Agricultural methanisation: What are the conditions for the sustainability of the sector?
Background
Vision:

100% renewable energy in 2050

One way to get there:

Reduction of energy consumption and demand
Improved energy efficiency
Development of renewable energies
Renewable gas

A little-known renewable energy:

Renewable gas is an energy compatible with a 100% renewable future.

A solution to replace fossil-based natural gas

A production chain (methanisation) that is developing

It responds to major challenges: energy transition and agricultural transition
The partnership with GRDF

Partner since 2018: *GRDF is committed alongside WWF France. The aim is to work together to define the conditions for the sustainable development of biomethane in France, so that this solution can be deployed in an optimal way and contribute to the energy transition.*

3 working axes:

1. Definition of the **conditions for the sustainable development of** renewable gas
2. Development of **new methods** and adapted **financing solutions**
3. **Raising public awareness** to increase knowledge of renewable gas
Works on the sustainability of agricultural methanisation
Background

Objectives: identification of sustainable agricultural conditions/practices and remaining questions (sustainability framework)

Ambition: to establish a sustainability framework to accompany the development of the sector.

Methodology: 4 technical workshops during the year 2019 (round tables, feedback, brainstorming)
Stakeholder Panel

Participants:

- Research Institutes

- Associations

- Public authorities

- Representatives of the agricultural world

- Representatives of the biogas industry

- To present a **shared vision** of the sustainability framework for the methanisation sector.

- To have a **reference document** presenting an initial assessment of the sustainability of the sector.

- Formulate **recommendations** to enrich, clarify, disseminate and implement sustainability conditions and practices.
Conditions for the sustainability of agricultural methanisation
## Issue of intermediate crops (CIVE)

<table>
<thead>
<tr>
<th>Sustainability Framework</th>
<th>Opportunities</th>
<th>Questions for further investigation</th>
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<tbody>
<tr>
<td>Plot and agro-ecological practices</td>
<td>Limitation of water and air pollution</td>
<td>Possible loss of yield of the main crop</td>
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<td>Limiting soil erosion</td>
<td>Possible fluctuation in the yield of CIVEs to be anticipated</td>
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<td>Maintenance of soil fertility</td>
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<td>Reduction of operating costs and empowerment of the operation</td>
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<td>Generation of additional income for the farmer</td>
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<td>Integration into the territory</td>
<td>Strengthened links between agricultural actors</td>
<td>Vigilance on the management of interculture and competition of possible uses</td>
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<td>Participation in maintaining a territorial agricultural identity</td>
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<tr>
<td>Responding to global challenges</td>
<td>Participation in carbon storage in agricultural soils</td>
<td>Need to deepen the interaction of ICES on biodiversity</td>
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## Issue of digestate

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</thead>
<tbody>
<tr>
<td>Plot and agro-ecological practices</td>
<td>Substitution of mineral fertilizers</td>
<td>Management practice to be implemented to protect the environment</td>
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<td>The safety of digestate depends on the incoming biomass</td>
<td>Effects on soils to be investigated</td>
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<td>Cost savings through substitution of mineral fertilizers</td>
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<td>Integration into the territory</td>
<td>Territory-wide development of the circular economy</td>
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<td>Resilience of farms and maintenance of agricultural activity in the territories</td>
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<td>Responding to global challenges</td>
<td>Impact on modelled carbon storage in soils</td>
<td>GHG emissions to be controlled</td>
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<td>Impact on biodiversity to be further investigated</td>
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Our recommendations

**Recommendation n°1**: Strengthen a common base that promotes the respect of conditions of sustainability

**Recommendation No. 2**: Continue research and experimentation

**Recommendation n°3**: Support the professionalization of the sector

**Recommendation n°4**: Enhance the integration of methanisation projects in their territory.
Conclusion

• A vision of **the conditions for the sustainability of** agricultural methanisation presented

• A review of **knowledge and outstanding issues** for the development of intermediate crops (CIVE) and the return of digestate to the soil.

• **A balance** between agricultural and energy interests must be found and conditions favourable to its maintain must be created.

• The sector must develop in an **agro-ecological direction**.

• This work is intended to be disseminated and deepened, and the WWF hopes that it will serve as a basis for further reflection (operational and territorial aspects).