NUTRIENT SUSTAINABILITY IN THE INTENSIVE LIVESTOCK SECTOR

Event website: https://phosphorusplatform.eu/LivestockBrittany
Dates: 5th – 7th March 2025
Location: Saint-Malo, Brittany, France
Venue: Global Research Centre - Roullier (CMI), 27 Avenue Franklin Roosevelt, 35400 Saint-Malo

Day 1. Wednesday 5th March

Morning Session – Roullier visit	
09:00 h – 09:30 h	Registration
09:30 h – 12:30 h	Visit to **Roullier facilities** *(Global Research Centre, Minerallium, or Industrial Sites)*
12:30 h – 13:30 h	Networking Lunch
Afternoon Session – Context	
13:30 h – 13:40 h	**Welcome and Overview of Workshop Objectives.** *Laia Llenas (BETA Technological Center) and Robert van Spingelen (European Sustainable Phosphorus Platform)*
13:40 h – 13:50 h	**How this workshop and the uPcycle project fit into UNEP's objectives.** *Will Brownlie (UK Centre for Ecology & Hydrology)*
13:50 h – 14:15 h	**Welcome on behalf of Cooperl and Roullier. Companies vision and actions on nutrient sustainability.** *(Cooperl and Roullier)*
Role of livestock production in nutrient movements	
14:15 h – 14:35 h	**Phosphorus Cycling in Soils for Sustainable Development.** *Julian Helfenstein (Wageningen University & Research)*
14:35 h – 15:15 h	**Regional nutrient imbalances related to livestock concentration: Case studies from Europe, Brasil, China and Argentina.** *Laurence Loyon (INRAE, France)* *Renjie Dong (Research Centre for Carbon Neutrality in Agriculture and Rural Areas, China)* *Vinicius de Melo Benites (Embrapa Solos, Brasil)* *Pedro Federico Rizzo (Instituto Nacional de Tecnología Agropecuaria, Argentina)*
15:15 h – 15:30h	*Discussion of key messages*
15:30 h – 16:00h	Break
Diet, intensive livestock production and sustainability	
16:00 h – 16:15h	**Global nutrient challenges and UN policies.** *Monica Kobayashi (UN Environment Programme: UNEP)*
16:15 h – 16:30h	**Intensive livestock: nutrient flows, environmental impacts, diets and bioeconomy.** *Adrian Leip (European Commission – Bioeconomy)*
16:30 h – 16:45 h	**Nutrients and the EATLancet diet.** *(Speaker TBC)*
16:45 h – 17:00 h	**Nutrient circularity, human diets, livestock feed and production choices.** *Wolfram Simon (Wageningen University and Research)*
17:00 h – 17:15 h	**LCA of intensive livestock systems.** *Aimable Uwizeye (FAO – Animal Production and Health Division)*
17:15 h – 17:30 h	*Discussion of key messages*
17:30 h – 20:00 h	Free time
20:00 h – 22:00 h	Networking Dinner

Day 2. Thursday 6th March

Morning session - Improving nutrient efficiency in animal production	
09:00 h – 09:15 h	**Towards circularity in animal feed.** *Anton van den Brink (European Feed Manufacturers' Federation, FEFAC)*
09:15 h – 09:30 h	**Nutrient footprints of meat production**. *(Speaker TBC)*
09:30 h – 09:45 h	**One Nutrient: A Holistic Approach to Nutrient Efficiency and Sustainability Across the Value Chain.** *Sylvain Pluchon (Groupe Roullier)*
09:45 h – 10:00 h	**Enhancing mineral bioavailability in farm animals: current strategies and future innovations.** *Tristan Chalvon-Demersay (Groupe Roullier)*
10:00 h – 11:00 h	**Expert panel – discussion of key messages Including insights** from the livestock sector, NGOs, food industry leaders, supermarkets, farmers and meat producers.
11:00 h – 11:30 h	Break
Towards manure recycling	
11:30 h – 11:50 h	**Overview of manure processing and nutrient recycling.** *Laia Llenas (BETA Tech Center)*
11:50 – 12:10h	**Manure processing and renewable biogas.** *Lucile Sever (European Biogas Association)*
12:10 – 12:30h	***Sustainable Nutrient Solutions for Intensive Livestock Farming in the United States.*** *Karleigh Lewis (Livestock Water Recycling)*
12:30 – 12:45h	**Sustainable agricultural farming.** *Raju Ahmad (Queen's University Belfast)*
12:45 h – 13:00 h	*Questions and discussion*
13:00 h – 14:00 h	Lunch
Afternoon Session	
Business models for a successful manure management	
14:00 h – 14:20 h	**Revision of the Best Available Techniques (BAT).** *(Joint Research Center)*
14:20 h – 14:40 h	**Innovations in Manure Processing and Nutrient Recycling under Flemish BAT Regulations** *(VITO)*
14:40 h – 15:20 h	**Policy and Funding Strategies**. *Stephanos Kirkagaslis (European Commission, DG AGRI)* *Francisco Salazar (INIA, Instituto de Investigaciones Agropecuarias) Argentina (Speaker TBC)*
15:20h – 15:45 h	Break
15:45 h – 16:15 h	**Cases of successful business cases implemented on intensive livestock farms.** *(Cooperl and Bioproductors d'Alcarras)*
16:15 h – 16:30 h	*Proposed key messages from first previous sessions.*
16:30 h – 17:00 h	*Discussion of key messages and input to uPcycle UNEP paper.*
17:00 h – 17:30 h	Closing coffee

Day 3. Friday 7th March

Visit to Cooperl	
08:00 h	Departure point: CMI, Roullier Group *(conference venue)*
09:00 h	Arrival to Lamballe and welcome coffee
09:30 h – 11:30 h	Visit to the **Bulle Environmental** of the Cooperl Group *(Lamballe)*
11:30 h – 12:15 h	Lunch break
12:15 h	Departure to Cooperl Chairman
12:30 h – 14:00 h	Visit to a **Cooperl Farm** (Featuring V-Scraping Manure System, Biogas Collection, and Manure Treatment)
15:00 h	Arrival in Rennes train station *(To be confirmed)*
16:15 h	Arrival in Saint-Maló

Site visits – Additional information:

- **Wednesday 5th March – Roullier facilities**

Global Research Centre: For over 60 years, Roullier has maintained unparalleled and constant investment levels in research unique to our sector. The Global Research Centre – Roullier was founded in 2015 to emphasise the group's innovation activities as a driver for a sustainable transformation of the fertiliser sector and agriculture. The centre includes fundamental and applied research laboratories, industrial research laboratories, regulatory affairs, marketing, innovation financing, glass houses and control chambers, etc.

Minerallium: The Minerallium is the first corporate philanthropic initiative of the Roullier Endowment Fund, emphasising the vital role of natural minerals from Earth's origins to modern agriculture. Visitors explore four immersive spaces that reveal how minerals contribute to plant, animal, and human nutrition. Among its highlights is the Couëron, a remarkable 6,500-year-old oak trunk. For more information, visit the Minerallium website.

Industrial Sites: TIMAC AGRO is an industrial business specialising in soil and plant nutrition and animal production. Since the first production site in 1959 in Saint-Malo, TIMAC AGRO has kept developing its activity worldwide based on people. In Saint-Malo, the site visit could include a granulation site, a micro-granulation site and a production site for Animal nutrition.

- **Friday 7th March– Cooperl facilities**

"La Bulle Environnement": "La Bulle Environnement" is a showroom created to discover Cooperl's activities and its specific circular economy model in the pig industry sector. Its purpose is to raise awareness of Cooperl Environment's strategic vision through an immersive experience. The themes covered explain how Cooperl transforms all waste into resources with the interconnected management of water, energy, and organic matter. A long-term vision is presented to meet the challenges of sustainability in pork production in Brittany. Several examples can be highlighted: reusing wastewater for industrial cleaning, recovering biogas from livestock, transforming manure into organic fertilizers, and producing biofuel from fatty waste. *More information on YouTube.*

"Couiclang" pig farm: Located in Plene Jugon, is operated by Bernard Rouxel, the chairman of Cooperl, and his wife. The farm houses 500 sows in a breeder-finisher model and represents a state-of-the-art example of sustainability in pig production. It emphasizes animal welfare through practices such as non-castration production and maintaining 100% long tails. The buildings are equipped with large group breeding rooms and individualized feeding systems. Furthermore, the farm employs an advanced manure management system, including V-shaped scraping, biological treatment, and biogas collection from manure storage.