

WASTEWATER AND STORMWATER SYSTEM

for Antonio Ante

Ecuador is one of the richest countries in Latin America in terms of available water resources, yet the nation remains poor in terms of adequate wastewater treatment infrastructure.

Currently, the vast majority of wastewater is discharged untreated into rivers or the ocean, or treated under anaerobic conditions, i.e. in septic tanks, negatively impacting the environment and the general health situation. An environmentally benign treatment of wastewater is fundamental to reduce health problems among the most vulnerable caused by contamination and pollution, as well as to mitigate climate change risks. Ecuador identified the treatment of solid and liquid waste as a key sector for climate mitigation in Ecuador’s Nationally Determined Contribution (NDC).

To achieve a reduction of GHG emissions, proper and safe management of wastewater is essential. This includes sewer networks and wastewater treatment plants.

Wastewater Management in Antonio Ante

The canton Antonio Ante is located in the Imbabura Province in Northern Ecuador. It has 54,000 inhabitants, of which 53% are considered poor. Currently, 44% of the inhabitants do not have access to sanitation services.



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FELICITY in a nutshell

“Financing Energy for Low-carbon Investment-Cities Advisory Facility” is an initiative of GIZ and the European Investment Bank (EIB) to support low-carbon infrastructure projects in cities that significantly contribute to sustainable development and climate change mitigation.

As a project preparation facility, FELICITY offers technical assistance to cities in designing and structuring their infrastructure investment projects.

FELICITY prioritises the interest of cities and incorporates the perspective of international financiers.

Presently, 85% of wastewater is discharged untreated into rivers or treated under septic conditions. The population suffers from environmental, social, and sanitary problems. During the rainy season, the canton experiences flooding by both rainwater and grey water.

The project “Stormwater Network, Extension of the Sewer Networks and Wastewater Treatment Plans” foresees the construction of six new wastewater treatment plants (WWTP) at strategic sites, as well as considerably extend the existing sewer network.

The project identified 17 critical sites usually affected by floods during heavy rains and aims to establish a stormwater collection system. The project will reduce greenhouse gas emissions (mainly methane) from wastewater. Furthermore, it will contribute to climate change adaptation by improving the resilience of the canton to extreme weather events.

31,000 inhabitants will benefit from better sanitation services through the project. It will also increase the treatment of wastewater from 15% to 90%, thus improving local health conditions and contributing to the recovery of the rivers Ambi and Chorlavi. The rainwater collection system will furthermore prevent flooding, and thereby reduce damages in local infrastructure.

FELICITY's support to Antonio Ante

FELICITY supports the project promoter, i.e. the Decentralised Autonomous Municipal Government of Antonio Ante, in preparing a bankable project in line with international financing requirements, capacitating the project promoter, and facilitating the project's financing. FELICITY's technical assistance addresses crucial challenges in project preparation, such as feasible and best-fit technological options, net GHG emission reductions, environmental and social impact assessments, clear and sound funding schemes, as well as required institutional arrangements.



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