
The energy potential of the wastewater sector: the REEF 2W approach

ENEA, Brussels
Rue de Namur 72, 1000 Bruxelles
6th June 2019 - 14h00-18h15

According to the International Energy Agency, the energy consumption of the EU's water sector is equivalent to 3.5% of the EU's electricity consumption and typically represents 30-50% of local authority's electricity consumption.

Energy consumption represents a substantial cost of wastewater treatment facilities. Improving energy efficiency therefore represents an opportunity to lower operational costs and carbon footprint. Compliance with EU Water Framework Directive (WFD 91/271/EEC), which made obligatory waste water treatment for the urban system, requires significant effort not only to avoid environmental pollution and damage to the ecosystems but also to minimize the energy use on waste water treatment plants (WWTPs).

The workshop - organised by ENEA, the Italian National Agency for New Technologies, Energy and Sustainable Economic Development - aims to discuss about the energy potential of the wastewater sector. The event will focus on the approach developed within the REEF 2W project (Increased renewable energy and energy efficiency by integrating, combining and empowering urban wastewater and organic waste management systems), funded by the INTERREG Central Europe program, whose consortium sees the participation of public and private institutions from Austria, Croatia, Czech Republic, Germany and Italy.

A panel session with guests of high standing from EC and other relevant associations will follow in order to trigger a fruitful discussion on how to minimize the energetic impact of the waste and wastewater treatment plants.

Overview of current and future scenarios towards an energy positive water sector and possible recommendation on strategies and on the regulatory framework to foster wastewater-to-energy solutions in Europe will be discussed.

Agenda

- 13:45 Registration & Welcome**
- 14:00 REEF 2W presentation: objectives and expected results**
Roberto Farina, Division of Bioenergy, Biorefineries & Green Chemistry, ENEA
- 14:20 EC policies to support the potential of the waste and wastewater sector**
Panagiotis Balabanis, EC DG RTD, Directorate I, Deputy Head of Unit Eco-innovation
- 14:50 Policies recommendation for improving the legal framework for fostering “wastewater-to-energy” solutions in Europe**
André Müller, Research Analyst, adelphi research
- 15:10 Energy and material recovery and reuse in municipal wastewater systems**
Francesco Fatone, Polytechnic University of Marche
- 15:40 Rethinking wastewater: from waste + water towards a mixture of renewable energy, recoverable nutrients and clean water. Waterleau case studies in both industrial and municipal context.**
Jeroen De Lathouwer, Director Business Development WATERLEAU
- 16:10 Coffee-break**
- 16:15 Panel discussion: Which strategies to minimize the energetic impact of the waste and wastewater treatment plants?**
Moderator: Andrea Rubini, Director of Operations, Water Supply and Sanitation Technology Platform (WssTP)
Panel members:
Roberto Farina - Division of Bioenergy, Biorefineries & Green Chemistry, ENEA
André Müller, adelphi research
Francesco Fatone, Polytechnic University of Marche
Milo Fiasconaro, Executive Director of Aqua Publica Europea
Jeroen De Lathouwer, Director Business Development WATERLEAU
- 17:40 Closure - DG ENV, Directorate C.2, Marine Environment & Water Industry Unit (TBD)**
- 18:10 Wrap up and conclusion**