EUROPEAN NUTRIENT EVENT

Programme

Nutrient recycling R&D projects and technologies meeting including technology fair

18th – 20th October 2017
Parterre Rialto, Birsigstrasse 45, 4054 Basel / CH
DAY 1, 18TH OCTOBER
Conference language: German, English translation

Knowledge exchange for European stakeholders on phosphorus recycling legislation and implementation in Switzerland and Germany / Launch of Phosphorus Network Switzerland

Moderation: Daniel Frank, German Phosphorus-Platform DPP

07:30 – 08:30 Set up of fair and poster exhibition

08:30 – 09:00 Registration and networking

Opening
09:00 – 09:15 Welcome in Basel
State Councillor Christoph Brutschin, Head of the Department of Economic, Social and Environmental Affairs of the Canton of Basel-Stadt
Falko Schlottig, Director of the School of Life Science FHNW

State of the art and regulatory framework
09:15 – 09:40 Phosphorus recycling in Switzerland: How to go on?
Kaarina Schenk, Federal Environment Agency BAFU

09:40 – 10:00 Regulatory requirements for Phosphorus recovery in Germany – consequences
Hans-Walter Schneichel, Environment Ministry Rhineland-Palatinate MUEF

10:00 – 10:25 Sewage sludge disposal and Phosphorus recovery, Options in Switzerland and Europe
Anders Nättorp, School of Life Sciences FHNW

10:25 – 10:55 Coffee break and networking at technology fair / poster exhibition

Sewage sludge disposal
10:55 – 11:15 Concept for sewage sludge disposal in Northwestern Switzerland
Alain Zaessinger, ProRheno / Peter Müller, ARA Rhein / Pascal Hubmann, AIB

Technology fair and poster exhibition
Phosphorus recovery technology suppliers stands. Posters of nutrient recycling R&D projects.
Run parallel to sessions on day 1 and 2

11:15 – 11:35 Sewage sludge drying as starting point for disposal and recovery, results from alcaline pyrolysis
Christoph Egli, AVA Altenrhein

11:35 – 12:00 Mono-incineration plants – a starting point for Phosphorus recovery
Claudio Bianculli, Association for waste recycling Bazenhied, ZAB

12:00 – 13:15 Lunch break at technology fair / poster exhibition

Phosphorus recovery technologies
13:15 – 13:35 Phosphorus mining from sewage sludge – the Phos4life process as option for the Swiss Phosphorus strategy
Stefan Schlimmerber, Center for sustainable management of recyclable waste and resources ZAR

Patrick Herr, Remondis Aqua

13:55 – 14:15 Mephrec: sewage sludge disposal and Phosphorus recovery in one, results from pilot trials
Burkard Hagspiel & Otto Schwarzmann, SUN Nürnberg

14:15 – 14:35 The Kubota furnace and its potential for Phosphorus recovery
Matthias Mann, Küttner GmbH & Co.KG

14:35 – 14:55 Technology demonstrations in Phos4You – options for Switzerland?
Marie-Edith Ploteau, Lippeverband

14:55 – 15:25 Coffee break and networking

15:25 – 15:45 Plant availability of Phosorus in recycling fertilizer
Else Bünemann-König, Research institute for organic agriculture, FiBL

15:45 – 15:55 Phosphorus Network Switzerland – information across sectors and networking for implementation
Maurice Jutz, Anders Nättorp, Jan Stemmann, School of Life Science, FHNW
**Programme**

**European nutrient event**

**Wrap up**

15:55 – 16:35 Options and financing: Panel discussion
Representatives from Federal Environment Agency, Environment Ministry Rhineland-Palatinate, Hauert fertilizer industry, Association for waste recycling Bazenheid and VSA und AVA Altenrhein

Moderated by Thomas Wintgens, School of Life Science, FHNW

16:35 – 16:45 Summary and perspective
Ludwig Herrmann, European Sustainable Phosphorus Platform ESPP / Sébastien Meunier, BaselArea.swiss

16:45 – 18:00 Get together

19:00 Networking dinner at Markthalle, Steinentorberg 20, Basel for participants of both Day 1 and Day 2 (at participant’s own costs)

**DAY 2, 19TH OCTOBER**

Conference language: English

Networking of leading nutrient recycling projects across Europe (EU H2020, LIFE, INTERREG, national and other projects), with technology suppliers and users / Launch of Phos4You project.

Moderation: Christopher Thornton, European Sustainable Phosphorus Platform ESPP

08:30 – 09:00 Registration and networking

State of the art of nutrient recycling R&D and perspectives for implementation

09:00 – 09:40 Welcome and keynote: Reasons to engage in nutrient recovery for a public water board
Burkhard Teichgräber, Lippeverband, Lead Partner Phos4You

Environmental challenges as drivers for innovation and prosperity
Eric Jakob, Ambassador, Swiss State Secretariat for Economic Affairs

EU policies and challenges and this event’s objectives and programme
Christopher Thornton, European Sustainable Phosphorus Platform

09:40 – 10:10 EU Research and Development activities: HORIZON2020, LIFE, SME instrument
Stefania Rocca, Executive Agency for Small and Medium-Sized Enterprises, European Commission / Unit B2 H2020 Environment and Resources

10:10 – 10:30 Nutrients Recycling under the EIP AGRI and Horizon2020
Gaëtan Dubois, Research & Innovation Unit – DG AGRI, European Commission

10:30 – 11:00 Coffee break and networking at technology fair / poster exhibition

**Current Research and development projects**

11:00 – 12:30 Leading nutrient recycling R&D Projects
Speed-Date presentations of current EU and nationally funded projects (H2020, LIFE, INTERREG, industry ...), see extra page A

12:30 – 14:00 Lunch break at technology fair / poster exhibition

Thematic workshops on common challenges
Parallel discussion sessions co-led by Phos4You and projects such as BIOREFINE Cluster Europe, SYSTEMIC, INCOVER, SMART-Plant and organisations such as Flanders VCM.

14:00 – 15:30 Workshop 1 – 5 see extra pages „A and B”

15:30 – 15:50 Coffee break

15:50 – 16:20 Industry operational assessment of manure processing and nutrient recycling technologies – widening the Newtrient process and suppliers catalogue to Europe?
via Skype: Steven Rowe, CEO Newtrient, USA (technology innovation company, members represent half of US dairy)

16:20 – 17:30 Reporting of workshops and panel discussion: Future actions and R&D needs Panel:
- Andrea Lanuzza, Operations Director, Gruppo CAP water utility Milan region
- Claire McCamphil, European Commission DG Research & Innovation, Unit I.2 Eco-Innovation
- Marja-Liisa Tapio-Biström, Finland Ministry of Agriculture and Forestry
- Silvia Lopez Palau, Suez / Cetaqua
Consequences for the Phos4You project.

09:00 – 15:30 Internal Phos4You meeting (Steering Group and Working Groups)
Closed meeting only for Phos4You partners and associated partners.

Event location
Parterre Rialto, Birsigstrasse 45, 4054 Basel / CH

Registration
Please register bindingly on:
www.nweurope.eu/phos4you
Places are limited. First registrations will be accepted first.

Conference fee
There are no fees for the conference. Cost for travel, hotel and dinner at day 1 (price subject to your choice) will have to be paid individually.

Poster exhibition
If you are interested in displaying a poster, please indicate in registration form.

Technology fair
Price for having a stand will be 1,500 EUR incl. VAT, if you are interested, please contact: anders.naettorp@fhnw.ch

Participants
Day 1 Swiss, German and Austrian nutrient recovery stakeholders, Phos4You partners and associated partners, R&D stakeholders, P-recovery technology providers

Day 2 Participants covering main EU and national R&D projects, selected representatives of user industries (water industry, fertilizer sector, farmers), EU and national project funders and innovation investment companies.

Also for Day 1 and 2: P-recovery technology suppliers (with stands), New / ongoing and recently completed R&D projects posters

Day 3 Phos4You partners and associated partners

Hotel accommodation
Recommended rooms for individual booking are available at:

Hotel Victoria
Centralbahnplatz 3-4
4002 Basel

Stay at Basel
Gempenstrasse 62
4053 Basel

ibis Basel Bahnhof
Margarethenstrasse 33-35
4053 Basel

Contact
For conference:
Anders Nättorp, FHNW:
anders.naettorp@fhnw.ch
Daniel Frank, DPP:
info@deutsche-phosphor-plattform.de
Christopher Thornton, ESPP:
info@phosphorusplatform.eu
Marie-Edith Ploteau, Lippeverband:
ploteau.marie-edith@eglv.de

For registration:
Nadine Bailleux, BaselArea.swiss:
events@baselarea.swiss

The event is supported by the European Regional Development Fund in the framework of the INTERREG V B NWE programme.
PROJECTS

to be presented, amongst others:

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Stands of
EasyMining Sweden AB, Kubota, TerraNova Energy GmbH, Paques bv

WORKSHOPS

1. Recycled nutrient product qualities and standard

**Objectives:**
- Articulate evidence-based options to reduce the uncertainties in quality and use efficiency of recycled nutrient products;
- Pinpoint the available expertise, competences and demonstrations towards a new EU standard for the quality assessment of recycled nutrients products.
- Link to the work of the TWG Strubias

**Moderator:** Erik Meers, University of Gent

**Rapporteur:** Oscar Schoumans, Wageningen Environmental Research

**Introductions:**
- Minna Sarvi, LUKE Natural Resources Institute Finland / BONUS PROMISE
- Oscar Schoumans, Wageningen Environmental Research / SYSTEMIC
- Mark Taggart, Environmental Research Institute of the University of Highlands and Islands – North Highland College / Phos4You
- Erik Meers, Ghent University / BioRefine Cluster Europe

2. Nutrient recovery in the sewage works of the future

**Objectives:**
- Anticipate future wastewater treatment enabling a better nutrient recycling;
- Appraise the integration of nutrient recovery technologies in innovative wastewater treatment systems as Anammox, Membrane Bio Reactor, etc.;
- Shape the research agenda for the implementation and validation of the nutrient recovery technologies in advanced sewage at large scale.
3. Life Cycle – Analysis (LCA) and – Costing (LCC) of recovery processes

Objectives:
- Share the methodologies used during different projects to perform LCA and LCC associated to nutrient recycling, focusing on phosphorus;
- Elaborate criteria for choosing the appropriated modelling software. Debate the definition of the functional unit, the allocation procedures, and the definition of basis or reference cases.

Moderator: Angélique Léonard, Liège University
Rapporteur: Charlotte Scheutz, Denmark Technical University
Introductions:
- Fabian Kraus, KWB - Berlin Centre of Competence for Water / PHORWÄRTS
- Charlotte Scheutz, Denmark Technical University / Emission factors for biofertilizer applications
- Anders Nättorp, University of Applied Sciences and Arts Northwestern Switzerland / P-REX
- Laurent Fraikin, Liège University / Phos4You
- Arabel Amann, Vienna University of Technology / Focus on LCA recovery processes

4. Technology transfer from municipal sewage to/from manures and other streams

Objectives:
- Identify current best practise and potential for transferring technology for phosphorus recovery and reuse;
- Discuss the tools (regulation / incentive / infrastructure) required to facilitate this transfer;
- Define the research requirements needed to encourage industry and regulators to adopt more sustainable practise in rural areas.

Moderator: Barbara Bremner, Environmental Research Institute of University of Highlands and Islands – North Highland College
Rapporteur: Emilie Snauwaert, Flemish Coordination Centre for Manure Processing
Introductions:
- Katrina Macintosh, Queen's University Belfast
- Tom Curran, University College Dublin - Institute of Food and Health / AGROCYCLE
- Emilie Snauwaert, Flemish Coordination Centre for Manure Processing

5. Nutrient recovery: how to move from R&D to implementation

Objectives:
- Highlight success stories of nutrient recovery technologies implemented at existing wastewater treatment plants;
- Set up the key factors for innovative nutrient recovery technologies to move from lab scale to full scale.

Moderator: Maelenn Poitrenaud, SEDE Environnement
Rapporteur: Francesco Fatone, Marche Polytechnic University
Introductions:
- Francesco Fatone, Marche Polytechnic University / SMART-Plant
- Javier Brañas Lasala, Fertiberia / Newfert
- Cedric Mebarki, Véolia / Phos4You