

Combined engineered and natural water treatment systems

Description

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

Objectives

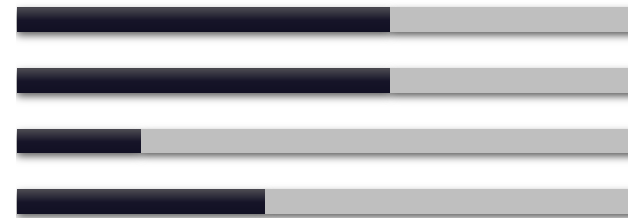
- To evaluate environmental benefits from the implementation of an innovative Retention Soil Filters (RSF) process to develop market opportunities and build trust and confidence in communities by addressing to system owners and operators,
- To evaluate social receptivity towards combined system focusing on impacts on the organisations and employees considering human rights, working conditions, health, safety and cultural heritage and to identify mechanisms to support citizen engagement.

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% CO₂ emissions.

