

ESPP follow-up to EU high-level meeting on Fertilises Strategy, 13th April 2025

Regulatory obstacles to nutrient recycling into fertilisers

30th April 2026

See also the joint call for an EU Circular Economy Act, ambitious for nutrients, signed by 40+ industry organisations, companies and stakeholders, “Joint call for EU Circular Economy Act (6_11_2025)” at www.phosphorusplatform.eu/regulatory

Executive summary

The EU’s goal of circular nutrient management is hindered by a patchwork of regulations (e.g. FPR, ABP, Waste, REACH, IED, CAP, Animal Feed, ...) that were not designed for recycled materials. The members and network of ESPP here identify specific regulatory obstacles and propose targeted solutions, including: a new “waste for recycling” status, an FPR biorefinery residue CMC, mutual recognition for national fertilisers, simplified IED permit changes for intake of secondary materials, and better inter-service coordination. Without rapid action, the EU will continue to rely on imported virgin phosphorus while innovative recycling processes remain stuck in regulatory limbo. We call on the Commission to adopt these proposals in the upcoming Circular Economy Act and the revision of the FPR in order for the EU to remain world leader in nutrient circularity.

Regulatory Obstacles

- **Lack of a high-level COM interservice coordination task force (with mandate and deadline) to address identified blockages and to structure incentives for nutrient recycling to fertilisers:** DG GROW, DG SANTE (animal by-products), DG RTD (BioEconomy), DG AGRI (CAP), DG ENVI (waste).
- **Reinforce CAP support for farmers for nutrient recycling and for the use of recycled fertilisers** (see discussion in [SCOPE Newsletter n°154](#)).
- **The EU should have a (Critical Inputs for Food Security’ Act**, comparable to the Critical Raw Materials Act (which targets technology industries and does not cover agri-food). This should identify critical inputs (e.g. could be considered phosphate, ammonia, seeds, tractors, land satellite coverage ...) and define resilience strategies (in coherence with existing tools (CAP, CRM Act, Critical Chemicals Alliance, Renewable Energy Directive ...).
- **Accelerate inclusion of recycled nutrient materials into the list of fertilisers accepted as inputs in Certified Organic Farming** (EU 2021/1165). Circularity is a core objective of Organic Farming, and Organic Farming suffers from an overall phosphorus input deficit which limits productivity (see [SCOPE Newsletter n°149](#)).
 - ❖ Develop overall criteria for acceptance or not of recycled nutrient materials as inputs to Certified Organic Farming (based on e.g. quality, solubility, nutrients, input materials ...) rather than assessing and regulating one-by-one (case by case).
- **Pollution at source:** rapidly phase out or strongly restrict industrial chemicals susceptible to be an obstacle to nutrient and organics recycling, including in imported products. In particular:
 - ✓ Rapidly phase out PFAS in consumer applications and for non-essential or dispersive industrial applications, with tolerances for recycling and reuse,
 - ✓ Ensure robust verification and enforcement for imports, including chemicals in imported ‘articles’.
- **Modernise the Animal By-Products and Animal Feed regulations** to improve coherence and user understanding, facilitate and remove unjustified obstacles to circularity, whilst maintaining guarantees of safety and food-chain confidence. This should target recycling of ABP nutrients to animal feed and to fertilisers.

See “EU Feed Circularity Catalogue”, version 1.0, 23rd May 2025, 8 EU industry federations and stakeholder organisations, initiative led by FEFAC (European Feed Manufacturers’ Federation), <https://fefac.eu/newsroom/news/eu-feed-circularity-catalogue-outlines-barriers-and-solutions-foradvancing-circular-animal-feed/>

- **Failure of the EU Fertilising Products Regulation (FPR) to allow new input materials/processes** in response to innovation in recycling and bioeconomy. One or more of the proposals below could address this failure:
 - ❖ **Following the ongoing official ‘Evaluation’ of the FPR, a rapid and flexible evidence- and criteria-based decision process could be proposed for adding new secondary raw materials/processing methods into the FPR CMCs.** This must be adapted to the locally and temporally variable, rapidly innovating nature of biobased nutrient recycling flows. The Current process for adapting CMCs to technical progress (based on limitative lists of inputs and processes), is too slow, too administratively cumbersome, and has no defined data or information requirements. Secondary nutrient flows for fertiliser recycling, submitted to the EU Survey in 2022, are still under study, and have not yet even reached the draft Delegated Regulation stage.

See joint statement from nine fertiliser industry organisations “Addressing structural barriers to innovation, circularity, and market access in the EU Fertilising Products Regulation (EU) 2019/1009” 10_2_2026 here www.phosphorusplatform.eu/regulatory -> EU Fertilising Products Regulation (FPR).
 - ❖ **Need for a new, intermediate status ‘waste for recycling’, to facilitate safe and responsible use of secondary nutrient materials as fertilisers,** without the cumbersome EU End-of-Waste / FPR process. This could function, as already for ‘National’ fertilisers in several Member States, by allowing use as a fertiliser (across Europe) while retaining ‘waste’ status and thus traceability, producer cradle-to-grave responsibility, a waste application plan, and declaration (possibly through an EU Digital Product Passport and with Extended Producer Responsibility). This would be appropriate for market access for innovative new recycling processes and material streams, in particular for bio-based secondary materials, which are often locally specific. The EU End-of-Waste status of the FPR should be retained for products with EU-wide production and proven roll-out. This could be subject to specified general EU safety criteria conditions, including relevant FPR PFC criteria.
 - ❖ **Introduce ‘default’ Mutual Recognition of ‘National’ fertilisers subject to conditions of digital traceability, and ‘waste’-type producer responsibility, application plan and declaration.** Traceability is today readily accessible to producers, logistics, and end users (farmers) via a QR code and a smartphone. In the food chain, traceability is already widely operational, for quality control, commercial label and operational reasons. Valorisation with traceability, under ‘Waste’ status, is today operational under Member States’ fertiliser regulations for some secondary nutrient materials, as well as for most nutrient valorisation routes for Animal By-Products. But export to other Member States is then impossible (in practice), and there is consequently no EU market for the recycling process (technology, know-how). This could be subject to certain political/safety limitations, e.g., sewage sludge inputs and non-sterilised ABPs (as per 142/2011 methods).
 - ❖ **Testing and labelling should be harmonised for all national fertilisers, with a Digital Product Passport:** this would facilitate Mutual Recognition, by ensuring that information requirements are the same across Europe.
 - ❖ **Add a ‘Biorefinery Residue’ CMC to the FPR** covering any residue from bio-economy processes (food and animal feed industry, bio-fuels, bio-fibres, bio-plastics, etc.) where input materials are plant and animal materials plus processing chemicals. This should allow use as such in CE-Mark fertilisers, or as input to CE-Mark composts, digestates, etc. This could be subject to exclusion of use in the biorefinery of chemicals classified for chronic health or ecotoxic endpoints, unless these are >99% removed or destroyed (e.g., solvent recovery in solvent extraction) and risk assessment shows no residual risk for fertiliser use.
 - ❖ **Read-across of safety for fertiliser use from higher safety or use hierarchy regulations:** where a material has been authorised or certified as safe for use in food or animal feed, then it should be automatically recognised as safe for use in fertilisers, subject to a simple risk assessment to verify that fertiliser use does not pose specific exposure or environmental risks.

- **Ensure legal recognition of “secondary nutrients for recycling”**, retaining traceability, producer responsibility, etc. The same secondary nutrient stream can be classified as ‘waste’ in one Member State and ‘by-product’ in another. There is no status recognition, so transport and site intake permitting are subject to the complexity of waste regulations. We propose to ‘Green List’, for transport on the EU market, nutrient materials intended for recycling (secondary nutrient raw materials for processing) or for re-use (without processing), in particular:
 - ✓ (intended) EU Fertilising Product Component Materials (conform to CMC criteria),
 - ✓ materials authorised for use as ‘National’ fertilisers in the recipient Member State,
 - ✓ biorefinery residues and similar: from processing of plant materials; from production of human foods or animal feeds, biofuels, biomaterials (biochemicals, biofibres).

See ESPP’s proposals submitted to the EU consultation on Green Listing in October 2025 (contribution code 362625f7-b5f7-4d41-9af3-7676cf90a244 document here www.phosphorusplatform.eu/regulatory -> ESPP input green-listing wastes 30_10_25).

- **Address IED permitting obstacles to the intake of secondary raw materials into production sites.** Changing site intake from virgin chemicals to secondary materials often requires modification of the IED operating permit. Companies have reported that this can be a major obstacle, with MS authorities requiring the complete updating of the operating permit dossier or the completion of complex studies, resulting in dissuasive delays and costs. Since Phosphate Rock is an EU Critical Raw Material, this could be facilitated under Articles 9 and 18 of the CRM Act.
- **Facilitate the administration of wastes for R&D and testing of recycling processes and routes.** The recently increased 250 kg limit for waste transport for R&D is insufficient for pilot plant testing, posing an obstacle to scale-up from research to implementation. For industrial pilot testing and pre-market trials, for both transport and for recycling plant intake, a 1000 t/year x 2 years limit should be authorised, under appropriate conditions.
- **Phosphate Rock as an EU Critical Raw Materials (CRM):**
 - ❖ CRM Act art. 26 (1) for phosphorus: Member States are to implement programmes to incentivise technological progress and improvement of resource efficiency. This should lead to national programmes to increase fertiliser Phosphorus Use Efficiency and to incentivise phosphorus reuse and recycling.
 - ❖ CRM Act art. 26(7): The Commission will adopt implementing acts specifying products and waste streams with potential for the recovery of critical raw materials. Phosphate rock should be included, with the establishment of EU and national monitoring programmes to estimate phosphorus flows in fertilising products used on fields, reuse-recycling rate (PUE) today and potential for increased reuse-recycling, covering: mineral and organic fertilisers, manure, crop residues, sewage sludge – cf. EU revised Urban Waste Water Treatment Directive 2024/3019 art. 21, other organic residue streams. In particular, improve data for organic-based fertilising products.
- **Improve rates of separate collection of household organic wastes (biowaste) with nutrient recycling.**
- **Resolve regulatory obstacles to nutrient recycling from aquaculture sludge and from waste-fed algae and biomass.** This requires cooperation among concerned industries, research institutions, safety experts, and farmers. Current obstacles include a lack of clear quality and safety criteria and an unclear regulatory status (as regards ‘waste’, ABP, FPR ...). One objective should be to define boundary conditions (materials, processes, ...) for and request an EFSA Opinion on safety for use as fertilisers.
- **REACH can be a barrier for recovered nutrient materials**, despite REACH art. 2(7)(d) “recovered substances”. Many recycled nutrients are UVCB (Substance of Unknown or Variable Composition or Biological origin), making registration complex and expensive,
 - ❖ REACH art. 2(7)(d) should apply to UVCB substances which are a variable combination of more than one already registered substance,
 - ❖ REACH SIP (Substance Identity Profile) should be available on request to recyclers to enable demonstration of ‘sameness’ as required by art. 2(7)d.

- **Resolve VAT disadvantage for recycled fertilisers.** Some Member States apply a reduced VAT rate to virgin mineral fertilisers but not to recycled nutrient products, possibly because of different classifications (“fertiliser” = reduced VAT, waste or recycling = standard VAT). We request a Commission recommendation to apply the same reduced VAT rate to recycled fertilising products (under FPR or national regulation) in the EU VAT Directive Annex III.
- **Carbon credits for organic carbon and nutrient recycling in secondary fertilisers.** Enable Member States to issue carbon credits or carbon farming credits for the use of recycled fertilisers under the Carbon Removal Certification Framework.
- **Economic and financial instruments** to close the price gap with imported virgin fertilisers. Possible instruments could include:
 - ❖ A price equalisation mechanism (similar to RED III’s sustainability premium or CBAM’s carbon price),
 - ❖ Direct support under CAP eco-schemes for farmers purchasing fertilisers meeting the quota.