

ERDF. Transforming human waste into 'humanure'

The start-up Finizio is revolutionising sanitation systems for the sustainable production of fertiliser. In doing so human excreta provide the basis for ecological humus formation fully in line with the concepts of a circular economy. At the company's pilot plant in Eberswalde, a trial is underway refining humus fertiliser from the contents of dry toilets.

If Finizio's pioneering spirit is anything to go by, it is not only animal dung but also 'humanure' that will be spread on Brandenburg's fields as quality-assured humus fertiliser and so returned to the nutrient cycle. With its dry toilets and the pilot plant in Eberswalde, which has received funding from the European Regional Development Fund (ERDF), Finizio aims to demonstrate the ecological added value and the previously untapped potential of this business. The plant serves as a trial run for the approval of humus fertiliser from the contents of dry toilets under fertiliser law.

Dry toilets instead of chemical loos

The stationary dry toilets already separate solids and liquids for the further processing steps with the innovative urine drainage system – the 'PeePot'. A useful side effect is that this reduces any unpleasant odours.

Project details Beneficiary: finizio GmbH Ostender Höhen 70 16225 Eberswalde www.finizio.de Priority: Raising the competitiveness of small and medium-sized enterprises Investment amount: EUR 134,000, of which EUR 100,000 is ERDF-funding Project term: February 2020 to December 2021



Another impressive feature of Finizio's mobile festival toilet is its sustainable transport efficiency. Thanks to the folding and stacking system, 40 instead of only six conventional cabins can now be transported on a trailer loading area of just eight square metres. The collected contents of the company's own composting toilets and those of other composting toilet companies are then processed at the pilot plant in Eberswalde, which is unique in Germany.

Value creation instead of disposal

The 'Hyco' – a hygienisation container – aerates the collected material, inactivates pathogens and also promotes the formation of good microorganisms at temperatures of up to 75°C. After seven days of heat treatment, the material is piled up in elongated heaps in Eberswalde and the humification process can begin. A turning machine now rotates the biomass almost daily, ensuring sufficient oxygen supply and homogeneity. After eight weeks, this process produces a nutrient-rich substrate, which is screened out in the final step to remove foreign matter such as sanitary products. The finished nutrient-rich and quality-assured humus fertiliser is now ready to be spread on regional farmland in the surrounding area.

ERDF funding has been used to finance 75 percent of the total investment costs for the pilot plant in Brandenburg. Finizio's work also serves as a model for future supra-regional production of humus fertiliser from the contents of dry toilets. True to the motto of this young and committed team and with the help of the ERDF, Germany may very well soon be paving the way for 'humanure'.

WHY IT MAKES SENSE

- Strengthening the competitiveness of innovative and sustainable companies
- Recycling of previously unused sustainable resources creates ecological added value through carbon storage in the soil
- Energy savings thanks to the elimination of wastewater treatment and chemical production of fertilisers
- ✓ A sustainable, transport-efficient and innovative alternative to conventional mobile sanitary facilities
- Closes the human nutrient cycle due to efficient humus production and use

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DID YOU KNOW?

This young company has been raising awareness on social media and documenting the current status of the project in a media-friendly way on both Facebook and Instagram where Finizio reported its important milestone in an appealing and entertaining way. At the end of 2020, the first official field trial with humus fertiliser from the contents of dry toilets was launched on the experimental field site in Eberswalde.