





Innovative ultrasonic antifouling system for membrane bioreactors in wastewater treatment

OBJETIVE

ULTRACLEAN project aims to develop an innovative system based in ultrasonic technology able to prevent fouling in membrane bioreactors (MBRs).

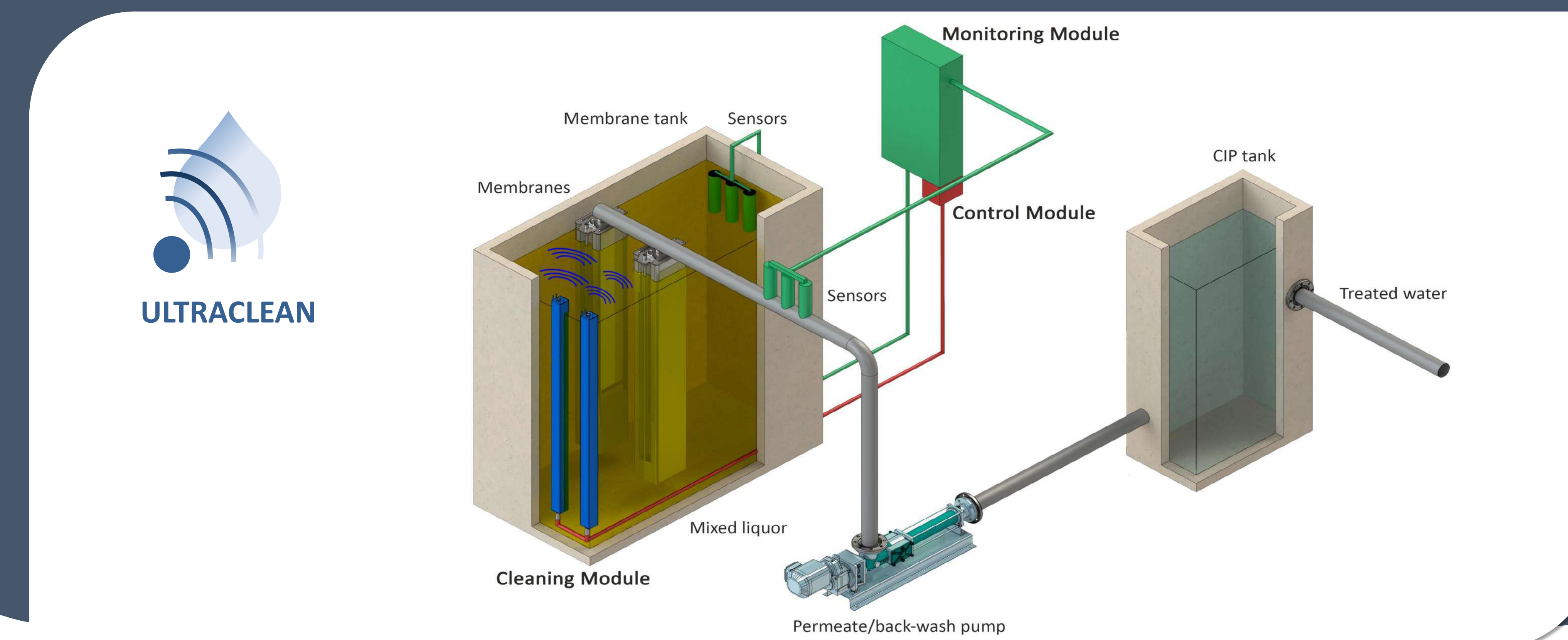
EXPECTED RESULTS

-  Improvement of efficiency in MBR wastewater treatment process.
-  Decrease in operation costs of MBR wastewater treatment system.
-  Reduction of chemical consumption for membrane cleaning.
-  Extend the service life of membrane used in MBR system.

TECHNOLOGICAL SOLUTION

The technological solution is comprised by three modules: monitoring (*i.e.*, sensors), control (*i.e.*, software) and cleaning (*i.e.*, ultrasounds).

The new innovative ultrasonic antifouling system is automatic, versatile and is capable to work simultaneous with the filtration process of MBR system.



PROJECT

ULTRACLEAN is an European initiative of AEMA and SINAPTEC, that is being developed under the support of the EUREKA's Eurostars Programme (12429/19/31481/Ae) and CDTI (CIIP-20182018). The projects has a time to completion of 33 months and the total cost for all parts is 714,415 €.