ESPP workshops

Phosphate as a Critical Raw Material for food security - P_4 in 'Strategic' industries

Brussels – Wednesday 19th and Thursday 20th November 2025, Brussels, in the EU Critical Raw Materials Week:

Wednesday 19th November:

- 10h30 – 12h: ESPP General Assembly (members only)
- 14h -17h30: Phosphate – an EU Critical Raw Material, key to food security and agriculture resilience
- 17h30: networking drinks – 20h informal dinner

Thursday 20th November:

- 9h – 12h30: P4 (white phosphorus) a 'Strategic' Raw Material for Europe?
  P4 and 'Strategic' technologies – P4 supply projects in Europe.

Draft programme: www.phosphorusplatform.eu/events Proposals for presentations or posters are welcome.

EU public consultations

Two EU consultations on Fertilising Products Regulation

Open to 19th September 2025. Two public consultations to evaluate functioning of the EU Fertilising Products Regulation (FPR). See details in ESPP eNews n°98 www.phosphorusplatform.eu/eNews098
1) "Call for Evidence": input = 4000 characters text plus optional attached document,
2) Public questionnaire.

Both consultations are here: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14365-Fertilising-Products-Regulation-evaluation_en

Draft ESPP input is online and open for your comments and input: www.phosphorusplatform.eu/regulatory

EU public consultation to prepare the Circular Economy Act

Open to 6th November 2025: public 'Call for evidence' consultation, , is the first formal stage in preparing the future Circular Economy Act, announced for end 2026. The consultation document underlines that the circular economy is necessary to reduce environmental pressures, improve EU competitiveness and reduce import dependency on imported materials, in particular Critical Raw Materials (phosphate rock is listed by the EU as a Critical Raw Material). The Commission

notes that environmental externalities of the linear economy are not internalised, that the price of recycled materials is often higher and they cannot compete with primary raw materials without targeted economic incentives, as well as a conducive legal framework and strong verification and compliance. The Circular Economy Act aims in particular to improve the economics of recycling by reducing fragmentation of the EU market for secondary raw materials and waste, addressing varying interpretation of EU rules by Member States, improving consumer and user information and ensuring that prices of secondary raw materials reflect their lower environmental impacts. Possible actions to encourage the market for and use of secondary raw materials and wastes include to reform waste criteria, widen Extended Producer Responsibility, mandate criteria for public procurement.

ESPP will input to this consultation supporting the announced aims of the Circular Economy Act, noting the actions for circularity proposed in the Commissions Clean Industrial Deal (ESPP eNews n°96) and referring to the Joint Call for nutrients in the Circular Economy Act signed by a range of stakeholders (open for signatures, see below) and ESPP's detailed proposals (at www.phosphorusplatform.eu/regulatory).

EU public Call for Evidence consultation on the Circular Economy Act, ***open to 6th November 2025****: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14812-Circular-Economy-Act_en Individuals, companies and organisations can input a free text (max. 4000 character) and/or submit documents.*

ESPP draft response, for comment www.phosphorusplatform.eu/regulator

Sign the joint stakeholder call for nutrients in the EU Circular Economy Act

Joint call, open for signatures of companies and organisations; calls for a Circular Economy Act ambitious for nutrients, to forward sustainability, EU job creation and competitivity, and food system resilience. The Joint Call proposes 16 actions and policy changes for the Circular Economy Act. Companies and organisations wishing to sign this Call, please contact ESPP info@phosphorusplatform.eu,

ESPP has also prepared detailed technical input, addressing nutrient circularity in a wide range of regulations and policies www.phosphorusplatform.eu/regulatory

Joint call for nutrients in the EU Circular Economy Act". ***Sign now!*** *www.phosphorusplatform.eu/regulatory*

EU consultation on facilitating transport of wastes for recycling

Open to 31st October, public consultation addresses which wastes should be "green listed" for transport between EU Member States to facilitate recovery and recycling. This consultation follows adoption of EU Regulation 2024/1157 on shipments of waste and prepares a possible extension of the "green list" of wastes (Annex III of 2024/1157) which are non-hazardous and which do NOT require prior consent of national authorities for transport. Green-listed wastes remain subject to information and documentation requirements for transport. The current 'green list' in Annex III of 2024/1157 covers various plastic wastes, scrap metals and electrical equipment, waste glass, ceramic wastes, coal combustion ashes, tanning and leather wastes (see Regulation for detail). The consultation consists of a public questionnaire considering possible (non-hazardous) waste streams to add to this Annex. Electronics wastes, other metal wastes, textiles, footwear and mattresses are suggested. The questionnaire invites to propose further waste types for addition to the 'green list' Annex III, requesting that respondents specify relevant Waste Codes, provide evidence as required in art. 79(3) or 79(4) of 2024/1157 "demonstrated that the waste in question will be managed in an environmentally sound manner within the Union", and submit data on economic benefits and potential quantities. The questionnaire further asks for which waste types EU harmonised criteria should be developed (e.g. criteria such as contamination limits), as per art. 29(6) of 2024/1157, again if possible, with waste codes, potential economic benefits and quantities. In addition to the short questionnaire, the consultation invites to submit supporting documents or files.

ESPP draft input to this consultation (proposed waste streams to add to 'green list' or for harmonised criteria) is here for consultation and comment www.phosphorusplatform.eu/regulatory

EU public consultation ***to 31st October 2025*** *"Green-listing certain waste for the purposes of shipments to recovery between Member States" https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14712-Green-listing-certain-waste-for-the-purposes-of-shipments-to-recovery-between-Member-States_en*

EU 'omnibus' simplification proposals: fertilisers, PFAS, Critical Chemicals

Chemical Regulation Simplification and Chemicals Action Plan aim to support the circular economy, simplify Fertilising Products Regulation (FPR) requirements, establish a "Critical Chemicals Alliance", support decarbonisation and access to affordable energy for the chemicals sector (ammonia production is specifically cited - critical for nitrogen fertiliser production), improve chemicals labelling, consolidate ECHA (European Chemicals Agency). The European Commission's proposed regulatory texts (including the Fertilising Products Regulation modifications: simplification of REACH+ and methodology for authorisation of microbial biostimulants) will now go to European Parliament and Council, so may be deleted or modified. Circularity actions target mainly plastics recycling and refer to the future EU Circular Economy Act. The Commission estimates that these proposed simplifications will enable over 360 million €/year economies for the chemicals industry.

The announced **Chemicals Action Plan** includes announcement of a 'Critical Chemicals Alliance' aiming to identify essential production sites needing policy support (in particular Europe's existing 150 chemical parks), map critical base chemical molecules, tackle trade issues such as supply chain dependencies and distortions. Ammonia production is again specifically cited ($2.1). The Alliance will coordinate EU and national projects, including Important Projects of Common European Interest (IPCEI) and support EU critical chemicals production sites. The Alliance will develop criteria for identifying chemical sites and

molecules that are critical for the EU's strategic objectives, reflecting importance for downstream strategic sectors and EU import dependencies. Such molecules will have enhanced Customs Surveillance monitoring and possibly specific legislative proposals. ESPP notes that P_4 (White Phosphorus) corresponds clearly to these criteria. P_4 is an EU listed Critical Raw Material so is also addressed by the Raw Materials Information Systems RMIS https://rmis.jrc.ec.europa.eu/ The Commission also intends to apply trade defence measures to ensure fair competition and expand chemical import monitoring through the existing Import Surveillance Task Force.

The Chemicals Action Plan also confirms the Commission's **commitment to restrict PFAS** "as soon as possible after receiving ECHA's opinion", probably early 2026. The Plan indicates consideration of bans on consumer uses of PFAS stating that "continued use of PFAS in industrial applications may be allowed for critical applications … under strict conditions until acceptable substitutes are found". ESPP considers that strict limitation of PFAS emissions at source is important to strongly reduce levels in secondary materials which are today an obstacle to nutrients and organics recycling and reuse.

"Commission strengthens Europe's chemical industry", European Commission press release, 8th July 2025: https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1755

Chemicals simplification omnibus proposal "Simplification of certain requirements and procedures for chemical products", COM(2025)531, SWD(2025)531, COM(2025)526, 8th July 2025 https://single-market-economy.ec.europa.eu/publications/simplification-certain-requirements-and-procedures-chemical-products_en

"European Chemicals Industry Action Plan", COM(2025)530, 8th July 2025 https://single-market-economy.ec.europa.eu/publications/european-chemicals-industry-action-plan_en

Proposed removal of EU Fertilising Products Regulation "REACH+" requirement

Concerning the EU Fertilising Products Regulation (FPR), the chemicals simplification omnibus proposal above (if adopted as proposed) will:

- Remove the current 'REACH+' requirements of the FPR: chemicals used in fertilisers at low volumes would no longer be subject to REACH requirements applicable to high-volume chemicals,
- Facilitate modification of CMCs (component material categories) by allowing Commission Delegated Acts to simultaneously modify several CMCs (allow a new material or method in different CMCs) whereas the current text requires a separate Act for each CMC concerned,
- Delay digital labelling obligations of the FPR and render digital labelling more flexible.

The **simplification of the "REACH+" requirement** has been repeatedly requested by industry because it adds supplementary data and administrative requirements for chemicals used in fertilisers, whereas these requirements are not demanded for use in other applications (e.g. detergents, paints …). The current REACH+ requirement is identified as a significant obstacle by industry federations because some additives, used at low doses but essential for fertiliser formulation, are today REACH registered only at low tonnage bands. A joint position paper (May 2025) co-signed by ESPP, proposed to exonerate from this REACH+ requirement any additive used at <0.1% in fertilising products which is not Classified for health/environment risks (see detail in position paper). ESPP considers that this proposal would ensure health and environmental safety whilst removing a significant obstacle to uptake of the EU Fertilising Products Regulation by companies.

Chemicals Regulation Simplification Omnibus proposed legal texts: https://single-market-economy.ec.europa.eu/publications/simplification-certain-requirements-and-procedures-chemical-products_en

Fertilisers industry REACH+ survey

Survey open to fertilisers manufacturers: aim is to collect data from fertiliser manufacturers on whether the current REACH+ requirement of the EU Fertilising Products Regulation is preventing CE-marking of fertilisers. This short survey is organised by EBIC with other partners, including ESPP. Questions ask whether the REACH+ requirement has posed difficulties to obtaining CE-mark Certification, whether it has prevented CE-mark certification of products or led to their being sold under national rather than EU fertilisers regulations, whether it has led to product reformulation. The survey results will input to discussions in the European Parliament and Council on the removal of the FPR REACH+ obligation (within the Chemicals Regulation Simplification omnibus, see above).

***Survey open to fertilisers manufacturers**: https://www.surveymonkey.com/r/ESPP-FPR-REACH*

EU consultation on simplification of environmental reporting

Open to 10th September 2025: the aim is to identify environmental reporting obligations which can be simplified without undermining environmental objectives, as part of the Commission's agenda for regulatory simplification and implementation agenda (Competitiveness Compass for the EU). Possible measures indicated include discontinuation of SCIP (substances of concern in products database) under the Waste Framework Directive, harmonisation of Extended Producer Responsibility mechanisms between Member States, streamlining and digitalising reporting for waste management, circular economy and industrial emissions and addressing environmental permitting challenges.

*"Simplification of administrative burdens in environmental legislation", EU public 'Call for Evidence' consultation **open to 10th September 2025** https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14794-Simplification-of-administrative-burdens-in-environmental-legislation-_en*

Input to EU consultation: flows with significant potential for phosphorus recovery

Following the EU public consultation to identify waste streams and materials with potential to recover Critical Raw Materials, ESPP is collating data to support a submitted list of streams for phosphorus recovery. ESPP now needs to collate data and evidence to support these proposals: clarify definition of these streams, potential quantities, feasibility of phosphorus (and other CRM) recovery, quality and safety, publications and other support references: **your input is welcome by mid-September**. This consultation process aims to finalise the list of materials referred to in art. 26(7) of the EU Critical Raw Materials Act 2024/1252 and so will identify "products, components and waste streams that are considered as having a relevant critical raw materials recovery potential". Some significant streams of secondary phosphorus are already included in the draft list proposed in the EU consultation, including sewage sludge and sewage sludge incineration ash, biowaste, municipal solid refuse incineration ash*, batteries, electronics wastes, catalysts, cables from buildings (e.g. P from flame retardants), PV panels, fuel cells. ESPP suggested some wording changes for some of these included streams and proposed to add the following streams:

- Animal manures and slurry,
- Agricultural run-off water, e.g. in tile or ditch drainage of fields,
- Food industry, dairy processing, slaughterhouse streams,
- Cat1 Animal By-Product incineration ash,
- Spent fire extinguisher powders,
- Metal processing liquors and 'spent' phosphoric acids,
- Dredging muds and sediments,
- Streams from processing of bio-fuels, bio-materials, biorefineries, etc.,
- Algae and biomass grown in wastewater treatment systems or collected as waste.

** Municipal solid waste incineration ash: ESPP comment: low relevance for phosphorus, relevant for other Critical Raw Materials and also for potassium.*

ESPP preliminary input to EU consultation on streams with potential to recover phosphorus: www.phosphorusplatform.eu/regulatory under "EU Critical Raw Materials (CRM)".

*ESPP will submit additional information to the EU (details of proposed streams, quantification of potential phosphorus recovery, quality and logistic aspects). **Your input is welcome** by mid-September to info@phosphorusplatform.eu*

EU public consultation "Critical raw materials – products, components and waste streams with a high potential to recover critical raw materials" (closed 25 July 2025) https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14677-Critical-raw-materials-products-components-and-waste-streams-with-a-high-potential-to-recover-critical-raw-materials_en

ESPP members news

OCP moves to low cadmium fertilisers

OCP Group, a global phosphate industry leader and custodian in Morocco of over 2/3 of the world's phosphate rock reserves, supplies only 'low cadmium' phosphate fertilisers to Europe since February 2025. By the end of 2025, all fertiliser products supplied globally by OCP Group will meet the same standard. 'Low cadmium' labelling is authorised in Annex I of the EU Fertilising Products Regulation for inorganic macronutrient and organo-mineral fertilisers with <20 mgCd/kgP_2O_5, one third of the authorised maximum cadmium permitted for fertilisers in Europe. To achieve this, OCP Group has developed advanced technologies to safely reduce the naturally occurring cadmium in its fertiliser products. OCP Group actively supports farmers in optimising fertiliser use to improve crop productivity whilst protecting the environment. This work includes promoting the '4Rs' principles of responsible nutrient stewardship – right source, right rate, right time, right place – ensuring balanced nutrient and micronutrient supply tailored to crop needs, and encouraging conservation agriculture practices such as cover cropping, organic soil improvers and reduced tillage.

For more information on responsible fertiliser use and cadmium awareness, visit OCP Nutricrops: https://www.ocpnutricrops-fertilizer-use.com/

SNB, Lanxess, GMB BioEnergie and Aquafin invest in Spodofos P_4 process development

The Spodofos process uses energy embedded in scrap aluminium to reduce phosphates to elemental phosphorus (P_4), avoiding use of coke and reducing energy consumption compared to a conventional P_4 furnace (see ESPP SCOPE Newsletter n°136). The Spodofos process is developed by ThermusP (a new ESPP member), a Netherlands 2020 technology startup, led by Frans Horstink with the aim of bringing Spodofos to full scale industrial implementation. The aim is to produce P_4 in Europe from sewage sludge and other phosphorus-rich incineration ashes. P_4 is an EU Critical Raw Material, separately and additionally to 'Phosphate Rock'. It is essential for a wide range of chemicals and industrial processes, including fire safety of (in e.g. plastics, composites …), battery electrolytes, photovoltaics, specialty chemicals …

Following successful small-scale testing (c. 10 gramme batches of sewage sludge incineration ash, plus lab scale investigation of mixing and reactor operation conditions), the process is currently being scaled up to TRL6 in a pilot under construction (2 t/day ash input). This pilot project is supported by SNB, Lanxess, GMB BioEnergie, Aquafin and STOWA. SNB, an ESPP member, was established by the Dutch water companies over 30 years ago, incinerates around 30% of The Netherlands sewage sludge (approx. 400 000 t/y dewatered sludge).

STOWA, the Netherlands water companies joint research organisation, published a first report on the Spodofos process in 2021, updated by a second report in March 2025. These reports evaluate the process technical, economic and LCA aspects, including in particular inputs (energy, availability of aluminium scrap), outputs (P4, slag, ferrophosphorus) and economic estimates.

The STOWA 2021 report suggested that the process could be economic with a payback time of <10 years but underlined that the price of aluminium scrap is the most economically critical aspect of the project (relative price of aluminium scrap versus P_4), with profitability also sensitive to content of phosphorus in incoming ash and the % "lost" in ferrophosphorus (where the P content has no significant commercial value), to the gate fee charged for ash intake and to the fate of the slag resulting from the process.

The STOWA 2025 report, based on TRL5 tests (1 kg batch tests) and output material application tests, indicates that the Spodofos process should operate at very high temperature (> 1 600 °C) to ensure that the resulting slag is liquid in the reactor, enabling continuous operation. This higher temperature should reduce the P content of ferrophosphorus (so increasing the proportion of input phosphorus converted to P4). ESPP notes that this is important as sewage sludge incineration ash contains around 10% iron (see table 1 in STOWA 2021 report). STOWA (2025) suggest that the Spodofos ferrophosphorus, because of its specific characteristics which are comparable to those of ferrosilicon, could find a market to replace ferrosilicon in Dense Medium Separation processes at an estimated sale price of €500/t ferrophosphorus. This improves the business case because the iron alloy was assigned a zero value in the 2021 report.

The 2025 report suggests, based on the lab tests to date, that the slag could be sold to the cement industry, depending on its physical properties, which depend on how it is cooled. This slag is rich in alumina (aluminium oxide), as well as containing the silica and calcium from the process input ash. If cooled rapidly in water, the slag develops an expanded amorphous structure which, after grinding, offers cementing properties. The 2025 report estimates a sales price of €40/t for the slag. The fate of the slag (sale price or landfill costs, processing costs, energy recovery in cooling) significantly impacts the business case because of the large quantities produced.

As does P_4, ferrosilicon and cement require high energy input for their production, so valorisation of the ferrophosphorus and the process slag to replace these significantly improve both the LCA/energy balance and the business case for Spodofos.

STOWA 2025 second report on Spodofos process, report n° 2025-06 (in English) https://www.stowa.nl/publicaties/spodofos-witte-fosforproductie-uit-slibverbrandingsassen-english-version-spodofos-white-phosphorus

STOWA 2021 first report on Spodofos process, report n° 2021-57 (in Dutch) https://www.stowa.nl/publicaties/spodofos-witte-fosforproductie-uit-slibverbrandingsassen-eerste-evaluatie-van-de

Nutrient policy and recycling

Proposed 'RENURE' manure recycling criteria fail on quality, clarity, pollution

ESPP has written to the European Commission clarifying proposals to ensure that 'RENURE' criteria for recycled manure nutrients under the Nitrates Directive respect recycling and environmental objectives. ESPP considers that the criteria currently proposed (April 2024) fail to ensure that eligible recycled nutrients from manure "truly are close to chemical fertilisers" (the aim stated by the European Commission), fail to deliver products corresponding to market and farmer requirements, and will not facilitate transport of excess nutrients away from livestock hotspots. This is because the proposed criteria would allow materials with significant organic content or which are very dilute. Also, the proposal does not include clear definitions and uses wording which is not coherent with other regulations, so would result in obstacles to investment (legal uncertainty) and to implementation difficulties for Member States. ESPP notes that the term 'Chemical Fertiliser' used in the 1991 Nitrates Directive is not defined and proposes instead to refer to the clearly defined and appropriate EU Fertilising Products Regulation (FPR) terminology of 'Mineral Fertiliser' (defined as <1% organic carbon) and to relevant FPR specifications for the three proposed RENURE materials: CMC12 for precipitated phosphates, CMC15 for recovered ammonium salts and PFC1(C)(I)(b) "Liquid Inorganic Macronutrient Fertiliser" for mineral concentrates. This would avoid legal ambiguities, ensure product quality, avoid allowing materials with high organic content and ensure concentration and value of nutrients compatible with transport away from livestock hotspots to crop-growing regions needing fertiliser inputs.

Draft RENURE criteria proposed by the European Commission, April 2024 https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=PI_COM:Ares(2024)2885619

ESPP ongoing exchange of letters with the European Commission services www.phosphorusplatform.eu/regulatory

NIBIO assessment of sales quota for recycled phosphorus in Norway

A sales quota for recycled phosphorus may support market growth, but poses challenges in implementation, fairness, and effectiveness, with possible limited impact on national surpluses.

Commissioned by the Norwegian Ministry of Agriculture, NIBIO (the Norwegian Institute of Bioeconomy Research) has assessed the potential of introducing a "sales requirement" (quota) for recycled phosphorus in fertilisers. The proposed measure studied would intend to stimulate a market for recycled phosphorus, reduce national surpluses and pollution, and support more sustainable phosphorus use. NIBIO was asked to assess a "sales requirement" (quota) formulated as a share of all fertiliser

phosphorus sold by distributors, that is: a certain % of total phosphorus sold by each distributor company or cooperative would have to be "recycled". A quota would apply to the total phosphorus in inorganic, organic and organo-mineral fertilisers sold. However, to begin with it is likely that the quota would mainly be met with organic fertilisers due to technical challenges with replacing phosphorus in mineral fertilisers.

Norway increasingly faces a situation where more phosphorus is available than is required by agriculture, after the new Norwegian fertiliser regulation implemented phosphorus limits per hectare in February 2025. Surpluses are primarily from livestock manure, followed by sewage sludge, food waste, and fish waste, in addition to mineral fertiliser. This trend is expected to continue due to stricter P-removal requirements for sewage, and collection requirements for food waste and fish sludge, as well as growth in aquaculture.

While stakeholders (fertiliser producers, distributors, farmers, agricultural advisory services, public authorities, technology providers) generally support greater use of recycled phosphorus, they express concern about whether a sales quota for recycled phosphorus is the right tool to achieve this.

According to NIBIO's analysis, the feasibility of such a measure depends on the availability of suitable fertiliser products with recycled phosphorus, which is currently limited due to immature technologies in Norway and uneven access to raw materials. If domestic supply cannot meet the quota, distributors might turn to cheaper imported recycled products, thereby missing the main objective of reducing Norway's own phosphorus surplus. There is also a risk that the measure could unintentionally favour fertiliser production from regions without a phosphorus surplus, depending on logistics and cost.

From a market perspective, recycled fertilisers are often less competitive than mineral ones, due to higher production costs, and have variable nutrient availability and bulkier application requirements for organic recycled fertilisers. Distributors would likely have to sell such products at a loss or raise the price of mineral fertilisers to compensate. In practice, this would shift the financial burden from "surplus producers" to farmers who do not contribute to the phosphorus surplus, contradicting the "polluter pays" principle.

To be viable, NIBIO recommends that to be considered in the "recycled P quota", fertilisers must conform to the EU Fertilising Product Regulation (FPR), to ensure safety and quality. NIBIO questions whether quotas should be defined nationally or regionally, and whether quotas should be calculated per retail outlet or across companies. Any quota should start at a realistic level and increase only when recycled products are available and competitive.

NIBIO concludes that while a quota could help stimulate a market for recycled phosphorus, it is not a necessary condition for improved phosphorus management in Norway. Existing and planned regulations, such as limits on phosphorus application and the landfill ban on organic waste, are already likely to drive increased recycling and better resource use. A sales quota for recycled phosphorus risks unintended consequences, such as encouraging livestock intensification or fertiliser imports, and may not align with Norway's broader sustainability and agricultural policy goals.

Anne Falk Øgaard, Valborg Kvakkestad, Kristian Bjerke, Eva Brod, Erin Byers, Astrid Solvåg Nesse, Michal Sposób, Nhat Strøm-Andersen, Simen Wilsher-Lohre, "Vurdering av et omsetningskrav for resirkulert fosfor", https://nibio.brage.unit.no/nibio-xmlui/bitstream/handle/11250/3156387/NIBIO_RAPPORT_2024_10_104.pdf?sequence=1

Vision for Agriculture and Food Conference

The Vision for Agriculture and Food Conference gathered EU leaders, Member States, and key stakeholders to discuss the future of European agriculture, with a session dedicated to the livestock sector and its sustainability.

Ursula von der Leyen, European Commission President, opened the event by reaffirming the central role of farmers, stressing the need to guarantee a fair standard of living, especially for smallholders. She introduced the new "Vision for Agriculture and Food**"** (see ESPP eNews 95), which aims to make the Common Agricultural Policy (CAP) simpler and more accessible (see ESPP eNews 97), with fewer administrative burdens and restoring trust in farmers. The Vision also highlights the need for support for young people entering the profession, and for adapting agriculture to evolving challenges such as sustainability, competitiveness, and climate resilience.

Christophe Hansen, European Commissioner for Agriculture and Food, underlined the urgency of simplifying access to funding, increasing digitalisation, and creating favorable conditions for young farmers for new generations of farmers, through improved access to land, credit, and rural infrastructure. He emphasized that the CAP remains an essential tool for resilience and sustainability. He reiterated that the CAP remains a fundamental tool for strengthening the resilience and sustainability of the sector, and referred to the upcoming EU Water Resilience Initiative (see ESPP eNews 98), which aims to reduce water waste and pollution.

These priorities were echoed by ministers, EU institutions, and financial actors throughout the event, who stressed the importance of

- strengthening income security for farmers and ensuring generational renewal;
- providing targeted financial tools, including through the European Investment Bank, to support innovation, digitalisation, and sustainable practices;
- decentralising CAP implementation to reflect regional conditions and needs;
- supporting young and small-scale farmers through training, social protection, and access to capital;
- foster a more attractive agricultural sector through regenerative, climate-resilient approaches.

A core focus of the Vision is the livestock sector. On 8th May, Commissioner Hansen officially launched the Livestock Workstream, a multi-stakeholder platform tasked with developing long-term policy pathways for a sustainable EU livestock sector. The initiative aims to ensure that livestock farming is economically viable and environmentally responsible, while recognising the diversity of systems across Europe. It also seeks to reinforce the sector's contribution to high-quality food production, biodiversity, and vibrant rural areas, whilst reducing climate and nutrient pressures.

In the dedicated livestock session, experts acknowledged the ongoing decline in livestock numbers across the EU and called for measures to increase resilience, competitiveness, and adaptation to climate change. Key interventions stressed the need to:

- reduce nitrogen and phosphorus surpluses in high-density farming regions;
- promote nutrient circularity, particularly through improved feed efficiency and manure management (see also ESPP Scope Newsletter 155);
- support a shift towards more extensive livestock systems that are better integrated with landscape and biodiversity objectives;
- align production models with dietary transitions and emerging market conditions.

Stakeholders also called for a holistic approach to nutrient stewardship, alongside stronger action on animal welfare, disease management, and climate mitigation, to ensure the sector's long-term environmental and social sustainability.

Conference on the Vision for Agriculture and Food, 8th May 2025 in Brussels: https://agriculture.ec.europa.eu/media/events/shaping-future-farming-and-agri-food-sector-2025-05-08_en EU Livestock Workstream: https://agriculture.ec.europa.eu/common-agricultural-policy/cap-overview/committees-and-expert-groups/livestock-workstream_en Commission launches new Livestock Workstream as Part of the Vision for Agriculture and Food: https://agriculture.ec.europa.eu/media/news/commission-launches-new-livestock-workstream-part-vision-agriculture-and-food-2025-05-27_en

CAP after 2027 and EU long-term budget (2028–2034)

Commission proposes €2 trillion EU budget (MFF 2028–34), with €300 billion for farm income support, a larger crisis reserve, and a simplified CAP delivered via National and Regional Partnership Plans.

Building on the "Vision for Agriculture and Food" (see above), the European Commission has tabled proposals for the Common Agricultural Policy (CAP) after 2027 and for the EU's next long-term budget (Multiannual Financial Framework, MFF) covering 2028–2034. In her statement of 16 July 2025, President von der Leyen presented a c. 2 trillion € MFF (c. 1.26% of EU Gross National Income), designed to be more flexible and simpler, with funding implemented via National and Regional Partnership Plans bringing cohesion and agriculture "under one roof". Funding for agriculture and rural areas will be:

- 300 billion € for farmers' income support* and 2 billion € for fisheries (within the 865 billion € allocated to National and Regional Partnership Plans);
- A Unity Safety Net of 900 million €/year (total 6.3 billion €) to support farmers in case of market disturbances, doubling the current CAP crisis reserve;
- Additional support to competitiveness and research through a new European Competitiveness Fund (410 billion €) and through doubled investment in Horizon Europe;
- Around 700 billion € will be dedicated to clean tech, bioeconomy and decarbonisation, alongside the 35% climate-spending target for the overall MFF.

It is proposed to maintain the CAP toolbox, but with simplified delivery, merging the two current pillars into a single fund. Income support would cover area-based payments, agro-environmental actions, and on-farm investments (e.g. modernisation, diversification, adoption of new practices and technologies). Other CAP measures, such as rural development projects, would be financed via the Partnership Plans, while the Competitiveness Fund would provide additional financing for agri-food research and innovation. Support would focus on farmers exercising "an agricultural activity on their holding", plus young farmers, small and mixed farms, and farms in areas with natural constraints. Payments for large farms would be capped at 100 000 €, to ensure fairer distribution. Member States would have greater responsibility and accountability for delivering policy objectives, while the Commission would safeguard a level playing field through a common set of objectives and rules, complemented by CAP national recommendations. The crisis reserve would be doubled (see above). Environmentally, "Farm Stewardship" would replace today's conditionality with an incentive-based, locally adaptable approach, while maintaining EU-level objectives such as protecting watercourses, soils, wetlands and peatlands, in line with the Vision's call for nutrient stewardship and water resilience.

ESPP notes that Farm Stewardship objectives (e.g. protecting rivers) would open opportunities for Member States to embed nitrogen and phosphorus loss-reduction targets in their CAP Plans. Support could possibly cover manure management, feed efficiency and circular fertilisers, consistent with the Vision's emphasis on nutrient circularity and water resilience. With agriculture integrated into Partnership Plans, investments in nutrient-smart infrastructure (biogas, composting, slurry processing), advisory services, and digital nutrient accounting tools could possibly be funded alongside rural investments in transport, water and skills. Finally, the Competitiveness Fund and EU research programme are expected to accelerate agri-innovation towards climate-resilient, regenerative farming models.

* *This represents the minimum guaranteed allocation, while additional resources for agriculture may come from the wider 865 billion € National and Regional Partnership Plans or other EU programmes (e.g. Horizon Europe, part of the Competitiveness Fund)*

The next chapter for the CAP: https://agriculture.ec.europa.eu/media/news/next-chapter-cap-2025-07-17_en

Statement by President von der Leyen on the next long-term EU budget: https://ec.europa.eu/commission/presscorner/detail/en/statement_25_1851

Proposal for a Regulation Of The European Parliament And Of The Council establishing the conditions for the implementation of the Union support to the Common Agriculture Policy for the period from 2028 to 2034: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52025PC0560

UK Water Industry Roadmap to Resource Circularity

Roadmap sees recycling as an important opportunity, but says more collaboration is needed with regulators and with the market supply chain for recovered products. Priorities include phosphorus, nitrogen, cellulose and CO_2. The Roadmap to Resource Recovery is the outcome of two years exchange in the UK Resource Recovery Working Group, led by Thames Water and bringing together key stakeholders from the water sector, regulators, government, and the fertiliser market. The roadmap suggests resource recovery will not be rolled out in the water sector until the focus of innovation shifts from testing technologies onto enabling financially and environmentally sustainable resource recycling. It proposes:

- Embedding resource recovery as a core tenet of water sector operations alongside the protection of public and environmental health.
- Learning from international best practice to shape what is implemented in the UK.
- Creating an open database of recovery opportunities to show key stakeholders the scale of opportunity.
- Advocacy for supportive legislation and regulation e.g. GB fertiliser regulations.
- Investment in business models that allow environmentally and economically sustainable resource recovery and recycling.
- Cross sector collaboration on resource recycling to increase the scale of supply and make supply chain logistics more economically viable.
- Develop sustainability metrics for recycling to verify the environmental credentials of recycled products in the market.
- Align resource recovery and recycling with the Net Zero commitments.

Resource recovery priorities are proposed:

- Short term: focus on eliminating resources which are currently being wasted/landfilled, e.g. grit, screenings, fats, oils, and greases, drinking water sludges, and construction residues.
- Medium term: focus on resources where there is a clear social and economic case for recovery, e.g. irrigation water, phosphorus, nitrogen, carbon dioxide, cellulose,
- Long term: Recover resources with significant potential value but that would require fundamental changes to existing infrastructure, e.g. drinking water, hydrogen, graphene, algae, heat.

"Roadmap to Resource Recovery", UK and Ireland Resource Recovery Working Group, R. Naylor & F. Firth, 15 pages, June 2025, contact: Chiara.Coleman@thameswater.co.uk

UK Parliament report on nitrogen pollution reduction and N-recycling

Parliament Committee report underlines negative impacts of nitrogen emissions on water, air and climate, possibility for recycling and reuse, need to quantify flows, losses and recycling potential. The report by the UK Parliament House of Lords Environment and Climate Change Committee is based on 14 expert audition sessions and over 60 inputs of written evidence. It emphasises the current lack of a coherent, cross-department approach to nitrogen management and the need to develop a 'Nitrogen Strategy', including quantifying major flows, sources and sinks, and to clarify regulations and toughen enforcement, in for agriculture, wastewater, transport and industry. A circular approach to nitrogen should include reducing inputs, maximising use efficiency (e.g. soil testing, agricultural best practices) and developing nutrient recovery technologies. Low hanging fruits are identified for farming as covering manure slurry storage and implementing low-emission spreading techniques, and for wastewater treatment as catchment management and nature-based solutions. The report's 27 conclusions and recommendations include:

- Develop and annually update an overview of nitrogen flows, sources and sinks (nitrogen balance sheet),
- Improve farm regulatory compliance by reinforcing guidance, inspections, enforcement and penalties,
- Develop recycled fertilisers from manures and slurries,
- Establish a 'roadmap' of when and where nutrient recovery technologies are expected to be commercially available,
- Ensure clear policy direction and financial incentives for investment in nutrient recovery technologies,
- Include funding for N-recycling in wastewater treatment funding (OFWAT),
- Legally require by 2027 coverage of all manure and slurry storage and implementation of low emission spreading techniques,
- Extend environmental permitting (equivalent of the EU IED Regulation) to large cattle farms and consult on extension to smaller pig and poultry farms,
- Revise the UK fertilisers regulations, within 2 years, to facilitate access to market of quality products from organic materials,
- For wastewater treatment: develop and fund catchment-based approaches (including collaboration with agriculture), implement N discharge limits, improve monitoring of emissions to water and to air, including from stormwater overflows.

"Nitrogen: time to reduce, recycle, reuse", UK Parliament House of Lords report, Session 25, 24 July 2025
https://committees.parliament.uk/committee/515/environment-and-climate-change-committee/news/208583/time-to-reduce-recycle-and-reuse-nitrogen-says-lords-committee/

ESPP input to this report, March 2025: www.phosphorusplatform.eu/regulatory

ISO standard officialises mineral recycling rate of sewage sludge in cement kilns

Some 460.000 tonnes/y of dried sewage sludge are currently used as fuel and mineral recycling in cement kilns in Europe*. The new ISO 4349 officialises the recycling rate of certain minerals (not phosphorus) in this valorisation. The new EN ISO Standard 4349 defines the recycling index of minerals in solid recovered fuels (SRF) valorised in cement kilns. It notes that SRFs "contain various chemical components that are crucial raw materials for cement manufacturers, fulfil specific tasks in cement clinker production or represent clinker phases giving the clinker its specific properties", citing in particular aluminium, calcium, iron, silicon and also magnesium, titanium, potassium, sodium and sulphur. The Standard defines ($3.1) the "Recycling index" as the share of the fuel "that can be considered as recycled on a material level, expressed as a mass fraction in per cent of the dry matter". The calculation of this share is defined (7.5.2 "Calculation of R-index for co-processing") with two indexes: R_{i4} and R_{i9} both based the ash content of the fuel multiplied, respectively, by the total content of (aluminium, calcium, iron and silicon) or the total content of the nine elements cited above. ESPP comment: phosphorus content is not taken into account in the recycling indexes, presumably because it does not bring property benefits (in fact it can inhibit cement setting) and so presence of phosphorus in the ash will arithmetically reduce slightly the recycling index. The cement industry aims to develop processes to recover phosphorus in the sewage works process or from sewage sludge, so as to both continue to valorise the energy and minerals content of sewage sludges and to recycle phosphorus.

** Source CEMBUREAU: brochure 1, brochure 2.*

EN ISO Standard 4349 "Solid recovered fuels - Determination of the Recycling Index for co-processing", 2024 available for 24.80€ from Estonian Standards https://www.evs.ee/en/evs-en-iso-4349-2024 (or nearly five times that price from ISO !).

Ontario funds Purified Phosphoric Acid plant under Critical Raw Materials policy

Fox River Resources Corp, Canada, has secured 135 K€ Ontario State funding to develop phosphoric acid purification for use in Lithium Iron Phosphate (LFP) battery cathodes at the company's Martison phosphate rock mine project site. LFP battery cathodes are based on lithium iron phosphate ($LiFePO_4$) produced from Purified Phosphoric Acid (PPA), for which a high level of purity is required. This is distinct from the need for P_4 (White Phosphorus) derivative chemicals in LFP batteries (for lithium hexafluorophosphate $LiPF_6$ in electrolytes, phosphorus flame retardants). ESPP and stakeholders consider that both P_4 and Purified Phosphoric Acid should be identified as Critical and Strategic Raw Materials by the EU (see Joint Position). The Fox River project aims to valorise igneous phosphate rock from a new mine at the Martison site to produce merchant grade phosphoric acid (MGA) purify this to battery-grade Purified Phosphoric Acid (PPA). The project is in the same geological formation as the now-closed Agrium mine at Kapuskasing.

"Ontario funding awarded to Fox River for phosphate fertilizers", 12th August 2025
https://www.worldfertilizer.com/phosphates/12082025/ontario-funding-awarded-to-fox-river-for-phosphate-fertilizers/

Research and innovation

Cemvita to produce "biofertilisers" from biofuel production by-products

Planned site in Brazil will use engineered microorganisms to convert glycerol from biodiesel production and CO_2 into sustainable aviation fuel (SAF) and FermNPK™ "biofertilizer". The transesterification process of biodiesel production generates around 1 t of crude glycerol per 10 t of biofuel. The crude glycerol is a mixture of glycerol, methanol, other organic compounds and inorganic salts. Cemvita's synthetic biology process will use proprietary microorganisms to convert this, along with CO_2, to oil for use in SAF aviation fuels and to fertiliser.

ESPP notes that such an innovative, bio-sourced, carbon-negative and recycled fertiliser would be excluded from the EU Fertilising Products Regulation (FPR) because it does not correspond to any of the current limitative list of CMC materials. ESPP proposes to address this by authorising under the FPR any plant-derived material, waste or by-product of biorefineries or food- feed or pet food production, where there has been no contact with chemicals Classified for risks for health or the environment.

"Cemvita signs agreement for Brazillian industrialbiofertilizer plant", 4th August 2025
https://www.worldfertilizer.com/environment/04082025/cemvita-signs-agreement-for-brazillian-industrial-biofertilizer-plant/

Impacts of sewage sludge characteristics and incineration conditions on ash P-recovery

Phoster project (EU Era-Min) shows important influence of sewage sludge incineration conditions and of sludge calcium content on P-recovery from ash by acid leaching (using sulphuric and/or hydrochloric acid) The project aims to recover the phosphorus as struvite by precipitation from the acid leachate using secondary magnesium sources (for example, from magnesite calcination offgas cleaning, provided by Magnesitas Navarras) or as calcium phosphates (using lime CaOH for

P precipitation). Adjustment of the sewage sludge incineration temperature enabled to ensure the EU Industrial Emissions Directive obligation of <3% organic carbon in ash and reduce inorganic contaminants by volatisation. Results show that high levels of calcium in ash, with related alkalinity, result in high acid demand to recover phosphate, and so uneconomic conditions. It is not clear however how calcium levels in sewage sludge and so ash can be reduced in practice and they are may depend on whether drinking water is hard or soft (calcium carbonite content).

Phoster ("Phosphorus and magnesium recovery from waste streams for production of high-value renewable fertilizers) project Work Package updates https://phoster-project.eu/results

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