



Side Event at EU Green Week 2026

Innovative solutions for energy efficiency of WWTPs: Experience from successful case studies

Date: 2 June 2026

Time: 13:00 – 14:00

Location: Brussels

The EU Green Week 2026 focuses on “Investing in a Nature-Positive Economy”, emphasizing nature-based solutions, biodiversity protection, and green business innovation.

Wastewater treatment plants (WWTPs) play a critical but often overlooked role in achieving a nature-positive future. They safeguard aquatic ecosystems, protect biodiversity, and enable resource-efficient circularity in the water sector by shifting from pollution-removal facilities to resource-recovery hubs. However, WWTPs are also highly energy-intensive, with electricity accounting for 25–40% of their operating costs and aeration alone consuming 40–60% of plant energy.

Across Europe, utilities have begun adopting innovative, energy-efficient and resource-recovery technologies that reduce emissions, cut operational costs, and transform WWTPs into circular systems. These solutions contribute directly to the nature-positive agenda by:

- Reducing environmental footprint and aligning with the EU Water Framework Directive & Zero-Pollution targets
- Recovering valuable resources (energy, nutrients, water) that support green business models
- Enabling utilities to reinvest savings into environmental restoration and nature-based solutions

This side event aims to showcase real-world examples, highlight the leadership of utilities that have implemented such innovations, and explore how investing in smarter wastewater management drives a nature-positive, circular economy.

Objectives:

This session will:

1. Present innovative technologies that enhance energy efficiency and resource recovery in WWTPs.
2. Highlight successful European case studies, with utilities sharing practical experiences, challenges, and measured impacts.
3. Connect energy efficiency to the broader nature-positive agenda, showing how optimized WWTPs protect ecosystems and biodiversity.
4. Promote green business opportunities emerging from energy savings, biogas upgrading, nutrient reuse, and circular water solutions.

Draft Agenda:

Opening Remark (10 min)

- Representative from European Commission
- UNIDO Representative

Presentation of Innovative Case Studies (3 presentation - 10 min each)

- Utility representatives showcasing implemented solutions

Potential options for speakers:

Speaker	Topic
Mr. Karl Wögerer, ebswien kläranlage & tierservice Ges.m.b.H. (E-mail: k.woegerer@ebswien.at)	SternE Project at Vienna WWTP – Kaplan Turbine, Hydraulic Screw, Heat pump
Mr. Nicola Frison, University of Verona, Italy (E-mail: nicola.frison@univr.it)	SMART-Plant Project – Cellulose recovery from wastewater
Mr. Andreas Kolb, Technische Universität Braunschweig (Email: a.kolb@tu-braunschweig.de)	P-NET Project – Process optimization for struvite precipitation from sewage sludge
Ms. Enora Delanoe, Purecontrol, France (Email: enora.delanoe@purecontrol.com)	Artificial Intelligence to Optimise Energy Consumption of UWWTP



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Open discussion or Q&A session (15 min)

Closing remarks (5 min)

Target Audience:

- EU policymakers (DG ENV, DG CLIMA, DG ENER)
- Private sector innovators in water/energy solutions
- WWTP authorities
- Financial institutions and donors
- NGOs and academia working on water, biodiversity, and climate