Target

INCOVER solutions can be applied in **farms, industries or municipalities** of up to approximately **100,000 Population-Equivalent.**

Muncipalities

From wastewater and wastewater sludge to bio-methane, fertilizer and reclaimed water.

Agriculture

From agricultural wastewater, crop residues and manure to bio-methane, fertilizer and irrigation water**.**

Industries

From industrial wastewater, F&B waste or organic waste to bio-plastics, organic acids, activated coal/carbon black and reclaimed water.

The combination of all INCOVER technologies will provide **complementary cost-efficient** or **alternative solutions to conventional wastewater treatment.**

Join us

Visit our website: www.incover-project.eu

Twitter page: @INCOVERproject

LinkedIn group: INCOVER

Contact us : incover-project@oieau.fr

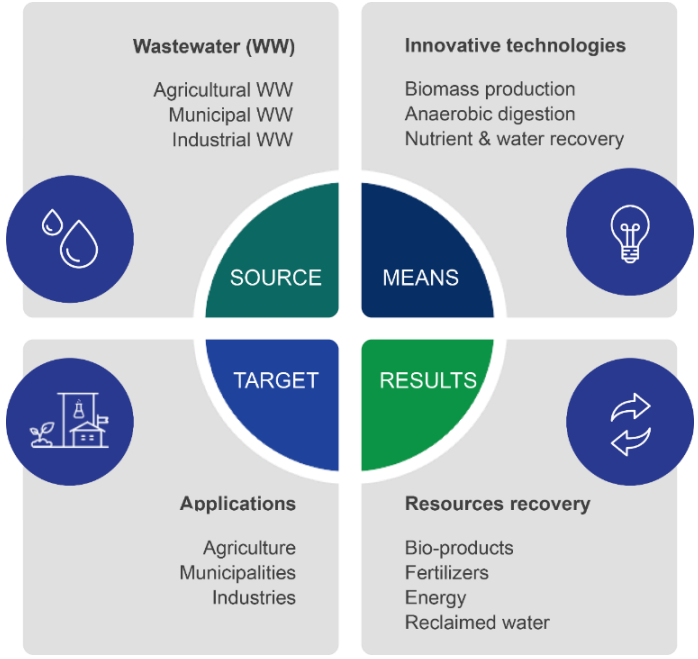
Partners

Coordination by AIMEN Technology Centre.
Duration : June 2016 – May 2019

INCOVER

Innovative Eco-Technologies for Resource Recovery from Wastewater

Taking into account the current global water scarcity and the high cost of wastewater treatment, INCOVER proposes a concept designed **to transform wastewater from a waste stream** into a source of **new added-value bio-products**, contributing to **circular economy.**



Main objective

Reduce the overall operation and maintenance costs of conventional wastewater treatment by 50% and alleviate water scarcity.

The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 689242. The dissemination of results herein reflects only the author's view and the Commission is not responsible for any use that may be made of the information it contains

Means

The project develops **innovative and sustainable added-value technologies** for a resource recovery-based treatment of wastewater.

Three added-value wastewater treatment plants are operated, assessed and optimised with **innovative monitoring techniques,** to ensure bio-production efficiency.

These three case studies are implemented in Spain and Germany and **treat wastewater from municipalities, farms and food and beverage (F&B) industries.**

Results

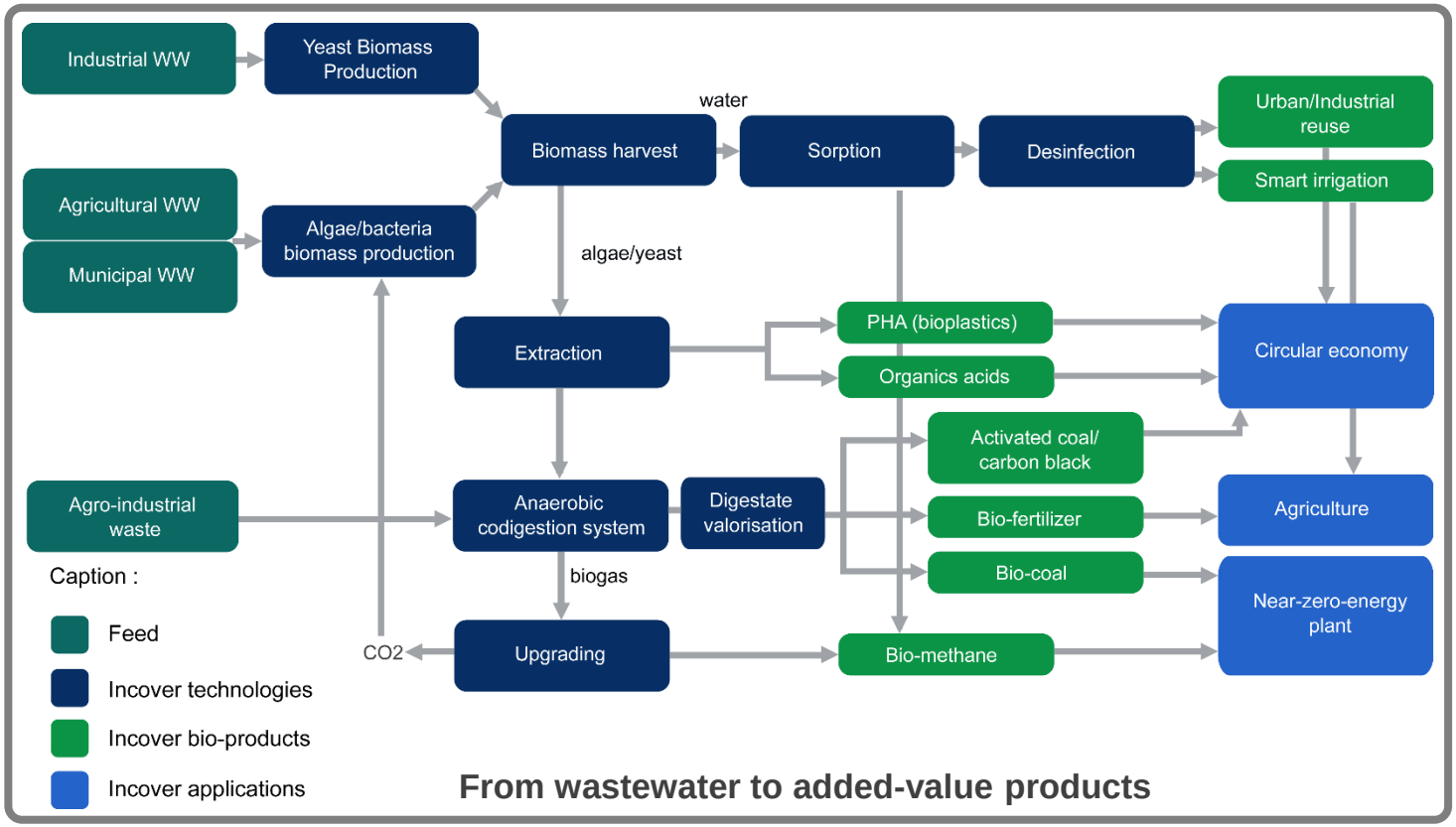
INCOVER added-value solutions will generate these valuable resources from wastewater :

- **raw materials** (bio-plastics, organic acids, etc.)
- **energy** (bio-methane)
- **agricultural inputs** (reclaimed water, fertilizer).

A **Life Cycle Sustainability Assessment** will be done, based on environmental, economic and social aspects. A **Decision Support System** will be developed based on this assessment. It will provide **assistance** to water authorities at choosing the optimal investments.

Impacts

High Rate Algae pond systems in Chiclana wastewater treatment plant, operated by AQUALIA in Spain, for bio-plastics production,



From wastewater to added-value products

Main impacts of INCOVER project :

- **Reduction of energy demand** (at least of 50%) of wastewater management
- **Reduction of GHG emissions** up to 80% using CO_2 sequestration processes
- **Resources recovery** without increase in energy requirements
- Provision of **cost-effective water reuse methodology** in countries facing water scarcity
- **Cost reduction** of municipal and industrial wastewater management
- Increased awareness on **the benefits of reused water** and bio-products