

AXIS	CATEGORY	EU TAXONOMY ALIGNMENT FOR THE YEAR 2024
Circular Economy	Wastewater Treatment	The project is linked to the taxonomic activity 2.2 (WTR), partially aligned in 2024
Short Description		
Operation of wastewater collection and treatment aiming at reducing sewage sludge		

8. Efficiency and modernisation of the purification sector (sludge reduction, centralisation and processing capacity increase, energy efficiency)



Acea, within the most important players in the integrated water system and national leader in the sector for consumers served, started different initiatives that converge to the efficiency and modernisation of the water purification sector. In particular, Acea Ato 2, the major subsidiary for the water sector within the Group, has developed a few projects with relevant impacts. Among those, the definition of a “Sludge Plan” which includes structural interventions aimed at increasing the power of medium-to-big-sized purifiers



and reducing the quantity of the overall sludge produced thanks to, by means of example, the further development of dryers, the process integration of different technologies such as ozonolysis, the renewal or the adoption of sludge drying compartments, and so on. Acea Ato 2 has also defined a plan for the rationalisation of purification plants, identified through the study of the territory on both an urbanistic and a geomorphological perspective. This activity will continue to be carried out by upgrading existing small plants or, whenever possible, through the centralisation of the purifying treatment process in bigger plants, with the related dismissal of smaller plants. Lastly, various energy efficiency activities have contributed to the modernisation of the purification sector, having been identified with a deep analysis of the plants' energy consumption and their relative sub-compartments.

PROJECT STATUS: ongoing

LOCATION: Latium, Italy

Green Bond Allocation

ALLOCATION			
TOTAL FINANCED AMOUNT (€ MILLION)	2022	2023	2024
180.53	65.23	39.81	75.49

Environmental performance indicators

KPI	UoM	2020	2021	2022	2023	2024
Sludge reduction						
Total sludge (solid and liquid)	t	78,934	66,605	63,229	58,384*	44,974
Reduction with respect to base year (2019)	%	21.3	33.6	37	41.8	55.2
Rationalisation of purifying plants						
Percentage increase of the purifying capacity with respect to base year (2019)	%	3.7	3.7	3.7	3.7	3.9
Dismissed-centralised plants during the year	n.	7	6	4	4	4
Population equivalent interested in the centralisation of purifiers during the year	PE	15,730	26,540	17,100	69,630	7,200
Energy efficiency interventions						
Avoided emissions thanks to energy savings in the purifying compartment**	tCO ₂	399.6	567.36	673.2	1,014.13*	1,214.72***

* 2023 figure has been adjusted for data consolidation.

** The calculation refers to the Terna conversion factor of the national mix for 2019, when the project started. Figures 2021-2024 considers the emissions avoided related to the energy efficiency measures in the purifying compartment carried out in previous years, which also determine benefits for the following year.

*** Estimated figure, pending consolidation of 557,20 MWh saved 2024.



