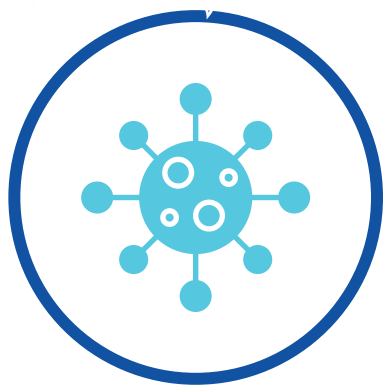




Badajoz Spain



CURRENT SITUATION

Rural wastewater plants need low-energy, circular solutions. Purple bacteria are promising but must improve nutrient removal to meet future EU rules.

NEGATIVE EFFECTS



Without improvement, PPB systems may fail to meet future EU standards, limiting safe water reuse and increasing risks of water pollution.



SOLUTIONS

WATERSENS will use a **new Photo-Bioelectrochemical system** that combines bacteria and charged biochar to improve nutrient removal.

The biochar helps bacteria work more efficiently, increasing nitrogen removal while keeping the system simple and low-energy.

Challenges

PPB systems need improvement to ensure effective nutrient removal



Solutions should be low-energy, zero-waste, and future-proof

Alignment with upcoming EU water reuse and discharge rules is essential

