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Events

19 December 14h: ESPP General Assembly

ESPP General Assembly (members only). ESPP actions 2025, budget 2025, ESPP positions on Circular Economy Act, Urban Waste Water Treatment Directive phosphorus reuse and recycling targets.

Online. Contact info@phosphorusplatform.eu

21-22 January 2025: proposals for the new EU Circular Economy Act and CAP

Registration is open for ESPP's back-to-back one-day stakeholder workshops to define joint policy proposals for

- **nutrient recycling under the announced EU Circular Economy Act**, and resource recovery from water treatment, agri-food streams and animal by-products
- nutrient management and recycled nutrients in the EU Common Agriculture Policy (CAP) upcoming revision.

The new EU Circular Economy Act is under preparation. This will follow the second Circular Economy Action Plan (March 2020), but is expected to be a Regulation and not simply a Commission plan (see <u>mission letter</u> for the new Commissioner for Environment, Water Resilience and a Competitive Circular Economy). This means that it could include changes to existing Regulations (e.g. waste, chemicals, industry site permitting, animal by-products) and that it will be discussed by and possibly amended by Council (Member States) and European Parliament. ESPP aims to develop ambitious policy proposals.

The Common Agricultural Policy represents over 40% of the EU budget. The current CAP runs from 2023 to 2027. An interim evaluation report is expected in 2025. ESPP will develop proposals for integrating nutrient management (including the Green Deal and UNEP Biodiversity Convention 50% nutrient loss reduction objective) and nutrient recycling into the future CAP revision.

Two one-day meetings to develop proposals to input to the European Commission: **Tuesday 21st January (Circular Economy)** and **Wednesday 22nd January (Common Agricultural Policy) January 2025**, Brussels and online. Programme, registration: <u>https://www.phosphorusplatform.eu/policy2025</u>

Consult and input to draft proposal for the EU Circular Economy Act: https://www.phosphorusplatform.eu/policy2025



Phosphorus use and recycling in intensive livestock: 5-7 March 2025

Can intensive livestock be more phosphorus efficient than extensive or organic farming ? Looking at P flows, P efficiency in feed, P-recycling, best nutrient management practices. UNEP uPcycle workshop, organised by BETA Technology Centre (University of Vic), with ESPP, hosted by <u>Cooperl</u> (the Brittany pig farm cooperative) and <u>Roullier</u> (feed and fertilisers). With site visits to the <u>Minerallium</u> (chemistry of minerals and phosphates), Roullier fertiliser and feed production and research, Cooperl experimental livestock technology research farm and Cooperl's



manure and animal by-product reprocessing to energy and organic fertilisers. This workshop will be limited to 60 participants, with representatives of livestock farmers organisations, meat and dairy processers and distribution, animal feed industries, with selected experts from science and from P recycling.

5-7 March 2024, Saint Malo, France and online. To participate: pre-register here https://forms.office.com/e/D2RbpJZY57

13th March 2025: EU phosphorus "reuse & recycling" targets

Workshop In <u>Aquatech</u>, Amsterdam RAI, on the revised EU Urban Waste Water Treatment Directive, coagulants (iron/aluminium salts), phosphorus removal and P "reuse and recycling" targets. How can coagulants contribute to achieving the revised Urban Waste Water Treatment Directive P-removal requirements? Impacts of coagulant use on Fe/AI concentrations in sewage sludge, on sludge digestion and methane production. Fe/AI and crop P availability in sewage sludge (phosphorus "reuse") and in sewage sludge biochars/hydrochars. Impacts of Fe/AI in sludge on P-recovery processes: in sewage works, from sewage sludge ash. Routes to increase P-recovery rates in P-recovery upstream of sludge valorisation in cement production.

13th March 2025. In <u>Aquatech</u>, Amsterdam RAI and online. Programme and registration <u>https://phosphorusplatform.eu/AquatechWorkshop</u> Access to Aquatech is free by prior registration <u>https://www.aquatechtrade.com/amsterdam</u> See ESPP first workshop on iron-phosphate interactions (2020) <u>www.phosphorusplatform.eu/scope138</u>

June 2025, Bergen, nutrients in aquaculture and fisheries

ESPP workshop, with partners in Norway and UNEP uPcycle, on nutrient management in aquaculture feed, seafood processing and fish sludge valorisation, Norway & online, June 2025 (dates tbc), covering nutrient flows, environmental best practice, phosphorus recycling, regulatory challenges. The workshop will contribute to the United Nations (UNEP) project uPcycle, leading to a UNEP white paper on phosphorus sustainability in aquaculture. Possible online connected meetings in Brussels, Chile. Site visits: state-of-the-art aquaculture, fish sludge processing installations.

If you wish to contribute, please email indications of your organisation's areas of interest, competence, possible content of presentation, to <u>info@phosphorusplatform.eu</u>

Call for abstracts: Ramiran

Europe's leading manure conference, Ramiran, (since 1978) will take place 15-17 October 2025, Wageningen, The Netherlands. Call for abstracts is open to 15th February 2025. Ramiran 2025 will cover the following aspects of manure management: agronomic value, greenhouse emissions, air quality, water quality, soil quality, integral analysis, policy and regulation. Field visits: research farm, dairy farm.

Ramiran 2025: <u>www.ramiran2025.nl</u> Summary of Ramiran 2023 in ESPP's <u>SCOPE Newsletter n°149</u>.

Call for experts

WaterEurope, the organisation for the promotion of water innovation, research and technology, is looking for participants for its Expert Groups, including "Resource Recovery". Deadline 16th December 2024.

"Water Europe launches its new Collaboration Matrix", Water Europe, 25th November 2024.

Policy

Proposals for EU Circular Economy Act

Contribute to ESPP's draft joint stakeholder proposals for the announced EU Circular Economy Act. <u>Download</u> the current draft proposals and submit your comments to ESPP by <u>email</u> or at the workshop 21st January 2025 (Brussels & online). <u>https://www.phosphorusplatform.eu/policy2025</u>



Revised Urban Waste Water Treatment Directive validated

The revised Urban Waste Water Treatment Directive has been finally validated by Council and Parliament, including the introduction of "Phosphorus reuse and recycling targets", and is pending publication in the EU Official Journal. The revised Directive was <u>voted and approved</u> in European Council 5th November and was validated by European Parliament in October (formal consultation, no comments so no vote). The revised Directive includes: phosphorus reuse & recycling targets, to be defined within 3 years from Directive publication, feasibility study on N reuse and recovery (by 2033, tighter P and N discharge limits, urban wastewater systems to achieve "energy neutrality", quaternary treatment (removal of organic contaminants) with Extended Producer Responsibility (initially for pharmaceuticals and cosmetics only), water use, microplastics measurement …

Revised Urban Waste Water Treatment Directive: European Council <u>Press release</u> and <u>votes</u> - final agreed text <u>https://data.consilium.europa.eu/doc/document/PE-85-2024-INIT/en/pdf</u>

ESPP is workshop on the requirements of the revised Urban Waste Water Treatment Directive for phosphorus removal and recycling, 13th March 2025 within <u>Aquatech</u>, Amsterdam RAI + online (Aquatech is the world's largest professional event on water, with 20 000 participants)

Norway assessing safety of sewage sludge use in agriculture

Norway Food Safety Agency (NFSA) has commissioned a study into health and environment safety of use of sewage sludge as a fertilising product, to conclude by end 2025. Currently 50 – 60% of Norway's sewage sludge is applied to land, with wide variations between regions. The study is carried out by VKM (Norwegian Scientific Committee for Food and the Environment) and will update a previous study by VKM (2009) and will not address copper & zinc, cadmium and heavy metals (covered in other studies, 2014, 2009, 2022). It will cover sewage sludge, digested, solid/liquid separated, dried, pelletised, thermal hydrolysis, pyrolysis (biochars), ashes and struvites, and specifically what conditions (e.g. temperature, time) are needed for pyrolysis and combustion to eliminate contaminants. The study will examine which contaminants are susceptible to be present in sewage sludge and in these different sludge processing materials, including with implementation of stricter waste water treatment works discharge consents, and at their risks, including possible 'cocktail' effects. It will address use in agriculture, including on crops, grassland grazed by livestock, vegetable, fruit and berries, in particular looking at the safe time between application and grazing/harvesting.

"Sewage sludge as a fertilizer and soil conditioner", VKM <u>HERE</u> and "Risk assessment of contaminants in sewage sludge used as fertilising product - fate and effects in the food chain and the environment in Norway" <u>HERE</u>. Study delivery: end 2025.

ESPP asks for EU safety assessment of phosphates from ash for animal feed

ESPP has requested the European Commission to engage an official safety assessment of use in animal feed of purified calcium phosphates from sewage sludge incineration ash. More widely, ESPP asks that EU Animal By-Products (ABP) and Animal Feed regulations be updated to better enable nutrient recycling whilst guaranteeing safety. This is coherent with joint positions taken by a number of industry federations from the animal feed, fertilisers and rendering sectors (links below). Appropriate regulatory changes, subject to safety assessment, could be included in the announced EU Circular Economy Act. Specifically concerning the exclusions of sewage and manures irrespectively of further processing in the Animal Feed Regulation (Annex III of 767/2009), ESPP requests "reconsidering these exclusions for recovered purified mineral nutrient products, on condition that the heat and/or chemical processing ensures removal of organics and contaminants and so guarantees safety", for example recovery from incineration ash, a safety assessment has been carried out by the Swedish National Veterinary Authority (SVA) and concludes that pathogen risk is negligible (see <u>ESPP eNews n°84</u>). ESPP proposes that the European Commission consider requesting a safety assessment from EFSA (European Food Safety Agency) to follow the currently ongoing EFSA assessment of prion (BSE) risk of Cat.1 ABP ash use as fertiliser (link below).

"ABPs and nutrient circularity", ESPP letter to European Commission, DG SANTE, 30th November 2024.

Joint letter to DG SANTE "The EU needs an approach to materials from animal origin in the food chain that is fit for the Circular Economy" (2 April 2024, 16 organisations including ESPP)

Joint industry letter regarding measures to improve animal feed circularity (7 organisations including ESPP), 18_9_24 The above online at <u>www.phosphorusplatform.eu/regulatory</u>

EFSA-Q-2024-00278, Mandate number M-2023-00166 https://open.efsa.europa.eu/guestion/EFSA-Q-2024-00278

Phosphorus in COP29 Ragn-Sells workshops

Three COP29 sessions, organised by Ragn-Sells in collaboration with UNEP and Alfa Laval Technologies, emphasised the need to transform waste into resources and showcased innovative technologies. A key focus was the role of wastewater treatment plants (wwtps) in water reuse (as potable water or for agriculture), as well as energy and nutrient recovery. However, UNEP noted that only 16% of Nationally Determined Contributions (NDCs) explicitly address wwtps and resource recovery as GHG emission mitigation strategies. While 70 countries recognise wwtps for emissions reduction, most omit energy or nutrient recovery, and many exclude wastewater treatment altogether. With NDC 3.0 submissions due next year,



incorporating wastewater resource recovery into climate strategies could significantly reduce GHG emissions while delivering financial, environmental, and health benefits. Technologies like EasyMining's Aqua2N (see <u>ESPP eNews n°74</u>) and Ash2Phos (see <u>ESPP eNews n°62</u>) enable recovery of valuable nutrients such as nitrogen (as ammonium salts) from wastewater and pure calcium phosphate (Revocap) from sewage sludge (see <u>ESPP eNews n°82</u>). While a plant in Germany is set to operationalise Ash2Phos by 2027, EU legislation currently prohibits using the Revocap product in animal feed, probably leading to export to Canada, where approval processes are underway. Other innovations include Chromafora's SELPAXT technology, which removes over 90% of PFAS from liquid matrices, and Alfa Laval's decanter centrifuges for separating salts in the Aqua2N process. Sustainable aquaculture was also discussed, focusing on aquaculture fish sludge collection for energy and nutrient recovery, including the Ragn-Sells Havbruk's project in Norway, utilising Framo's sludge collection technology, and the recently EU-funded Aquaphoenix project (see <u>ESPP eNews n°90</u>) led by NORCE.

Ragn-Sells COP29 insights.

"The world needs a circular transformation, in order to succeed we need to adopt new processes in society and use innovative technology – these solutions already exist", Sweden at COP29 - <u>video</u>

"From Wastewater Treatment Plants to Resource Recovery plants – raising the ambition for NDCs 3.0", Sweden at COP29 - <u>video</u> "Closing the phosphorus cycle, will reduce eutrophication and methane emissions", Sweden at COP29 - <u>video</u>

ESPP calls for Critical Raw Material Act action for phosphorus

ESPP has written to the European Commission asking how the Critical Raw Material (CRM) Act <u>2024/1252</u> will be implemented for 'Phosphate rock' and 'Phosphorus' and proposing cooperation. The CRM Act includes specific actions for "Strategic" Raw Materials (phosphorus is not on this list) and also dispositions applicable to all "Critical" Raw Materials (including 'Phosphate rock' and 'Phosphorus', the latter meaning P₄) including:

- Member States single contact point for project permitting (Art. 9 & Art. 18)
- Member States to include CRM projects in national and regional planning (Art. 13).
- Commission monitoring of supply risks (Art. 20)
- Member States to identify and monitor key value chain operators (Art. 21)
- Member States programmes to incentivise resource efficiency and increase the use of secondary CRMs (Art. 26(1))
- Commission to specify products and waste streams with CRM recovery potential (Art. 26(7))
- Environmental footprinting for prioritised CRMs and certification template (Art. 30 & Art. 31)
- Commission to update every three years the lists of Critical and Strategic Raw Materials

ESPP suggests that recycling of phosphorus (meaning CRM = 'Phosphate rock') from sewage and use of phosphorus in fertilisers are addressed by the revised EU Urban Waste Water Treatment Directive and the EU Fertilising Products Directive, but that other actions need to be defined:

- Recycling from other sources (manure, agri-food waste, industrial streams ...)
- Use other than in fertilisers (animal feed, industry ...)
- Improving fertiliser use efficiency
- Supply risks of 'Phosphate rock', so including phosphoric acid, mineral phosphate chemicals
- Uses and supply risks of 'Phosphorus' = P₄ and organic phosphorus chemicals derived from P₄) including production of P₄ from wastes
- Consideration of Purified Phosphoric Acid as a possible Strategic Raw Material.

Letter from ESPP to the European Commission on implementation of Critical Raw Materials Act concerning 'Phosphate Rock' and 'Phosphorus', 26th November 2024 <u>www.phosphorusplatform.eu/regulatory</u>

Fertilisers

EU Fertilisers Expert Group meeting 26-27 November 2024

ESPP participated at this Fertilisers Expert Group which brings together the European Commission, Member States, different sectors of the fertilisers industry, NGOs and experts. Points discussed:

- **need for experts**, from research and industry, to participate in CEN (European Standards Organisation) to develop European Standards for recycled fertilisers. See below.
- further organisations are obtaining Notified Body (NoBo) status (now 16 across Europe), enabling them to deliver Certification of CE-mark EU fertilising products, and also NoBos are widening the range of products and materials they cover.
- **fertilisers statistics**: EU imports of nitrogen fertilisers from Russia are today significantly higher than before Russia attacked Ukraine (around 30% of EU fertiliser imports). EU phosphate fertiliser consumption has fallen to around 75%



of mid-term average since the price peak which resulted from Russia's attack on Ukraine (European Commission <u>slides</u>).

- progress was presented on defining criteria for use of certain Animal By-Products in EU fertilising products (QLab study, see <u>ESPP eNews n°89</u>, draft final report <u>here</u>), nitrification efficiency inhibitors, micro-organism biostimulants (CMC7)
- evaluation of the EU Fertilising Products Regulation: a public call for evidence is announced for early 2025 (EU consultation strategy <u>here</u>)
- Eurostat explained the new SAIO (Statistics on Agricultural Inputs and Outputs) Regulation, which should provide in the future data needed to assess EU policies on nutrients and fertilisers, <u>including</u> the Green Deal Farm-to Fork nutrient loss reduction target and the Common Agricultural Policy. See below.
- DG ENVI presented the ongoing Nitrates Directive Evaluation. The evaluation aims to assess if the Nitrates Directive remains fit for purpose and is in line with EU environmental and climate ambitions and contributes to sustainable, resilient agriculture and food security, including the Green Deal target to reduce nutrient losses. A public consultation (end 2023) received nearly 250 inputs (see <u>ESPP eNews n°84</u>). A further study is now underway looking at costs and benefits of the Directive, implementation, historic N and P flows, administrative burdens. The aim is to conclude the evaluation before end 2025.
- Definition of "biowastes". The waste regulation definition of "biowaste" (separately collected household organic waste and similar) excludes various agri-food industry by-products and wastes, thus resulting in them not being allowed as inputs to anaerobic digestates and composts under the EU Fertilising Products Regulation. ESPP and other stakeholders underlined that this is a significant problem, as such streams offer organic and nutrient content and are widely taken as inputs to digestion/composting, where use higher up the waste hierarchy is not possible (quality, logistics). ESPP suggests however that the solution is to modify the wording of CMCs 3, 5, 12, 14 (compost, digestate, precipitated phosphates, biochars) to ensure that such streams are allowed as inputs, with safety criteria, and with coherent wordings not to try to distort the definition of "biowaste" (see below streams from biorefineries).
- NMI updated on the study ongoing for the European Commission on possible new secondary materials and processes for inclusion into the EU Fertilising Products Regulation (CMCs). A draft report will be published in coming months and will be followed by a stakeholder workshop in 2025. Materials under consideration include vivianite, human urine/excreta, secondary limes, ammonium salts from fire extinguishers, micronutrients from battery recycling, recovered nitrogen and potassium salts, algae and plants grown in wastewaters, industry sludges, cyanobacteria, various agri-food industry streams, several additional processes. ESPP suggests that several materials/streams are not yet being considered appropriately, despite having been submitted in the 2022 'survey' (see detail in ESPP eNews n°85) in particular: use of waste/by-product acids for P extraction from ashes (CMC13 "derivates"), additional nutrients/micronutrients from battery recycling, streams from biorefineries (see below), phosphates recovered by leaching from sewage sludge and other biochars (see call for data below). Overall ESPP hopes that proposals for new CMCs / new processes will take a wide approach, to not exclude future innovation, subject to ensuring safety: for example authorise not only recovered Mn and Zn from battery recycling, but also other micronutrients and nutrients (Cu, Zn, P, K ...).

EU Fertilisers Expert Group <u>documents here</u> (under Library -> Meetings)

Call for data and examples on certain recycled nutrient streams

To support proposals to consider such materials as inputs for EU fertilisers (EU Fertilising Products Regulation CMCs), ESPP urgently needs examples of recovery processes and data on quality and safety of recovered products for the following. Without such supporting information, these are unlikely to be taken into consideration in the currently ongoing NMI study for the European Commission (see above):

- Waste streams and by-products from biorefineries. It is not feasible to authorise these "one by one" as every biorefinery has different processes, and often variable inputs over time. ESPP would suggest criteria such as any biorefinery or agri-food processing site using only plant material inputs (animal by-products are covered differently), with no contact between the stream considered and biocidal products or chemicals Classified for chronic health or environment impacts. We need examples of such streams, including indications on potential quantities, agronomic value, safety.
- Micronutrients and nutrients from battery recycling
- Phosphates recovered from leaching of biochars or hydrochars, including from sewage sludge or manure.

Contact: info@phosphorusplatform.eu



CEN call for experts and for laboratories

CEN (European Standards Organisation) and the European Commission (DG GROW) are calling for experts from research and industry to participate in development of European Standards for recycled fertilisers. Experts are needed for CEN Technical Working Groups to develop European Standards for testing methods for Fertilising Products Regulation specifications for STRUBIAS materials (precipitated phosphates, ash materials, biochars / pyrolysis materials), for Animal By-Products and for recovered ammonia salts (and CMC15 materials).

CEN is also looking for further laboratories to participate in inter-laboratory studies for the validation of testing methods. This concerns mainly testing of: various elements, nutrients and parameters in inorganic fertilisers, liming materials, organic and organo-mineral fertilisers, nutrient polymers when used in fertilisers, nitrification inhibiting compounds (determination, efficacy)...

Experts for CEN recycled fertiliser standards development. See CEN mandate <u>M564</u>. If interested: contact: <u>cvanherzele@cencenelec.eu</u> Laboratories. Start of studies foreseen early 2025. See list of projects <u>here</u>. Contact (as soon as possible) CEN/TC 260 <u>sophie.dithmer@din.de</u>

EU rules for national nutrient statistics

Implementing Regulation of SAIO (Statistics on Agricultural Input and Output Regulation) requires collection by Member States of data on inorganic fertiliser nutrients, certain organic fertiliser types, nutrient balances. The updated SAIO Regulation (2022/2379 see ESPP eNews n°75) fixed the principle that Member States should collect and submit data on inorganic and organic fertilisers and nutrient balances. This Implementing Regulation 2024/2212 confirms that data will be required as national total (NUTS0 not regional NUTS2), defines reporting periodicity and specifies the details of what data must be provided. Some of this data is currently collected by some Member States on a voluntary basis but coverage of all Member States will now be obligatory from 2026. Data requirements include: nitrogen (and also specifically urea), phosphorus and potassium used in agriculture in inorganic fertilisers; organic fertilisers (quantities and total content of phosphorus and of nitrogen); data needed to calculate total national phosphorus and nitrogen nutrient balances (crop and forage quantities and nutrient content coefficients per different crops); data on P and N in manure (quantities, nutrient content coefficients, livestock excretion factors, per different animals and ages); data on P and N in crop residues and in crop seeds; data on nitrogen fixation and atmospheric nitrogen deposition. The aim is to ensure full nutrient data coverage across Europe, compatibility and availability to users. The implementing Regulation specifies only that data for "Organic fertilisers" "used in agriculture" must be separated into three categories: "sewage sludge", "other organic fertilisers" and "organo-mineral fertilisers". Raw manure is excluded. The aggregated data for "other organic fertilisers" will presumably thus cover a very wide range of materials: composts and digestates (including of manure), processed organic fertilisers, biowaste / food waste, paper or food industry sludges. It is unclear to ESPP whether sewage sludge composts, digestates or biochars/hydrochars would be classified as "sewage sludge" or "other organic fertiliser". The SAIO does not cover nutrients traded in animal feed, food crops and other products.

"Commission Implementing Regulation (EU) 2024/2212 of 3 September 2024 laying down rules for the application of Regulation (EU) 2022/2379 ... as regards statistics on nutrients" <u>https://eur-lex.europa.eu/eli/reg_impl/2024/2212/oj</u>

Cheap fertilizers from Russia - a threat to the EU economy

The conference, hosted by MEP Krzysztof Hetman, focused on the challenges that the EU agriculture sector is facing due to the surge in low-cost fertiliser imports from Russia and Belarus.

Krzysztof Hetman, MEP, highlighted the economic challenges arising from the EU's decision to halt gas imports from Russia following its attack on Ukraine. This shift has led to a significant reduction in nitrogen fertiliser production across Europe, threatening jobs and food security. Meanwhile, Russia has redirected its gas supply toward producing fertilisers, which are now being exported to Europe from Russia at a low price and are "flooding" the EU market.

Adam Novak, Polish Ministry of Agriculture, emphasised that the issue extends beyond fertilisers to encompass Europe's food security, economic stability and profitability for farmers, energy security, and environmental protection. He stressed that each of these sectors must be safeguarded and that trade regulations with Russia should ensure fairness, including appropriate tariffs and customs duties for imports. Between January and September 2024, over 3.75 million tonnes of fertilisers were imported from Russia, with projections exceeding 5 million tonnes by year-end. Krzysztof Hetman, MEP, added that while fertilisers are currently cheap, this apparent benefit is temporary; as Europe becomes increasingly dependent on Russian fertilisers, prices will rise.

Theodora Nikolakopoulou, European Commission (DG GROW), highlighted the 2022 Commission communication on ensuring availability and affordability of fertilisers, as well as the establishment of the EU Fertilisers Market Observatory, aimed at improving market transparency and data access. The Observatory has convened six times since 2023. She provided an overview of recent market trends for nitrogen fertilisers, emphasising that ammonia production is heavily reliant on natural gas, which accounts for 70-90% of its variable production costs. In 2022, record-high natural gas prices in the EU caused a significant drop in ammonia production, resulting in a surge in imports. She noted that EU nitrogen fertiliser imports have historically fluctuated but have reached a consistently higher level since 2021, reflecting a structural decline in EU competitiveness due to local gas price trends. Most imports come from Russia and Egypt, with urea imports from Russia



increasing by 10% between 2023 and 2024. She also underscored the EU's commitment to promoting sustainable and more efficient fertilisers through the Fertilising Products Regulation (FPR) and supporting farmers via the Common Agricultural Policy (CAP), the Farm Sustainability Tool for nutrients (FaST), and research and innovation initiatives such as EIP-AGRI and the Soil Deal for Europe.

Tiffanie Stephani, Yara, noted that Russia now accounts for one-third of all urea imports to the EU, with particularly high volumes going to Poland, Germany, and France. In Poland, 65% of urea imports during the first three quarters of 2024 originated from Russia. She explained that Russian fertilisers are priced artificially low due to state-regulated gas costs, creating an uneven playing field for EU producers and threatening their survival. Moreover, importing Russian fertilisers indirectly supports Russian gas production, undermining the EU's goals to reduce reliance on Russian energy and inadvertently contributing to the war. She emphasized the serious risks posed by this situation: fertilisers are critical for sustaining EU food production, and any future supply shortages could jeopardise food security across the continent. While EU producers are committed to advancing circularity and decarbonisation, the unfair competition from Russian imports undermines their ability to compete effectively and sustain vital investments. Unlike EU producers, Russian fertilisers are not subject to Europe's stringent environmental standards, directly threatening the EU's environmental ambitions. The fertiliser industry in Europe supports 76,000 jobs, which are now at risk as temporary shutdowns of produce its dependency on Russian imports by fully utilising its domestic capacity to meet fertiliser needs and safeguard the European fertiliser industry. She also called for the introduction of a 30% duty on Russian fertilisers to effectively curb imports and restore fair competition.

Hubert Kamola and Justyna Dziewisz, Grupa Azoty, Poland, explained that over the past two decades, Russian agriculture has undergone significant modernisation, prioritising its domestic market by selling fertilisers at lower prices to Russian farmers. This shift has been accompanied by a steady increase in agricultural exports, with grain exports becoming a key instrument of Russian geopolitical influence. This strategy has gradually reduced the market share of EU farmers both globally and locally. Over the past seven years, Russia's fertiliser production has grown by 33%, and forecasts suggest a further 47% increase in the next six years. Meanwhile, imports of Russian fertilisers into the EU27 rose by 30% in the first three quarters of 2024. Since the war began, the EU has indirectly supported Russia by purchasing fertilisers worth 5.5 billion €. From Poland's perspective, the increase in imports from Russia has pushed out other suppliers and EU producers. The EU could be self-sufficient in fertiliser production, as consumption is well below the production capacity of domestic producers. The rise in imports from Russia and Belarus poses severe risks, including the economic decline of EU producers, the displacement of local suppliers from the market, the elimination of third-country exporters supplying Europe, and a growing dependency on Russia and Belarus, who will increasingly dictate prices in the European market.

Marek Maraszek, Trade Union of Employees and Renata Wyskwar, Trade Union of Engineers and Tecnicians, Grupa Azoty, emphasised that the fertiliser sector currently provides significant employment in Poland. They called for the implementation of tariffs and customs duties on fertilisers imported from Russia.

"Cheap fertilizers from Russia - another threat to the EU economy", 20th of November, European Parliament, link.

ESPP new Members

CleanMatter - phosphorus recovery by electrolysis



CleanMatter®

CleanMatter has developed a patented electrolysis process to recover phosphoric acid from sewage sludge incineration ash by electrolysis without chemical addition. The process can be powered by renewable electricity and is based on the cation-exchange membrane (CEM) electrolysis cell presented by Lisbeth Ottosen in <u>ESPP SCOPE</u> <u>Newsletter n°138</u>, now improved and <u>patented</u>. Electrical current applied causes acidification at the anode, which can release over 85% of phosphorus from a suspension of sewage sludge incineration ash (grinding is not necessary), or potentially from other inorganic substrates. Most heavy metals stay undissolved in the ash, with copper and zinc accumulating in the cathode compartment in a solution stream which may be valorisable to industry, so resulting in a phosphoric acid low in heavy metals. The dry weight of the treated ash is reduced by around one half. The process has to date been successfully demonstrated in several test

installations, up to 1 t-ash/day. A 5t-ash/day pilot plant is planned, aiming for market launch of the process in 2026. CleanMatter is joining ESPP to focus on sharing information and learning about the phosphorus recovery market by meeting and exchanging with colleagues from all over the world.

CleanMatter is a spin-off from Denmark Technical University, established in 2021 to develop the "Power-to-P" electrolysis P-recovery process <u>https://clean-matter.com/</u>

SYNECO

SYNECO is an EU rural development fund project to support farmers in reducing impacts on air and water, improving soil quality and reducing greenhouse gas emissions. The project brings Malta's largest fruit and vegetable farmers' cooperative (FCCS), with around one thousand farmers, alongside cattle

(Koperattiva Produtturi tal-Halib) and pig (Koperattiva ta' min Irabbi I-Majjal) cooperatives. SYNECO will employ innovative manure processing technologies to transform livestock slurry into fertiliser products, rather than continuing to treat it at urban wastewater treatment facilities, which is costly and in appropriate. The project will also teach (?) farmers to use a smart app for managing their fertilisation and crop production, including information on the soils of fields using AI-interpreted satellite data. The project prioritises gender equality and employment of young people, whenever possible. Joining ESPP gives SYNECO the possibility to follow and participate more closely in the ongoing dialogue on technological innovations and policies for maximising nutrient recycling in line with EU policies. We consider important, for the sustainability of our project results, that SYNECO's concept for manure processing takes advantage of results and conclusions of other European initiatives. We see ESPP as a forum which offers opportunities for dissemination of our project results.

www.synecomalta.com

Politecnico di Milano

Politecnico di Milano (POLIMI) sees ESPP as a strategic choice for complementing its research activities and its engagement in EU-funded projects on circularity of municipal and industrial secondary resource streams. In particular, POLIMI is actively participating in ESPP stakeholder networking, outcomes dissemination and interaction with European policymakers. POLIMI's research activities develop innovative technological solutions for the treatment of municipal and industrial streams, to valorise waste and by-product streams into sustainable products and to create circular value chains. POLIMI is currently coordinating two new relevant European projects: <u>PHOSTER</u> = Phosphorus and magnesium recovery from waste streams for production of high-value renewable fertilizers (ERA-NET Cofund on Raw Materials - ERA-MIN 3) and UPCYCLE = UPscaling deep

conversion routes for hard-to-reCYCLE biogenic waste (MSCA Doctoral Network). POLIMI is also engaged at the national scale as leader in Task 8.3.1 of AGRITECH, working on nutrient recovery from wastes to produce mineral fertilizers and promoting water recovery for the agri-food sector (National Research Centre for Agricultural Technologies, founded within the Piano Nazionale di Ripresa e Resilenza (PNRR, National Recovery and Resilience Plan - NextGenerationEU).

www.polimi.it

Wien Energie

Wien Energie is the largest regional energy utilities provider in Austria. Wien Energie has strong sustainability, greenhouse and circular economy objectives, including

recovery of phosphorus from sewage sludge incineration ash. Wien Energie ensures that the city's residents enjoy reliable, uninterrupted access to electricity, power, heating, cooling, electromobility and telecommunications. To promote climate protection, Wien Energie is investing to decarbonise its portfolio and to extend renewable energy production, with the objective of a climate neutral Vienna by 2040. Wien Energie's circular economy objectives include phosphorus recovery from ash from our incineration plant processing sewage sludge from Vienna's water treatment facility, one of the largest in Europe. After pioneer testing, we are now planning and evaluating for full scale implementation, to respect the 2024 Austria Waste Incineration Ordinance (Abfallverbrennungsverordnung AVV 2024, see <u>ESPP eNews n°87</u>) which requires the recycling of 80% of phosphorus from sewage sludge incineration ash by 2033. This will reduce import of phosphates to Austria, contribute to the circular economy and reduce environmental impact. Wien Energie is actively seeking collaborations and partnerships in the field of phosphorus recovery. "Becoming a member of the European Sustainable Phosphorus Platform (ESPP) is our first step towards fostering collaborations, securing funding, and developing a market for recycled phosphorus. Additionally, we are interested in exploring further circular products derived from sewage sludge treatment."

https://positionen.wienenergie.at/blog/gastbeitrag-phosphorrueckgewinnung/





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WIEN ENERGIE





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