

$\begin{array}{c} \textbf{BIOLOREX} \\ \textbf{Technology matured by } \\ \textbf{SAYENS}_{\text{SATT}} \\ \end{array}$

Ex-situ biomethanation process

#Biométhanation

#Power2Gas

#Biogaz

In the horizon 2050, France targets to increase biomethane share in its natural gas production, relying mainly on anaerobic digester system large-scale development. Besides an energy sovereignty issue, this strategy is considered in a broader context of **Power-2-gas** installation, dedicated to better manage intermittent generation from renewable energies.

Biolorex is an *ex-situ* biomethanation process innovation working under **low pressure** and **mesophilic conditions** (T= 65°C). It's based on the use of a **simple culture medium** with methanogens and increase the performance of such process key step by using an external loop for gas/liquid transfer improvement.

Benefits

- Optimisation of traditional biomethanation proces
- Culture medium **less expensive** than alternative methanation catalysts
- Operating conditions facilitating biomethanation plant implementation and maintenance



- Partnership: Co-maturation partner
- Development stage : TRL 4