



NPOWER

BALANCING N & P FLOWS



www.npower.es

REVOLUTIONIZING NUTRIENT MANAGEMENT FOR A SUSTAINABLE FUTURE

NPower is redefining how Europe manages Nitrogen and Phosphorus (N/P) by bridging regional innovation with scalable solutions. The project works to rebalance N/P flows and cut emissions, all while fostering a circular economy of nutrients that delivers lasting benefits for communities and the environment.

#CircularEconomyOfNutrients

Key impacts



N/P budget to
quantify N/P flows



Innovative
governance models
for sustainable
management



8 Recovered
fertilizers



20 Best management
practices to reduce
N/P emissions



By 2050, 14.3B
saved due to
avoided
emissions



6 Technologies to
circularize N/P-rich
residues into key
outputs

NP

Technologies to circularize and recover N/P

- Bacteria cocktails and nanobubbles for pig manure treatment
- Biogas/ fertilizers production from pig manure, animal by-products and plant-based agricultural residues.
- Halophyte production from aquaculture effluent
- Recovery of phosphate salts from urban wastewater
- Recovery of N-rich reclaimed water from urban wastewater
- Recycling of run-off water for irrigation

Key N/P emitting sectors



Agriculture



Water/waste management



Energy and transport



Industrial sectors

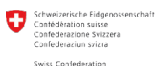


Other primary sectors

6 EU COUNTRIES; 4 REGIONAL CLUSTERS: SPAIN, BELGIUM, FINLAND, IRELAND; €14.3B SAVED DUE TO AVOIDED EMISSIONS BY 2050



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