P2GreeN

December 2022

32 organizations from 13 countries set new standards for resource efficiency.

December 1, 2022, was the starting date for the four-year EU project **P2GreeN**, which will develop, test, and adapt the use of human sanitary waste to produce safe, bio-based fertilizers for agriculture. A consortium of 32 European partners scored well with the EU Horizon program and has been awarded the contract to implement an unprecedented project.

Vast amounts of wastewater with a high nutrient content disappear daily into the sewers of large cities. On the other hand, agriculture, using conventional fertilizers, struggles to produce good yields in the fields to feed the growing world population. What some have too much of, others have too little of. There must be a solution to this.

This was the thinking of a European alliance of SMEs, NGOs, universities, research institutes, local governments and network partners two years ago. An idea gradually matured into a concept that successfully met the high requirements of the Horizon Europe research and innovation funding program and now receives funding for implementation from the largest transnational research funding program in the world.

What is behind the idea?

The nutrient system within the food supply chain is currently linear. In simplified terms, this means that agriculturally grown food is produced with the addition of energy-intensive fertilizers, the consumer consumes it and this is where the chain ends. But it makes more sense to develop a cycle that eliminates fertilizers from costly production and negative effects on our environment, as well as the waste of nutrient-rich wastewater from cities.

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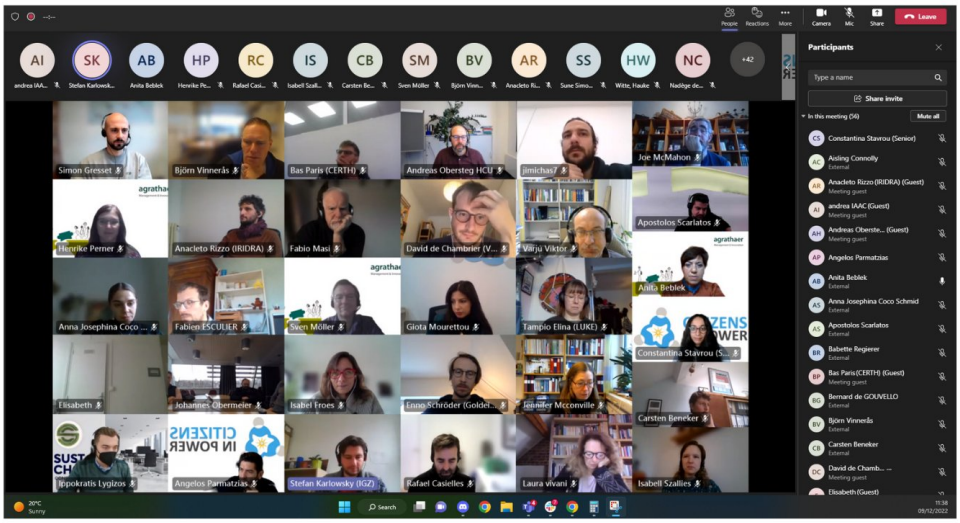
What is the solution?

The circle can be closed by using human sanitary waste and converting it into bio-based fertilizers, utilizing important nutrients that are produced in large quantities every day anyway. The key lies in nutrient recovery. The focus here is on the nutrients nitrogen and phosphorus. These two are the most important nutrients for maintaining soil fertility and increasing agricultural production. At the same time, considerable amounts of nitrogen and phosphorus are generated daily with human sanitary waste in cities or urban areas.

P2GreeN aims to develop and demonstrate viable and sustainable approaches to nutrient recovery from sanitary waste. Three P2GreeN pilot regions will develop and demonstrate the conversion of human sanitary waste into safe bio-based fertilizers in an innovative closed-loop system. Lessons learned will be shared with four P2GreeN successor regions.

Already it can be stated, the consortium of the P2GreeN project has big things in store and for sure we will hear a lot more about it in the next four years.

P2GreeN Introductory Meeting



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