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# 2016 legislative proposal for the recast of the Renewable Energy Directive - Biomethane -

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## Objectives of the Renewable Energy Directive (2009 and 2016)

Greenhouse gas emission reduction and compliance with the 2015 Paris Agreement on Climate Change

Compliance with the EU energy and climate framework

Promotion of:

- Security of energy supply,
- Technological development and innovation
- Opportunities for employment and regional development, especially in rural and isolated areas or regions with low population density

## Objectives of EU bioenergy sustainability and GHG emissions saving criteria post-2020

- ✓ Cover **all bioenergy uses** (biofuel, heat and power)
- ✓ Minimize risks of **negative environmental impacts** (e.g. deforestation, degradation, biodiversity and carbon stock impacts)
- ✓ Deliver **optimal greenhouse gas savings** compared to fossil fuels
- ✓ Promote **resource efficiency**
- ✓ Avoid **market distortions**
- ✓ Ensure **proportionality and cost-effectiveness** by applying a risk-based approaches and *de minimis* thresholds for bioheat and power plants

## Summary of the proposed changes in the Renewable Energy Directive with high importance for biomethane sector (I)

*Article 2* – Biomethane not covered by **definition** of biofuels; covered by definitions "biogas" and (gaseous) "biomass fuels"

*Article 7* - Phase down of **accounting the contribution of food and feed crop based biofuels and biogas** used in transport sector from 7% in 2021 to 3.8% in 2030; Member States are allowed to introduce lower limits

*Article 19* – Requirements related to **guarantees of origin** for the information purposes to the final consumer extended to cover also renewable gas

## Summary of the proposed changes in the Renewable Energy Directive with high importance for biomethane sector (II)

*Article 23* – Requirement to MS to endeavour to increase the user of **renewable energy in heating and cooling sector** of at least 1% per year

*Article 25, Annex IX* – **Incorporation mandate to fuel suppliers** to increase the share of advanced biofuels and biogas (biomethane), produced from feedstocks included in a harmonised list of feedstocks (Annex IX) to increase from 0,5% in 2021 to 3,6% in 2030; 70% GHG emission savings to be reached

## Summary of the proposed changes in the Renewable Energy Directive with high importance for biomethane sector (III)

*Article 26 – Sustainability and GHG emission requirements* extended to cover biogas for heating & cooling, and electricity generation; not applicable to small installations (except if used in transport); high efficiency GHG requirement for large installations

*Article 27 – Mass balance rules* include transmission and distribution infrastructure as an example; allows application to a raw material mix for further processing adjusted to their energy content

## **Annex VI - Default GHG emission values, fossil fuel comparators and calculation methodology for gaseous and solid biomass**

*Fossil Fuel Comparators set per sector (183 gCO<sub>2eq</sub>/ MJ – for electricity, 80 gCO<sub>2eq</sub>/ MJ – for heating and/ or cooling, 94gCO<sub>2eq</sub>/ MJ – for transport, 124 gCO<sub>2eq</sub>/ MJ – for indirect replacement of coal for heat production)*

*Bonus given to animal manure used as substrate for avoided emissions associated manure storage*

*Default values for biogas produced from manure, maize and bio-waste and used in electricity and transport sector*

*Default values for three different mixture options of maize and manure (80% - 20%; 70% - 30%; 60% - 40%)*

*Method for calculation of the default and actual emission values co-digestion of different substrate mixtures*

*Conversion efficiency for production of electricity and heating & cooling to be taken into account*

## Summary of the revised EU sustainability and GHG emissions saving criteria

Sustainability  
criteria –  
feedstock based

**AGRICULTURE BIOMASS:** based on existing land criteria for biofuels, streamlined requirements for peatland and highly biodiversity grassland

**FOREST BIOMASS** – new risk-based criteria on forest harvesting and LULUCF requirements

End-use  
performance criteria

### GHG SAVINGS from supply chain

- 70% for new biofuels/biogas for transport (all plants)
- 80% (85% in 2026) for biomass (for plants above 20 MW fuel capacity) and biogas (for plants above 0.5 MW el. capacity)

### CHP requirement for bioelectricity:

- Applies to new bioelectricity plants (equal/above 20 MW); 3-year transition period after adoption of Directive + exceptions for national risks of security of electricity supply

### AIR QUALITY standards (under other EU legislation):

- Households biomass boiler (EU Ecodesign Regulation)
- Mid-size and large scale plants (EU Air quality Directives)





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