

Monts du Lyonnais BioGNV station

by Ludovic GUTIERREZ / 2021-03-16 16:39:51 / France / 14377 / FR



Year of commitment : 2020

Circular economy and waste management : Methanation



700 000 €

Builder

Prodeval

Manager / Dealer

SAS Biogaz des Monts

GENERAL INFORMATION

The BioGNV station is an emblematic decentralization and ultra-short cycle energy production project. The fuel pumps are in fact located a few tens of meters from the methanizers.

The project is also positioned as a model in terms of governance, since it associates a group of farmer managers (Méthamoly) with an equipment supplier specializing in the treatment and recovery of biogas (Prodéval company). Together they manage the site through SAS Biogaz des Monts.

Local projects initiated by farmers and a community of municipalities

The genesis of this project dates back to 2012. The first stage was the commissioning of the St Denis sur Coise methaniser in February 2019. This allowed 12

farmers to better use their farm manure. The manure is thus introduced into the methanizer. Its methane potential is converted into biogas, while the digestate is then spread on the farms. This circular economy initiative makes it possible to reduce the use of synthetic fertilizers which supplement manure. The digestate is more efficient than the latter. The initiative also allows farmers to diversify their income and fits ideally into the socio-economic reality of the Monts du Lyonnais.

In 2019, the community of municipalities of Mont du Lyonnais decided to go even further in the local exploitation of biomethane produced on site. It offers this CNG station and obtains funding from the Auvergne-Rhône-Alpes Region allowing the purchase of 10 heavy goods vehicles by local companies. The farmers thus offer to invest. A public-private partnership is created, the community of communes providing the land.

A project part of a dynamic of territories

The success of the project is due in particular to the diversity of the actors who took part in it. This diversity has made it possible to create an ecosystem of trust from the local level, to the banks which have supported the group in their investments.

In addition, the work of identifying and creating demand on the part of the community of municipalities quickly reached a break-even point. The station's strategic position on one of the main intercommunal transit routes allows community facilities (dumpsters), but also local transporters to stock up on fuel without making a detour. At the start of 2021, 10 heavy goods vehicles come daily as well as around ten light vehicles.

An innovative resort, but "normal"

Taking into account the needs of users has resulted in a station that is in every way similar to "normal" equipment. HGVs benefit from a turning zone, payments are made by credit card. For the moment, the station has 4 tracks. The use of all-in-one pumping equipment in a container will make it possible to resize the station at a lower cost when the customer flow has increased.

[Discover the interview with Thomas Robert, director of the Eco Habitat park in the Monts du Lyonnais community of municipalities and project manager of the bioNGV station .](#)

Progress Status

Delivered

Data Reliability

Self-declared

Funding Type

Public/Private Partnership

Sustainable Development

Attractiveness :

More attractiveness for the territory

The station provides a local fuel alternative for mobility. This promotes both the circular economy and the economic development of the territory, while making it possible to secure the fuel budget of local players regardless of the international price of oil.

The ease of use of the station and the ability to quickly resize it are also good assets.

Social Cohesion :

A contribution to social cohesion

For the farmers participating in the project, the station provides security for part of their resources. At the local level, the project is also a source of employment. An example: the local Peugeot agent considers that the transformation of private cars to bioNGV will allow him to maintain a traditional mechanical activity for his employees who cannot or do not want to be trained in electricity.

Beyond that, as with food, local consumption strengthens the links between producers and customers.

Preservation / Environmental Improvement :

Preserving the local environment

The bioNGV station is attached to a methanizer. Even if legally the biomethane consumed by vehicles is not necessarily the same as that injected a hundred meters further, the methanizer makes it possible to:

- recover food waste from school canteens (7,000 t)
- create added value for farm manure (10,000 t), which, partly become digestate, becomes more efficient for the soil. This also avoids the use of synthetic fertilizers.

According to studies, a vehicle running on bioNGV:

- releases 80% less CO₂ into the atmosphere than a diesel equivalent of the same generation
- over its entire life cycle, its carbon impact is less than or equal to that of an electric vehicle

Sources:

[https://www.ifpenergiesnouvelles.fr/sites/ifpen.fr/files/inline-images/Innovation%20et%20industrie/Analyse%20du%20cycle%20de%20vie%20\(ACV\)/Rapport_ACV%20GNV_version%20finale.pdf](https://www.ifpenergiesnouvelles.fr/sites/ifpen.fr/files/inline-images/Innovation%20et%20industrie/Analyse%20du%20cycle%20de%20vie%20(ACV)/Rapport_ACV%20GNV_version%20finale.pdf)

Resilience :

Gains in resilience

Regions that are more independent in terms of energy are more resilient in the face of global events.

Moreover, by extension, the resilience of agricultural land is managed at the local level and not in the laboratories of synthetic fertilizer manufacturers. A digestate too rich in certain components can be treated and adapted to the soils on a local scale.

Responsible use of resources :

Responsible use of resources

Driving from waste transformed into resources is much more responsible than extracting non-renewable resources at a significant carbon and environmental cost.

Governance

Community of municipalities of the Monts du Lyonnais

Holder Type : Local Authority

Prodeval

Builder Type : Other

SAS Biogaz des Monts

Manager / Dealer Type : Private

The station is a public-private partnership between the community of communes of Mont du Lyonnais, which provides the land, and SAS biogaz des Monts, which has invested in the project. This is made up of a group of local farmers and the company Prodeval which also supplies the bioNGV distribution unit.

Sustainable Solutions

CN'Green®

Description :

This bioNGV dispensing unit is based on an all-in-one modular concept. The single container acts as an island in the station and houses all the equipment necessary for its operation, from the payment terminal to the pumps.



Designed as a transient equipment, it can then give way to a more powerful model or to a final station once the needs have stabilized.

- Renewable energies

Company (es) Website :

Photo credit

Community of municipalities of the Monts du Lyonnais - Prodeval
Frédéric Berthet - GRDF

Contest

Reasons for participating in the competition(s)

BioGNV station attached to a methanizer. This is a project that is part of a dynamic of the territory making it possible to promote local energy and create value and cohesion around local and national players.

Building candidate in the category



Grand Prix Infrastructure Durable





Date Export : 20230315140711