

BioGas2Market

Business Opportunities for Sustainable BioGas Production

BioGas2Market was a 12 month pathfinder project funded through the Climate KIC initiative with the aim to explore relevant climate arenas to identify and prioritise innovation opportunities for sustainable production.

Currently the biogas production chain leads to the emission of both strong greenhouse gases (N₂O, CH₄) and related-CO₂ from energy-use biogas upgrading/conditioning.

The climate relevance of biogas production was assessed through Life-Cycle-Analysis; and other sustainability issues through a critical Sustainability Analysis. Currently running digester facilities both at small, medium and industrial

scale were used as reference-cases. From new innovative processes designed, expected GHG emissions and other sustainability issues were calculated and compared to the reference cases.

The results of the project were used to upgrade existing facilities to improve their overall sustainability (economy and ecology), and to develop sustainable biogas-driven biorefinery platforms for new conversion capacity to be built.

The BioGas2Market approach is innovative and adds to sustainable development whilst offering great business opportunities at the same time. The project collaborated with eight partners from academia and business with Dr Sreenivas Ravella, BEACON fermentation scientist co-leading from Aberystwyth University.



Summary

Project Lead:

René van Ree, Wageningen University and Research Centre (DLO)

Lead Institute:

Wageningen University

Project Partners:

- Utrecht University
- Province of Utrecht
- Imperial College London
- Aberystwyth University
- Ceredigion County Council
- Farm Renewable Environmental Energy Ltd
- University of Debrecen
- Aachen University of Technology and Economics

Sponsors:

Climate KIC

Project Value:

£45,383 (GBP) / €56,500
€267,000 (total project value)