

# Combined engineered and natural water treatment systems (RBF)



## Description

It catalyses innovations in water and wastewater treatment processes and management through improved combinations of natural and engineered components.

## Objectives

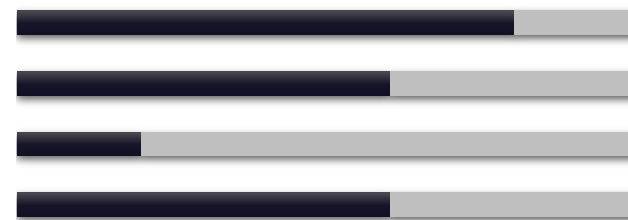
- To evaluate environmental benefits associated to the development of combined Natural and Engineered treatment Systems (cNES) when compared to fully engineered solution for drinking water production.
- To quantify the enhanced economic feasibility of cNES in reason of the reduction of investment and operating costs.

## Activities

- Sustainability assessment:
  - Life-Cycle Assessment LCA,
  - Life-Cycle Costing LCC,
  - Social Life-Cycle Assessment SLCA.

## Challenges

- Input data complex to collect
- Technical knowledge required
- Legal & legislation barriers
- Technology readiness level



## Expected outcomes

- - 50% energy consumption,
- - 15% operational costs,
- - 50% CO<sub>2</sub> emissions.

