

The case study: PURROT®/PURUF®, from PurFil® ApS

The technologies that were selected for this course as a red thread case study have both been awarded ETV statements of verification. These technologies are:

- **PURROT®**: is a self-cleaning vibrating rotor-filter integrated with a high pressure screw press. Without using any chemicals, **PURROT®** operates a mechanical separation of organic matter and nutrients from liquid manure and wastewater produced by the livestock farm industry and sewage treatment plants. The ETV statement of verification was issued in 2016.
- **PURUF®**: is an ultra-filtration system constructed with ceramic membranes. It further processes (separates) the liquid fraction (Filtrate) from **PurFil®**'s patented **PURROT®** module, and produces Ammonium Nitrogen ($\text{NH}_4^+\text{-N}$) and Potassium (K^+) rich water, a valuable fertilizer for growing crops. **PURUF®**'s ETV verification is ongoing and is expected to be completed in 2020.



Dr. Joanna Drake, EU Deputy Director General of the Directorate for the Environment delivering the "ETV Statement of Verification" for **PURROT®** to Anders Tange, CEO of **PurFil®** ApS in Tallinn, Estonia, oct. 2016



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ETV eligibility: Knowing the ecotechnology

CASE STUDY

The photographs below show the industrial sites from which samples of the 3 intended matrices were collected for PURROT®'s ETV verification.



Site 1: 1.050 Sows and 32.000 piglets (pr. year) farm, Hoejrupgaard, Ringe, DK



Site 2: One of the tests-days during the ETV in Foulum



Site 2: Research Center, Biogas at Foulum, Aarhus University, DK



PURROT® operating at farm site.



PURUF®
Ultra Filter



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