Micro-methanisation on the farm – Mcube Project / EnAccess

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Interreg POCTEFA ORHI
UNIÓN EUROPEA
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TERRITORIES INVOLVED	
	EUSKADI
	LA RIOJA
	NAVARRA
	PYRENEES ATLANTIQUES
x	OCCITANIE
	AUTRE/S TERRITOIRE/S

DESCRIPTION OF THE PROJECT

- The ambition of the Mcube project is to create a reliable and profitable French micro-methanisation industry at farm level.
- Between 2015 and 2019, an initial R&D phase was carried out, with the setting up of 2 pilot micro-methanisation sites on a dairy cow farm and a fattened duck farm.
- The project then continued with a pre-industrial phase: revamping of an installation with the installation of pre-series equipment; finalisation of the organisational and legal model for deployment by the company EnAccess.
- This model will be put to the test in 2021/2022 with the installation of 5 new micro-methanisation sites. A first installation should have taken place in the first quarter of 2021 but had to be postponed due to avian flu.
- Within the framework of the ORHI project, an analysis of the methanogenic potentials of different biomasses has been carried out, making it possible to finalise the feasibility study for the installation of the methanisers on 3 of the 5 future sites (in pigs, dairy cows, ducks).
- The support also consisted in making the companies Mcube and EnAccess visible, with the aim of deploying the concept on a larger scale very soon. This has resulted in the promotion of the model in agricultural sectors.

RESULTS OBTAINED AND REPLICABILITY

- From a technical point of view, the Mcube project has enabled the development of a new micro-methanisation technology: a compact, standardised and modular system that adapts to existing effluent storage infrastructures.
- The Mcube project has also enabled the development of an innovative economic and organisational model, enabling the rapid deployment of micro-methanisation on territories, making it accessible to small farms: this model for carrying micro-methanisation projects is proposed by the company EnAccess.
- ORHI support has made it possible to finalise the studies to launch the pre-series sites that will make it possible to test the technology and the associated deployment model.
- The results obtained will also be used to set up future.

PROJECT CONTINUATION

- EnAccess will continue its plan to deploy micro-methanisers on farms. The ambition is to equip several 100 farms over the next 5 years.
- Ovalie Innovation is also involved in R&D projects with the aim of finding new ways of valorising biogas.

PROJECT´S CONTRIBUTION TO THE FOLLOWING INDICATORS

INDICATOR	INITIAL VALUE (*data or description*)	FINAL VALUE (*data or description*)
• *Renewable energy production*	0	36 kW for a "standard" size farm.
• *Energy saving*	10 T propane	60 Kw thermal power produced by cogeneration, which can be used to heat livestock buildings and thus replace fossil fuels.
• *Sanitary improvement*	Bacteria and viruses present in effluents	Reduction of the microbial and viral load in the effluent mainly due to the heating of the digester.
• *Social acceptance*	Transport to large methanisation units	Small units that do not transform the site and its surroundings: no construction, no transport of effluent, no odour during storage and spreading of digestate.
• *Economic balance sheet*	Value generated by methanisation not accruing to farmers	For farmers: Income guaranteed for 16 years by the company EnAccess.

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