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AGRICULTURE & INNOVATION

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Case study linked to the theme of the Focus Group on nutrient recycling

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European Biogas Association



13-14 April 2021

**EIP-AGRI Seminar 'Healthy soils for Europe:
sustainable management through knowledge and practice'**



Nutri2Cycle

Transition towards a more carbon and nutrient efficient agriculture in Europe

Marco Giacomazzi – European Biogas Association



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Nutri2Cycle

Project Inception

The EIP-AGRI Focus Group on nutrient recycling (2017) concluded that the ambition towards nutrient recycling is not only about technologies for producing biobased fertilisers, but also about better understanding the behaviour of nutrients and their management at the farm using practical tools





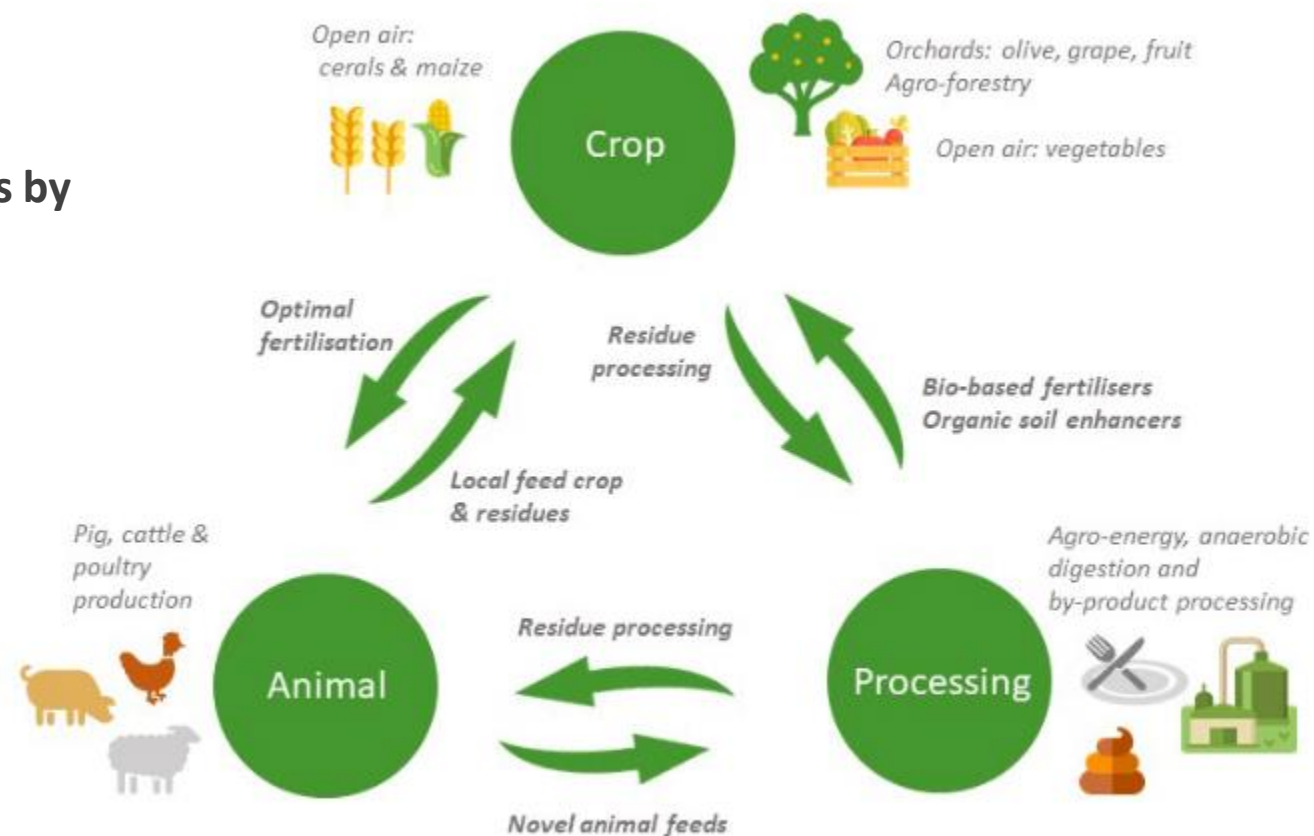
Nutri2Cycle

Closing on-farm nutrient and carbon cycle

The Nutri2Cycle project aims at closing C-N-P loops by reconnecting nutrient & carbon flows between conventional agro-pillars through agro-processing.

The project will:

- Benchmark existing N-P-C flows
- Propose & test innovative technologies at local level
- Validate (lighthouse demos)
- Develop scenario modelling to forecast the effects of innovation at EU scale



Project partners aim to validate enabling conditions for closing nutrient and carbon loops

1. Processing technology such as Anaerobic digestion, ammonium stripping and stable construction
2. Fertilisation and crop management systems (cereals, orchards and vegetables) in different climatic areas based on processed residues and recycled nutrients in organic fertilisers.
3. Tools for higher-precision fertilisation having in focus sensor technologies.
4. Bio-based fertilisers such as ammonium nitrate, liquid fraction of digestate and concentrated phosphate.
5. Novel animal feeds grown on liquid agro-residues as new source of proteins

Methologies for validation Meta-analysis; life cycle assessments; cost-benefits analysis; market survey and consumer behavior analysis; direct engagement of farmers and stakeholders at national level to disseminate the findings of the project; 13 lighthouse demos

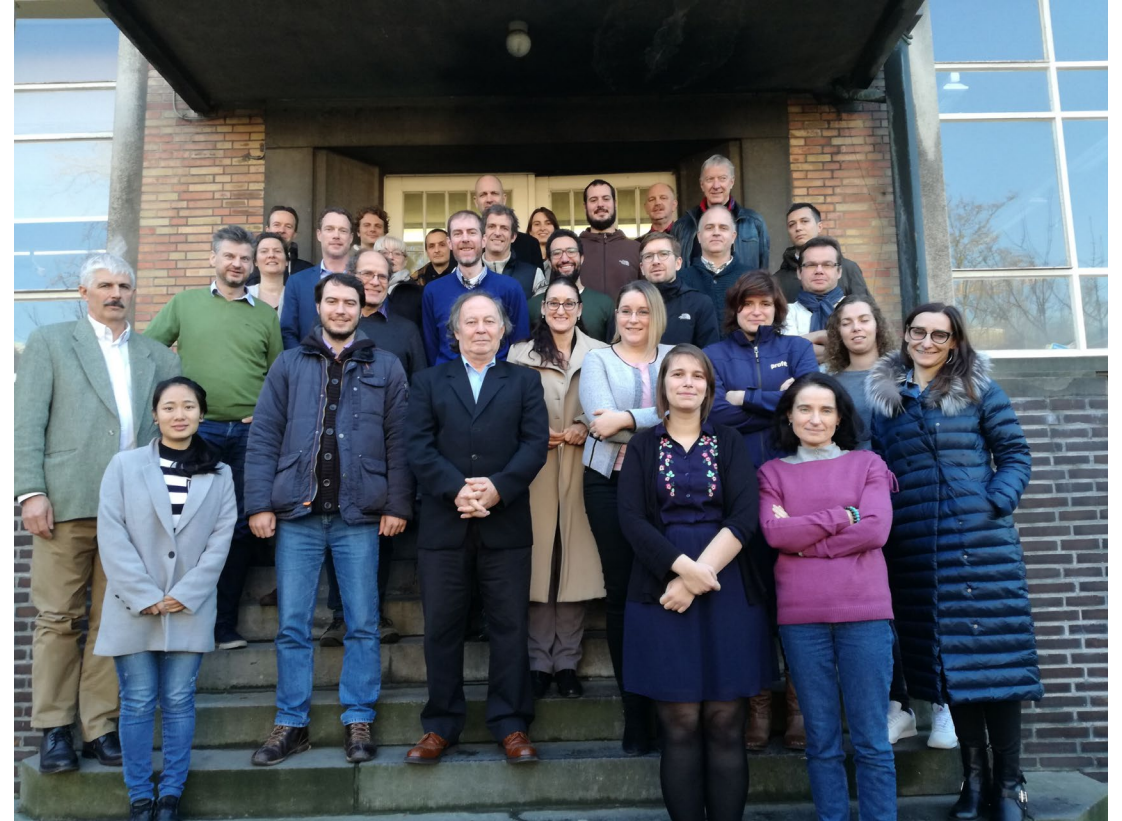




Nutri2Cycle

N2C Consortium

- 19 participants from 11 Countries – Belgium, Croatia, France, Germany, Hungary, Ireland, Italy, Netherlands, Poland, Portugal and Spain
- Interdisciplinary group of farmers, agro-consultants, associations and academic experts



Thank you for your attention!

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Nutri2Cycle
Nurturing the Circular Economy

www.nutri2cycle.eu

Twitter: [#Nutri2Cycle](https://twitter.com/Nutri2Cycle)

EIP-AGRI seminar

Healthy soils for Europe: sustainable management through knowledge and practice

Online – 13-14 April 2021

All information of the seminar is available on
www.eip-agri.eu

On the event webpage
<https://ec.europa.eu/eip/agriculture/en/event/eip-agri-seminar-healthy-soils-europe-sustainable>

