




SMART-Plant **Material recovery from wastewater**

Context

Domestic wastewater contains many valuable raw materials, which have not been tapped so far. Their systematic recovery would be of advantage in ecological and economic terms.

Objectives

The SMART-Plant project aims to make increased use of domestic wastewater as a material source and to test the corresponding processes on a technical scale. The project focuses on the recovery of biopolymers, cellulose, plant nutrients, fertilisers and semi-finished products, which can be recycled into commercially usable products.

Activities

- Demonstrating the feasibility of recycling of different materials originating from domestic wastewater
- Assessment of the environmental and economic benefits with LCA
- Optimisation and testing of technologies for material recovery on an industrial scale at five existing municipal WWTPs
- Performance of a market study and the development of novel business models to consolidate the partnership between the wastewater sector and the chemical industry and to stimulate the implementation of the relevant technologies
- Life Cycle Assessments of all processes in order to demonstrate the sustainability of the concept



Duration: 6/2016 – 5/2020

Project Volume: 9.7 M€ (291 k€ KWB)

Contact

DR. CHRISTIAN REMY, christian.remy@kompetenz-wasser.de
Kompetenzzentrum Wasser Berlin GmbH

Partners

Kompetenzzentrum Wasser Berlin in a consortium of 25 partners from Europe and Israel, coordinated by the University of Verona (IT)

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