

vendredi 1er mars 2019

BioMethane Plus Project: A Naskeo-ADEME initiative Toward a better biogas valorization



Naskeo develops 3 Anaerobic Digestion Processes

Wet process



Dry batch process



Continuous dry process





Specialized into organic waste valorization through biogas technology.

More than **50 different type of wastes** valorized **into biogas**



14 years of experience. A **wide range** of project scale From **100 kW**_{él} to **2 200 kW**_{él}

More than **45 projects** under operation or construction

NASKEO

NASKEO ENVIRONMENT – COMPANY PROFILE



PROJECT BIOMETHANE PLUS





BioMethanePLUS Project

1Maintenance efficiency





GOALS

- Increase maintenance efficiency
- Reduce maintenance time on tanks' equipments

INNOVATION

- Gas-tight boxes around agitators
- Removable maintenance platform

RESULTS

- Agitators' maintenance become possible without removing tanks' membrane and stopping biogas production
- 200t/yr of CO² production avoided on Naskeo's site after the process implementation
- Added value on Naskeo's maintenance service offer

2 Dry-batch digesters' doors gastightness





GOALS

- Reduce gas losses during the plant operation
- Increase methane digestion rate

INNOVATION

- Two-step system design: special joints on the sides of the doors
- Pre-doors

RESULTS

- Gas-tight atmosphere, allowing a better waste digestion and less gas losses
- 200t/yr of CO² production avoided on Naskeo's site after the process implementation



3 Membrane insulation for heat and gastightness



GOALS

- Reduce thermic losses in order to improve energetic yield
- Reduce gas losses during the plant operation
- Increase methane digestion rate

INNOVATION

- Thermic cycle specific to digester tank
- Challenging insulation system: 3rd membrane to reduce thermic convection + an insulation layer between the internal membranes

RESULTS

- Biogas autoconsumption + digester heating needs reduction
- Gas-tight atmosphere = better waste digestion and less gas losses
- 6 750MW/yr of heat saved on Naskeo's sites

BioMethanePLUS Project



ENVIRONMENTAL

Global biogas autoconsumption + digester heating needs reduction ⇒ 6750MWh/yr

Gas losses reduction ⇒ 2562MWh/yr

□ CO₂ Reject reduction ⇒ 6 200 t-CO₂ eq/yr

GLOBAL RESULTS



ECONOMICAL

□ +3M€ Turnover in 2018

□ +150% units sold in 2018

Revenue increases for farmers valorizing their wastes in biogas

Added value for the entire biogas field due to better methane production

NASKEO





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