



ENGIE

Entreprises & Collectivités

# Certification requirements and the role of intermediate crops

# ENGIE: biggest French biomethane market player



~560 producers  
signed a purchase  
agreement with  
**ENGIE**

(as of Jan 30<sup>th</sup> 2023)

~260 sites  
injecting into  
**grid**

(as of Jan 30<sup>th</sup> 2023)

>400 sites expected by year end

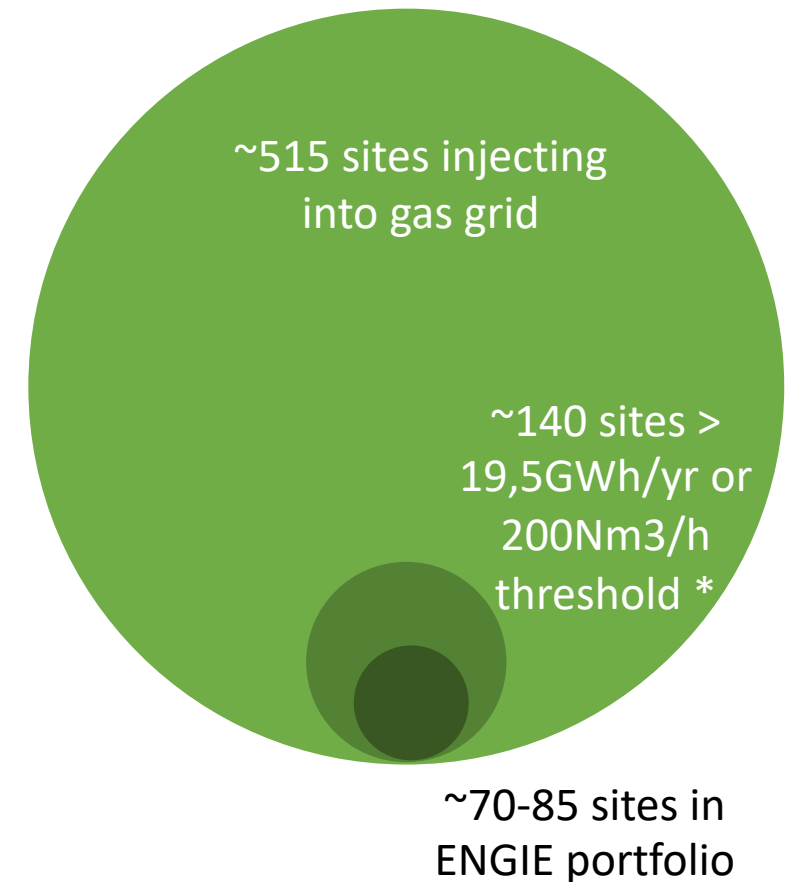
3.3 TWh bought  
by **ENGIE** in 2022

(~45% market share)

90-100 TWh by 2038

# Certification: how to transform limitation into opportunity

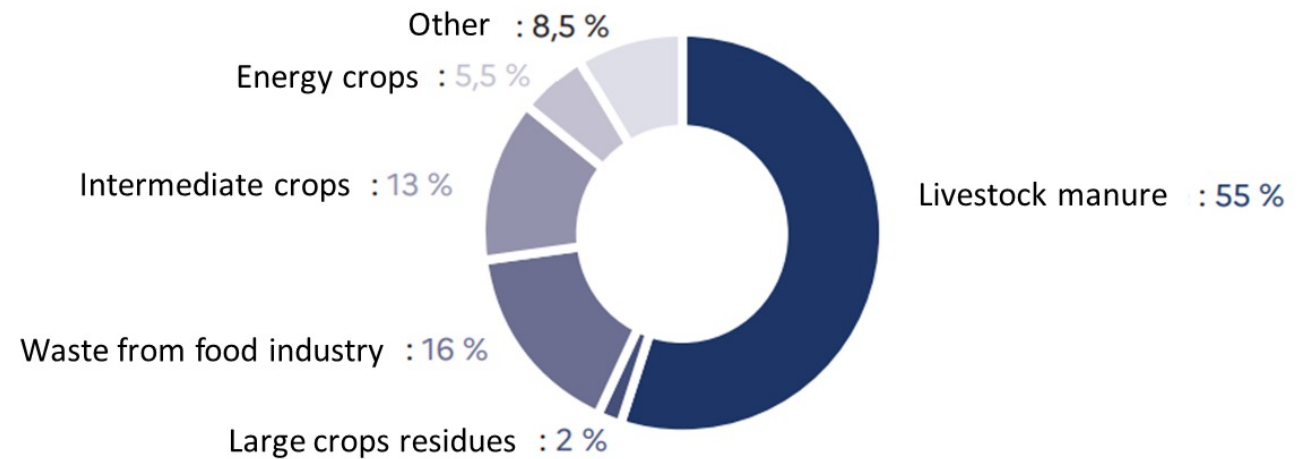
- Since 2021: difficult to get fair value from “green gas” in France...
- ... yet a growing demand from Pan-European customers for “certification-backed sustainable” gas
  - ⇒ Leverage on this demand
  - ⇒ For sites compelled by the RED II threshold, and even for sites below such threshold yet which may want to benefit from this opportunity window
- ENGIE committed since 2021 into helping its biomethane producers to certify their production:
  - ~30 producers helped to get certified
  - Raising awareness among the “filière”
  - Training 7 design consultants’ firms



\* Source : ODRE website, data on « Points d’injection de biométhane en France », as of December 31<sup>st</sup>, 2022

# Intermediate crops: a French feature in biomethane market

- Average French inputs' breakdown: 13% intermediate crops <sup>(1)</sup>
- Intermediate crops represent ~50% of French biomethane potential by 2050 <sup>(2)</sup>, so up to ~70TWh/yr
- Intermediate crops represent 445 TWh/yr to 1800 TWh/yr of EU biomethane potential <sup>(3)</sup>



Sources :

(1) FranceAgriMer – « Ressources en biomasse et méthanisation agricole : quelles disponibilités pour quels besoins ? », October 2022

(2) ADEME, GRDF, GRTgaz – « Un mix de gaz 100% renouvelable en 2050 ? », 2018

(3) « The role of sequential cropping and Biogasdoneright in enhancing the sustainability of agricultural systems in Europe » by Magnolo F. et al., October 2021

# Intermediate crops: key characteristics

- Intermediate crops are NOT energy crops:
  - Grown in between food crops ...
  - ... instead of bare soil
- Intermediate crops are not limited in volume as input for anaerobic digestion
  - Energy crops are limited (15% / yr)
- Intermediate crops play other key environmental roles:
  - Improve soil from agronomic perspective thanks to quite long root system
  - Store carbon & nitrate in earth
  - Limit soil erosion with soil structuring (cover crops)
  - Allow for producing a “green” fertilizer, hence decreasing use of chemical fertilizers
  - Improve water quality
  - Preserve biodiversity & microfauna

# French biomethane certification

- Some countries have limited / no intermediate crops, and voluntary schemes are influenced by such mindset
  - ⇒ Some voluntary schemes do not recognize intermediate crops as of today
  - ⇒ France acknowledges intermediate crops legally since 2016. Specific legal framework is to be refined soon
- **ISCC made a real effort to understand intermediate crops' specificities:**
  - If soil cover is compulsory ...
  - ... and if digestate is used as fertilizer / for irrigation ...
  - ... then intermediate crops can be considered as residual waste, with 0 carbon emission factor
  - Otherwise, intermediate crops can still be taken into account, though with a non-null emission factor
- **Some facilitating actions still to be considered:**
  - **Allow for sustainability at the patch level, instead of the farm level**
  - French biomethane landscape is quite different from other countries': high use rate of waste and residues. Consequently, **many typical French inputs are not taken into account into European documents nor in the ISCC list of materials eligible** (residues from processing and/or storage of cereals, fiber sludge from paper industry, agricultural harvesting residues, lactoserum / dairy waste scum)
    - ⇒ **French biomethane players have high expectations from ISCC to add such materials to this list, as other Voluntary Schemes have done. Intermediate crops are supposed to be integrated into the Annex IX of RED II list of eligible inputs.**

Thank you for your  
attention

Feel free to reach  
out

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