Consultations open

STRUBIAS (Fertilising Products Regulation) final criteria public consultation

Open to 1st February 2021. The EU has published the final “STRUBIAS” criteria for struvite and phosphate salts, ash/ash derived materials and biochars and pyrolysis materials, prior to adoption and official publication of the criteria.


EU consultation on Animal Feed: Circular Economy not considered

Open to 25th January 2021. ESPP has input to this public consultation (see here) underlining that nutrient recycling is not addressed. The different animal feed Regulations (1831/2003, 767/2009 annex III and 178/2002) currently exclude, from use in production of animal feed additives, any nutrients resulting from processing of manure or wastewaters, even after e.g. incineration, acid extraction from ash and then solvent purification. ESPP fully supports strong safety requirements to prevent any risk of contamination in the animal feed chain, but considers that the blanket exclusion of appropriately processed nutrients poses an unnecessary barrier to nutrient recycling, by blocking added-value markets and potentially preventing sale of recovered nutrients to commodity chemicals markets.

Public consultation: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12624-Feed-additives-revision-of-EU-rules

EU consultation: Zero Pollution Ambition

Open to 10 February 2021. Public consultation on the EU Zero Pollution Action Plan for air, water and soil, to be adopted in 2021. The Commission’s “Roadmap” outlines as key orientations to: strengthen implementation and enforcement, improve the regulatory “acquis” on health and environment (including water, waste and wastewater), address soil pollution, improve governance and drive societal change / sustainable consumption. The public consultation questionnaire asks for input on questions such as to what extent pollution is felt to be negative, which populations are most exposed, which EU policies are known, which types and sources of pollution should be priorities, possible types of action (regulatory, financial, education, …), significance of digitalisation. “Excess nutrients (nitrogen and phosphorus)” are proposed as one of the possible priority pollutants.

“EU Action Plan Towards a Zero Pollution Ambition for air, water and soil” HERE
EU consultation: algae production and use
Open to 18th January 2021. This Roadmap consultation will prepare possible targeted activities to support the algae sector, maybe including regulatory measures. The document submitted to consultation recognises fertilisers and bio-stimulants amongst different uses of algae and the need of nutrient inputs to algae production. Regulatory gaps cited include limitations to use of algae based animal feeds and fertilisers, and status of algae in the Organic Farming Regulation. Possible regulatory actions cited include binding targets for substitution of fish-based aquaculture feeds. ESPP notes that the proposed Roadmap does not mention the use of algae for waste water treatment (although nutrient removal as an ecosystem service is cited).
Public consultation “Blue bioeconomy - towards a strong and sustainable EU algae sector”
https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12748-Setting-of-nutrient-profiles-(EU) No 1169/2011 on the provision of food information to consumers”

EU consultation: food “nutrient profiles”
Open to 3rd February 2021. This Roadmap consultation aims to implement the action announced in the EU Farm-to-Fork Strategy on “nutrient profiles” for foods and “mandatory front-of-pack nutrition labelling” for food products. The Farm-to-Fork strategy specifies also an action on 'maximum levels for certain nutrients' in processed foods, but this is not mentioned in this Roadmap. The term ‘nutrient’ is here used to cover only “fat, saturates, sugars, salt”. ESPP notes that this will make difficult general public communication concerning the links between plant nutrients (phosphorus, nitrogen …), food sustainability and health. The EU proposal does not consider phosphorus-content of food products, despite the significance of this for kidney disease patients (see ESPP eNews n°34, EFSA new ADI for phosphorus in food).
https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12748-Setting-of-nutrient-profiles-

EU consultation: industrial and agricultural emissions
Open to 23rd March 2021. This EU general public consultation questionnaire addresses emissions from industrial installations, livestock production and pollutant emission monitoring and information, via the Industrial Emissions Directive (IED) and the European Pollutant Release and Transfer Register (E-PRTR). ESPP will input underlining the need to better address the Circular Economy and resource consumption (questions 1, 2, 3, 8, 19, 22, 23); the importance of livestock production (intensive pig and poultry units in question 7, and proposed addition of intensive cattle rearing in question 8). ESPP also underlines that PFAS/PFOs, pharmaceuticals (human and veterinary and microplastics should be added to the E-PRTR substances list, because they pose obstacles to nutrient recycling and the Circular Economy and should be monitored and emissions reduced at source. ESPP also suggests that the E-PRTR list should be automatically updated to be coherent with the Water Framework Directive Priority Substances list (certain pharmaceuticals, HBCDD brominated flame retardant).

EU consultation: Sewage Sludge Use in Farming
Open to 5 March 2021. Public consultation to support revision of the EU Sewage Sludge Directive 86/278, as promised in the Circular Economy Action Plan. The presentation underlines that the objective is valorisation in agriculture of nutrients, such as phosphorus and nitrogen, as well as organic carbon. The questionnaire is open to individuals, stakeholders and companies and includes general questions about whether the respondent considers sludge use in agriculture to have different positive or negative effects, cost-effectiveness of agricultural sludge application, whether sludge quality is improving and which contaminants are today relevant. A presentation to the EU Fertilisers Working Group by DG Environment (Caroline Attard) indicated that the evaluation underway of the Sludge Directive will particularly look at nutrient recycling, as well as at methane emissions, impacts of stricter wastewater treatment requirements and pollutants in sewage sludge. A study has been launched into different pollutants in sewage sludge, their sources and risks, possible mitigation according to sludge treatment methods and possibilities for removing pollutants at source. This study will also look at benefits and cost-effectiveness of different sewage sludge use or recycling routes. Public consultation on the Sewage Sludge Directive HERE.

Events
CRU Phosphates 2021: “the” phosphate industry event
The annual industry conference and exhibition of the world phosphates industry (mining and processing, fertilisers, feed, food, technical applications), CRU Phosphates 2021, will be online 23-25 March 2021. This conference annually brings together over 400 delegates from phosphate rock mining, processing and different user industries and stakeholders. This year’s online event includes a virtual exhibition and networking centre, interactive discussion groups, conference presentations with Q&A. ESPP members benefit from a 10% discount (on request from ESPP) on the €440 conference fee, significantly cheaper than the usual physical conference. CRU Phosphates 2021 https://bit.ly/386iizr and events showcase page on LinkedIn.
Save the date: Phos4You Final Conference

After four years of cooperation, the Phos4You Interreg project’s final conference will focus on: Recovery, processing and distribution of novel phosphorus (P) products; Technologies and processes for deploying P-recycling in urban areas; Technologies and approaches for enabling P-recovery in remote, rural and island locations; Quality assessment of recovered P materials and LCA-LCC of P-recovery processes. The programme will include plenaries, multi-stakeholders discussions, a poster exhibition, an excursion to a Phos4You demonstrator and plenty of opportunities to enjoy, exchange and network. Speakers will be Phos4You actors in the fields of wastewater treatment and sewage sludge incineration, recovery processes and research. Stakeholders in the agri-food value chain as well as policymakers from EU and national organisations will share their knowledge and engage in discussion.

Phosphorus recovery from wastewater: approaches developed within Phos4You, 22-23 September 2021
Essen - Germany & online www.nweurope.eu/phos4you

EAT – RagnSells webinar on nutrient circular economy

“The science-based global platform for food system transformation”, EAT is a non-profit founded by the Stordalen Foundation, Stockholm Resilience Centre and the Wellcome Trust. RagnSells (EasyMining’s mother company) organised a session on nutrients as part of the EAT@Home online event.

Pär Larshans, Ragn-Sells and Anna Lundbom, EasyMining indicated the companies’ objectives to maximise recycling, remove contaminants and ensure long-term sustainability of recycling. Sara Stiernström, EasyMining, underlined that EU regulations for both fertilisers and animal feed are based on the origin of input materials, not on the quality of the product, thus posing a fundamental and inherent obstacle to recycling.

Fabrice DeClerck, Director of Science at EAT, underlined that the United Nations will take critical decisions in 2021 on climate, food and the environment. Today environmental curves are still trending the wrong way, such as increases in dead zones driven by nutrient losses. Business as usual will result in +30% increases in planetary boundary transgression for phosphorus and nitrogen. Unlike climate change, the biggest potential impacts on nutrient losses come not from dietary choice, but from technology and waste reduction. The aim of respecting planetary boundaries is urgent and essential, but needs to be completed by actions towards circularity: “Farm to Flush”.

Asger Christensen, Member of the European Parliament, underlined the potential for technology to improve nutrient use in farming and the potential of the Circular Bioeconomy as a new business model for farmers.

Magnus Ek, Member of the Sweden Parliament, noted that Sweden is developing a new Circularity Strategy and Action Plan, which will include nutrients. To enable recycling, regulatory support is necessary and costs of externalities must be paid for resource consumption: today’s tax system is not fit for purpose for the circular economy.

Pär Dalheim, Svenskt Vatten (Sweden municipal water federation) fully supports recycling, both of water and resources present in waste water, and aims to be a resource provider in the future.

Klaus Kastenhofer, REWE Austria, underlined the need to convince consumers that recycled products are safe.

Kristina Atkinson, WWF, emphasised the need to reduce nutrient losses to the Baltic, to reduce from eutrophication. Key actions include precision farming, manure treatment to facilitate transport (so enabling better use), reduction at source of contaminants and separative sewerage. WWF supports the setting of national nutrient recycling goals and nutrient accounting.

EAT@Home https://eatforum.org/event/eat-home/
Watch all sessions at https://www.youtube.com/watch?v=1Pi1aZ78X30
Watch the RagnSells session on nutrients https://www.ragnsells.com/eat and to watch https://www.youtube.com/watch?v=1Pi1aZ78X30

Insect production for sustainable food and feed

300 participants (including ESPP President, Ludwig Hermann, as a panellist) joined the IPIFF (International Platform of Insects for Food and Feed) webinar on circularity in insect farming, 19th November 2020. Sabine Jüllicher, European Commission DG Santé, indicated that insect production is a relevant component of sustainable food chains. She noted that the use of food waste as feedstock for insect farming will be assessed by EFSA (no timescale yet). Bas Drukker, European Commission DG Agriculture, noted that insects can be used in Organic Farming in some Member States, and that 2021 should see adoption of EU standards for insect production, and consequently for their use as human food and animal feed / aquaculture feed products, as well as standards for insect frass (insect production “manure”). William Clark, Zero Waste Scotland, and Chris Atkinson, IFOAM (EU Organic Farming federation), both underlined the role of insect production in improving local and regional food system circularity.

IPIFF “The European insect sector reaffirms its commitment to supporting the EU sustainability agenda” information 20/2/2020 and webinar recording watch here
SERA-17 annual meeting: agricultural phosphorus run-off

SERA-17 is an expert network on phosphorus sustainability in agriculture. The group’s 2020 annual meeting, online 15th October 2020, led by SERA-17 chair, John Kovar, USDA-ARS Iowa, discussed four operational projects underway:

- Deanna Desmond, North Carolina State University: Collection of data on fertilisation practices and soil tests across the USA. Data from nearly 1300 field trials and 60 questionnaire responses from 48 States are collated so far. The objective is to develop a Fertilizer Recommendation Support Tool (FRST).
- Andrew Sharpley, University of Askansas: phosphorus trade-offs project, looking at trade-offs for practices such as 4R fertiliser application, no-till and cover crops, buffer strips …
- Lindsay Pease, University of Minnesota: 4R implementation in the Red River Basin, Northern Great Plains
- Pauline Welikhe, Purdue University: Network P Budget Project (USDA Long-Term Agroecosystem Research LTAR), analysing data on soil – plant system P budgets (data from 19 sites, 41 systems to date)

*“SERA-17 Meets Virtually to Discuss P” 2/11/2020*

Policy and science

ESPP input to EU Soil Strategy

ESPP submitted input to the public consultation on the EU Soil Strategy (Roadmap, 8/12/2020). ESPP underlined the importance of soil to food production, climate and biodiversity, and the critical role of phosphorus and other plant nutrients in soil quality and fertility. ESPP noted that the Soil Strategy should include ensuring a fi income for farmers, should contribute to increasing soil organic carbon (including by facilitating return to soil of carbon-rich secondary materials). Problematic contaminants must therefore be addressed at source, in particular PFAS, persistent plastics additives, veterinary pharmaceuticals. ESPP noted the need for EU policy and regulatory support for nutrient stewardship and carbon recycling, including the CAP FaST Tool, addressing obstacles to recycling of manures and animal by-products in the EU Fertilising Products Regulation and progressing recognition of nutrient recycling in Organic Farming.

ESPP input to EU Soil Strategy, 8th December 2020 [here](#).

Analysis and plant tests of 24 commercial struvites

Despite variable characteristics, all the struvite samples showed similar fertiliser effectiveness, comparable to single super phosphate in 28 pot trials with maize. The authors estimate that around 900 – 1250 tP/y (phosphorus) were recovered as struvite in the EU in 2019. In this study, struvites from 24 European struvite production plants were sampled and tested, from a total of 39 plants identified in Europe (39 sewage works, 9 potato industry, one dairy wastewater). Organic carbon was always lower than the proposed EU Fertilising Products Regulation (FRP) STRUBIAS limit of 3% (and often very much lower) in struvites recovered from digestate or digestate dewatering liquor, but significantly higher for three struvites recovered from secondary wastewater treatment effluent (one of these struvites also showed P content below the FPR limit). Heavy metals were very much lower than the FRP limit. Biological indicators of pathogens were generally low in the struvites, and the data is considered to indicate that the crystallisation process selectively excludes pathogens, leaving them in the water phase. Nonetheless struvites can exceed limits for microbes, and should be analysis. Storage of the struvite causes a reduction in microbe levels. In pot trials, all the struvites gave maize biomass dry weight results similar to single super phosphate (SSP) and significantly better than phosphate rock or control.


Renewable Nutrients / QuickWash update

The QuickWash process, developed for P-removal and recovery from manures by the USDA (see SCOPE Newsletter n°119), is now developed and marketed by Renewable Nutrients. The process has been developed and can now be combined with ammonia removal for pig manure, cattle manure or municipal wastewater. The basic process involves acid dosing and solid/liquid separation, giving a low-P “acid recovered manure” adapted for local land application. Alkali (lime) is then dosed to precipitate and recover calcium phosphate. Polymer dosing improves precipitation to give a low P discharge effluent. A 2020 paper updates on experimental testing of the process for dairy manure. Course solids after the acidification stage are shown to be useable as cattle bedding, and the finer solids as low-P N fertiliser. Renewable Nutrients are now combining Quick Wash with ammonia recovery (as ammonia sulphate). They have also demonstrated the technology at a 7 200 head pig farm in Ohio. Tests have also shown that the technology can be combined with geotextile bag filtration of pig manure lagoon sludge.

Renewable Nutrients – QuickWash [https://www.renewablenutrients.com/](https://www.renewablenutrients.com/)

“Chemical Extraction of Phosphorus from Dairy Manure and Utilization of Recovered Manure Solids”, A. Szogi et al., Agronomy 2020, 10, 1725; DOI.
EIP-AGRI “Ideas for Operational Groups”

The European Commission (DG AGRI) organisation EIP-AGRI has published a short document suggesting themes for “Operational Groups”. These are local innovation/demonstration projects, funded by the EU Rural Development Programmes (1,600 projects funded to date). A number of the proposed themes concern nutrients. This includes those originating in the EIP-AGRI Focus Group on Nutrient Recycling, proposed by ESPP (final report 2017, see ESPP eNews n°18)

- Integration of nutrient management in certifying schemes
- Demonstration of how tailor-made biobased fertilisers match plant requirements
- Cooperation business models to improve the production and marketing of tailor-made fertilisers
- Exchange of information and practices between farms on the use of bio based fertilisers
- Development of new fertilisers for organic farming
- Demonstration of nutrient recycling technologies such as low ammonia (NH3 emission techniques)
- Nutrient release of organic fertilisers in organic farming
- Fertiliser efficiency: developing advice based on a system approach,
- Increasing nutrient efficiency with cover crops and optimal use of organic manure
- Optimising the use of innovative organic sourced fertiliser
- Identify best practices to optimise energy/nutrient cycles
- Appropriate handling and use of organic fertilizer
- Manure composting
- On-farm implementation of green manure
- Promote legumes by inoculation of seeds of specific species with effective Rhizobium strains
- Improve fertilisation strategies to increase grassland production
- Livestock feed: how to analyse and get “on-line” (fast) nutrient value for (by-)products
- Optimise and/or develop new forage conservation techniques to avoid nutrient losses …
- Improving knowledge exchange to increase nutrient use efficiency by including different experts
- Making fertiliser advice more farmer friendly and sustainable
- Remote sensing applications for agriculture, with a focus on … nutrient management

“Ideas for Operational Groups and other innovative projects, from Focus Groups experts”, EIP-AGRI, November 2020

Students input to EU nutrient action plan

Seven Masters students at the University of Amsterdam have prepared input to the European Commission for the future Integrated Nutrient Management Action Plan, announced to be developed as part of the Farm-to-Fork policy in 2021. They propose to develop a “Phosphates Directive” to limit the use of P in agriculture and concentrations in surface waters. Their specific proposals are to fix a mandatory level of recycled P in fertilisers, a tariff on phosphorus imports, lower cadmium limits, addressing legal obstacles to P-recycling, support for P-recycling investments and reducing consumption of meat and dairy (including by investing in meat replacement products, adjusting CAP funding and supporting farmers converting away from livestock). The recommendations are based on a readable 40-page summary of the context, challenges, scenarios and vision, on which the recommendations are based.

Input on the proposed considerations for the EU’s Integrated Nutrient Management Action Plan (INMAP), I. Stammes, T. Maassen, F. Miller Kerins, G. Votano, D. Palma Munguia, Z. Yuan, M. Gereadts, Amsterdam University, June 2020 online here.

Regulatory options to align livestock farming with environmental objectives

A study from the University of Rostock, Germany (ESPP member), assesses policy instruments to make livestock farming compatible with legally binding environmental objectives, including the Paris Climate Agreement, the Convention on Biological Diversity and disrupted nutrient cycles, in particular P and N surpluses resulting from concentrated livestock farming. The study considers a greenhouse emissions cap-and-trade system for livestock farming, and a livestock-to-land ratio fixed to limit greenhouse emissions per hectare. The authors note that the cap-and-trade system has less impact on livestock farmers, allows simpler protection at EU borders vis-à-vis countries not applying similar obligations (by ETS), but might be less effective in addressing biodiversity and nutrient cycles unless combined with a livestock-to-land ratio.

“Land Use, Livestock, Quantity Governance, and Economic Instruments—Sustainability Beyond Big Livestock Herds and Fossil Fuels”, A. Weisshaupt et al., Sustainability 2020, 12, 2053, DOI.
EU Fertilising Products Regulation

JRC “By-Product” 2nd report open for comment
The second JRC report on “proposals for by-products as component materials for EU fertilising products” is open for comment to 25th January 2021. The report is available here. JRC proposes to allow use of (only) four classes of by-products under CMC11 of the new EU Fertilising Products Regulation, that is by-products from: fossil fuel refining (but this in fact seems to also include various chemical industry by-products, such as ammonium from caprolactum …), refining of minerals, ores and metals (but phosphogypsum seems to be not included), some gas cleaning systems (but not from waste or manure treatment, see below), processing of biomass, water, food, drink, biorefineries, including from the pulp and paper industries. For ammonia or sulphate salts recovered from cleaning of process gases, the report suggests (pp. 49-50) that these cannot be considered as by-products if there is any waste input into the process. This would exclude nutrient salts from stripping of biogas from digesters processing manure or food waste, or from stripping of municipal solid waste incineration off gases. It should be noted that this report concerns only use of by-products in fertilising products without further processing. If a by-product is used as a chemical reagent then this is eligible for CMC1 (e.g. sulphuric acid recovered from oil refinery sulphur removal from fuels, reacted with phosphate rock to produce phosphoric acid).

“Technical proposals for by-products as component materials for EU Fertilising Products” (2nd report), European Commission JRC, 27th November 2020 here, open for comment to 25th January 2021. Comments must be submitted via a member of the EU Fertilising Products Expert Group. ESPP is a member, so you can send comment to info@phosphorusplatform.eu and we will forward them.

STRUBIAS criteria finalised
The EU Fertilisers Expert Group validated the finalised “STRUBIAS” criteria, which define under what conditions struvite & precipitated phosphate salts, ash-based materials and biochars and pyrolysis materials will be included in the list of materials which can be used in future CE-marked fertilisers (CMC = Component Material Categories of the EU Fertilising Products Regulation). The key principles defined in the JRC “STRUBIAS” report (2019) remain unchanged: phosphate salts recovered from sewage and materials recovered from sewage sludge incineration ash will be eligible, but biochars from sewage sludge will not. Materials not included in the new EU Regulation can nonetheless be authorised in national fertilisers. Manure and other animal by-products (ABPs) of Cat. 2 and 3 can be used as input materials for all three STRUBIAS categories, but only after definition of an ABP “End Point” by DG SANTE/EFSA (see below). Minor wording changes concern interaction with CMC1, frequency of Conformity Assessment audits, bio-waste, definition of waste water, incineration temperature clarification, definition of ash. A discussion concerning sewage sludge in biochars, currently excluded, confirmed that this should be reassessed if new scientific data is developed to demonstrate safety. The finalised criteria will now be subject to a one-month public consultation (in coming months), translation and publication, and will then logically be able to enter into implementation at the same time as the Fertilising Products Regulation itself in 2022.

Possible new CMCs
The European Commission has circulated to Member States and stakeholders, for comments, a table, prepared by ESPP, of secondary materials which cannot currently be used as input materials (CMCs) under the EU Fertilising Products Regulation, and which offer potential for nutrient recycling. This document can be consulted here and comments are welcome, either on the materials listed or proposals for other new CMC materials. The objective is to collect data and to engage discussion with the European Commission to hopefully launch assessment of these and proposal of CMC criteria, although the Commission has indicated that this will not be possible in coming months until other outstanding work is finished finalising and implementing the Fertilising Products Regulation.

Input welcome: “ESPP table of materials currently not included in the FPR as input materials (CMCs)”, v4/11/2020 here

Why are animal by-products not moving towards the circular economy?
At the EU Fertilisers Expert Group, a representative of DG SANTE was asked to update on progress towards including animal by-products (ABPs) into the new EU Fertilising Products Regulation, which was published in June last year. This is important for nutrient recycling because until the questions around animal by-products are resolved, manure and all other ABPs will be excluded from all CE-mark fertilising products (composts, digestates, biochars, precipitated phosphate salts, …). CMC10 Animal By-Products, in the published Regulation last June, was an ‘empty box’: after several years of discussion of the draft Regulation, DG SANTE had not provided content, and still today, little progress has been made. This is particularly surprising in that manures and various other ABPs are authorised for use as fertilisers in the Animal By Products Regulation (art. 22 of Regulation 142/2011, that is since nearly ten years ago), subject to specified processing requirements to ensure safety. The difference is that under this regulation 142/2011 these ABP-derived products remain subject to traceability, which would not be the case when included in CE-mark fertilisers under the EU Fertilising Products Regulation FPR (note: this is ESPP’s understanding: ABP regulation is complex and we do not claim to fully understand).
The DG SANTE representative at the EU Expert Group Meeting provided neither slides nor documents, and seemed reluctant to release any information, indicating only that a consultation has been submitted to EFSA (European Food Safety Agency), whose Opinion is necessary before modification of the ABP Regulations. But in fact, the information is public: the mandate requesting an EFSA Opinion is publicly available (enter ‘Mandate Number’ 2020-0088 HERE). This mandate concerns only the following:

- meat meal, bone meal, meat-and-bone meal, hydrolysed proteins of Category 3 materials
- processed manure, compost, biogas digestion residues, feather meal, glycerine and other products of Category 2 or 3 materials derived from the production of biodiesel and renewable fuels,
- petfood, feed and dog chews that have been refused for commercial reasons or technical failures,
- derived products from blood of animals, hides and skins, hoofs and horns, guano of bats and birds, wool and hair, feather and downs, and pig bristles.

ESPP does not understand why it has taken nearly a year after publication of the Fertilising Products Regulation before this mandate was submitted to EFSA, whereas it could have been done immediately or even before publication (ABPs were already an “empty box” in CMC10 in the initial FPR proposal published in March 2016), especially as the mandate simply copies the list of materials already approved for use in fertilisers in the 142/2011 ABP regulation.

DG SANTE provided no answers concerning STRUBIAS materials using ABPs or manure. Similarly, the STRUBIAS process was launched by the European Commission in 2016 and the JRC final report published summer 2019. ESPP does not understand why no mandate on this has yet been given to EFSA.

**ESPP members news**

**ESPP new member: P-TRAP**

P-TRAP, a H2020 MSCA-ITN European Training Network – is a consortium of 16 international participants and hosting 11 Early-Stage Researchers (ESRs). A characteristic of these networks is a combined focus not only on science but also on training of a new generation of creative, entrepreneurial and innovative ESRs.

Scientifically, P-TRAP targets two interlinked global problems: I) the flux of phosphate (P) from agricultural areas to surface waters is wasting a resource which is becoming scarce, and II) on the other hand, an enhanced loading of surface water with P is the main cause for eutrophication. Both are in conflict with our understanding of circular economy and a key challenge in meeting the objectives of the EU Water Framework Directive. Within P-TRAP we will develop new methods and approaches to trap P in drained agricultural areas and in the sediments of eutrophic lakes, aiming to constrain the uncontrolled loss of P in one system and preventing others from overloading.

The project is organized in 3 scientific work packages (WPs), which are closely interconnected and each tackling specific objectives and tasks to ensure a successful project.

More information about the project and our participants can be found at [https://h2020-p-trap.eu](https://h2020-p-trap.eu).
Ostara purchases fertiliser granulation facility

Ostara (ESPP member), and the world’s leading producer of recovered struvite from municipal wastewater, has acquired Oakley’s fertiliser granulation facility at St. Louis, Missouri, USA. Oakley will provide full logistic support and storage facilities. Ostara aims to start production of its Crystal Green® continuous release fertiliser at the site within a year, so increasing the company’s production capacity by a factor of ten.

“Ostara and Oakley Sign Letter of Intent for Purchase of Oakley’s St. Louis Granulation Facility”, 3rd November 2020

Call for partners P-recovery via incineration / gasification

ESPP’s new member ZSW is looking for partners in the area of phosphorus recovery via incineration / gasification of P-rich residual fuels (e.g. sewage sludge). The not-for-profit Centre for Solar Energy and Hydrogen Research Baden-Württemberg” (ZSW, www.zsw-bw.de), Germany, is looking to participate in consortia or R&D projects into phosphorus recovery via incineration / gasification of sewage sludge or other wastes. The centre can offer testing at a 15 kWth fluidised-bed incinerator / gasifier with flexible feed gas dosing and high-temperature flue / product gas particle separation, as well as analysis of ash melting behaviour with rotational viscometer or thermogravimetry testing, and can contribute to theoretical studies (e.g. modelling and simulation works via IPSEPro, HSC Chemistry, own developed models), in synergy with a current Marie Curie project on P-recovery in fluidised bed incineration (ReCaPHOS, see https://cordis.europa.eu/project/id/842138). Focus on Green Deal Calls and HORIZON EUROPE workprogramme.

If interested, please contact Ms. Dr.-Ing. Glykeria Duelli Varela, tel. +49 711 78 70-319 eMail: Glykeria.duelli@zsw-bw.de

Stay informed

SCOPE newsletter: www.phosphorusplatform.eu/SCOPEnewsletter
eNews newsletter: www.phosphorusplatform.eu/eNewshome
If you do not already receive SCOPE and eNews (same emailing list), subscribe at www.phosphorusplatform.eu/subscribe
LinkedIn group: https://www.linkedin.com/company/european-sustainablephosphorus-platform/
Twitter: @phosphorusfacts
Slideshare presentations: www.slideshare.net/NutrientPlatform

ESPP members