



BIOGAS ACTION :
acting for the biogas / biomethane sector

PROJECT SHEET



PROJECT OVERVIEW

The objective of the Biogas Action project is to develop the biogas and biomethane sector. Financed by the EU Research and Innovation programme, Horizon 2020, it includes partners from 10 countries.

The Biogas Action implementation in the Auvergne-Rhône-Alpes region aims to facilitate the development of agricultural and territorial biogas actions and projects. It focuses on the technical innovations, administrative aspects, social acceptability, the optimisation of economic models and the project financing.

 **OBJECTIVES**

- ∞ Contribute to the regional strategy for the development of the biogas and biomethane sector in Auvergne-Rhône-Alpes
- ∞ Facilitate the investments in the biogas/biomethane production in the region
- ∞ Optimise the economic models and the project financing
- ∞ Support the development of quality biogas plants
- ∞ Promote these sectors and their economic impact among public decision-makers

ACTIVITES 

- ∞ Promote the information and experience sharing
- ∞ Support innovative projects (bioNGV on farms, carried gas...)
- ∞ Develop support tools for installation projects
- ∞ Create a dynamics for the economic development of the biogas sector in the region
- ∞ Train the actors and capitalise on the know-how

BUDGET



1,99 M€
allocated to 13 European partners

DURATION



January 2016 -
December 2018



TARGETS

This project mainly targets farmers and public authorities, producers or future producers of biogas and biomethane. It also targets companies in the sector and public administration.



INVOLVED ACTORS

- ∞ Institutional partners (government, region, agricultural chambers...)
- ∞ Local public authorities
- ∞ Companies – suppliers of technology or know-how
- ∞ Energy suppliers and DSOs (distribution system operators)
- ∞ Project owners (farmers, companies...)
- ∞ Local, regional, national and international facilitators
- ∞ Clusters, competitiveness clusters
- ∞ Research and development actors

ACTIVITIES CARRIED OUT



▶ Promote the information and experience sharing



AURA-EE participated in national fairs, as Biogas Europe and Pollutec, in order to share methodological information and experience feedback on projects, through targeted conferences.

Moreover, the Biogas Auvergne-Rhône-Alpes advisory committee, which gathers all the actors of the regional biogas sector (companies, administrations, public authorities, counsellors, financiers...) met twice a year under two formats:

- Conferences: the last 3 have dealt with the biomethane sector, the quality of the projects and biowaste;
- Site visits: Serge FERRARI and PRODEVAL.

▶ Support innovative projects (bioNGV on farms, carried gas ...)





The project owners were assisted during each project phase (study, economic model, financing, implementation). Through this approach, it was possible to work on the specific issues of innovative projects (those who do not exist yet in our region or in France):

| Who and where ? | Issues | Activities carried out within the project |
|--|---|---|
|  A farmer and entrepreneur: Dominique Ronzon | <i>"I am a farmer, I will build an AD plant and I want to produce my fuel on the farm"</i> | Creation of a methodology for implementing a refuelling station on farms, based on a biogas project. |
| | <i>"I want to inject biomethane into the natural gas grid, but it is impossible to connect the gas grid with my biogas plant"</i> | Supporting a feasibility study on the implementation of a "carried gas" solution, meaning the transport of biomethane by truck to the natural gas distribution network (study made by the engineering consulting firm Astrade). |
| | <i>"I want my project to serve the territory and especially the farmers"</i> | Supporting the implementation of a collective project bringing together 40 farmers (Agrometha), alongside the concerned public authorities. |
|  Companies: Méthelec, Agritexia, Méthadaine | <i>"I am an owner of biogas plant with CHP (heat and electricity production) and I want to produce fuel with Agri-GNVV ©¹"</i> | Undertaking a feasibility study on the production of gas fuel, using the technological brick Agri-GNV © on three experimental sites in the region (study made by the engineering consulting firm). |

¹ Small compressed national gas refuelling station (bioGNC) meant to recover a surplus of biogas from a biogas plant coupled with a cogeneration.



Agribiomethane visit near Nantes by Agrometha farmers group
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| Who and where ? | Issues | Activities carried out within the project |
|--|---|--|
|  <p>Farmers groups and farmers leading biogas plant</p> | <p><i>"I represent an agricultural project and I encounter difficulties to obtain financing"</i></p> | <p>Providing solutions for project financing, with the support of three finance firms Unica conseil, Decid&Risque and Finergreen and in collaboration with AILE (Association of Local Initiatives in the field of Energy and Environment) in Brittany.</p> |
|  <p>One local authority: The association of municipalities from Trièves</p> | <p><i>"I am a rural public authority, I do not have a gas distribution network in my area. Can I open a refuelling station delivering gas, especially biomethane, and use this fuel to power a garbage pickup truck?"</i></p> | <p>Conducting an opportunity study to create a CNG gas station fuelled by liquefied natural gas (LNG) delivered by trucks, with a guarantee of origin mechanism for biomethane.</p> |
|  <p>Local public authorities: Métropole de Lyon, Vienne Condrieu Agglomération, Le Pays Rochois</p> | <p><i>"I am a local authority that produces biomethane and I want this biomethane to be useful to my territory"</i></p> | <p>Providing guidelines on the mechanism of guarantees of origin and proposing negotiation strategies with biomethane buyers (with the support of the law firm Adamas, GRDF and ADEME).</p> |
|  <p>One entrepreneur setting up the business</p> | <p><i>"I want to set up an input processing and repackaging platform for substrats and digestats from agricultural projects"</i></p> | <p>Strategic, organizational, technical and regulatory support for the project definition.</p> |

▶ Develop support tools for installation projects

While supporting the innovative projects described above, our agency developed tools (mainly guides) that allow centralising information and getting a first glimpse of the current status.

These tools help the project owners to take the necessary measures for the good elaboration of their project.

▶ Create a dynamics for the economic development of the biogas sector in the region

AFG, AURA-EE and Tenerrdis join forces in order to accelerate the development of the biogas sector in Auvergne-Rhône-Alpes. Hence the banner “Biogaz Génér’Action”, created to stimulate and bring forward new facilities, technologies or services launched by regional companies.



In 2017 the following activities derived from this partnership took place:

- a professional event organised by AFG in Lyon, with 60 companies,
- a regional event on innovation, organised by Tenerrdis (150 participants),
- 2 advisory committees for sharing/know-how and experience feedback, organised by AURA-EE (50 participants).

The implementation of the partnership between the three actors brought more efficiency to the actions undertaken within the “Biogaz Génér’Action” dynamics. Each partner brought its own experience, network and the ability to mobilise different type of stakeholders.

Salon BePositive 2017: “The consultation, one of the key levers of success for biomethane projects” from left to right:

Serge Nocodie (AURA-EE President),
Didier Saussier (East Central AFG President),
Catherine Candela (Tenerrdis General Delegate).



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▶ Train the actors and capitalise on the know-how

Several trainings were organised in order to complement the existing trainings in the region:

- Trainings for project owners within “Biogaz Génér’Action”, aiming at developing human skills to facilitate project financing, negotiation with banks, local acceptance etc.
- Trainings for specific targets: waste sector actors (technical and regulatory training), public investigators (risks and experience feedback), local authorities in charge of energy supply (market comprehension and guarantees of origin).



DOCUMENTS PRODUCED



“Guide to implementing a bioCNG refueling station on the farm” *Guidelines for project owners and counsellors*

This document is the result of a collaborative work, under the guidance and with the support of GRDF (gas distribution system operator) and ADEME (Agency for Environment and Energy Management), involving different experts of the sector. Its objective is to establish the basis for the development of a vehicle refuelling station, in the agricultural environment, linked with a biogas plant on the farm, producing biogas which supplies this refuelling station. This work allowed to improve the strategic vision for the development of this type of installation and confirms the possibility for a farmer to sell fuel on the farm.

Composed of thematic fact sheets, the guide presents project management methodology (approaches, actors ...). It also addresses technical, regulatory and tax-related aspects and directs towards different station pre-sizing scenarios.

This guide was developed by AURA-EE and AGROMETHA and was published in September 2016.

<https://bit.ly/2Koc5KD> (in french)



“Finance a biogas plant project” *An advice guide*

The development of a biogas plant project is a complex process and requires substantial investment from the project owners, especially for farmers and the public authorities that subsidise them.

The main objective of this guide is to increase awareness among the project owners about the risk analysis approach. It also aims to offer expert answers and qualified feedback on the procedures to follow for setting up financing scheme. Several banks have been involved in the process in order to bring their expertise.

The guide was developed by AURA-EE and AILE and was published in January 2017.

<https://bit.ly/2so7f90> (in french)



“Towards the energy self-sufficiency of the territories” *Biogas, a sector with a bright future*

This training document is intended for elected officials and public authorities to raise awareness on the issues of biogas and biomethane. The Biogas Action project allowed to make an update of this document in 2016. It contains the contributions of Club Biogaz ATEE, ARENE Île-de-France and AURA-EE.

<https://bit.ly/2M0D6sn> (in french)



“Guide for public authorities : how to produce biomethane and value it as bioNGV on its territory”

Many local public authorities consider the opportunity of producing biomethane and value it as fuel. They are confronted with understanding the guarantees of origin mechanism, which allows a production on a given site to be used on another site, technically disconnected.

The purpose of this guide is to provide tools for a public authority, that is biomethane producer and/or consumer, to produce locally and /or to consume it locally.

The document is intended to be pragmatic and illustrates different strategies and actions for local authorities services, in order to ensure the destination of production or the supply source.

<https://bit.ly/2RA6CV1>



FUTURE PROSPECTS

The **Biogas Action** project facilitated the following aspects:

▶ Several projects of refuelling stations that sell bioCNG

The guide for implementing a bioCNG refueling station on farm and the demonstration of the feasibility of the tested projects contributed to the setting up of several types of installations in France. Thus, a first conventional refuelling station was built in Vendée in December 2017, supported by Agribiométhane, and projects with Agri-GNV © are in progress, particularly in the Auvergne-Rhône-Alpes region (Méthadaine in Haute-Savoie).

The work carried out highlighted the following difficulties for the project owners:

- Territorial planning: today it is still difficult to set up a refuelling station that sells bioCNG in the agricultural zone of the Local Urbanism Plan.
- Regulation: the absence of a purchasing tariff for “non-injected” biomethane constrains the conventional refuelling stations to inject biomethane into the gas grid and to extract it later.

▶ A future mechanism supporting the “non-injected” biomethane sale

Today, selling biomethane directly from an agricultural biogas plant does not bring profitability for the project owners, if one does not fit into the existing support mechanism. This is due to the fact that there is no purchasing tariff for non-injected biomethane, nor any specific aid for the development of the bioCNG sector (except for one investment aid in the Auvergne-Rhône-Alpes region).

Discussions are in progress at the ministerial level, thanks to a working group to which the Biogas Action project has contributed. The project helped to animate conferences on the “carried gas” topic and to highlight this new issue, together with the French farmers association dealing with biogas and ADEME.

The “Lecornu”² report for the liberalisation of biogas in France incorporated some elements from the discussions and a call for projects should be launched in 2019.

▶ The control of biomethane produced on a territorial scale

The guide produced by the project provides the local authorities, producing or wanting to produce biomethane, with useful elements to help them recover it in the form of bioNGV in their area.

WHAT REMAINS TO BE DONE...

The published guides are meant to be enhanced over time in order to take into consideration the regulatory and economic changes. Also, it is necessary to complete them with project financing elements that will result from regional and national feedback.



TO FIND OUT MORE

- The project website : biogasaction.eu/
- Renewable energies in Auvergne-Rhône-Alpes : enrauvergnerhonealpes.org
- AURA-EE website : auvergnerhonealpes-ee.fr
- AILE (Association of Local Initiatives in the field of Energy and Environment), partner in the European project Biogas Action aile.asso.fr

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