

editorial

The worldwide population is facing limited available freshwater resources. Used water by humans, discharged as **wastewater**, must be treated to ensure its safe re-use. However, wastewater treatment plants are high-energy consumers, generate continuous waste with limited reuse, and surprisingly even significantly contribute to environmental pollution.

The project comes to meet all these problems with a solution found in nature itself by using earliest life forms developed on earth: microalgae.

Granular activated algae technology for wastewater treatment and resources recovery

The **GRAALrecovery project** aimed to develop alternative biotechnology for wastewater treatment based on the use of **granular mixed microalgae-bacteria consortium** following technology development and demonstration outside laboratory border to answer to the multiple stringent environmental needs and to provide solutions to the conventional biological treatment processes. The project entails the use of **innovative technology**, with the patented procedure of the microalgae-bacteria granulation, providing increased wastewater treatment performance with **efficient granules separation** only by simple and fast biomass settling overcoming as also the major barrier facing microalgae-based technology.

What brings the Graalrecovery project?

- complies with the strategy of **decreasing wastewater treatment costs** by **elimination of the aeration costs**
- targets the global strategy on **reducing greenhouse gas emissions** by **capturing the carbon dioxide** resulted from wastewater treatment
- **increases treatment performance**
- targets wastewater treatment plants utility strategy concerning **waste management** as the **residual biomass is turning into resources**

Target audience:

- wastewater treatment plants operators
- water sector
- scientific community
- public

Partners:

GRAALrecovery project



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*Graalrecovery technology -
rethinking wastewater treatment*