Social acceptability of agricultural methanation units in operation

Le biogaz dans l’économie circulaire : impact sur les communes et l’agriculture, OFATE/DFBEW – 04/04/2019
10 biomethane injection plant

- O’Terres Energie
  Ussy-sur-Marne (77)

- BioEnergie de la Brie
  Chaumes-en-Brie (77)

- GAEC du Champs Fleuri
  Liffré (35)

- Agribiométhane
  Mortagne-sur-Sèvre (85)

- Pré au Loup Energie
  Saint-Josse (62)

- Biogaz Pévèle
  Wannehain (59)

- SARL Hoche Letang
  Epaux-Bezu (02)

- Panais Energie
  Thennelières (10)

- Les Longs Champs
  Andelnans (90)

- Gâtinais Biogaz
  Château Renard (45)
A variable distribution of the targets according to the characteristics of the sites. The selection of inhabitants by gradual remoteness of site.

Less than a third of respondents are natural gas consumers.

Connection to natural gas network is not a decisive criterion in favour of the social acceptability of biomethane injection plants.
Collected perceptions
Spontaneous perceptions on sites

First, to get started, what can you tell us about the project? What do you think about it?

- Inhabitants who spot the sites but declare themselves little and/or poorly informed → lack of information/communication
- Positive opinions expressed: innovative project, "recycling" of waste...
- But also expressions of negative opinions spontaneously warn of nuisances:
  - Punctual increase in traffic and/or noise,
  - Visual appearance "non attractive"
  - Smells: amalgam between smells linked to the anaerobic digestion plant and smells due to the farm activity (pigsty); smells that "don't bother"

Major recommendations: a better information and communication towards the inhabitants; ensure the correct location of the site
Location of the site

What do you think about the location of the site?

« Frankly, it is well secluded. It's good, it's a good place in the countryside and not very close » (St Josse)

« There are no housing around. I see the unit every day. It's like it doesn't exist because it's part of the landscape » (Andelnans)

« This must not be done in the middle of the village. They can put the unit wherever they want but not next to the houses » (Wannehain)

« He built the unit next to his house, with his fields around. He can manage his farm and the anaerobic digestion unit. He is right next door if he would have to intervene, it is well » (Ussy-sur-Marne)

« We have a property to sell and the view is not great when visiting. If there were deciduous trees, it would be nice » (Liffre)

• In major, a location that **does not disturb** (no direct impact) even a good location (distant from the dwellings)

• Some respond with a **negative discourse**, evoking the **impact on the village** : olfactory nuisance, poor integration in the landscape, risk associated with gas production

At the margin:

• Presence of the farmer living on the site is likely to reassure on the question of the risk

• The anaerobic digestion unit is linked to the pre-existing farm

• Risk of impact on real property value
Opinion on localization is a cross-analysis of several criteria:

- Perception securing of the site & risk management
- Proximity / distance to accommodations
- If nuisance: the fact of residing or not in the prevailing winds
- Site visibility & Impact on the landscape
- Impact in terms of nuisances (smells, traffic)
Territorial dialogue

How did you get informed about this project? When and by what means?

Different communication strategies which impact the quality of the territorial dialogue

- Word of mouth / Neighbourhood exchanges
- Discovery during the construction work "passing by there"
- Information given by the farmer or his family members
- Public information meetings
- Local newspaper
- City hall
- Site visits

« By word of mouth: we know people who live right next door... who are in the agricultural sector, they are the ones who explained » (Epaux-Bezu)

« We have not been informed. We just saw signs. The neighbors talked about it. But we never had any mail. The unit has been built, we didn't know. We'd like to know what's going on around here » (St Josse)

« We know the farmers: they talked about it a long time before to the municipality and the newspapers » (Mortagne-sur-Sèvre)

« There were meetings in town hall to explain, and the project has been well explained. There were no surprises » (Ussy-sur-Marne)

« By newspapers and television... and also during the inauguration » (Liffré)
Evolution of perceptions over the time

**BETWEEN THE PROJECT**

- Majority of inhabitants **do not know** anaerobic digestion (principle, objectives, functioning)
- **Questions, fears and negative images** are conveyed on internet (blog of opponents)
- Some people knew the technology and had a positive opinion; others have thought nothing special

**DURING COMMISSIONING**

- In trend, inhabitants do not know the **date of commissioning** of the unit located beside

  **3 points of view:**
  - Always positive reviews
  - People **reassured** about their fears (no nuisance)
  - **Inconveniences evoked** during the commissioning (smells, torch working)

**AUJOURD’HUI**

- **Satisfied inhabitants:**
  - No inconvenience
  - Innovative project, positive aspects underlined
  - *but* some questions on the evolution of the unit

- Some inhabitants mention some **nuisance** (recurring or punctual smell, visual pollution)
Good practices in dialogue

• Site visit with City Council → explain the project, make understand the biogas operation (Epaux-Bezu)

• Exchanges with the State services among the administrative file → know his representative, make him aware of the technology, know how to complete his file, facilitate the steps (Liffré)

• Two alternatives proposed for the location of the site during the exchanges with the local elected representatives and the inhabitants → not to give the feeling of imposing the project (Ussy-sur-Marne)

• Listening and visiting inhabitants during the commissioning → hear the annoyances, explain transient nuisances (Liffré)

• Take into account fears and treat the nuisances :
  - Establishment of a smell survey in collaboration with local residents and set up of solutions (limited outdoor storage, closed storage building with biofilter) (Château Renard)
  - Installation of noise-cancelling walls to reduce sound pollution (Ussy-sur-Marne)

• Partnership with the local waste management Union → raise awareness about green waste collection (Liffré) or partnership with the extracurricular service of the city → environmental awareness (Chaumes-en-Brie)

• Inauguration, open-door day (snack, child care, etc.) → show the reality of the commitments made and the evolution of the operation over time (Mortagne-sur-Sèvre, Andelnans, …)

• Distribution of digestate to the non-professional "gardeners" (Chaumes-en-Brie)
Survey perspective
8 project-wide strategic recommendations to promote a better social acceptability

1. To organize of the **upstream territorial dialogue** with local elected representative and the instructor services

2. To study the **location** of the unit beyond the technical and financial criteria

3. To guarantee the **quality of the process, landscape integration, securing the site**

4. To identify and consider perceptions of **all project stakeholders**

5. To be attentive during the construction phase and the commissioning of the unit

6. To deploy a **territorial dialogue** strategy towards the **local population**

7. To multiply the "**open" actions** in the territory

8. To maintain local social acceptability over time (« **after-sales service** »)
Thank you for your attention