Open Letter to the European Commission

Revision of Annex V and VI of the Renewable Energy Directive (Directive (EU) 2023/2413, RED III): Ensuring Accurate Greenhouse Gas Accounting for Manure-Based Biogas and Biomethane

Dear Executive Vice-President Ribera,
Dear Commissioner Hoekstra,
Dear Commissioner Hansen,
Dear Commissioner Jørgensen,

We, the undersigned organisations, are writing to express our serious concerns regarding the methodology proposed for greenhouse gas accounting under Annex V and VI of the Renewable Energy Directive (Directive (EU) 2023/2413, RED III), particularly concerning manure-based biogas and biomethane pathways.

Under the current methodology, manure-based biogas and biomethane pathways are credited with extraordinarily high greenhouse gas savings. Under certain pathway assumptions, greenhouse gas savings can exceed **210 percent** relative to the RED fossil fuel comparator. Such exceptionally high values are only possible because the methodology awards a substantial avoided-emissions credit (**esca**) of **−45 g CO_2eq/MJ** based on assumptions about manure management that overestimate methane emissions and therefore the savings from anaerobic digestion. The methodology therefore effectively treats certain manure-based biomethane pathways as climate-negative fuels.

Such exceptionally high values are driven by two key methodological choices: the assumption of **highly emitting baseline manure management practices** and the treatment of manure as a **zero-emission waste feedstock.** Notably, the JRC itself acknowledges in its technical assessment that methane emissions and potential savings vary significantly across livestock categories, climatic conditions and manure management practices and calls for further work to determine actual emissions and emission savings[1]. The high emission saving assumptions also risk further increasing the **inefficient use of biomethane in sectors with better alternatives** (e.g. transport and buildings).

1. Baseline assumptions overstate climate benefits

The exceptionally high savings attributed to manure-based biogas and biomethane build on the assumption that manure would otherwise be stored in highly emitting open-pit / slurry systems. As a result, the methodology awards exceptionally high avoided-emissions credit through the default **esca value for biogas and biomethane of −45 g CO_2eq/MJ**.

This assumption increasingly fails to reflect current manure management practices and available evidence. Based on updated Eurostat data, the International Council on Clean Transportation concluded that the current methodology overestimates methane savings from manure-based biomethane and estimated an avoided methane credit of approximately **−19.5 g CO_2eq/MJ.**[2] Less than half of the **−45 g CO_2eq/MJ** proposed by the Commission. Similarly, submissions by the German Environment Agency and the ifeu Institute highlighted that methane emissions and potential savings vary significantly across livestock categories,

[1] BUFFI, M., HURTIG, O. and SCARLAT, N., Methane emissions in the biogas and biomethane supply chains in the EU, Publications Office of the European Union, Luxembourg, 2024, https://data.europa.eu/doi/10.2760/7927411, JRC139485.
[2] International Council on Clean Transportation (ICCT), *Feedback to the European Commission consultation*, submitted via the Have Your Say portal, 2025. Link: Feedback from: ICCT

climatic conditions and manure management practices, calling into question the scientific basis for applying a uniform credit of **−45 g CO_2eq/MJ** across all manure pathways.[3]

By continuing to award exceptionally high default climate credits based on assumptions that no longer reflect agricultural realities, the methodology over-credits manure-based biomethane and undermines the environmental credibility of the RED.

2. Manure is not a zero-emission waste

The methodology also treats manure as a zero-emission waste feedstock, excluding all upstream emissions associated with livestock production. This approach assumes that manure is simply a waste product with no economic value and no influence on production decisions. As a result, major sources of livestock-related greenhouse gas emissions are excluded from the accounting framework, including **enteric fermentation, feed production and transport, and land-use change** associated with feed cultivation. This is particularly problematic given that enteric fermentation is by far the largest source of livestock-related greenhouse gas emissions in the EU, substantially exceeding emissions from manure management itself.

Manure is not simply a waste product. Public support schemes have created significant economic value for manure, transforming it from a waste stream into a commercially valuable input for biogas and biomethane production. In many regions, biogas infrastructure depends on a high and concentrated supply of manure over decades, creating **a direct economic link between energy production and industrial livestock systems.** By continuing to treat manure as a zero-emission waste, the current methodology overstates the climate benefits of manure-based biomethane and obscures its link to intensive livestock production.[4] [5]

Required revisions to Annex V and VI

To ensure environmental integrity and policy coherence, we urge the European Commission to revise the methodology in Annex V and VI according to the following principles:

1. **Revise baseline assumptions for manure management and the default esca value of −45 g CO_2eq/MJ** to reflect realistic, forward-looking and policy-consistent agricultural practices rather than worst-case slurry management scenarios.
2. **Reassess the treatment of manure as a zero-emission waste feedstock** and evaluate whether current system boundaries reflect the climate impacts and strong economic incentives associated with manure-based biomethane production.
3. Ensure that support frameworks **contribute to achieving the EU's climate targets** by avoiding incentives for **livestock intensification** or the **lock-in of environmentally harmful production systems.**

The proposed revision of Annex V and VI is not yet final. The ongoing revision process provides the European Commission with the opportunity to address concerns regarding the scientific robustness,

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[3] BMUKN (German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety) (2026), 23 January 2026. Link: Feedback from: BMUKN

[4] Magesh, V., Morton, C., Lyu, Q., Harding, J., & Lobell, D. B. (2025). *Do methane mitigation incentives intensify livestock production? Evidence from California, 2016–2025* (Working paper). Stanford University & Johns Hopkins University. https://dho.stanford.edu/wp-content/uploads/digesters.pdf

[5] Foodrise & NOAH – Friends of the Earth Denmark. (2026). *Denmark's dystopian dash for biogas: Driving intensive animal production, jeopardising the country's climate leadership*. https://foodrise.eu/denmarks-dystopian-dash-for-biogas/

environmental integrity and policy coherence of the proposed methodology before adopting the Delegated Act.

We therefore call on the European Commission to reconsider the proposed treatment of manure-based biogas and biomethane in Annex V and VI before final adoption.

Sincerely,