Unlocking the safe use digestate in the INMAP: an opportunity for nutrients recycling and on-farm circularity

5 June 2023

The cosignatories include <u>COPA-COGECA</u>, which represents over 23 million farmers and 22,000 agricultural cooperatives and the <u>European Biogas Association</u>, which represents nearly 8000 stakeholders from the biogas and biomethane value chain in Europe, as well as two European projects focusing on nutrients recycling and digestate – <u>Nutri2Cycle</u> and <u>NOVAFERT</u>.

The need to reduce dependency on nitrogen fertilisers by diversifying the sources of fertilisers and developing the supply of sustainable fertilisers has gained urgency following Russia's war on Ukraine. Using fossil-free, low-carbon, recycled nutrients to produce organic fertilisers will also accelerate the decarbonization pathway to a net-zero Europe. These challenges were outlined in the communication of the Commission on Safeguarding food security and reinforcing the resilience of food systems from November 2022 as well as in the resolution of the European Parliament on the availability of fertilisers in the EU from February 2023. Yet, to date, digestate faces a major barrier in the 32 years old Nitrates directive and the market of this sustainable fertiliser struggles to develop due to a lack of legal certainty. Nonetheless, digestate has the potential to significantly replace synthetic/inorganic nitrogen fertilisers as produced based on natural gas, thereby improving both the environmental impact as well as economic and geopolitical self-reliance.

In the framework of the upcoming publication of the Integrated Nutrient Management Action Plan (INMAP), we call on the Commission to allow and facilitate the safe use of digestate and employ the INMAP to provide guidelines for its usage.

Organic fertilisers partially or entirely derived from animal manure through anaerobic digestion, known as digestate, represents a key tool to **substitute synthetic/inorganic fertilisers, increase on-farm circularity and make food systems resilient as they depend on locally available resources whilepreserving the environment and waters in Europe**. In line with the objectives of the EU Green deal, digestate contributes to recycling nutrients, increasing resource efficiency and when managed adequately, avoids nutrients losses and maintains soil fertility.

In the framework of the INMAP, we urge the Commission to:

- allow for a **temporary exemption** from the Nitrates Directive limit, *in the short term*, so that the safe use of digestate is allowed above the limit of 170 kg of nitrogen per hectare per year.
- propose a revision of Annex III of the Nitrates Directives to allow for a permanent exemption of digestate from the Nitrates Directive limit *in the medium term*. The Expert group on the implementation of the nitrates Directive or a dedicated expert group should propose a set of guiding agronomic practices to mitigate any potential environmental risks.

It must be noted that digestate is the resulting product of a controlled biological process of anaerobic digestion whose purpose is the transformation of the easily fermentable organic fraction into biogas. The biological transformations carried out by the bacteria also determine profound modifications of the substrates subjected to the biological process, the result of which is a **biologically stable matrix with excellent soil improver and fertiliser properties**.

Digestate cannot be compared or assimilated with livestock manure for the following reasons:

- Anaerobic digestion is a biotechnological process that deeply transforms zootechnical effluents into another product.
- Livestock manure unlike digestate still contains fermentable fractions that, by degrading in the soil, can lead to the partial mineralization of organic nitrogen with a risk of nitrate leaching.
- The fertilising effects of digestate are specific: digestate contains stabilised organic matter, whose carbon-to-nitrogen ratio (C/N) is generally very close to soil organic matter as well as ammonia which is a readily available source of nitrogen for plants. With the application of a specific amount of digestate, calibrated to the nitrogen need of the crop, comes a positive net environmental balance since the nitrogen content of digestate is about 90% efficient. This efficiency reduces the risk of nitrate leaching into groundwaters to a minimum.

Thank you for your attention,





