

PARTNERS

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artICA4nr

www.artica4nr.eu

Project information

Call (part) identifier	CIP-EIP-Eco-innovation-2013
Funding scheme	CIP-Eco-Innovation-Pilot and market replication projects
Project coordinator	CEIT - www.ceit.es
Duration	01/07/2014 - 31/12/2016
Overall budget	1,440,143.00 € (EU contribution: 50 %)
Contract number	ECO/13/630386



Co-funded by the Eco-innovation Initiative of the European Union

artICA4nr

www.artica4nr.eu

Replication of the art-ICA controllers for improving the eco-efficiency and sustainability of nutrient removal wastewater treatment plants

The artICA4nr project has been co-funded by the Eco-innovation Initiative of the European Union under grant agreement nº 630386

THE PRODUCT: art-ICA controllers

The art-ICA controllers automatically optimise effluent quality and energy consumption in conventional nitrogen removal wastewater treatment plants. These controllers are part of ICA 2.0 suite, offered by MSI Grupo (www.eficienciaenergeticaedar.com)

The art-ICA controllers have been technically validated in two Spanish WWTPs: Galindo-Bilbao WWTP and Mekolalde WWTP.

THE PROJECT: artICA4nr

Speed up the time-to-market of art-ICA

Replicate art-ICA in three new plants

Quantify the environmental and economical benefits of art-ICA

Validate art-ICA using low-cost NH₄-N and NO₃-N ISE sensors

EXPECTED RESULTS

By 2021 (five years after the end of the project) the art-ICA controllers will be working in about 80 wastewater treatment facilities.

Energy savings: 4 GWh/year

Reduction in CO₂ emissions: 1160 t CO₂/year

Reduction in N discharges: 1000 t N/year

The art-ICA controllers will be showcased in two international fairs and two national workshops in Spain and Portugal.

art-ICA will be replicated in three WWTPs.



The Navarrosillos WWTP
113000 PE (Spain)



The Chelas WWTP
210000 PE (Portugal)



The Velilla de San Antonio
WWTP. 123000 PE (Spain)