Renewable energies | Biogas

BIOGAS
OUR NETWORKS

BIOMET PROJECT

Within the context of the French Investments for the Future program, ADEME supported the Biomet project targeting the energy recovery of biomass using high-energy performance **gas sweetening** technology. In partnership with the SME Arol Energy, IFPEN worked on the **purification of biogas** from biomethane fermentation, with a view to reinjection into the network.

« Our participation in the Biomet project enabled us to test our AE-Amine gas sweetening solvent on a demonstrator installed on the Terragr'eau ***methanization*** *site in Haute-Savoie. In particular, we were able to confirm the technology's performance:*

- *the increase in biomethane productivity combined with a reduction of close to 50% in electricity consumption improves the global EBIT by between 15% and 20% for the sizes of facilities under consideration,*
- *AE-Amine also helps reduce:*
  - *the carbon footprint of purification by 70%,*
  - *and that of the biomethane methanization and production site compared with alternative technologies by between 25% and 40%,*
- *lastly, resistant to biogas pollutants, AE-Amine makes it possible to produce ultra-pure (more than 99.9%) biomethane and bioCO_2, which increases the development opportunities and environmental benefits of the biomethane sector.*

Thanks to our process design expertise, we also contributed to the dimensioning of the pilot unit, which was operated for a year. At the end of the project, our solvent was added to the catalog of our partner Arol Energy. »

Julien Grandjean, Gas Treatment project manager, IFPEN

CONTACT

Raphaël Huyghe
Program manager
raphael.huyghe@ifpen.fr

Biogas: Our networks

Link to the web page :