

## Urease and Nitrification Inhibitor technologies contribute to the European Green Deal

Fertilisers Efficiency Enhancers, a CEFIC Sector Group, recognises the European Green Deal and its climate neutrality ambition will require a deep industrial transformation within a short time frame. Fertilisers Efficiency Enhancers is well positioned to offer innovative and simple solutions addressing the challenges highlighted in initiatives such as the Farm to Fork and Biodiversity strategies, which present roadmaps for the transition towards a sustainable food system, a healthy living environment and the protection of healthy ecosystems. By increasing nitrogen use efficiency, our technologies - Urease Inhibitors (UIs) and Nitrogen Inhibitors (NIs) - play an important role in achieving these goals.

Moreover, with a raising demand for food and a reduction of arable land per capita, it is a challenge for farmers to boost yields.

UIs and NIs benefit both the environment and farmers by offering valuable solutions for sustainable and effective nutrient management.

UIs are a proven technology used for over 25 years in more than 130 countries. For their contribution to meeting ammonia (NH<sub>3</sub>) reduction targets, UIs are considered mandatory or best practice recommendations in countries including Germany, Denmark, France and Ireland. UIs help reduce eutrophication, acidification and small particle dust caused by ammonia emissions from urea, which help preserve biodiversity and reduce air quality impairment.

NIs increase the Nitrogen Use Efficiency (NUE)<sup>1</sup> by decreasing nitrogen losses of mineral and organic fertilisers and therefore contributing to reducing their use. The application of NIs reduce nitrous oxide (N<sub>2</sub>O) emissions and NO<sub>3</sub> leaching which results in better water quality and less eutrophication.

Both UIs and NIs mitigate nitrogen (N) losses whether from gaseous emissions (NH<sub>3</sub> and N<sub>2</sub>O) or nitrate leaching. While improving NUE, crop yields can either be improved or current yield levels are achieved with less nitrogen fertiliser. A higher NUE means less nitrogen is required for food production which supports the overall Farm to Fork objective of tackling excess nutrients in the environment<sup>2</sup>. Since revenues from better yields typically outperform costs of inhibitor technology, the improvement of NUE contributes to a higher return on investment for farmers and a lower carbon footprint of crop production.

Fertilisers Efficiency Enhancers is ready to help growers grasp the opportunities arising from the transition to a climate-neutral and circular economy, and to contribute to the development of a policy framework to meet EU's ambitious climate and environmental targets.

Clear legislative measures and farmers' access to science-based information on the environmental benefits of UIs and NIs should be coupled with free and open access to flexible solutions to meet

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<sup>1</sup> The amount of applied nitrogen that is absorbed and used by the plant.

<sup>2</sup> "The Commission will act to reduce nutrient losses by at least 50%, while ensuring that there is no deterioration in soil fertility.

This will reduce the use of fertilisers by at least 20% by 2030"

([https://ec.europa.eu/food/sites/food/files/safety/docs/f2f\\_action-plan\\_2020\\_strategy-info\\_en.pdf](https://ec.europa.eu/food/sites/food/files/safety/docs/f2f_action-plan_2020_strategy-info_en.pdf)).



grower and consumer needs. While we do not believe a mandate to be the most effective solution to promote wider use of EU registered UIs and NIs, we recognise the urgency by which the European Green Deal wishes to drive progress and we are confident that a wider endorsement and adoption of UIs and NIs use would create significant added value in line with the EU climate and environmental ambitions.

[For more information about NI and UI please see the annexed document.](#)

**About Fertilisers Efficiency Enhancers:**

Fertilisers Efficiency Enhancers is a Sector Group of Cefic, the European Chemical Industry Council. We represent the value chain of nitrogen stabilisers and other fertiliser enhancers in Europe and promote the agronomic and environmental benefits of nutrient enhancers in fertiliser applications.

Membership: BASF, Bioline, Compo Expert GmbH, EuroChem Group AG, Koch Agronomic Services and Solvay