

Strategy and action plan in Rhône-Alpes

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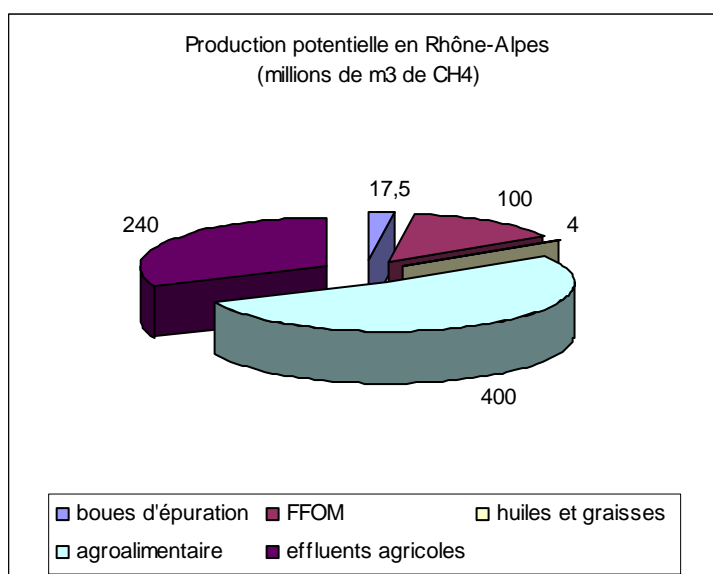
Anaerobic digestion, which energetic potential, which stakes in Rhône-Alpes

Rhônealénergie-Environnement realised a projection of the gross potential of de salvaged methane in Rhône-Alpes. The data used for this projection come from the ADEME concerning the organic wastes.

Concerning the farming effluents, data from the farming census, about the livestock's and the farm plants allows us to refine our estimation..

The only goal of this estimation is an order of height of the gross potential.

Therefore, the gross potential, if all the wastes were treated, is estimated at 750 millions m³/years, givent 7 millions MWh/year.



STRATEGY in Rhône-Alpes

The strategy has been submitted to the members of the advisory committee for alteration and positioning.

The five defined main lines will be carrying the strategy.

These main lines will become objectives.

To be reached, these objectives will need an possible action plan at all levels carried by the different players that shall work together →→→ professionals, Region, ADEME, administrations, agriculture chambers cooperation, food-processing industries, Rhônalénergie-Environnement, IERA (network of renewable energy associations), ALE (local agencies), ERAI (economic development actors), GDF...

The advisory committee has been mandated to ratify the main lines and objectives.

This strategy is generating 10 actions to be conducted at a regional level.

On another hand, some of these actions are already treated and have identified means.

LINE 1 : toward a maximal energetic efficiency (best using of local resources, at acceptable environmental, economic and social costs)

1.1 Optimisation and development of anaerobic digestion in Sewage plants

Most of sewage plants in Rhône-Alpes are not provided with digesters, initially for some technologic choices and break-even point.

But, for those which are, do they correctly use the biogas?

A study carried by the ARENE Ile-de-France showed that, in Ile-de-France, the sewage plants don't valorise the produced biogas. The objective should be the optimisation of existing installation and the development of anaerobic digestion during the renovation and the creation of these equipments.

Possible Actions

- A study must be made on existing sites for optimisation →→→ RAEE
- We must communicate on existing sites →→→ALE, IERA and RAEE
- We must keep the local communities and their delegate members aware: information meeting →→→ALE, IERA et RAEE
- A financing must be created for the most innovator projects: a regional call for proposals carried by the Region, the water Agency, the ADEME and the Conseils Généraux
- We must also observe the sites (valorisation...) →→→ regional observatory

1.2 Developing the biogas in the CSDU (landfill)

The development of biogas coming from landfill sites for waste is well carried by the owners of the sites. Anyway, Rhônalénergie-Environnement conducted already 3 projects linked to the biogas transport and its development in heat supply station.

Possible actions :

- No development action plan proposed
- Observation of sites (valorisation) →→→ regional observatory (OREGES)

1.3 Towns and processing waste syndicates: anaerobic digestion development for organic wastes

The household waste is a significant source of organic matter. To be efficient, we must sort and collect the matter before thinking at the anaerobic digestion and the development of biogas. Some projects are ongoing in the department of l'Ain and La Loire.

The city of Lille produces some biogas for fuel.

Possible actions

- Heightening local community awareness? : →→→ ADEME, ALE and RAEE, Environment, departmental plans, wastes elimination.
- Communication concerning existing sites →→→ Rhônalénergie-Environnement, ADEME, IERA and ALE
- Accompanying programme for the projects →→→ ADEME RAEE

1.4 Developing the anaerobic digestion in the food-processing industries

The food-processing industrials raise the problem concerning the future of their manufactured goods by-products but they sometimes also need heat and cold for the manufacturing process.

Nevertheless, the lack of information and tool avoids them to judge the relevance of the anaerobic digestion in comparison to their real needs.

We should :

- Show them the environmental and economic interest of this network at long term
- Make easier projects emergence
- Accompany the projects and reduce the gestation time.
- Develop the know-how of the carriers

Possible actions

- Creation of analysing tools : works, national or regional studies →→→ ADEME Coop, alimentec
- Feedback on existing sites →→→ Alimentec Coop
- Awareness campaign for industrials →→→ Coop, alimentec
- Training of industrials →→→ Coop- alimentec
- Accompaniment of the projects →→→ RAEE Coop- alimentec
- Creation of a professional's network →→→ Coop- alimentec
- Observation of the sites (valorisation...) →→→ regional observatory
- Financing the most innovator projects: call for proposals carried by the Région, the ADEME and the Conseils Généraux.

If the industrial can not make his project alone, he must incite other players to join forces at a territory scale.

1.5 Development of anaerobic digestion in the territories

Beyond farm anaerobic digestion, a biogas plant of over 500 kWe is considered as a territory project, as the territory must create a heat network and call the local community to develop the network.

There will be several suppliers of matter, several consumers of heat and several products collectors.

So, we should:

- Make easier the emergence of projects
- Accompany the projects, reduce the gestation time
- Develop the know-how of the carriers
- Develop the professional network
- Provide a feedback and a follow-up
- Build references and evaluation
- Create communication tools
- Create financing tools
- Make easier the administrative approach

The involvement of the local communities is of major importance : they are the key players for the development of these projects.

Possible actions

- Accompanying the projects: →→→ Rhônalénergie-Environnement, chd'A, IERA and other
- Training of the guide of ground : →→→ RAEE Hélianthe Chd'A and other
- Creation and use of tools to find out interesting projects →→→ rae, hélianthe ch'A
- Training of the carriers, creating training tools: →→→RAEE
- Creation of a process with crossing points to valid the projects and make sure that they are proper references →→→ RAEE
- Creation of communication tools for the public sector and elected members →→→ RAEE IERA
- Implicating the authorities as players of the project →→→ RAEE, IERA
- Heightening the administrations awareness, better organization, create instruction tools →→→ RAEE
- Mobilizing the elected members and maintaining a link with the ministries to improve the rules →→→ Everyone
- Gathering players in network to share the established experiences: DDSV network, Accompaniers... →→→ rae, administrations, coop
- Observing site (valorisation) →→→ regional observatory
- Financing efficiently the projects: →→→ ADEME, region, call for proposals doesn't appear to be the most pertinent, taken into consideration the territorial implication

1.6 Cogeneration and valorisation of the heat:

The valorisation of biogas is a key point for profitability and efficiency of the plants. The current context doesn't allow us to make something different than cogeneration.

So, we should:

- Develop territorial projects et reinforce the link with the local communities
- Reduce the administrative terms for the connection to the electric network
- Develop heat network
- Develop the use and the manufacturing of cold by heat

Possible actions

- Identifying and following up professional players of heat and drying ... → → → RAEE
- Mobilizing and accompanying the local community for the development of the heat and electric network... → → → RAEE, IERA
- Mobilising and making the elected members behave to improve the rules to reduce the administrative terms... → → → Everyone

1.7 Elaboration of injection development of biogas in the network

In the near future, the injection of biogas in the network will expand, so long as we make evolve the regulations.

Subsequently, we should:

- Create injection references

Possible actions

- Mobilising and make the elected members behave to improve the rules to obtain acceptable condition for the injection and the transport condition of biogas...
→ → → everyone
- Capitalizing the acquired experience in Europe → → → RAEE and professionals

1.8 Creation of biogas network

It is technically possible but some regulatory improvements are needed .

Possible actions

- Mobilising and making the elected members behave to improve the rules to obtain acceptable condition for the transport of biogas by dedicated canalisation...
→ → → Everyone
- Capitalising the experience on dedicated networks... → → → RAEE

1.9 Biogas valorisation: expanding the biogas into fuel oils

In the near future, it will develop with big size project, so long as we make evolve the regulations (injection and transport of biogas)

Subsequently, we should issue references

Possible actions

- Finding out some interesting production plant, from FFOM, for example...
→ → → rae, ALE and IERA
- Capitalising the acquired experience in Europe : → → → Rae and professionnals

LINE 2 : toward a territorial coherence: players and projects

2.1 Creation of synergies for connecting players to each other

The anaerobic digestion will allow the suppliers of organic matters to get closer to those who are putting them back into the ground. Some synergy must be found between food-processing industry, agricultural and local community.

Also, synergies concerning the valorisation of heat have to be found, in order to use them all the year long. Dryers are interesting users.

Possible actions

- Keeping watchful with local projects that will allow the valorisation of heat, dryer, cold... → → → IERA, chd'A, Cuma PNR
- Having a territorial approach of projects, building bridges between different sectors. → → → IERA, chd'A, Cuma PNR

2.2 Development of analysis tools for the territory

Yet, the territories don't possess the tools to :

- Avoid the competition between ENR project (ex wood) or other and decide which project is more relevant for the territory
- Provide guidance for the financial players to refine their helps

Possible actions

- Creating a study and diagnostic tool for the project for territories purposes
→ → → PNR, RAEE

LINE 3 : toward a present, active, profitable and well known agriculture

3.1 Better qualification of agronomic advantages

The major stake of a project is the return on the ground for the digestion of matters. There are still some questions concerning the quality of the matters.

Possible actions

- Mobilising and making the elected members behave to improve the rules to hurry the registration of the digestion of matters → → → Everyone
- Centralizing and issuing existing technical studies → → → ADEME, Chd'A
- Make complementary studies → → → ADEME, Chd'A

3.2 Management of the « return on the ground », the quality of the ground and amendment substitution or manure

Once the digestion of matters is qualified; they can enter in agricultural itinerary as well as the amendment or manure.

A manure spreading plan will be needed

Possible actions

- Training the chambres d'agriculture →→→ Chd'A RAEE professionals
- Elaborating a standard manure spreading plan →→→ Chd'A
- Training and informing farmers and digestion matters receivers →→→ Chd'A, Cuma

3.3 Good qualification of environmental advantages, reduction of the impacts.

Possible actions

- Making ACV analysis →→→ ADEME
- Supplying technical guidance →→→ ADEME, Chd'A, RAEE, professionnels...

3.4 Training of the carriers

The project carrier will have to control the management of the methanisor, the biogas, the electricity and the heat production an in some certain extends, the distribution and the sale of heat. For a farmer or an industrial, it's quiet new. The anaerobic digestion activity needs to be let with exactness and organization to limit the risks inherent to the biogas technical: explosion and intoxication.

Possible actions

- Training for the risks and follow-up of the installation →→→ RAEE professionnels MSA
- Managing the constructor training →→→ RAEE professionnels
- Creating tools for the follow-up →→→ Chd'A, RAEE IERA
- Produce technical guidance →→→ ADEME Chd'A, RAEE IERA

LINE 4 Development or maintain in the territories: economical life, players on territories, know-how and richness

4.1 Identification of the economical players involved in anaerobic digestion and development of the offer

In Germany, the biogas development generated a strong economical activity in the territories with creation of new jobs...

Therefore, we must help the territories to welcome the companies that will reassure the network.

We must :

- Facilitate the setting up of enterprises
- Facilitate the development of enterprises
- Reduce the time of the emergence of the projects.

Possible actions

- Identifying the enterprises →→→ Cluster and RAEE
- Putting the enterprises in the network →→→ RAEE and Cluster
- Welcoming foreign competences and facilitate the implantation of enterprises in Rhône-Alpes →→→ ERAI and RAEE
- Centralizing the market offers →→→ RAEE, coop ERAI
- Giving access to the opportunities →→→ RAEE, coop ERAI...

4.2 Development of the links with local players : local enterprises, communities

The anaerobic digestion is also a project of local enterprises that we should mobilize:

- Producers of organic matters
- Users of manure and amendment (return to the ground)
- Players in management and equipment
- Players in achievement and engineering
- Players in energy : electricity and heat

Possible actions

- Accompanying the development of an organic matters stock exchange →→→ Coop
- Facilitating the partnership between local enterprises →→→ CCI, IERA, chd'A, ERAI, RAEE, coop alimentec

4.3 Economical and financial security of the project

The return of investment for anaerobic digestion plant costs will be the receipts linked to the treatment of the co-substrates and the sale of energy (heat and electricity). In certain cases, subvention will be necessary.

We must:

- Reassure the contract for co-substrates
- Give subventions
- Develop the buy-back rate
- Facilitate the energy distribution

Possible actions

- Refining the funding methods of the ADEME and the Region and the Conseils Généraux : →→→ Région ADEME CG et RAEE
- Finalizing the contracts model →→→ RAEE
- Mobilising and making the elected members behave to re-evaluate the rate of purchase →→→ Everyone
- Identifying the other possibilities for financing the installations: pension funds →→→ RAEE

LINE 5 : towards efficient regulation, understood and respected

5.1 Acknowledgement of the anaerobic digestion and evolvement of the regulation

The regulation is still evolving, therefore it is of major importance to make a correct interpretation of the laws.

Possible actions

- Mobilising and making the elected members behave to improve the regulation in order to obtain acceptable regular conditions for the projects →→→ Everyone
- Finalizing the contracts model →→→ RAEE
- Making the follow-up of the evolvement of the regulation
→→→ DDSV, RAEE, ADEME
- Guiding the coming into being of the laws →→→ DDSV, RAEE, ADEME, everyone

5.2 Identification of anaerobic digestion and biogas within regulation

Possible actions

- Heightening authority awareness, better organisation, creation of instruction tools
→→→ RAEE
- Mobilising the elected members and maintain a link with the ministries to make evolving the regulation →→→ everyone
- Integrating the players into a network for the mutual benefit of the acquired experience : DDSV network
- Managing the return to soil of the digestates : creation of a follow-up (valorisation and characteristics of the matter →→→ Ch d'A
- Mobilising and making the elected members behave to evolve the regulation in order to reduce the administrative delays for the connection to the mains
→→→ everyone
- Regulation about "injection" to be followed up
- Accompanying the coming into being of the laws →→→ DDSV, RAEE, ADEME, everyone.

ACTION PLAN: Defined by the Advisory Committee

	ACTION PLAN	CARRIER	DEADLINE
1	Increasing the security of the future projects : profitability and financing	RAEE Valérie Borroni	2010
2	Training the owners of the plant	RAEE Valérie Borroni	2011
3	Training the BET the ground accompanists	RAEE Valérie Borroni	2012
4	Developing an expert's report, centralised information about the returns to the soil	CA 26 Anne Le Lez	2011
5	Monitoring the production or sources vegetables for anaerobic digestion	CA 26 Anne Le Lez	2012
6	Developing food-processing industries implication of Rhône-Alpes into anaerobic digestion : project handler or supplier of raw material	Coop de France Rhône-Alpes – Auvergne Cyril Jarny	2012
7	Monitoring and regulation action for the network	RAEE Valérie Borroni	2012
8	Preparing the development of bio methane in Rhône-Alpes	RAEE Valérie Borroni	2011
9	Gas network, or biogas monitoring, preparation of the injection into the natural gas network or development of dedicated network.	RAEE Valérie Borroni	2012
10	Developing the "little anaerobic digestion" and dry processing anaerobic digestion	AJENA Bertrand Aucordonnier	2012

Principle of action sheet :

A carrier

Possible fund contributors

A defined goal

Precise Methods and organisation

A turnaround time

Defined means: working time, side costs

Method for evaluating the efficiency of the action

GLOSSARY :

ADEME : National Agency for environment and energy

ALE : Local Agency for Energy

Alimentec : Professional organisation of food processing industries en Rhône-Alpes

ARENE : Regional Agency for Energy and Environment

CCI : chamber of commerce and industry

Conseil général/département :

Coop Coopérative Agricole : Farmers co-operative

CUMA : co-operative use of farming equipment

ERAI : Regional Partnership for economical development (settlement of foreign industries)

GDF SUEZ: Suez France gas

HELIANTE : Partnership for development of renewable energies

IERA : Energy Information network in Rhône-Alpes

MSA : Social Farming insurance

DDSV : administrative level on health and safety