiency (NUE) indicator to ensure optimal nitrogen use.



The Nitrogen Use Efficinecy indicator developed by the EU Nitrogen Expert Panel can be used to improve nitrogen use in food production, hence reducing losses to the environment.

Critical N input: necessary for crop growth

N output: an indicator of farm productivity

N surplus: an indicator of potential environmental impact

NITROGEN USE EFFICIENCY INDICATOR (NUE)

3 Crop production scenarios

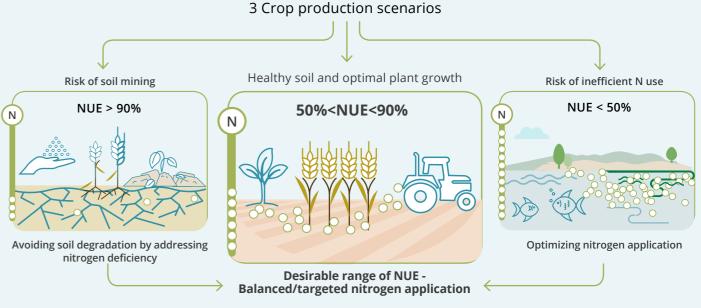


Figure 1: Infographic adapted from the study presented at the IFS Proceedings 842, 'Required changes in nitrogen inputs and nitrogen use efficiencies to reconcile agricultural productivity with water and air quality objectives in the EU-27' and EUNEP's report on 'Nitrogen Use Efficiency (NUE) - an indicator for the utilization of nitrogen in agriculture and food systems'.



The NUE indicator was developed by the EU Nitrogen Expert Panel. This Panel brings together experts from academia, EU institutions and industry who work for the improvement of nitrogen use efficiency in the agri-food chain.

The NUE indicator is based on nitrogen input and nitrogen output at different levels and provides information about resource use efficiency, the economy of food production (nitrogen in harvested yield), and the pressure on the environment (nitrogen surplus).

The NUE indicator allows farmers to examine differences between fields, farms, farming systems and between years. It can be adapted to site and crop-specific conditions, and takes efficiency as well as environmental aspects into consideration. Such an approach can reward farmers for continuous, progressive improvement of their nitrogen use efficiency at farm level. The advantage of such an indicator is that it could easily be compared with local/standard values, thus leading to a corridor of good practices that improve farm performance.



Nitrogen indicators of farm performance across Europe



EU Nitrogen Expert Panel showcased at the 2019 IFS Agronomic Conference its latest publication "Exploring nitrogen indicators of farm performance

among farm types across several European case studies" written by Prof. Miguel Quemada et al.

The study tested the NUE approach at farm level. Data from 1200+ farms (from six European countries) were processed to understand differences in nitrogen performance between farm

What are the main findings?

The report demonstrated how the economic and environmental performance of a specific farm is closely related to its type and management.

- → The study showed that arable farms have the highest nitrogen use efficiency, produce the highest yields and emit the lowest nitrogen to the environment.
- → In contrast, livestock farms have the lowest nitrogen use efficiency and the highest level of losses to the
- → Mixed farms, with crop and livestock, have values between the specialized farms.

A Guidance document was developed that clearly defined how to account for the different components of the nitrogen balance, allowing comparison among the indicators and providing a twodimensional framework to analyse farm performance.

What implications for policy discussions?

This scientific paper demonstrates that the indicators proposed by the EU Nitrogen Expert Panel are suitable for setting realistic targets and monitoring of progress in improving efficient nitrogen use in food production, thus, they should be taken up by the designed measures in EU agricultural legislation.



Adapting nitrogen inputs to reconcile agricultural productivity with EU's environmental objectives

The scientific study entitled "Required changes in nitrogen inputs and nitrogen use efficiencies to reconcile agricultural productivity with water and air quality objectives in the EU-27" by Prof. Wim de Vries and Lena Schulte-Uebbing (Wageningen University) assessed the impacts of nitrogen in the environment and identified the distribution of potential hotspots in Europe. The study was funded by Fertilizers Europe, the International Fertilizer Association and the European Environmental Agency.

The study considered all agricultural nitrogen inputs (i.e. mineral nitrogen fertilizers, nitrogen from manure, biosolids and biological nitrogen fixation) and assessed where agricultural nitrogen losses currently lead to negative impacts on biodiversity, eutrophication and drinking water quality

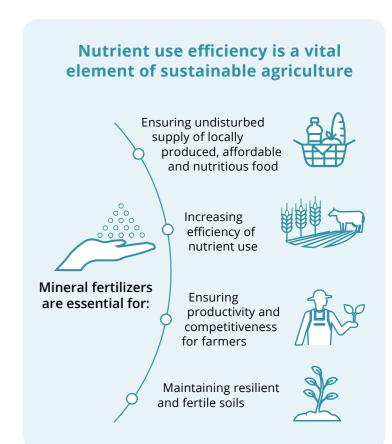
The assessment was linked to an analysis of the quantity of nitrogen needed in order to achieve target yields in Europe.

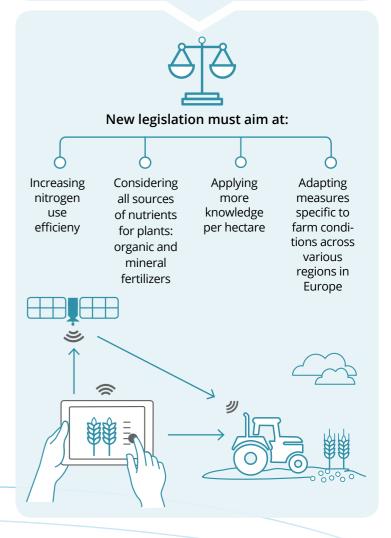
What are the main findings?

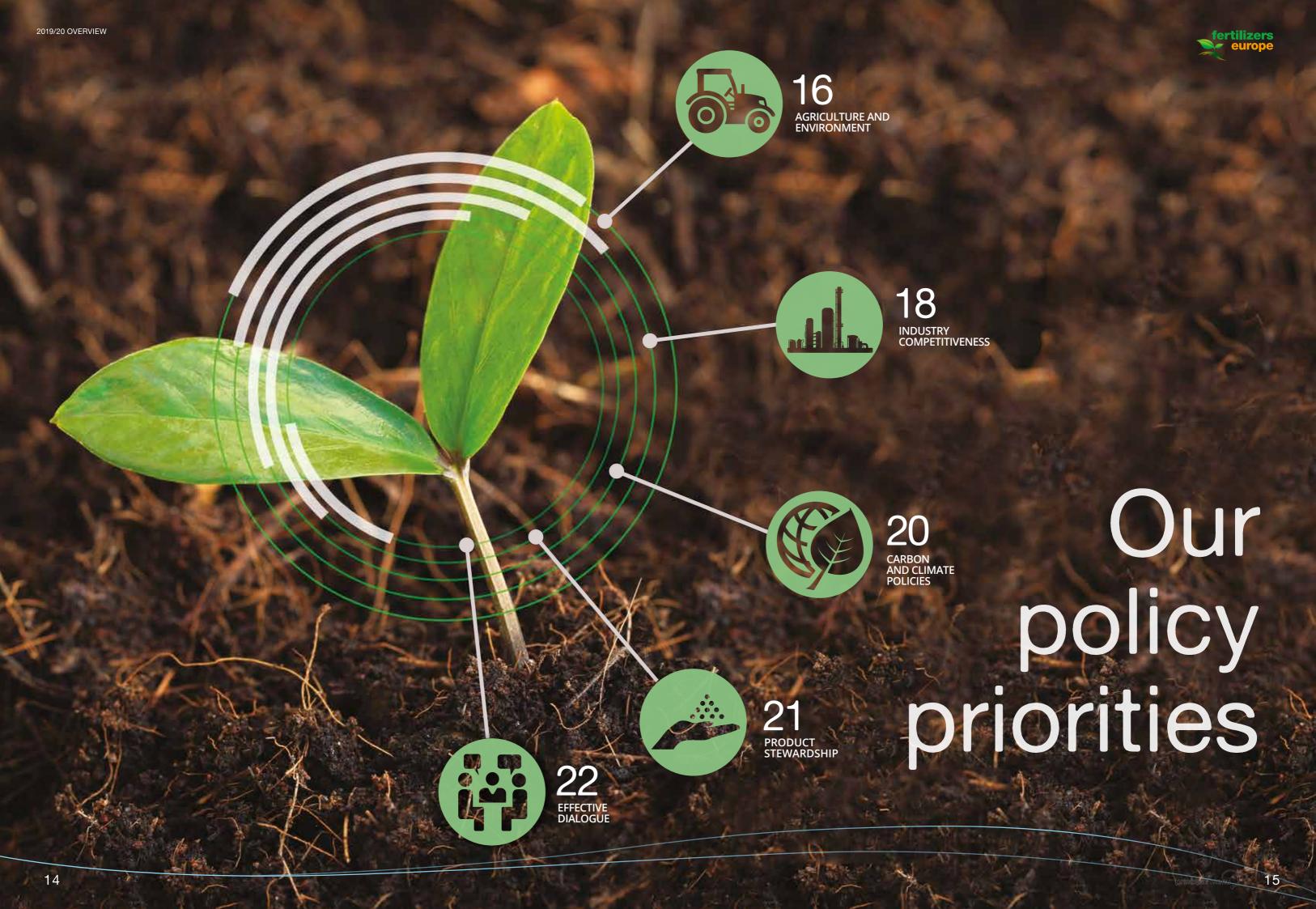
- > Results showed that groundwater protection today in the EU can be reconciled with agriculture production.
- → However, the picture looked quite different when considering ammonia emissions and surface water protection. This was particularly the case in regions with high actual nitrogen inputs from livestock production, such as Ireland, the Netherlands, Belgium and Luxembourg, Brittany in France and the Po valley in Italy. In this context, a significant increase in nitrogen use efficiency is necessary, and for some specific cases it has to be complemented with other practices in order to comply with EU's environmental objectives.

What implications for policy discussions?

The study identifies at a regional level the necessary reduction of ammonia emissions and increase in nitrogen use efficiency to attain sufficient yields, while reaching air and water quality goals. The different approach of this study which differentiates the situation amongst various EU countries, paves the way to a better targeting of environmental measures as well as nutrient management tools.







Agriculture and environment

The current European regulatory context increasingly focuses on environmental issues. Being circular economy, climate change or water quality, all these political priorities are challenging fertilizer producers and farmers. Fertilizers Europe strives to be at the forefront of the agricultural discussions to pave the way to a future-proof EU agriculture sector.

EU Fertilizing Products Regulation

From summer 2022 onwards, fertilizer producers, traders and farmers will be confronted with the Fertilizing Products Regulation (FPR), which will change the way fertilizers are receiving the CE mark and the labelling requirements provided on the products.

The adoption of the FPR is part of the Circular Economy Action Plan. The new legislative framework is designed to ensure:

- Harmonised rules in placing the CE marked Fertilising Product on the market.
- > Free movement of products in the single market.

Manufacturers are faced with important challenges to adapt their current practices and be ready for the application of the EPR.

They will have to adapt their current practices to the new FPR requirements in terms of conformity assessment including assessment from a notified body, labels requirements, criteria on the agronomic efficiency, biodegradability criteria for controlled release fertilizers and timelines for compliance. Fertilizers Europe has been working closely with the European Commission in order to enable the implementation of the EU Regulation 2019/1009 on fertilizing products as of 16 July 2022.

Johanna Bernsel, Deputy Head of Unit, European Commission took part in the Fertilizers Europe workshop on the Fertilizing Products Regulation Implementation to provide participants with practical overview of the different processes that fertilizer manufacturers need to put in place in order to be compliant with the regulation.

Enabling infrastructure

Some provisions started to apply in April 2020 in order to allow EU countries to set their infrastructure for the new conformity assessment. In parallel, the mandate of the European Commission to CEN foresees the availability of the harmonized methods available as of April 2022 and harmonized standards "EN" as of April 2024.

The focus on Circular Economy remains high on the agenda

- → To ensure legal certainty, the Commission proposed delegated acts to include new Component Material Categories, such as struvites, ashes and biochar in the Regulation.
- The Joint Research Centre of the European Commission is undertaking a study, with the aim of developing a proposal regarding the safety and agronomic efficiency criteria for by-products in the FPR. This proposal is welcomed by the industry as it will further enhance the circularity of the mineral fertilizer sector.

Guidance document for manufacturers

Based on the FPR, the European Commission will publish by 16 July 2020 at the latest a guidance document for manufacturers and national market surveillance authorities with clear information and examples concerning the visual appearance of the label. Fertilizers Europe actively supported the developments of this work, with the aim of allowing a pragmatic approach and facilitating the adaptation of the industry to the new labelling requirements.

Forecast of food, farming and fertilizer use 2019-2029

Fertilizers Europe publishes annualy the "Forecast of food, farming and fertilizer use in the European Union" which has been independently recognized as one of the most trusted sources on fertilizer use in Europe. Its data is regularly used by many international organizations including the European Commission (DG Agriculture, DG Environment and DG Energy), the Food and Agriculture Organization of the United Nations (FAO), the European Environment Agency (EEA) and the International Fertilizer Association (IFA).

Political priorities like circular economy, climate change and the environment are challenging fertilizer use by farmers.

At the same time, there are also opportunities for the European fertilizer sector. Better fertilizer products and products more targeted to the specific crop, encompassing the latest knowledge and combining different technologies are an important part of this. New tools are enabling real-time assessment of fertilizer need, and intelligent application allows to feed plants according to their needs.

Agricultural production at EU-28 level over the next 10 years

The forecast is established through the combination of estimates of crop areas and yields, and the fertilizer application rates which will be applied.

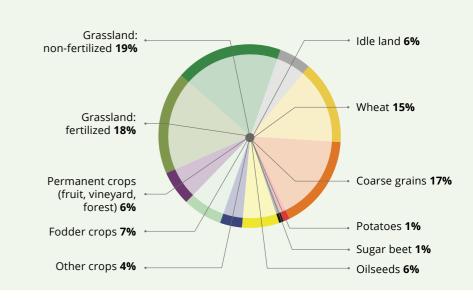
The main crop in EU-28 remains cereals with 32% of the agricultural area. It is estimated that the total EU-28 cereal area will decline by 0.8%. At the same time, cereal yields are expected to increase over the period by an average of 4%, resulting in an overall output increase of 3%. The area of oilseed rape is forecasted to decrease by 5.5%, with the yield increasing by 2%, it will result in a decrease of the production by 4%. The sugar beet area is expected to decrease by 6.3%. The potato area continues to decline by 5.2%, but with increased yields of 3%, limiting the production loss at 2%.

Fertilizer consumption in EU-28

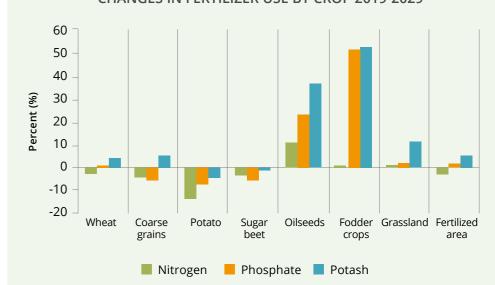
On average over the last three seasons in EU-28, fertilizers containing 11.5 million tons of nitrogen (N), 2.7 million tons of phosphate (P), and 3.1 million tons of potash (K) were applied to 133.8 million hectares of farmland. 44.6 million cultivable hectares were not fertilized.

Consideration of the economic outlook and the anticipated evolution of Europe's cropping area has led Fertilizers Europe to expect annual nitrogen, phosphate and potash fertilizer consumption to reach 11.1, 2.7 and 3.2 million tons respectively by the 2028/2029 season, applied to 133.0 million hectares of farmland.

AGRICULTURAL LAND USE IN THE EUROPEAN UNION



CHANGES IN FERTILIZER USE BY CROP 2019-2029



Source: Forecast of food farming and fertilizer use in the European Unionon 2019-2029



Industry competitiveness

Fertilizers Europe supports the development of policies to enable the transition to a climate-neutral economy by 2050, whilst keeping industry competitive. Fertilizer sector calls for a coherent long-term policy that balances EU's climate ambitions with its industrial competitiveness.

Trade

Over the final year of a Commission and Parliament there is a tradition that the EU institutions try to complete "big work". The year 2019 was not an exception with the agreements in principle or further finalisation of Free Trade Areas with Canada, Japan and arguably most significant of all, the MERCOSUR region in South America.

The latter signified the new special attention the EU gives to climate change commitments with the Amazon forest protection featuring higher than ever in discussions. However, the traditional strains arising from agriculture's liberalisation and the huge overall market access potential on all parts of the respective economies were in evidence again.

The Free Trade Area (FTA) movement had its breaking points over the year too. Very notably, the prospectof agiant Transatlantic Trade and Investment Partnership (TTIP) disappeared amongst a series of real or prospective bi-lateral trade disputes.

For fertilizers, the Airbus-Boeing proved to be the most relevant dispute with the US administration at one time considering applying compensatory, but WTO legal, additional tariffs on EU exports of fertilizers and ad blue into the USA.

Recently EU-USA have become less tense as both sides seek out a mini-FTA type deal. But while the EU wants it to be a predominantly regulatory co-operation package, the USA goes for tariff reductions and improved direct market access. Reconciliation of this will be uppermost in the priorities of the new trade Commissioner Phil Hogan.

EU "competition model", i.e. hub gas and market integration together with security of supply regulatory and infrastructural investments has been a major EU success. However, the Von der Leyen Commission launched the European Green Deal which promises the full net decarbonisation of the EU's gas supply system by 2050. Just as the "Golden Age of Gas" was amongst

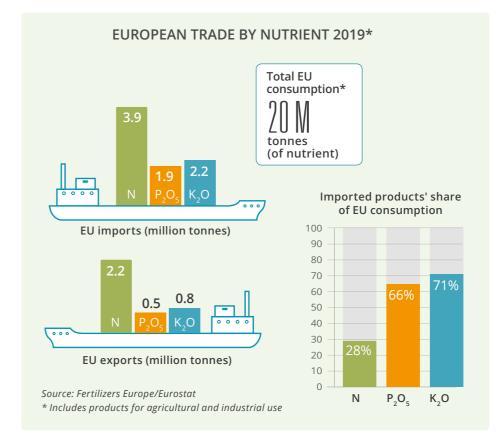
In addition to the original UAN proceedings against Russia, Trinidad & Tobago and the USA opened in August 2018 and successfully concluded in October 2019, Fertilizers Europe's application for a sunset review on the existing anti-dumping duties on ammonium nitrate from Russia was officially accepted in September 2019.

For the duration of the investigation – which can last 12 or 15 months – the existing Euro 32/mt anti-dumping duty remains applicable.

With regard to policy and legal developments, the WTO proceedings brought by Russia on ammonium nitrate with regard to the "gas adjustment' in the EU dumping calculations carried on. A conclusion from the Panel is likely before summer end-2020.

In addition to this, however, there is now certain legal judicial challenges arising from the UAN original proceedings whereby the exporter producers once again challenge the 'gas adjustment" and other new features such as the "sea freight" adjustment.

Many of the the new trade defence modernisation features were implemented. There was a new UAN profit rating for EU industry which rose from 5% ROS to 10%; the future ETS / environment allocation on the injury cost margin was applied; and there was a new faster application of the registration of imports and the faster imposition of provisional anti-dumping measures, i.e. by month 8 in the case of UAN rather than month 9 of the investigation.



EU gas market

Aside from EU-Ukraine-Russia gas transit negotiations, the Eastern front this year was relatively quiet until the Ukraine in summer 2019 launched two major safeguard actions on straight nitrogen products and on complex fertilizers. Fertilizers Europe intervened to seek European Commission (EC) support. This was forthcoming with the EC registering as an interested party in these proceedings to do with "fair competition" causing harmful injury.

With regard to gas supply, it has become ever-increasingly obvious that the

us, new challenges in the form of bio-gas, hydrogen and nitrogen supply were presented as part and parcel of the energy transition to a new Green Deal.

Trade defence

European fertilizer manufacturers operate in a global market and advocate fair and open trade. However, market developments have damaged free global trades which in turn meant that Fertilizers Europe's trade defence activity was especially high over year 2019.

BREXIT

A Northern Ireland back-stop replaced a UK back-stop and explicit UK government support for an EU – Canada like Free Trade Agreement (FTA) was made explicit. The EU however remains concerned to have "dynamic alignment" or even "parallel alignment" on Health, Safety and Environment and climate change regimes. Thus, we are set upon a fast and bumpy ride this year as both parties do not rule out a deal of some type this year.

principal menu



Carbon and climate policies

A combination of policy solutions is needed to enable the transition to a climate-neutral economy by 2050 while keeping fertilizer industry competitive. Much can be done, but an adequate protection from carbon leakage is key to limit fertilizer sector's exposure and safeguard a level playing field between EU producers who are subject to EU ETS carbon costs and importers who are not.

EU Emission Trading System (EU ETS)

As Phase III of EU ETS (2013-2020) is coming to an end, the European Commission is finalising preparations for Phase IV (2021-2030). The update of product benchmarks is an important part of the process for the fertilizer sector as it will determine the free allocation for the fertilizer industry. Fertilizers Europe analysis indicates that ammonia benchmark will likely fall into the minimum reduction rate of 0.2% as European ammonia plants (on average) are close to the limits of the current technology and have not been able to go beyond the significant carbon footprint reductions made in earlier years.

On the other hand, EU producers reduced nitrous oxide (N₂O) emissions by more than 90% over the last decade.

Fertilizers Europe supports the recognition of Carbon Capture and Use (CCU) in EU ETS. The transfer of CO₂ from ammonia (NH₂) to calcium carbonate (CaCO₂) production has been recognized as CCU, thus resulting in the reduction of ETS costs for some of the fertilizer producers in the EU. We are also advocating for the recognition of CCU of urea-based glues, resins and melamine.

Representing a sector which is highly exposed to carbon leakage due to its high trade and emission intensity, Fertilizers Europe is advocating for the continuation of compensation for indirect ETS costs passed on to the industry in electricity prices.

Carbon Footprint Calculator

Fertilizers Europe's Carbon Footprint Calculator was first developed in 2014 and serves as a tool for assessing direct and indirect GHG emissions related to the production of selected fertilizer products. It follows the 'cradle to gate' approach where emissions associated with all stages of the product life are taken into account, from the raw material extraction, energy supply, the manufacturing process to the product storage at the production site.

The tool calculates GHG emissions for selected fertilizers based on production parameters for ammonia and nitric acid. These values can subsequently be used in calculating emission factors required in the Life Cycle Assessment (LCA) calculators for the products in the broader agri-food chain, such as the Cool Farm Tool.



The tool is available for free at: www.calcfert.com

CARBON LEAKAGE INDICATOR **Emission intensity Trade intensity** (kg CO₂/EUR) Non-ferrous metals 0.2 Organic basic chemicals 2.2 Inorganic basic chemicals 3.0 Paper 28% 3.0 7.6 **Fertilizers** 32% Steel 26% 8.3 Refineries 26% 12.5 10% 24.2

Product stewardship

The EU fertilizer industry is committed to ensure safe and efficient production and applies the highest standards in all aspects of the value chain including product development, raw materials, production processes, distribution, storage and use.

Product Stewardship Programme

The European fertilizer industry's aspirations for efficient, safe and environmentally-friendly production has led Fertilizers Europe in 2003 to launch a Product Stewardship Program to maintain and consolidate the industry's advanced production techniques and safety procedures across Europe.

Product Stewardship Program is compulsory for all Fertilizers Europe members and sets the highest global standards for this type of program. An external audit performed every 3 years covers the development of fertilizers, their raw materials and production products as well as how the resulting products are distributed, stored and used.

In 2020, all Fertilizers Europe members will pass such an audit by external auditor. Although delayed by the COVID-19 outbreak, the objective is to finalise the audit by end-year to ensure continuity and safe operations along the value chain.

Fertilizer Classification and REACH

Numerous issues related to the classification of fertilizers and their ingredients are being brought up by the European Chemical Agency (ECHA) and the international bodies. Fertilizers Europe and its members devote a lot of efforts to ensure that, while assuring the highest safety standards, the burden on industry remains acceptable.

As an accredited stakeholder organisation within the European Chemicals Agency, Fertilizers Europe contributes to an efficient flow of information about how and where fertilizers are used.



Fertilizers Europe has developed a "Fertilizer Use Maps package", tools helping industry evaluate the environmental impact of fertilizers usage.



The whole package is made available on a dedicated website www.reachfertilizers.com/





Effective dialogue

AFCC Networking Reception, European Parliament, 17 February

2020. MEPs and AFCC Secretary Generals. From left to right: MEP

Alexander Bernhuber, MEP Ulrike Müller, MEP Herbert Dorfmann,

Engaging in a constructive dialogue with EU institutions, Member States, industry, academia and the agriculture sector at large on the evolution of the fertilizer industry and EU agriculture remains a priority for Fertilizers Europe. This proved to be challenging following the COVID-19 outbreak early 2020, leading to a cancellation of a number of important events planned by Fertilizers Europe, and requiring swift adaptation of association's communication activities to the new reality.

Unleashing the great potential of the European agri-food systems

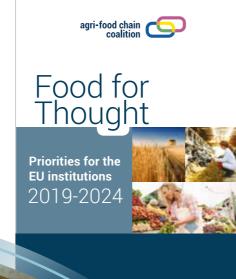
During 2019/2020 Fertilizers Europe chaired the Agri-food Chain Coalition, a joint initiative of 12 leading associations in Brussels united in their call for sustainable, solution-orientated and innovative policy that benefits EU citizens and economy.

During Fertilizers Europe's presidency the Coalition published the Brochure "Food for thought. Priorities for EU institutions 2019-2024" identifying the

main challenges and opportunities in the agri-food sector and calling on the EU Institutions and Member States to develop and adopt common policies that unleash the great potential of the sector.

The brochure was unveiled at 17 February 2020 Networking Reception at the European Parliament hosted by MEP Norbert Lins, Chair of Committee of Agriculture. In the light of the upcoming "Farm to fork" strategy, the event proved to be a successful occasion that welcomed more than 10 MEPs and encouraged dialogues with the

aim of addressing the challenges of food systems and setting the pathway for the evolution of the EU agricultural sector.





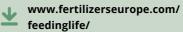




Global Fertilizer Day -Fertilizers at the roots of life

Global Fertilizer Day is a worldwide campaign that was established in 2016 by Fertilizers Europe with the objective of raising awareness on the crucial role fertilizers play in feeding the world. The theme of the campaign during 2019 was "Feeding Life" and aimed at demonstrating the essential role of fertilizers at the roots of life, feeding crops, people, farming, European economy and a sustainable future.

Thanks to the strong involvement and participation of the member companies, regional and national associations, the campaign had a truly international outreach.





Balanced plant nutrition - vital element of sustainable crop and soil management

The role of different plant nutrients in plant growth and soil quality was the theme of the Balanced Plant Nutrition campaign that Fertilizers Europe launched during 2019.

The campaign aimed at explaining the importance of balanced plant nutrition as well as demonstrating the specific role each of 17 nutrients play in ensuring an optimal plant growth.

The objective of balanced fertilization is, therefore, to ensure that the plant has access to an adequate supply of each nutrient at every growth stage in order to avoid any over or under-supply and to optimize plant yield. Nutrient use efficiency is a vital element of sustainable agriculture.

As part of the Global Fertilizer 2019 campaign, Fertilizers Europe in cooperation with Argus and IFS organised a panel debate during Argus Europe Fertilizer 2019 that touched upon the role of mineral fertilizers in agriculture, the role of sulphur as well as the importance of balanced plant nutrition in improving nitrogen use efficiency.



www.fertilizerseurope.com/ fertilizers-in-europe/ balanced-plant-nutrition/

New website -Information hub to drive change towards sustainable agriculture

Fertilizers Europe launched during 2019 it's new website which combines modern design with functionality and aims to be a hub of information on European fertilizer industry and its products for all agri-food stakeholders. By modernizing design, streamlining content and making the platform fully responsive, the website responds better to the needs of the variety of stakeholders seeking information on fertilizers, their production and use, their contribution to global food security as well as key policy developments concerning the industry and agriculture.



www.fertilizerseurope.com



The European Fertilizer Industry at a Glance





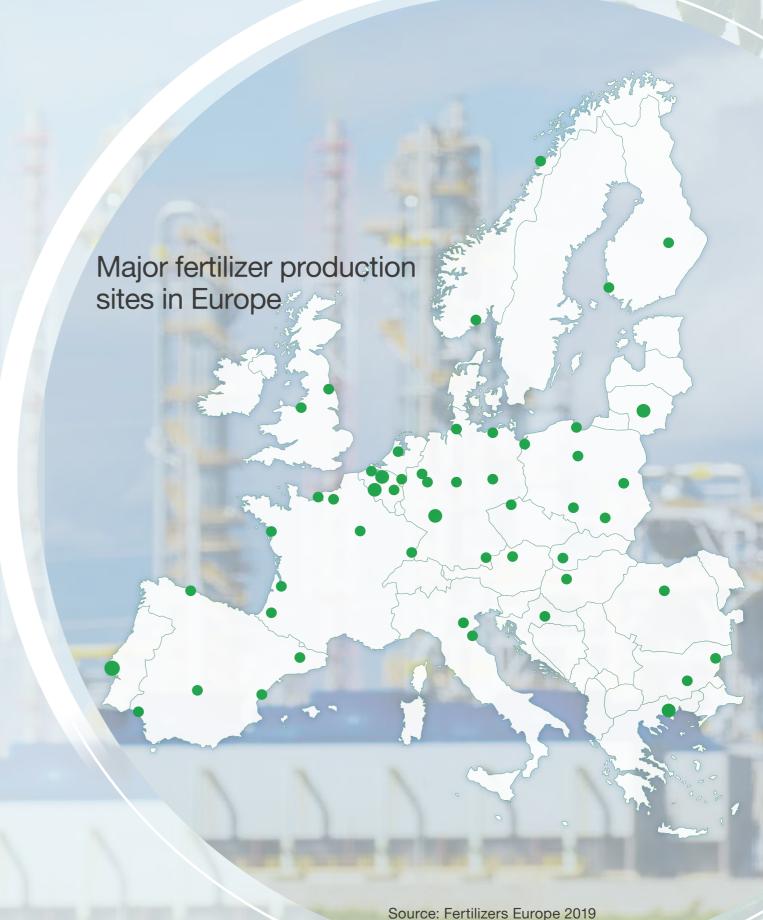






* EU-27

Note: Average for last 5 years. Source: Fertilizers Europe



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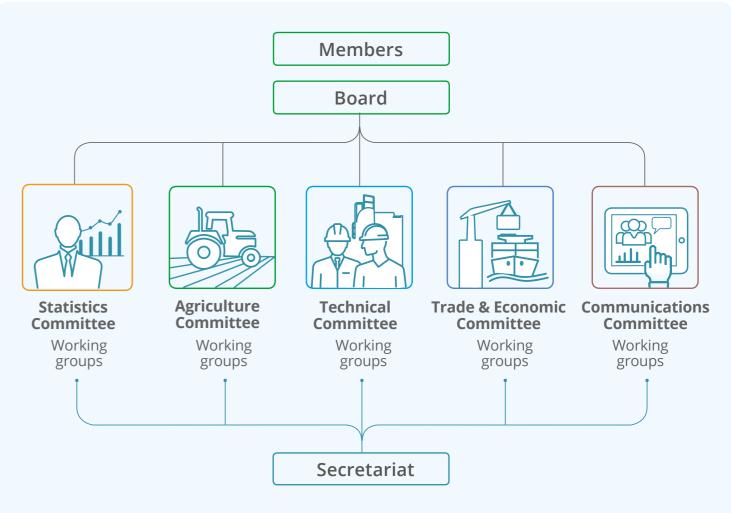
Structure

Fertilizers Europe represents the interests of the majority of mineral fertilizer manufacturers in the European Union. The association's membership comprises 16 fertilizer manufacturers from countries across the European Union and 8 national fertilizer associations.

The association communicates with a wide variety of stakeholders, institutions, European and national policy-makers and members of the general public who seek information on fertilizer products and application technology, and topics relating to today's agricultural, environmental and economic challenges.

Fertilizers Europe's activities are directed by its President and Board, who are elected by its General Assembly of members. Its day-to-day business is primarily carried out through five committees and various working groups and task forces.

The secretariat in Brussels supports the association's committees and working groups under the guidance of the committee chairmen and vice-chairmen and manages Fertilizer Europe's activities. It also acts as its main interface with stakeholders.



fertilizers

Members

CORPORATE

































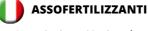
ASSOCIATIONS

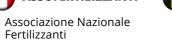


Agricultural Industries Confederation



Asociación Nacional de Fabricantes de Fertilizantes







Belgian Mineral Fertilizer Association



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Industrieverband Agrar e.V.



Fertilizers Netherlands



Polish Chamber of the **Chemical Industry**



UNIFA Union des Industries de la Fertilisation

Board



Javier Goñi del Cacho Fertiberia President (until December 2019)



Bartolomeo Pescio YARA Acting President (Since January 2020)



Paweł Łapiński Grupa Azoty Vice-President



Jacob Hansen Fertilizers Europe Director General

Statistics



Trade & Economic Committee



Andreas Steinbuechler Borealis Chairman



Frank De Vogelaere YARA Vice-Chairman



Mindaugas Liaukonis Vice-Chairman



Krzysztof Homenda Grupa Azoty Chairman



Aviv Bar Tal ICI Fertilizers Vice-Chairman



Technical Committee



Radomir Věk Lovochemie Chairman

Harri Kiiski

Azomures

Chairman



Zoltán Bige Nitrogénmuvek Vice-Chairman



Theodora Kouloura New Karvali Fertilizers Vice-Chairman



Jan-Jaap Nusselder OCI Nitrogen Chairman



David Herrero Fuentes Vice-Chairman (Since January 2020)

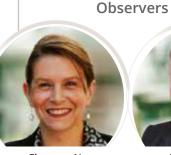
Agriculture Committee



Charles Bendaña Eurochem Vice-Chairman



Jacek Mendelewski Anwil Vice-Chairman



Florence Nys UNIFA Observer



Dietrich Pradt Observer

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Team



Jacob Hansen Director General



Antoine Hoxha Technical Director



Sean Mackle Trade & Economic Director



Jenny Wahlman Senior HR & Administration Manager



Tiffanie Stephani Senior Agriculture & Environment Manager





Lukasz Pasterski
Communications Manager
Michał Wendołowski
Manager Market Analysis & Senior
Energy and Climate Advisor



Konstantin Golombek Senior Agriculture & Environment Officer



Laura Casuscelli Senior Trade & Business Analyst



Gábor Marton Senior Data & Statistics Analyst



Sofia Tsaliki Communications Officer



Leticia Salvador Policy & Administration Officer



Fertilizers Europe represents the majority of fertilizer producers in Europe and is recognised as the dedicated industry source of information on mineral fertilizers. The association communicates with a wide variety of institutions, legislators, stakeholders and members of the public who seek information on fertilizer technology and topics relating to today's agricultural, environmental and economic challenges. The Fertilizers Europe website provides information on subjects of relevance to all those interested in fertilizers contribution to global food security.

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Group Fertilizers Europe



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