



ManuREsource 2024 emphasizes the importance of a feasible legal framework

Manure is a valuable source of nutrients, but an excess harms the environment. During the sixth edition of the ManuREsource congress, participants from the business sector and research institutions highlighted the spotlight on manure as a resource. Policymakers including both DG Grow and DG Environment of the European Commission discussed the need for legal support for the manure processing sector in the transition to sustainability.



The manure processing sector is already undergoing evolution

Manure processing retains a significant role in addressing environmental pollution caused by nitrates from the agricultural sector. During the plenary sessions at the opening of the congress on March 20, stakeholders expressed their concerns: There is a need for a feasible legal framework that focuses more on how to achieve objectives rather than the objectives themselves. Manure processing can upgrade manure into a sought-after resource for the production of green energy and sustainable alternatives to synthetic fertilizers, provided that the law allows it. In addition to the strong representation from Flanders (Boerenbond) and the Netherlands (LTO, Regulatory Authority, and Agrifirm Group), we were also extensively informed about the situation in Catalonia.

Due to significant climate changes, the sector is under more pressure than ever before; this is evident from the numerous protests, which even caused a stir in the European Parliament. During the plenary sessions, some speakers focused on the digestion of manure, which produces energy and digestate as



valuable fertilizers. However, it was emphasized that a combination of different technologies is needed to further support the sector.

The European Commission will address RENURE

RENURE fertilizers, recovered fertilizers from animal manure, have similar properties to synthetic fertilizers. However, under the current legal framework, they are classified as animal manure, meaning they must be disposed of under the fertilization norm in nitrate-sensitive areas and compete with an excess of animal manure. Consequently, RENURE fertilizers cannot replace synthetic fertilizers, which can be disposed of above this norm. The limited use of RENURE hinders the transition to sustainable agriculture within Europe. There is an urgent need for the European Commission to recognize RENURE fertilizers as synthetic fertilizers.

As early as 2020, the European Commission issued RENURE criteria that fertilizers must meet to receive RENURE status. However, we are still waiting for a legal framework and the implementation of these fertilizers. It remains relevant because in 2024, the European Commission will evaluate the operation of the Nitrates Directive, which will include the implementation of RENURE. During a plenary session, Jeanne De Jaegher, European Commission DG Environment, informed us about the Nitrates Directive and European nutrient policy: "The Commission supports the reuse and recycling of nutrients from organic waste streams such as fertilizers." She stressed the importance of the directive in protecting the environment from the dumping of fertilizers.

She announced that the evaluation received more than 1300 responses and that the European Commission will further address RENURE in this evaluation. Perhaps it was a sign, but on March 22, the Dutch agricultural news site Nieuwe Oogst reported that the European Commission is indeed accelerating its work on RENURE. This was also confirmed by the office of Flemish Minister of Agriculture Jo Brouns.

European projects in large numbers present

In the European and national projects [Lex4Bio](#), [LemnaPro](#), [Eurofema](#), [CiNURGi](#), [Nutribudget](#), [Fertimanure](#), [Betere Stal Betere Mest Betere Oogst](#), [NovaFert](#) & [FER-PLAY](#), [Renu2Cycle](#) and [BioDEN](#), research was conducted on nutrient recovery, biogas production, closing nutrient cycles, the legal obstacles and motivations involved, and how these innovations can be linked to practice. The researchers involved in these projects presented their key results and conclusions to the attendees in two rounds of four parallel sessions. Additionally, dozens of research results were presented on the three topics of the congress: (1) manure as a resource, (2) manure and sustainability, (3) innovations in manure and digestate processing.

DG Grow aims for energy independence with BIP

On the second day (March 21) of the congress, a second representative from the European Commission, DG Grow Laure Baillargeon, spoke about the importance of the Biomethane Industrial Partnership (BIP), a European initiative to achieve the European target for biomethane production by 2030 by bringing together relevant stakeholders. With this initiative, the European Commission aims for energy independence, which has gained renewed attention since the war between Russia and Ukraine, and also supports the transition to a circular economy.



Practical installations also had their say

The nominees of the Ivan Tolpe Award 2023 - EMA depuració (ES) with the concept 'Solar drying of manure and digestate', GlasPort Bio (IE) with 'GasAbate manure additive', Bioelectric (BE) with 'Mono manure digester, manure separator, and nitrogen stripper combination', and the winner of the Ivan Tolpe Award 2023, Green Service (BE) with 'Nutrient and energy recovery at farm scale' - presented their innovations. During the congress, the Poster Award was also awarded to Lukas Audenaert for his research on duckweed and constructed wetlands to strive for a circular economy in managing pig manure.

Algae cheese, digestion installations, and fertilizing machines on company visits

On the excursion day (March 22), congress participants visited some innovative entrepreneurs who are already applying new manure processing techniques in practice. The company visits took place at (1) the dairy farm Heirbaut aLgriculture, which digests their own manure and uses derived electricity and CO₂ for their farm shop and algae cultivation, followed by a fertilization demonstration of ammonium sulfate from an air scrubber of pig barns; (2) at Sustainable Fuel Plant Group Westdorpe, which focuses on scalable biogas installations that produce green electricity and heat from manure; (3) at Vervet, where fertilizing machines with connected NIR were demonstrated.

The international conference ManuREsource 2024 on manure processing and valorization was organized on March 20, 21, and 22 in Antwerp (BE) by the Flemish Coordination Center for Manure Processing (VCM), Ghent University, Inagro and in collaboration with the Dutch Center for Manure Valorization (NCM). Over 200 participants from 25 different countries attended the congress, which was financially made possible by the sponsorship of the following companies: Province of Antwerp, Moving Floor Concept, Farmcubes, Certrust, Colsen, Nature Energy and Movanta.

