

## **EurEau feed-back on the Inception Impact Assessment for the review of the EU renewable energy rules (Directive 2018/2001/EU, EED)**

**EurEau** is the European federation of water services and represents drinking water (DW) and waste water (WW) operators from 29 countries.

We **support the EU's Green Deal**, including its climate ambitions and Strategies. We call for full coherence between the RED, other energy legislation (EED), and sectoral legislation (DW Directive, Urban WW Treatment Directive).

Meeting society's demand for safe water services may involve energy intensive processes making energy one of the sector's highest operational cost factors. Optimising energy use has therefore been a top priority for many years. The sector will step up efforts further with the ambition to reduce its GHG emissions in line with EU objectives.

The sector already generates a large amount of RE, but significant potentials remain.

- **Hydropower from turbines** using appropriate slopes in the DW/WW networks.
- **Biogas from sewage sludge** is a storable resource. Refined, it can be injected into grids and used during peak demand / low RE production, or power vehicles.
- **Heat recovery** from WW through heat pumps in large sewers is promising but needs more research is required. Heat / cold recovery from DW networks is investigated.
- **Energy recovery from dried sewage sludge** is a mature process, but sludge drying asks as much energy as is produced through its incineration. Drying should only use waste heat.
- **Solar and wind energy:** Depending on site conditions, solar or wind energy can be generated.

**EurEau does not support specific European RE targets** for the water sector but favours its integration in local energy policies. The sector needs flexibility on its way to **climate neutrality**.

### **Reasons**

- **Local conditions** determine potentials (type of DW source, treatment levels needed, population density, plant size, topography).
- Energy use in WWTP increases when installing resource recovery facilities or supply water for reuse (**circular economy**).



- **New regulatory requirements or increasing pollution** of DW resources or WW may trigger the installation of energy-intensive extra treatment. Hence, the **polluter-pays principle** must be fully applied.
- Increasing **water scarcity** may push energy-intensive DW processes, including desalination.
- Energy use is not the only relevant GHG emission source. WW services may emit high GWP gases (nitrous oxide, methane, see EU Methane Strategy). Those emissions need addressing, too.
- Regional development levels differ largely. Solutions for large plants may not be adapted to small ones.
- The sector's long investment cycles (40-50 years) need consideration.
- No measuring unit offers a comprehensive way to reflect progress: kWh/m<sup>3</sup> of DW or WW; GHG emissions/m<sup>3</sup>; kWh/pe; degree of energy self-sufficiency.

The RED should address remaining bottlenecks:

### **Regulatory framework**

MS should be required to establish enabling regulatory frameworks and remove obstacles to a wider RE roll-out:

- Water operators of all MS should be allowed to inject excess RE (heat, power, gas) into grids.
- Solutions to refine sewage sludge gas to grid quality need support.
- The recent French ban to add bio-waste to sewage sludge digesters is not justifiable and reduces process efficiency. It should be removed.
- Subsidies for RE investments should not discriminate between sectors applying similar technologies.

### **Financing, cost effectiveness**

Investments in RE may exceed the financial capacity of water operators while having slow or no pay-back.

Policy options must respect the GHG reduction calendar, the water sector's investment capacity and the lifetime of existing assets.

The EU should **authorise and support national incentives for RE investments** of water operators through Cohesion Funds, the EU Recovery Fund and other financial mechanisms.

### **Sustainability of investments**

We support efforts to determine the sustainability and GHG emissions saving criteria for bioenergy based on objective LCA.

**Provided the above comments are taken into account, we could support option 5 (combination of options 2, 3 & 4).**