BioSolWaRe - LIFE (LIFE13 ENV / FR / 000711):
Demonstration wastewater treatment system dedicated to freshwater reuse and recycling.

With a total duration of 54 months, activities began on the 1st July 2014 and count with the participation of entities from France and Spain.

Project background
While Europe is considered to have adequate water resources, water scarcity and drought is an increasingly frequent and widespread phenomenon in the EU. According to recent estimates, at least 11% of Europe’s population and 17% of its territory had been affected by water scarcity by 2007. This puts the cost of droughts in Europe over the past 30 years at 100 billion euros.

Project objectives
In this frame, the BioSolWaRe-LIFE project will develop and test an innovative, more efficient and competitive wastewater treatment method based on an ecological process called bio-solar purification (BSP) mainly addressed to small and isolated populations (10-10,000 inhabitants). This process uses biological (microalgae photosynthesis) and solar (photo-oxidation) technologies to enable 80% water reuse, the recovery and valorisation of greenhouse gases and organic wastes.

Expected results
The project expects to develop an operational pilot wastewater treatment plant that will:
- Allow fresh water savings through reclaimed water.
- Process 50 m³ per day of purified and disinfected wastewater.
- Improve energy and carbon balances compared to existing wastewater treatment and reuse processes.