EurEau feed-back on the Inception Impact Assessment for the evaluation and review of the Energy efficiency directive (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 targets and Strategies. We call for full coherence between the EED, other energy legislation (RED), and sectoral legislation (Drinking Water Directive - DWD, Urban Waste Water Treatment Directive - UWWTD).

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 its use has therefore been a top priority for many years. Still, the EE potential is far from exhausted. The sector accepts the need to step up efforts further with the ambition to reduce its GHG emissions in line with EU objectives. However, if an energy-intensive treatment step is technically necessary (safety, regulatory compliance), it must prevail despite higher energy use.

**EE priorities**

- Reduce energy use in DW works and waste water treatment plants - WWTP: proper component dimensioning, optimise operations, preventive maintenance
- Reduce energy use in DW networks (pressure/leakage management, pumping stations)
- Use of efficient pumps in DW/WW networks and efficient plant equipment
- Reduce water quantities collected by sewers (less impervious surfaces, storm water infiltration) and prevent groundwater infiltration in sewers
- Maximise gravity transport of DW/WW depending on topography to avoid pumping
- Apply intermittent operations where possible
- Reduce energy footprint in corporate management (buildings, vehicle fleet)
- Outside the control of water operators: reduce (hot) water consumption per capita.

**EurEau does not support specific European EE 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 energy reduction 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 steps. Hence, the polluter-pays principle must be applied.
- Increasing water scarcity may require the development of new, energy-intensive DW sources, including desalination.
- Energy use is not the only relevant GHG source. WW services may directly emit high GWP GHG (nitrous oxide, methane - see EU Methane Strategy). Those emissions need addressing, too.
- Regional development levels differ significantly. Solutions for large plants may not be adapted to small ones.
- The sector's long investment cycles (40-50 years) need consideration.
- There is no market failure, as EE is already a top priority of water operators.
- No measuring unit offers a comprehensive way to reflect progress: kWh/m³ of DW or WW; GHG emissions/m³; kWh/pe; degree of energy self-sufficiency.

The EED should:

- **Avoid duplication** with the UWWTD (in revision) and the DWD (new);
- In coordination with the UWWTD, encourage energy audits in larger WWTP to ensure awareness of EE potentials;

**Financing and cost effectiveness**

- EE investments may exceed the financial capacity of water operators while having slow or no pay-back.
- Policy options must be consistent with the GHG reduction calendar, the water sector’s investment capacity and the lifetime of existing assets.
- The EU should authorize and support national incentives for EE investments of water operators through Cohesion Funds, the EU Recovery Fund and other financial mechanisms.
- **The development of quality energy services** for water operators needs support to overcome the financing gap.

EurEau supports option 2 of the IIA. Provided the above comments are taken into account and duplication with the UWWTD/DWD is avoided, option 3 could be supported.