

# LIFE INTEXT PROJECT



With the contribution of the European Union LIFE programme LIFE18 ENV/ES/000233

## INTensive-EXTensive resource recovery from wastewater in small communities

## **Project description**

The Project will create a technological platform located in Talavera de la Reina wastewater treatment plant (WWTP), where innovative hybrid technologies for wastewater treatment and resource recovery in small communities will be developed, with the next objectives:

-Wastewater treatment system robustness against environmental (wintersummer) and pollutants/industrial loads variations

-Reduction of investment and maintenance costs

-Reduction of the required area < 1 m<sup>2</sup>/PE

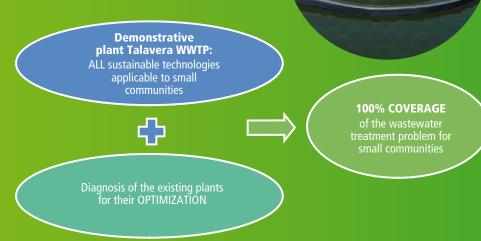
-Quantification and assessment of greenhouse gases emissions reduction

-Assessment of emergent pollutants removal

-Disinfection and water reuse

-Decision Support System (DSS) based on Life Cycle Analysis.

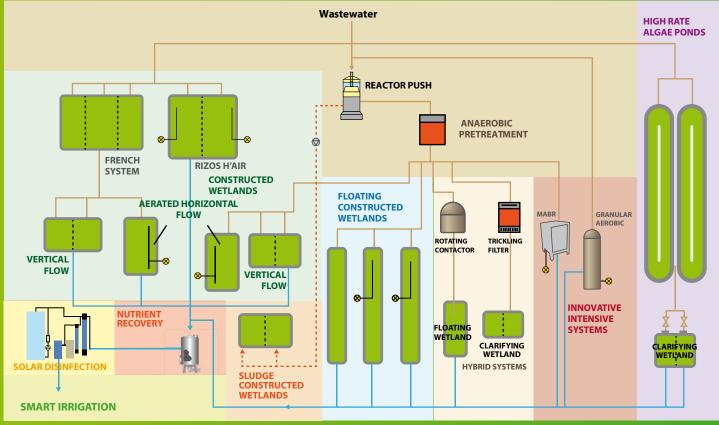
-Validation of technologies broadly used in the north and centre of Europe.





Location: Talavera de la Reina (Toledo), Carrión de los Céspedes (Sevilla) Duration: From the 1st of July 2019 to the 30th of June 2023 Total Budget in Euro: : 2,926,547 € Aqualia: : 1,155,599 €

## FLOW CHART PROJECT



To that end, about 16 different technologies will be implemented in Talavera de la Reina WWTP. These will be sized to treat 125 population equivalent (PE) and could be classified in the next different groups according to their technology and companies involved:

- Anaerobic and biofilm pretreatments (Aqualia)
- Constructed wetlands: vertical, horizontal, aerated (Syntea)

- Floating constructed wetlands (Projar)
- High rate algae ponds (Aqualia)
- Nutrients recovery by innovative adsorption materials (Aarhus University)
- Solar anodic oxidation for water disinfection (Autarcon)
- Smart irrigation system (FINT)
- Greenhouse gases emissions (Aarhus University)
- Sludge constructed wetlands, emergent pollutants and toxicity (AIMEN)

In parallel, the Centro de Nuevas Tecnologías del Agua (CENTA) facilities in Carrión de los Céspedes (Sevilla) will be used for the implementation of INTEXT technologies and the evaluation of their potential to improve the existing treatment plants.

#### PROJECT PARTICIPANTS

- AQUALIA (Leader)
- Asociación de Investigación Metalúrgica del Noroeste (AIMEN)
- Aarhus University
- Autarcon Gmbh
- Fundación Centro de las Nuevas Tecnologías del Agua (CENTA)
- Future Intelligence (FINT)
- Comercial Projar
- SYNTEA
- SYNTEA Tratamientos de Depuración



## **DETAILS OF FUNDING**

Funding: LIFE Programme.Organism: European Commission (EC).Project: LIFE18 ENV/ES/000233Grant: Subsidies 55% of budget.

**Funding Received Total:** 1,596,470 € **Agualia:** 623,718 €

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