

## Environmental and Social Data Sheet

### Overview

Project Name:	WEST PANAMA CITY SANITATION PROGRAMME - CHORRERA
Project Number:	2015-0865
Country:	PANAMA
Project Description:	The overall objective of this operation is to support the Panama Sanitation Project in the Panama Oeste Province. The project will consist of the construction of a wastewater collection system - sewerage networks, pumping stations and household connections-, the construction of a conveyance system and a wastewater treatment plant to provide full sanitation services to the sector of La Chorrera and other surrounding areas. The project is a successor operation to the West Panama City Sanitation Programme - Burunga, also supported by the EIB.

EIA required: yes

Project included in Carbon Footprint Exercise<sup>1</sup>: yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

### Environmental and Social Assessment

#### Environmental Assessment

The EIB proposed operation will support the second intervention of the *Panama Sanitation Programme* in the Panama Oeste province. The project consists of the construction of a wastewater treatment facility, the sewers and the wastewater collection system in the districts of La Chorrera and Arraiján.

Panama Oeste is mostly urban, with a high water supply coverage of about 80%. It has one of the highest growth rates in the country. Though the Government has invested in urban infrastructure, notably roads and water supply services to keep pace with the demographic growth, sanitation infrastructure is lagging behind. Only 38% of the population is connected to independent sewerage systems and small treatment facilities, with most of them not working or in a poor state of maintenance. Collected wastewater is thus discharged untreated into rivers and the rest of the population utilizes septic tanks, pit latrines or simple open pits, mostly inappropriate solutions given the population density. This situation leads to serious surface and groundwater pollution, thus resulting in health problems in an area where 25% of the population is under the age of 14. The project area is located in a tropical forest area considered as a fragile ecosystem. Rivers show high levels of *E. coli*, a clear indicator of human pollution.

<sup>1</sup> Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

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The EIB financed components will focus on the sewers and wastewater collection network in the areas of San Bernardino (Arraiján district) and Martín Sánchez (La Chorrera district).

Both the Waste Water Treatment Plant (WWTP) and the sewers have been screened according to article 24.1 of the “Ley General del Medio Ambiente” – or General Environmental Law - No 41 of July 1998, defining the projects subject to an environmental impact assessment. According to articles 22, 23 and 24 of the Executive Decree No 123 of 2009, the projects in both cases were classified as Categoría III, thus requiring a full Environmental and social Impact Assessment (ESIA).

According to the Environment and Safeguards Compliance Policy of the Inter-American Development Bank (IADB), the lead co-financier, the operation has been classified as a category “B” thus requiring full EIAs, one for the WWTP and another one for the sewers component.

The Government of Panama enacted Law 25 in March 2015, by which the Ministry of Environment (Ministerio de Ambiente) assumed all the functions of the former National Environmental Authority (ANAM). The Executive Decree of 2009 regulates the Environmental Impact assessment (EIA) approval process. The Project's Coordination Unit – Unidad Coordinadora de Proyecto (UCP) will ensure that construction activities are carried out in compliance with the Environmental and Social Management Plans (ESMPs), supported by international consultants. The UCP has shown to apply good environmental and social practices.

In European context The WWTP would require a full EIA according to the EIA Directive 2014/52/EU (Annex I) and the sewers scheme would fall under Annex II. A strategic environmental assessment (SEA) as defined in the SEA Directive 2001/42/EC is not required by local legislation. The project promoter, the Ministry of Health (MINSA) is committed to respect the WWTP discharge in full compliance with Panama Regulations, mostly in line with EU requirements (see table below).

Thresholds (mg/l)	EU Directive	Panama legal requirements
BOD5	25	35
COD	125	100
Total SS	35	35
P*	1	5
N*	10	10

\*Only required for EU declared sensitive areas

The wastewater treatment plant will incorporate a standard biological treatment process with anaerobic sludge digestion to recover methane and cogenerate energy. It is expected to produce about 20 tonnes of residual sludge per day at full capacity in 2030, to be disposed in a municipal landfill. The new landfill will have enough capacity to receive the sludge produced by the 3 WWTPs. Nonetheless the promoter is exploring other potential alternatives i.e. the project requires that sludge must comply with Class I of the national standard DGNTI-COPANIT 47-2000, so that it can be further used as a fertilizer.

This operation also includes a capacity building component to support the implementation of a water quality and of an industrial discharges monitoring systems in the project beneficiary area.

The project's contribution to climate action - mitigation is estimated at 45% of the loan. This figure is based on the reduction of methane emissions to the atmosphere produced under anaerobic conditions in septic tanks and in the currently poorly operated infrastructure. These

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emissions are estimated at 34,000 tCO<sub>2</sub>/year, which includes the savings from the energy cogenerated in the WWTP.

### **Social Assessment, where applicable**

Social impacts of the project include the disruption to services, noise, temporary occupation of public or private space, traffic disruptions and safety hazards. The project doesn't affect any protected area, species or indigenous groups. No involuntary resettlement is foreseen.

The Government of Panama has ratified all 8 ILO fundamental conventions and the Promoter shows awareness and compliance with health and safety regulations.

### **Public Consultation and Stakeholder Engagement**

Public consultation for the environmental impact assessment of projects follows national regulations, as described in Executive Decree No. 123 of 14 August 2009. The Plan de Participación Ciudadana consisted of interviews with key stakeholders, surveys, meetings with communities and specific groups and workshops. Both EIAs have been made available to the public on the promoter and IADB websites. During programme preparation, citizen participation, communication and dissemination plans were designed, and a complaints resolution mechanism was developed, with the aim of reducing or mitigating social conflicts and promoting participation by key stakeholders.

### **Other Environmental and Social Aspects**

The UCP has obtained certifications in three strategic aspects: ISO 9001 (Quality Management), ISO 14001 (Environmental Management) and OHSAS 18001 (Occupational Health and Safety Management) in March 2017.

## **Conclusions and Recommendations**

The project supports the Government of Panama's effort in addressing environmental problems in the country. The project beneficiary area is subject to rapid population growth with an estimated beneficiary population of circa 220,000 at project completion. The new sewerage and treatment system will foster the protection of the urban rivers and the Panama Bay; it will also reduce the pollution of underground waters, thus benefitting public health. Overall the project will have a positive impact on the population due to the employment created and underpinning the foundations for the economy in an area whose growth has until now taken place in a context of high urban poverty.

The Promoter will be required: i) to implement and follow the recommendations of the Environmental and Social Impact Assessments and the Environmental and Social Management Plans, and ii) not to start the works related until the necessary assessment has been finalized and approved by the competent authority. Once the EIA is available, the Promoter will provide the Bank with an electronic copy for publication on the EIB website.

Taking into consideration the above undertakings, the project is considered to be acceptable for Bank financing from an environmental and social perspective.