



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<sub>2</sub>, 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**

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## CONTACT



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