

# SEWERAGE SYSTEM AND STORMWATER NETWORK

in the urban zone of Jipijapa, Province Manabí

Ecuador is one of the richest countries in Latin America with regard to 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 mitigation of greenhouse gas (GHG) emissions in its Nationally Determined Contribution (NDC).



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

## Wastewater Management in Jipijapa

The canton of Jipijapa is located in the south of the province of Manabí. The zone has one of the highest poverty rates in Ecuador with about 83% of the population considered poor. The canton provides access to sanitation services for about 59% of the population. The existing wastewater treatment plant functions suboptimally. The stormwater system is also deficient; it is



### 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 facilitator, FELICITY offers technical assistance to cities in designing and structuring their infrastructure investment projects.

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

estimated that in the rainy season about 20% of urban lands suffer from flooding (1,159 affected premises).

The Project “Sewerage System and Stormwater Network in the Urban Zone of Jipijapa” will establish a new network to collect and canalise wastewater and stormwater. This includes both the rehabilitation of existing canalisation and a wastewater treatment plant, as well as the construction of new infrastructure in order to expand the service coverage.



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This project will benefit a current population of 44,805 inhabitants, improving their quality of life. The pollution of the environment will be mitigated, achieving better water, soil, and air quality. Furthermore, the risk of flooding, e.g. due to the effects of recurrent climatic events such as El Niño, will be reduced along with the related economic losses. By capturing and treating wastewater, greenhouse gas emissions, especially of methane, will also be reduced.

## FELICITY's support to Jipijapa

FELICITY supports and capacitates the project promoter, i.e. the Autonomous Decentralised Municipal Government of Jipijapa, in preparing a bankable project in line with international financing requirements and by facilitating the project's funding. 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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