Katharina Guillon, Methanation in France

Background information

1 Generic information about the conflict

In France, The regulatory position framing the production and recovery of biogas strongly strengthened since 2009 by the publication of a number of official texts.

In June 2014, Ségolène Royal announced the development plan of 1 500 installations units of methanation by 2017. [2]

Earlier, Minister for Agriculture had announced the launch of the plan « Energie méthanisation autonomie azote (EMAA) » (Energy methanation autonomy nitrogen) to optimize this process. [7]

Different communities, regions, towns started to implement methanation factories but faced a lot of difficulties:

- A new methane factory building permit was table in 2014 by the Biogas society of Bannalec in Brittany.
- Project of methanation « of Établières » in the community of la Roche-sur-Yon (Vendée) in the North-West of France,
- Anthon dans l'Isère in the South-East of France,
- Ouroux (Rhône), ten breeders plan to install a methanation factory for producing some energy from the waste of their exploitations.

2 Conflict type

The reasons of the conflicts are almost the same in the different places like:

- potential nuisances for the local residents :

- noise by increase of the road traffic,
- bad smells generated by waters of washing and with the risk of flies invasion,

- risk of explosion,
- Planned installation too close to the habitations,
- Depreciation of the real estate properties close to the site.
- traffic mattering : the village is going to be crossed by dozens of trucks and tractors to bring the fertilizer on the site so not ecological,

In Bannalec the fear was also about the risk of water pollution.The zone of storage of waste (digestats) is from now on open-air and submitted to rainwater and thus leaching (loss of water-soluble plant nutrients from the soil). As soon as it will rain, loaded runoff water (leachates) outcomes of digestats, will finish in the brook. These Runoff water comes pollute the brook which is below and which, further, feeds the Aven River. [6]

In Roche-sur-Yon it was also about the price of the projects which was too expensive. [3]

In Anthon dans l'Isère the industry was going to take too much space.

The opponents were also worried about the composition of the waste for the treatment on the site: 50 % involve effluents of breeding (fertilizers and liquid manures ...).The Association of Environmental Defense of the North-Isère was getting suspicions about the production of these fertilizing, suspected to be in charge of plastic. [4]

In Ouroux the points of debate stay on the opportunity to have cultures intended only to make biogas. The critical size of the units of methanation is not defined. A multitude of small sites is more difficult to manage. The debate was also about the risk of a mismanagement of the digestat. [7]

3 Resources involved

Methanation is a natural biological process of degradation of the organic matter by bacteria, in the absence of oxygen. It allows to produce some gas convertible into renewable energy: Biogas, and a fertilizing from organic waste : Digestat.

In North-Isère :

- 50 % : involve effluents of breeding (fertilizers and liquid manures ...),
- household waste, even industrial (from the industry paper-maker in particular),
- Mud stemming from water-treatment plants of Isère, the Loire and Savoie. [4]

We distinguish two types of waste :

- The liquid effluents:

- residual, urban or industrial waters;
- effluents of breeding (liquid manures);
- sewage sludge which are often mixed mud;
- the food-processing effluents.

- The organic solid waste:

- industrial waste: processing waste of vegetable and animal industries;
- agricultural waste: solid plant substrata, excrement of animals;
- municipal waste: newspapers, food waste textiles(textile industries), waste greens... [9]

Evaluation of the conflict

1. Main Issues and descriptions

Already listed above in **2. Conflict type**, the main issues were mainly ecological (water pollution), economical (depreciation of the real estate), social and cultural (Modification of the landscape).

2. Main stakeholders involved

The main stakeholders are :

- Local population : the inhabitants of Bannalec, Roche-sur-Yon, Anthon dans l'Isère and Ouroux,
- the prefect of the regions,
- environmental associations,
- Operators of methanation,
- Farmers.

3. Analysis of the stakeholders values and interests

France wishes to catch up it's delay in terms of the renewable energies

The main purpose is : Energy transition by reducing the greenhouse gas emissions which is one of the main causes of the global warming.
This transition allows to find new sources of energy and to restrain our consumptions.
Methanation handle organic waste. The methane rejected is transformed into biogas. This biogas can be then transformed into electricity like it's planned in Ouroux project.

4. Evaluation of the intensity of the conflict

There were a few demonstration organized against the projects of methanation.

Like in la Roche-sur-Yon, a demonstration against the unit of methanation take place in march 2016 : https://www.youtube.com/watch?v=2vsRN-A98n8

In Ouroux, more serious disagreements and signs of protest happen.

- Tags against the project on the main road of the village,
- White plastic covers indicating: *" methanation near houses: no "* on the road leading to the village,
- Warnings written on the tar some meters further.

A public meeting organized in April to present the project degenerated (insults of the opponents).
" At the public meeting, we had the impression to be at court " [7]

5. Evaluation of the possible causes of the conflict

The main possible cause of these conflicts is the lack of communication around the projects of methanation.This kind of technology is quiet new in France.

The local residents have interpreted this as a lack of transparency, and had the feeling this project was hidden from them.

The project owners also sometimes forget about the life environment of the inhabitant and were more focused about the ecological and economic profitability.

The installation of the industries were often planned to be near to the inhabitant houses but the regulation in force on the installation of methanation units in France requires the tanks which produces the biogas, to be situated at least in 50 meters of a house. [5]

6. Main elements that may preclude conflict resolution and encourage conflict escalation

Enhance the communication around the methanation is a good solution to familiarize the public to this kid of technology. France is among the most promising country regarding biogas, because of their important agricultural surfaces and cultures. [1]

Some of the opponent fears are not justified, like about the risk of bad smells because numerous installations planned the construction of buildings with filtered air where waste will be stored. [3]

In Ouroux, the methanation industry could have other benefits other than the initial ones like energy valuation. The cogenerator produces big quantities of heat, which can be inject in the municipal network. It would maximize the energy earnings. [7]

References

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