

PRESS RELEASE

POWERSTEP free energy audits

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www.powerstep.eu/energy-audit

Converting wastewater treatment plants into energy suppliers?

Did you know that organic matter contained in EU municipal wastewater accounts for the energy equivalent of twelve large power stations? **The power of wastewater currently remains vastly underestimated.**

By implementing new concepts for sewage treatment using existing technologies (e.g. sludge digestion and biogas valorisation), the EU-funded POWERSTEP project aims to go beyond current ambitions of marginal improvements of energy efficiency in wastewater treatment. Based upon six full-scale investigations of individual processes and design elements, POWERSTEP aims at demonstrating that wastewater treatment plants (WWTPs) can become viable, net energy producers without compromising the water treatment quality and cost.

In 2017, the POWERSTEP partners will offer free energy audits to 10 European municipalities. Selected applicants will benefit from Veolia energy audit software OCEAN and will get detailed information on their WWTP energy profile. They will also receive a full audit report with recommendations tailored specifically to the WWTP of the municipality, which will indicate steps to improve its energy balance and mitigate associated greenhouse gas emissions using technologies demonstrated in the POWERSTEP project. It will be ensured that at all times, all data will remain fully confidential within the project team. The roles, duties and confidentiality will be clearly defined in a cooperation agreement.

All European municipalities are welcome to apply before 30 November 2016. The selection of the ten candidates will aim to ensure the widest possible geographical and technological coverage in order to secure the representativeness of the project's results. **Make sure to apply!**

Are you ready to take the next power step for your city? Fill in the online form available at www.powerstep.eu/energy-audit before 30 November 2016!

For more information, contact Dr. Christian Remy of Berlin Centre of Competence for Water at christian.remy@kompetenz-wasser.de



ARE YOU READY TO TAKE THE NEXT POWER STEP
FOR YOUR WASTEWATER TREATMENT PLANT?

WWW.POWERSTEP.EU



About POWERSTEP

The POWERSTEP project stands with the idea that a leap-frog progress in wastewater treatment is possible by converting sewage treatment plants into power production facilities, without compromising the quality of treated wastewater.

There are four distinct and interconnected steps to make energy-positive WWTPs:

#01 Carbon extraction for energy recovery into biogas

Sludge digestion as a means of producing more biogas is key to obtaining energy-neutral or energy-producing WWTPs. This is achieved with more efficient primary treatment that removes as much primary sludge as possible from the system prior to the biological treatment.

#02 Nitrogen removal in the main stream

Nitrogen removal is challenging when using the conventional process of nitrification and denitrification due to the dependence of denitrifying bacteria on an easily accessible carbon source for growth. POWERSTEP will help to guarantee extensive nitrogen removal with new technologies and control concepts.

#03 Biogas valorisation and efficient energy management

A key step for municipalities to make is efficient conversion of the energy potential of biogas into usable and marketable forms of energy. This will lead directly to a better overall energy recovery for future WWTPs.

#04 Nitrogen management in side stream

Treatment of ammonia in sludge dewatering effluent will save on aeration demand and will offer the opportunity to recover nitrogen in the form of a fertilizer product.

The results gained from the six POWERSTEP full-scale case studies will be integrated into holistic models for designing the entire treatment schemes of the future WWTPs.

Started in July 2015, POWERSTEP brings together expertise and capabilities from both the public and private sector, as well as from universities and research institutions from 7 different European countries.

To learn more about the project, visit the website www.powerstep.eu

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