



EurEau position on the Draft revised Renewable Energy Directive (RED III)

Summary

Although the Renewable Energy Directive (RED III) does not specifically address the water sector, the water cycle has renewable energy generation potential, i.e.: the generation of electricity from hydraulic turbines, biogas from sewage sludge, electricity and thermal energy from sewage sludge mono-incineration, electricity from on-site windmills and solar panels, heat pumps and thermal energy from waste water at several stages of the water cycle. Hence, the water sector substantially contributes to the renewable energy targets and climate policies.

With regards to waste water treatment, biogas is often consumed on-site through the cogeneration of heat and electricity, while in some Member States it is mostly upgraded to biomethane for injection into the gas network or for vehicle fuel, resulting in a reduction of GHG emissions in the hard-to-decarbonise or hard-to-electrify transport (Article 25), building (Article 15a, Article 20, Article 23 and Article 24) and industrial (Article 22a) sectors.

The renewable energy produced in the water sector could even be transformed into green (renewable) hydrogen in the future.

It is important to be aware of the emission of potent greenhouse gases (GHGs) from biogas production. There may be a trade-off between energy recovery and climate neutrality. The link between the RED III, the Energy Efficiency Directive (EED) and other climate regulations should therefore be strengthened in a consistent and coherent way.

1. Article 2: Definitions (24) Biomass (RED II 2018/2001)

It is necessary to modify the definition of biomass so that sewage sludge is duly recognised as a source of origin of biogas. Part A of Annex IX already includes “(f) Animal manure and sewage sludge”, so we consider that there is an omission that needs to be amended. We propose a change to the definition of biomass by adding sewage sludge as a biodegradable fraction:

- “biomass’ means the biodegradable fraction of products, waste and residues from biological origin from agriculture, including vegetal and animal substances, from forestry and related industries, including fisheries and aquaculture, as well as



sewage sludge from waste water treatment and the biodegradable fraction of waste, including industrial and municipal waste of biological origin;”

2. Article 3.4a: Support Schemes

The cost-efficient production and recovery of energy from the urban water cycle fulfils all EU Green Deal criteria. It enhances the renewable energy production and the circular economy, it is aligned with the RED III objectives in terms of targets and potential deployment of renewables across the sectors and it improves the EU energy independence while minimising pollution in the highest sustainable way. This justifies the development of support schemes at EU level to address the unequal renewable energy generation around the EU and to reach the highest cost-efficient renewable energy generation potential at waste water treatment plants (WWTPs) and the whole urban water cycle.

This support should also include regulatory aspects ensuring access to the energy grids to achieve the integration of the renewable energy production in the energy system.

Funding should also cover innovation on renewable hydrogen production at WWTPs.

3. Articles 15.8, 19 and 31a: Renewable energy certification

Regarding the certification and traceability of renewable energy, EurEau welcomes the measures to support and improve the Guarantees of Origin (Article 19) and the Union Database (Article 31a). In Article 15.8, the provision of using credit guarantees in order to reduce the financial risks associated with Power Purchase Agreements (PPA) might generate market distortions. Hence, PPA should remain a market instrument.

4. Article 20a: Facilitating the system integration of renewable electricity

In the past, barriers have been raised for electricity and biomethane discharge into grids and unjustified taxation, for example on renewable energy self-consumption from biogas, has jeopardised the deployment of the renewable generation. EurEau recommends that all these aspects should be taken into account in this Directive, extending the scope of Article 20a, and in all related legislation.

Here we show a few examples of barriers in the water sector:

- ~ In Germany, complex technical provisions place a financial burden on biogas/biomethane use that calls into question the economic viability of the facilities required for this purpose.
- ~ In Sweden, the impact derived from the criteria of the Taxonomy Regulation (2020/852) indicated below would destroy the predominant market of biogas as a fuel in a few years.
- ~ Danish law requires a waste water company to create a different company if it wants to produce heat extracted from the water cycle, unless the water company requests and obtains a dispensation. This bureaucratic process may deter some operators



from contributing to the production of renewable energy.

Hence, EurEau advocates for an adjustment of the European state aid framework to ensure the economically viable use of biogas without additional energy tax burdens.

5. Articles 23 and 24: Heating and cooling

The water sector could contribute to meeting the targets on district heating and cooling.

Thermal energy can be recovered from the effluent at the WWTP or from the incineration of sewage sludge in specific locations. Heat pumps in both drinking water and waste water can contribute significantly to district heating systems.

6. Article 25: Transport sector

The biomethane from WWTPs could contribute to the Directive's targets for the transport sector (Article 25), that shows an increase in the ambition regarding the expected contribution of advanced biofuels and biogas from 3.5% (real 1.75%, but double counted for target accounting proposes in the previous RED II) in the 2018 Directive for 2030, to present 2.2% (single counted in present RED III). The feedstocks considered as advanced biofuels are in Annex IX, Part A, and sewage sludge is part of them.

However, EurEau points out the additional costs of upgrading biogas to biomethane is often prohibitive and it needs increased EU and/or national financial support.

In addition, the proposed Taxonomy Delegated Act on climate mitigation (chapter 6) discourages the use of biogas as a sustainable vehicle fuel in the EU due to the so-called "tailpipe principle". This principle will make it impossible to use biogas as a sustainable vehicle fuel in the EU, except during a transitional period. This may result in reduced investments in biogas production facilities and the upgrading of biogas to vehicle fuel.

The Commission should instead apply the much more technology-neutral well-to-wheels principle on emissions, and by extension, consider the entire life cycle of both fuel and vehicles. The tailpipe principle should be changed in the technical screening criteria from "the vehicle has zero direct (tailpipe) CO₂ emissions" to "the vehicle has 75% less CO₂ emissions calculated as well-to-wheels principle on emissions".

Further reading:

EurEau Position paper on Energy and Greenhouse Gas emission reduction objectives for the European water sector under the UWWTD

<https://www.eureau.org/resources/position-papers/5815-position-paper-on-climate-mitigation-in-the-uwwtd/file>

EurEau Briefing note on Reducing the Energy Footprint of the Water Sector

<https://www.eureau.org/resources/briefing-notes/3890-briefing-note-on-reducing-the->



[energy-footprint-of-water-sector/file](#)



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Our members are 34 national associations of water services. At EurEau, we bring national water professionals together to agree European water sector positions regarding the management of water quality, resource efficiency and access to water for Europe's citizens and businesses. The EurEau secretariat is based in Brussels.



EurEau

With a direct employment of around 476,000 people, the European water sector makes a significant contribution to the European economy.