



Empowering **you** to act
on **climate change**

AG FEBA

Rôle du biométhane dans la transition ?

20/06/2024



Nécessité et urgence d'une stratégie de sortie du gaz fossile en Wallonie

Quel sera le rôle réservé au biogaz et au biométhane ?

PACE 2030 – Mesure 241

« Au plus tard pour le 30 juin 2023, établir, en consultation avec les parties prenantes, une *stratégie de sortie du gaz fossile* sur base d'un calendrier à l'horizon 2050 avec des *objectifs de réduction progressive* d'ici 2030 et 2040.»

Réductions
sectorielles de la
consommation
de gaz

PLAN AIR CLIMAT ENERGIE 2030
DE LA WALLONIE

PACE 2030

Version finale
adoptée par le Gouvernement Wallon le 21 mars 2023

Décarboner
le marché
du gaz en
Wallonie ?

Augmentation de
la production
domestique de
gaz SER / bas
carbone

Augmenter la
consommation
de gaz SER /bas
carbone
(domestique et
importé)

PACE 2030 – Mesure 298

«...Evaluer l'opportunité d'un *mécanisme de financement de la production de biogaz, biométhane et gaz de mine*, non-restreint à la production d'électricité, et le cas échéant le mettre en place...»

PACE 2030 – Mesure 297

« Fixer, à destination des *fournisseurs de gaz*, des *objectifs contraignants* d'intégration de *gaz renouvelable* dans leur mix, en tenant compte des capacités de production locale et à des prix de marché»

RePowerEU Action Plan – 350 TWh de biométhane en 2030 ?

A major lever to strategic energy autonomy



Equivalent to 10% of today's natural gas demand

A source of organic fertilizer and biogenic CO₂

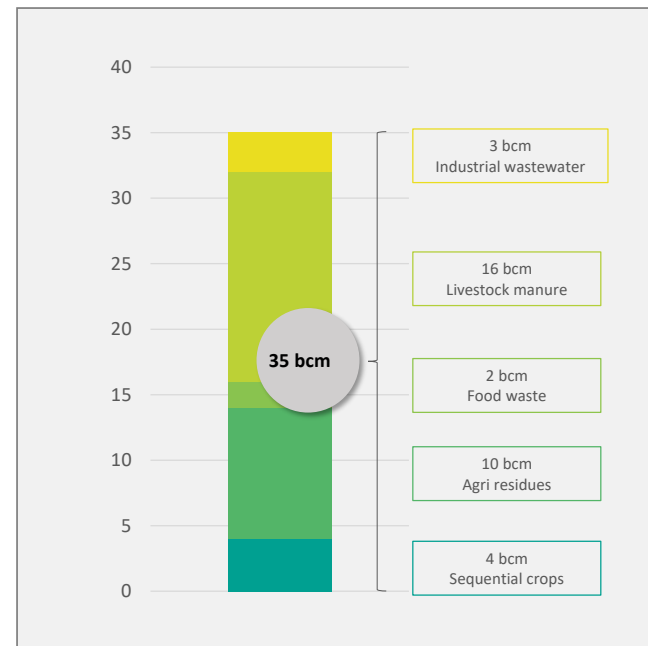
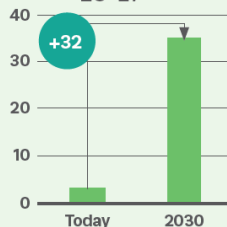
The digestate co-produced by anaerobic digestion is an organic fertilizer. It can replace significant share of imported fertilizer

35 bcm biomethane = 46 Mton bio-CO₂ available

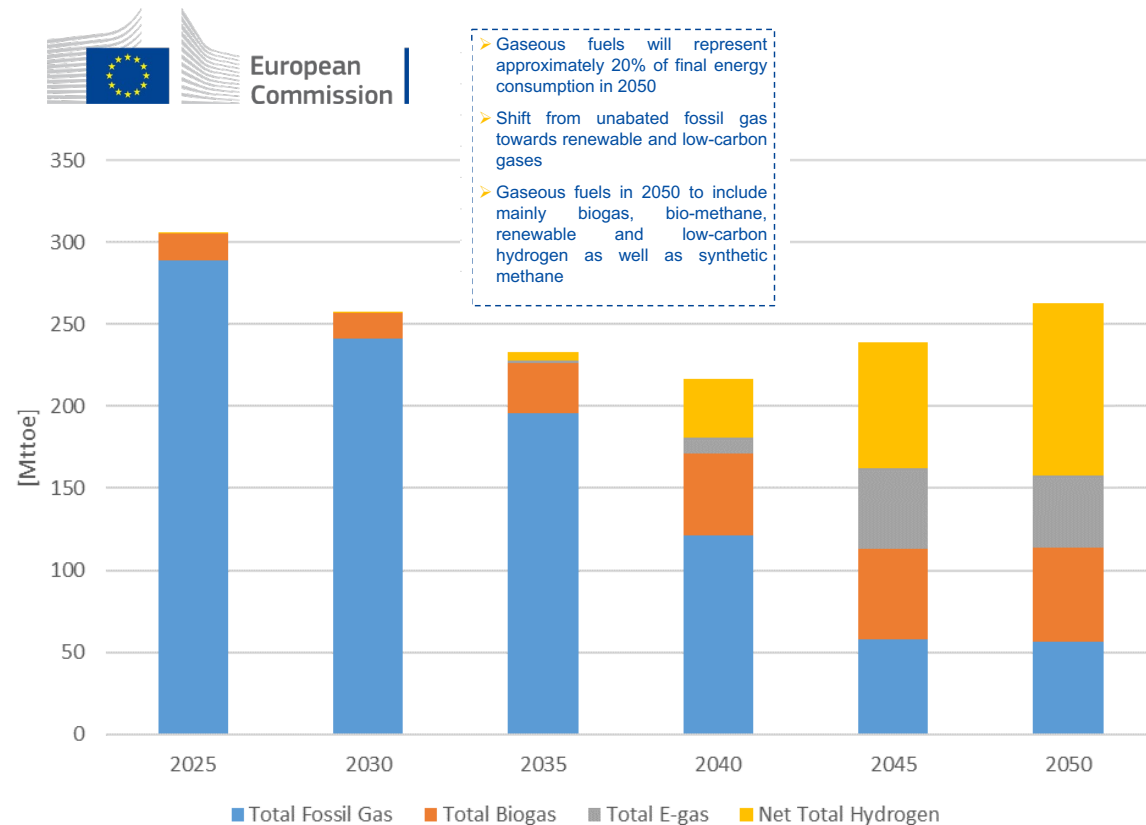
Capital investment of €83 billion in biomethane production capacity

The assessed potential is strong enough to deliver 35 bcm in 2030

From 3 bcm biomethane production today to 35 bcm EU-27



RePowerEU Action Plan – 350 TWh de biométhane en 2030 ? Et après ?



Assuming a reduced total gas demand in 2050 of 271 bcm, it is estimated that **biomethane can cover 35 – 62% of the gas demand** by 2050.

Source : BIP 2024

Source : EC DG-ENER, PRIMES MIX scenario, May 2022

European Commission and industry leaders launch Biomethane Industrial Partnership



BIP

Source: [Biomethane - European Commission \(europea.eu\)](https://europea.eu)
[Home - BIP Europe \(bip-europe.eu\)](https://bip-europe.eu)





Task Force 1
National biomethane targets, strategies and policies

Task Force 1 focuses on the creation of national biomethane targets, strategies and policies, feeding into the NECP process.



Task Force 2
Accelerated biomethane project development

The goal of Task Force 2 is to identify and scale up best practices, initiate creative solutions and overcome barriers to speed up investments in new biomethane projects across the value chain.



Task Force 3
Sustainable potentials for innovative biomass sources

Task Force 3 works to identify the EU-wide potential for innovative (additional) biomass sources that help to achieve the 2030 target.



Task Force 4
Cost efficiency of biomethane production and grid connection

The goal of Task Force 4 is to provide insights into best practices for efficient and low-cost biomethane production and grid injection.



Task Force 5
Research, Development and Innovation needs

Task Force 5 works to identify the current status of R, D&I in biomethane production and what is needed for innovation to be commercialised



Task Force 6
The integration of Ukraine as a supplier of sustainable biomethane

Task force 6 contributes to unlock biomethane production in Ukraine, contributing to reduce dependency on fossil fuel imports from Russia



BIOMETHANE INDUSTRIAL PARTNERSHIP

BIOMETHANE INCENTIVES AND THEIR EFFECTIVENESS

FEB 2024 // PREPARED BY TASK FORCE 1



BIOMETHANE INDUSTRIAL PARTNERSHIP

BIOGENIC CO₂: THE ROLE OF THE BIOMETHANE INDUSTRY IN SATISFYING A GROWING DEMAND

APRIL 2024 // TASK FORCE 4.1

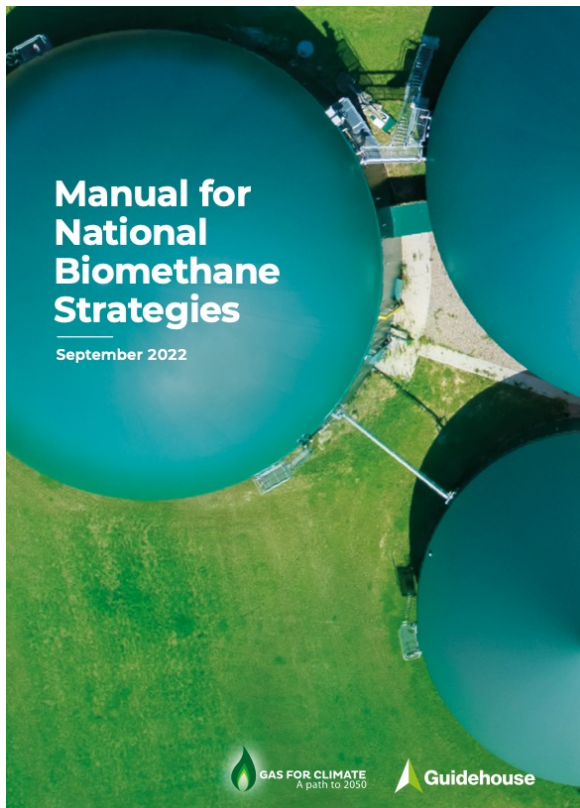


BIOMETHANE INDUSTRIAL PARTNERSHIP

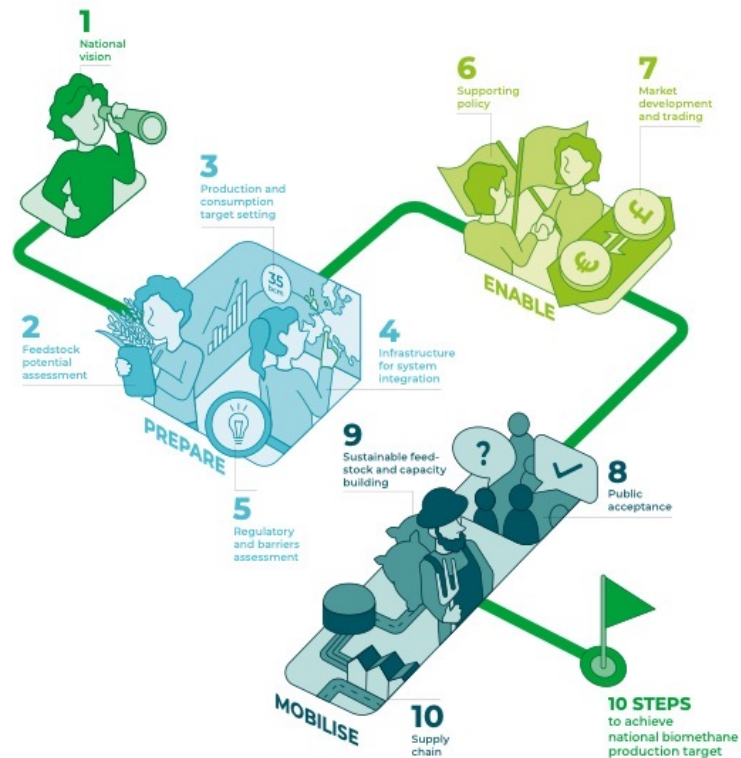
INSIGHTS INTO THE CURRENT COST OF BIOMETHANE PRODUCTION FROM REAL INDUSTRY DATA

OCT 2023 // PREPARED BY TASK FORCE 4.2



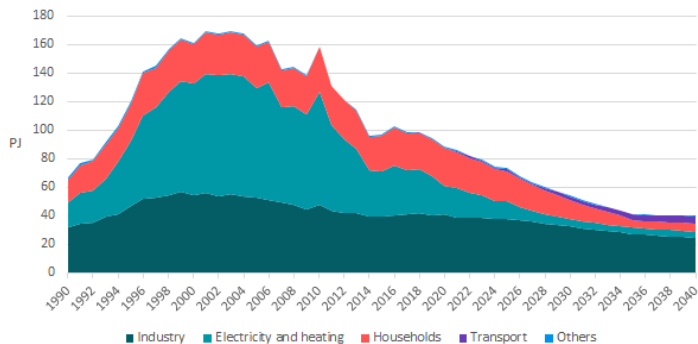


Positionnement fort de l'industrie du gaz

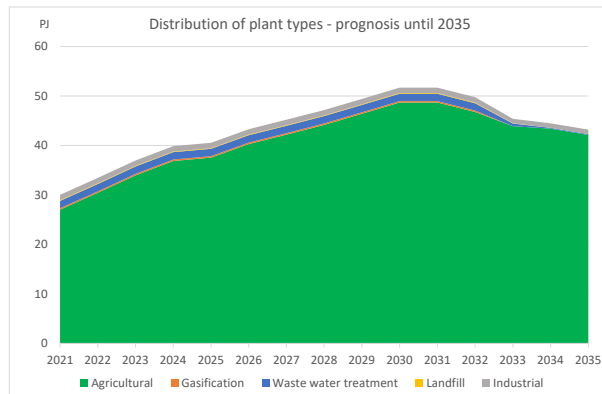


Exemple Danois

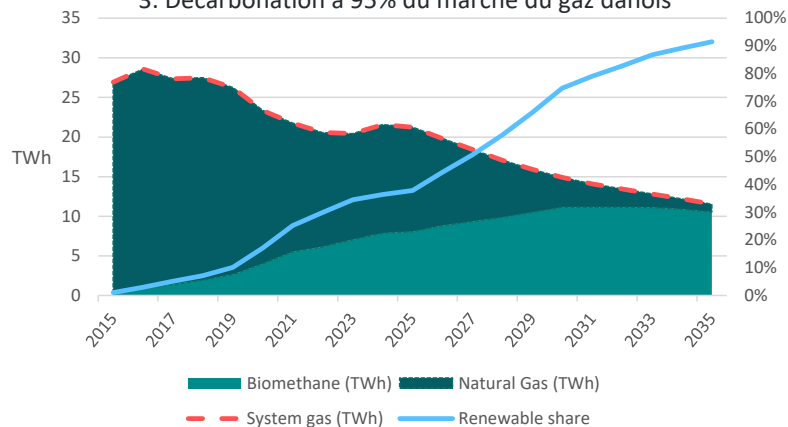
1. Diminution de la consommation de gaz



2. Augmentation de la production domestique



3. Décarbonation à 95% du marché du gaz danois



Source : Danish Energy Agency (11/2022)



Rialtas na hÉireann
Government of Ireland

Ireland's Draft National Biomethane Strategy

January 2024

Prepared by the Department of Agriculture, Food and the Marine in
partnership with Department of Environment, Climate and Communications
gov.ie

The Need for Biomethane in Ireland

Ireland is recognised as having a large potential for Biomethane production due to its substantial agriculture sector. The development of an agri-centric Biomethane industry will see cross sectoral benefits for Ireland including:

- ✓ Meeting our legally binding climate targets
- ✓ A reduction in Agriculture related emissions
- ✓ A diversification opportunity for farmers
- ✓ Opportunity to replace the use of chemical fertilisers
- ✓ Soil health restoration
- ✓ A reduction in Ireland's Energy Emissions – High-Temp Heat
- ✓ Gas security and diversification of supply

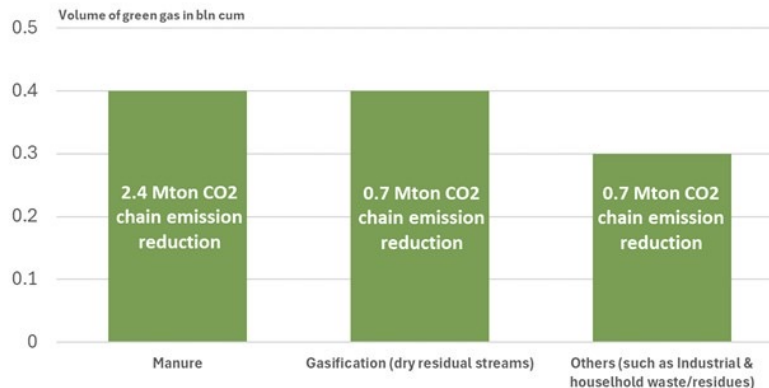
Government Target

The Irish Government has set a target of up to **5.7 TWh** of indigenously produced biomethane **by 2030**.

The National Climate Action Plan commits to an interim target of **1 TWh by 2025**.

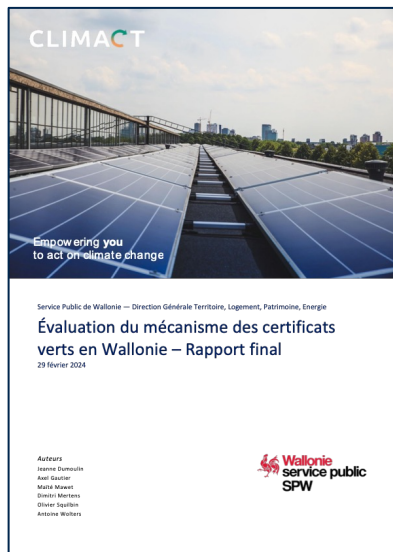
**Quid d'une obligation
similaire d'incorporation
de biométhane dans la
fourniture de gaz en
Wallonie ?**

Dutch blending obligation for renewable gas
Emission reduction assumptions by 2030

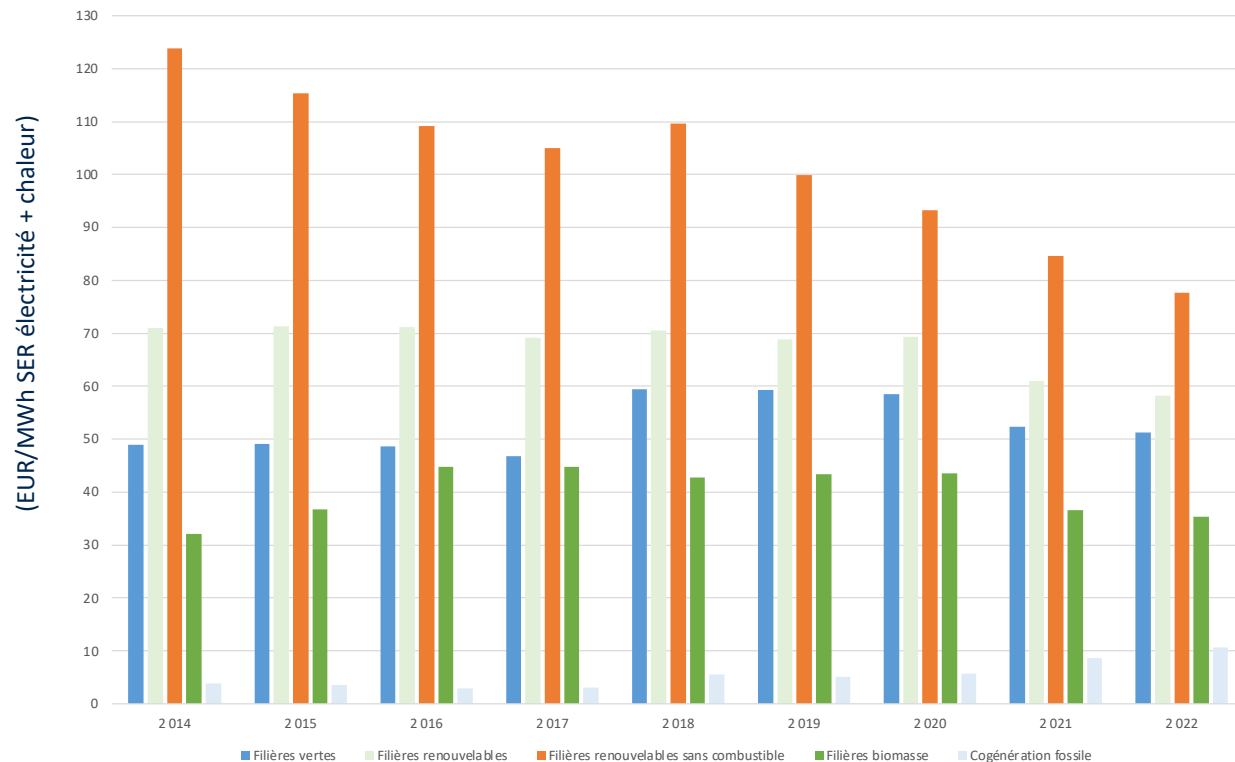


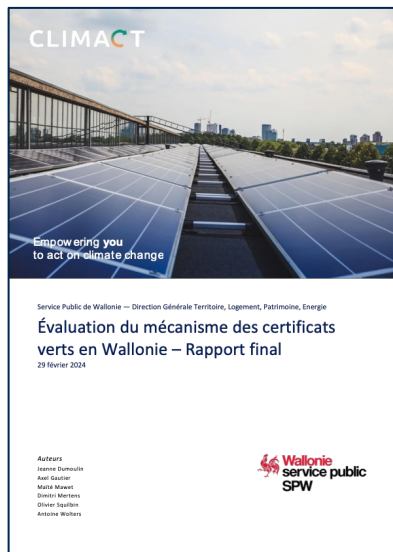
Source: Directoraat-generaal Klimaat en Energie

The target by 2030 has now been adjusted to 3.8 Mton CO₂ chain emissions reduction (equivalent to more than 10TWh/year of biomethane) while the buy-out prices for Energy suppliers have been lowered from 500€/ton to 450€/ton of CO₂.

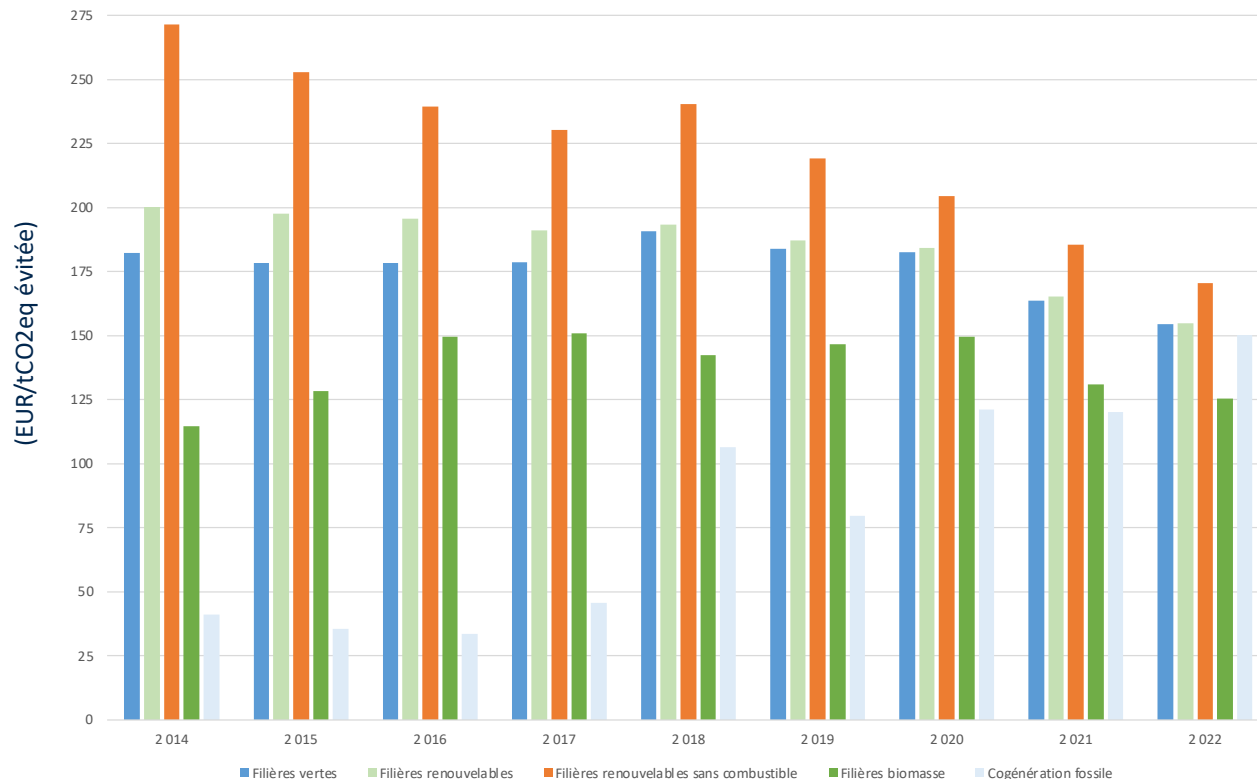


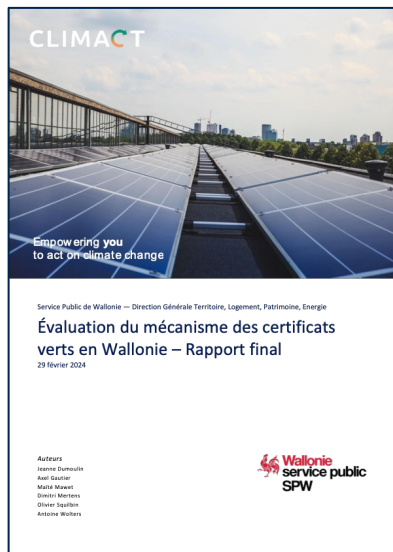
La bioénergie reste la filière qui bénéficie du niveau de soutien le plus faible par quantité d'énergie renouvelable utile produite





La bioénergie est la filière renouvelable la plus efficiente en termes de réduction des émissions de gaz à effet de serre





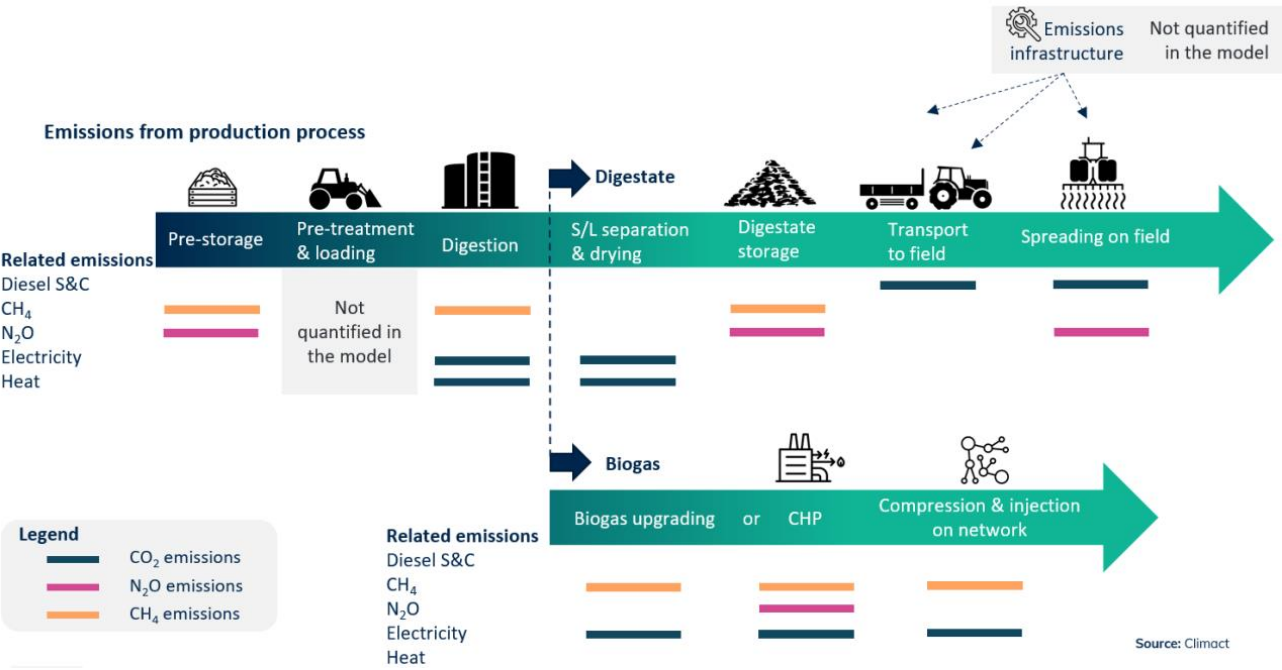
Recommandations d'amélioration du mécanisme des certificats verts et de modes alternatifs de soutien à la production d'électricité verte

Plutôt que de plafonner le soutien à un nombre de CV/MWh (en l'occurrence 2,5) et de prévoir d'autres plafonds artificiels (par exemple le plafonnement du soutien à la première tranche de 20 MW pour certaines installations), on pourrait recourir à une valeur tutélaire du carbone. Les projets qui présenteraient un coût de la tonne de CO₂ évitée inférieur à cette valeur pourraient obtenir un soutien.⁴⁶



Biométhane & Emissions de Gaz à effet de serre ?

Attention à la qualité des installations !

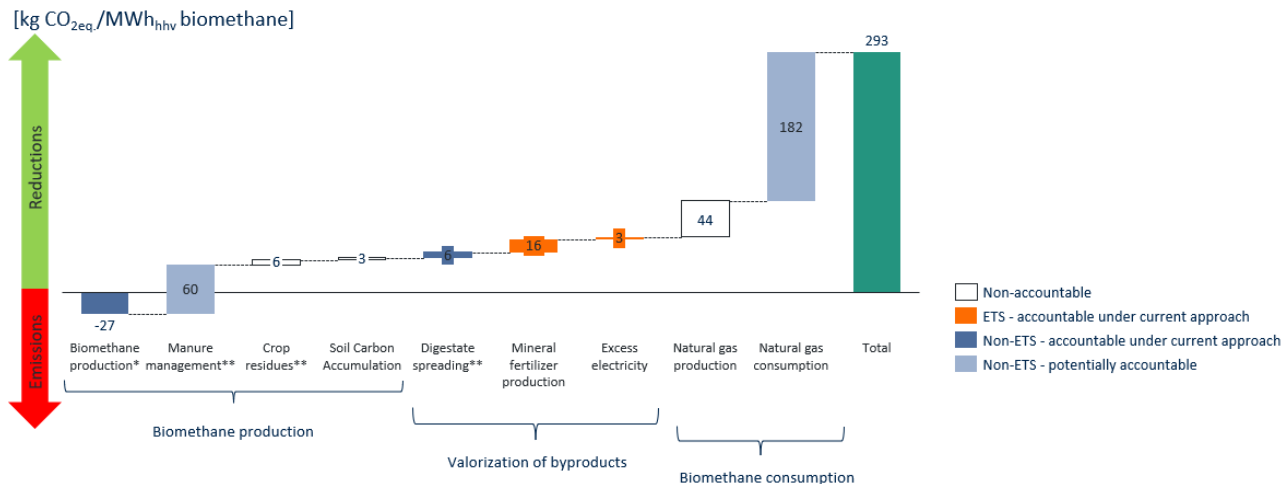




Biométhane & Emissions de Gaz à effet de serre ?

D'importantes réduction d'émissions de GES ne sont actuellement pas comptabilisées dans les inventaires !

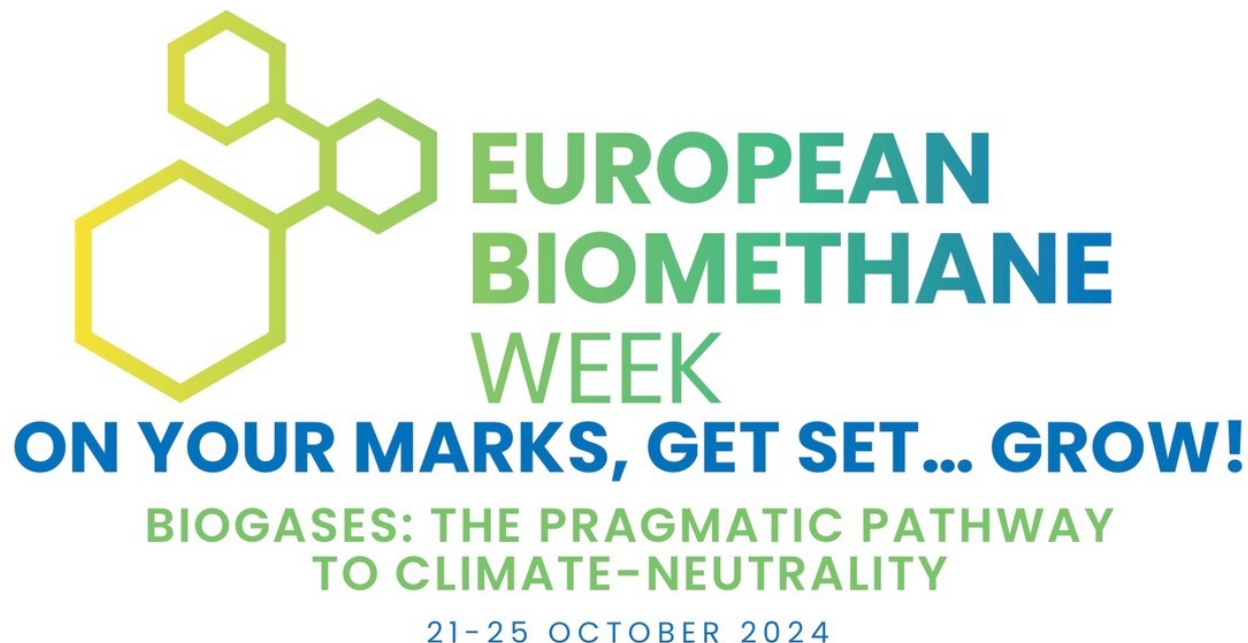
Specific GHG emissions and reductions – case 1



* Including injection and transport of biomethane, excluding emissions from manure during pre-digestion storage and the digestion itself, which are accounted under the 'manure management' category

** Net impact compared to the reference scenario

Rendez-vous en octobre à Bruxelles ?



<https://www.europeanbiomethaneweek.eu>

Testez vos propres scénarios de transition bas-carbone : <https://pathwayexplorer.climact.com>

