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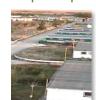
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Small-scale decentralized biorefinery demo sites in Romania – ManuREfinery Project

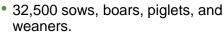
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ManuREfinery aims to implement a decentralized **small-scale intelligent**, **modular**, **mobile and sustainable biorefinery**, which will transform animal manure into biofeeds with added value and bioingredients for fertilizers. https://ope.unizar.es/en/manurefinery



Interprod Pig Farm Demo Site #1 for testing the gas valorisation line – Peris, Ilfov County, Romania





- significant NH₃ emissions, in the range of 30-40 ppmv.
- indoor air concentrations need to be reduced below the best available technique (BAT) threshold of 22.1 ppmv.

Denver Chicken Farm Demo Site #2 for testing the gas valorisation line – Bacu Village, Giurgiu County, Romania

- 38.750 chicken
- produces table eggs for different consumers.
- the systems are controlled by sensors of temperature, light intensity, humidity, negative pressure of air for ventilation and a computer is monitoring daily water and feeding consumption.





ManuREfinery solutions for the two farms: 1 m³ fixed biotrickling filter for bioconversion of the NH₃ gas into NaNO₃.