

PRESS RELEASE – POWERSTEP

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www.powerstep.eu

Don't underestimate the power of wastewater. This sentence summarises the objective of the EU co-funded project POWERSTEP, a project led by research and industry players working to convert sewage treatment plants into power production facilities while still achieving high quality water treatment.

Shifting business model makes economic sense. Shifting wastewater treatment plants (WWTP) technology means increasing regions' and cities' energy production capacity. Today, about 1% of the EU electricity demand is consumed by WWTP. This accounts typically for the largest part of the municipality energy bill while municipal wastewater contains a potential chemical energy of 87,500 GWh/year in its organic fraction (equivalent to the output of 12 large power stations).

Achieving an energy positive wastewater treatment plant is based on sound technological development that requires a combination of new concepts together with an optimized integration of available technologies, e.g. sludge digestion and biogas valorization. POWERSTEP will demonstrate in six large-scale references that WWTPs can improve their water treatment while harnessing the untapped potential of biomass as a renewable energy source.

Technology-driven, competitive. POWERSTEP will act both on the technology side and market uptake by designing cost competitive, energy positive and carbon neutral treatment schemes that will provide enough evidence to enable replication of the solution and quick deployment of the concept.

POWERSTEP technology performance claims will be verified by independent third parties to obtain a "Statement of Verification" that will be used as evidence that the innovations are both credible and scientifically sound. Technologies are microsieve as primary treatment, mainstream anammox, duckweed bioreactor, biological methanisation, thermoelectric conversion, side-stream nitrification and membrane stripping.

The POWERSTEP project was kicked-off in Berlin on 28 and 29 September. In the second half of 2016, large-scale demonstration sites for the new technologies will be set-up at actual WWTPs in Austria, Denmark, Germany, Sweden, and Switzerland.

POWERSTEP – € 5.2 million – 15 partners – 2015-2018

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Kick-off meeting 28 -29 September 2015, Berlin, Germany.



Partners list:

-  KWB KOMPETENZZENTRUM WASSER BERLIN GEMEINNÜTZIGE GMBH - GERMANY
-  TECHNISCHE UNIVERSITÄT WIEN – AUSTRIA
-  Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz - SWITZERLAND
-  Fraunhofer Gesellschaft zur Förderung der angewandten Forschung EV - GERMANY
-  VEOLIA DEUTSCHLAND GMBH - GERMANY
-  VEOLIA WATER TECHNOLOGIES AB - SWEDEN
-  NEAS ENERGY AS - DENMARK
-  BIOFOS AS - DENMARK
-  BERLINER WASSERBETRIEBE - GERMANY
-  UMWELTBUNDESAMT - GERMANY
-  ELECTROCHAEA DK APS - DENMARK
-  APS AQUA PLANT SOLUTIONS GMBH - GERMANY
-  SUSTEC CONSULTING & CONTRACTING BV – THE NETHERLANDS
-  ATEMIS GMBH – GERMANY
-  ARCTIK SPRL - BELGIUM

