

# The Nutri2Cycle Lighthouse Network



Demonstrating nutrient and carbon recycling  
in EU agriculture in practice

The Nutri2Cycle project aims to close the existing carbon (C), nitrogen (N), phosphorus (P) flows, proposing an integrated approach to create a more efficient and sustainable farm business models for nutrient recovery and recycling. With the aim to put theory in action, the Nutri2Cycle consortium is organizing a series of webinars, which are intended to present the lighthouse prototypes of nutrient management approaches and innovation. The lighthouse demos will demonstrate the research outcomes at relevant pilot, field, farm scale in order to assess the technical feasibility of the proposed solutions and favor their transferability across the EU regions.

## 19 April 2022 from 10:00 to 11:30 CET

The first day of the webinar series will focus on two aspects: (i) innovative management systems, tools and practices for optimized nutrient and GHG management in animal husbandry and (ii) novel animal feeds produced from agro-residues. [REGISTER HERE](#)

### Speakers:

- Farm-scale anaerobic digestion of agro-residues/pig manure to increase local nutrient cycling & improve nutrient use efficiency, *Sander Vandendriessche, Inagro*
- Adapted stable construction for separated collection of solid manure and urine in pig housing (followed by separate post-processing), *Erik Meers, Ghent University, Geert Vermeulen, Vermeulen Construct*
- Crop farmer using a variety of manure and dairy processing residues to recycle and build soil C, N, P fertility, *Patrick Forrestal, Teagasc*
- Floating wetland plants grown on liquid agro-residues as a new source of proteins, *Reindert Devlamynck, Inagro*
- Algae grown on liquid agro-residues as a new source of proteins, *Marcella Fernandez de Souza, Ghent University*



## 22 April 2022 from 10:00 to 11:30 CET

The second day will provide a comprehensive overview on the achievements regarding biobased fertilisers and soil enhancers from agro-residues in various lighthouse demo solutions. [REGISTER HERE](#)

### Speakers:

- Field trial on maize (2019), spinach (2020) and potatoes (2021) with recycling-derived fertilizers: ammonium nitrate, ammonium sulphate, (liquid fraction of) digestate, pig urine and pig slurry, *Tomas Van de Sande, Inagro*
- The substitution of the mineral fertilizers with the biological fertilizers to optimize the organic carbon storage in soil and the NP cycling : two application cases in France, *Jean-Philippe Bernard, CA17 - Chamber of agriculture of Charente-Maritime*
- Ammonia recovery from raw pig slurry in a vacuum evaporation field plant, *Miriam Cerrillo, IRTA*
- ABC Animal Bone Char for Phosphorus recovery: Formulated Bio-Phosphate trials for two comparative plants, elder and wheat, *Edward Someus, 3R-BioPhosphate Ltd*
- Pig manure refinery into mineral fertilizers by using a combination of techniques applicable at industrial pig farms, *Axel Herrera, UMIL*

## 28 April 2022, 10:00 to 11:15 CET

On the final day of the webinar series, lighthouse demo solutions on innovative soil, fertilisation and crop management systems, practices for enhanced N,P efficiency and increased soil organic C content as well as tools, techniques and systems for higher-precision fertilization, will be presented. [REGISTER HERE](#)

### Speakers:

- Using digestate, precision agriculture and no-tillage focusing on OM stocking in an area characterized by the lack of it, *Massimo Zilio, UMIL*
- Use of poultry compost and pig slurry to replace mineral fertilizers as basal fertilization in maize crop, *Paula Alvarenga, ISA*
- Comparison of different precision technologies used in plant cropping system, having in focus the sensor technologies, *Zoltán Hajdu, SOLTUB*
- Trial potato growing with refined pig manure fractions, *Chantal Hendriks, Wageningen*

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