
8th
World Water
Forum
Brasília-Brazil
2018

Regional Process EUROPE

Session 3- Theme Urban and Development

Cities: Why Waste Water and Energy?

INCOVER

Innovative Eco-Technologies for Resource Recovery from Wastewater

Project overview

Move towards resource recovery based wastewater treatment plants and promote the circular economy

Eric TARDIEU

International Office for Water

OIEau

- Training
- Data & information
- International cooperation projects
- Facilitating networks

Capacity building for better water management and adaptation to climate change

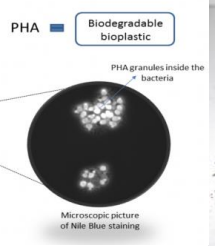
INCOVER Objectives

Main objectives: to reduce the overall operation and maintenance cost of wastewater treatment by at least 50%, through the use of wastewater as a source for energy and added-value production

- **Validate innovative technologies** through full-scale testing to obtain bio-products
- Develop **innovative monitoring techniques** (optical sensing and soft sensors)
- Assess their **cost-effectiveness** and **sustainability**
- Develop a tailored **Decision Support System** for selecting the most technical, social and cost efficient treatment solution
- Develop strategies to facilitate **a rapid market access**

- **Test innovative combination of technologies in order to reduce** :
  - Greenhouse gas emission
  - Energy consumption
  - Operating and maintenance costs

INCOVER by-products



- Bio-plastics (PHA)
- Organic acids
- Bio-fertilisers
- Biochar
- Treated water
- Energy (biomethane)

INCOVER by-products : Reutilisation and Application (Examples of PHA & Biofertilizers)

- **PHA (bioplastic)** ➔ Produced using bacteria/microalgae technology ➔ Various applications of PHA as bioplastics for biopackaging : **currently used to produce bioplastics films for bags, containers and paper coatings, disposable articles, upholstery and other diverse packaging applications** (PHA produced within INCOVER will be non-food material packaging)
- **Biofertilizers** ➔ obtained by sludge treatment wetland and Evaporative systems to obtain an agricultural bio-fertiliser ➔ The **main market for biofertilizers is agriculture** (and also) re-supply the right amount of nutrients in soil to maintain optimal growth of crops

Case studies

Case study 1:
Treating municipal and agricultural wastewater

- Universitat Politecnica de Catalunya (Spain)
- Lead by UPC

Case study 2:
Treating agricultural wastewater

- Chiclana and Almeria AQUALIA facilities (Spain)
- Lead by AQUALIA

Case study 3:
Treating industrial wastewater

- UFZ (Helmoltz – Centre for environmental research) location (Leipzig, Germany)
- Lead by UFZ

INCOVER project details

- 3-years project : June 2016 – May 2019
- Funding by EU H2020 (Topic: Water1b-2015); GA: 689242; 7.2 millions EU contribution (Total budget: 8.4 millions)
- Project coordinator aimen CENTRO TECNOLÓGICO
- 18 partners : IBET, Aqualia, Aarhus Universitet, HelmHoltz, UPC, ISLE, Solarspring, Simbiente,…

Visit our website www.incover-project.eu

Follow us on Twitter

Contact us : incover-project@oieau.fr

Thank you !

The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 689242

8th World Water Forum

Brasilia-Brazil 2018

Sharing Water

Organization

WORLD WATER COUNCIL

GOVERNO DE BRASÍLIA

MINISTRY OF THE ENVIRONMENT

BRASIL BRAZILIAN GOVERNMENT

Support

ABDIB

Adasa
Agência Reguladora de Águas, Energia e Saneamento Básico do Distrito Federal

ANA
AGÊNCIA NACIONAL DE ÁGUAS