

Luxembourg, 27.01.2025

Environmental and Social Data Sheet

Overview

Project Name:	COSTA RICA ELECTRIC TRAIN
Project Number:	2023-0892
Country:	Costa Rica
Project Description:	The project comprises the development of a tram-train system in the Greater Metropolitan Area of Costa Rica with frequencies of 10 minutes at peak times. The project includes three main components: (i) Rehabilitation, track duplication, electrification, and upgrade of two existing rail lines, (ii) Acquisition of 28 new electric trainsets to operate on both lines and (iii) Construction of two depots and one maintenance workshop.

EIA required: yes

Project included in Carbon Footprint Exercise¹: no

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

Environmental and Social Assessment

Project Description

The project consists of the development of a tram-train public transport system, by means of upgrading and extending the existing railway infrastructure in San José and the Greater Metropolitan Area and acquisition of new electric rolling stock. The project includes the following main components:

1. Line 1 Paraíso – Atlántico with a new connection to Pacífico:
 - reconstruction, track duplication and electrification of the existing Line 1 between the stations Atlántico and Arrabará (approx. 25 km),
 - extension of line 1 from Arrabará to Paraíso (approx. 2.3 km of existing right of way, where tracks are currently dismantled),
 - construction of a connection between the stations Atlántico and Pacífico (approx. 2.3 km of which approx. 1.3 km on new alignment),
 - Construction of a new train depot in Paraíso;
2. Line 2 Atlántico – Alajuela:
 - reconstruction, track duplication and electrification of the existing Line 2 between the stations Atlántico and Alajuela Hospital (approx. 21 km),
 - extension of line 2 from Alajuela Hospital to Alajuela Centro on new alignment (approx. 1.1 km),
 - construction of a new train depot and maintenance workshop in Las Cañas;
3. Acquisition of approx. 28 tram-train units.

¹ Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO₂e/year absolute (gross) or 20,000 tonnes CO₂e/year relative (net) – both increases and savings.



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The operating speed of the tram-trains will be up to 80 km/h on the sections where the alignment and traffic safety conditions allow it, in particular, where the line is segregated from the road and pedestrian traffic.

The tram-train system will be operated from 5am to 11pm. This will be a significant improvement comparing to the current service limited to the morning and evening peak hours.

The Promoter of the project is the Costa Rican Railway Institute (*Instituto Costarricense de Ferrocarriles, INCOFER*).

Environmental Assessment

Compliance with applicable Environmental Legislation

In Costa Rica, the EIA procedure is regulated by the “Regulation for the Environmental Assessment, Control and Monitoring” (*“Reglamento de evaluación, control y seguimiento ambiental”*, Decree N° 43898 -MINAE-S- MOPT-MAG-MEIC).

The competent authority for issuing the environmental consent called “Environmental Feasibility (License)” (*“Viabilidad (Licencia) Ambiental”* (VLA)), is the National Environmental Technical Office (*Secretaría Técnica Nacional Ambiental* (SETENA)).

In 2020 a preliminary EIA was carried out for a previous version of the project with a wider scope, which also included the reconstruction and electrification of Line 3 Atlántico – Ciruelas, Line 4 Alajuela – Ciruelas and Line 5 Ciruelas – El Coyol. On the basis of this preliminary EIA, SETENA issued a “Potential Environmental Feasibility” (*“Viabilidad Ambiental Potencial”* (VAP)), which is an intermediate step and allows further project preparation but does not allow the commencement of the works. This project is largely included in the wider scope analysed in 2020, with the exceptions of the extension of Line 1 to Alajuela Centro, some existing level crossings that will remain instead of being delevelled, and the connection between Atlántico and Pacífico, which will be implemented fully at grade instead of partially in cut&cover as planned in 2020.

A full Environmental and Social Impact Assessment (ESIA) in accordance with the national legislation and the Bank’s Environmental and Social Standards is planned to be undertaken in 2025 prior to the commencement of the works.

Project location, protected sites and biodiversity

The project is located in the densely populated Greater Metropolitan Area. It does not intersect any protected sites. The protected sites closest to the project are Z04 Cerros de la Carpintera and Z08 Río Tribi, and the Important Bird Area CR008 El Rodeo, Cerros de Escazú and La Carpintera.

Concerning biological corridors, the project crosses on the existing alignment corridors C48 Torres, C25 Cobri Surac.

Impacts during construction

According to the preliminary EIA, the main impacts during the construction are expected to be loss of trees and plant cover, noise and vibration created by construction machinery, movement of tracks and works machinery in the project area, dust and mud on the access roads, generation of waste (including hazardous waste), risk of contamination of soil and water.

In order to limit the residual impacts to an acceptable level, the preliminary EIA identified mitigation measures to be included in the Environmental Management Plan.

The full ESIA will include further analysis of project impacts and definition of the appropriate mitigation measures, which will be included in the Environmental and Social Management Plan (ESMP).

Impacts during operation



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According to the preliminary EIA, the main impacts during the operation phase are expected to be mostly positive and related to the reduction of the road traffic and related emissions, the main negative impacts are the risk of contamination of soil and water. As in the case of impacts during construction, the full ESIA will include further analysis of these impacts and the appropriate mitigation measures will be included in the ESMP.

Vulnerability to the climate change

A climate risk vulnerability assessment (CRVA) was carried out in 2020 for the originally considered wider project scope. The project is sensitive to the climate change, in particular, to the risk of increase of precipitations and floods, increase of temperatures, landslides. The vulnerability to the climate change will be further analysed in the full ESIA, amongst other taking into account the National Climate Change Adaptation Plan, and the design will include the necessary adaptation measures.

Paris alignment

The project has been assessed by the Bank's services for Paris alignment in accordance with the policies set out in the Climate Bank Roadmap. The project consists of construction of infrastructure and acquisition of vehicles for zero direct emission transport; therefore, it is considered to be aligned with the low carbon goal. The climate risk of the project is assessed as medium and, therefore, it is considered to be aligned with the resilience goal.

Social Assessment

Resettlement

The project will mostly be implemented within the existing right of way and reasonable efforts have been made to avoid physical and economic displacement as much as possible.

The two sections that will be implemented on new alignment, the new connection between the stations Atlántico and Pacífico and the extension of Line 2 from Alajuela Hospital to Alajuela Centro, will be implemented mostly along existing urban roads.

As the project will include track duplication and some minor adjustments of the alignment, some land acquisition along the existing track will be necessary. In addition, in certain areas there has been some encroachment into the existing right of way and the corresponding land will need to be recovered for the project. Moreover, the project will affect the access to some land plots or buildings.

The two new depots and maintenance workshops in Paraíso and Las Cañas will require additional land acquisition.

As result of the above the project will require some demolition of existing buildings and structures, with related economic and physical displacement. In addition, there might be temporary restriction of land use during construction activities that may result in temporary loss of access to land, physical, cultural assets or natural resources.

At this point in time, it is not possible to provide precise quantification for economic and physical displacement. According to a preliminary evaluation, the project will require approx. 133,000 m² of land to be expropriated. The removal of the encroachment will concern approx. 74,200 m² of land and 611 m² of structures. The two sections on the new alignment will mostly be implemented in existing urban roads, requiring a transfer of approx. 24,500 m² of land. The project is expected to result in physical displacement of approximately 40 households.

The promoter prepared a Resettlement Policy Framework with an entitlement matrix including measures to mitigate and compensate the impacts related to involuntary resettlement. The RPF is in accordance with the Costa Rican legislation and the relevant EIB standards. The Promoter and the EIB have disclosed the document on their respective websites.



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A Resettlement Action Plan (RAP) will be prepared prior to the commencement of the works. RAP will include a detailed census, asset inventory, livelihood restoration measures in line with the Costa Rican legislation and the EIB standards. The RAP will be developed in consultation with the project-affected persons, to ensure acceptance of the proposed mitigation measures and facilitate the involuntary resettlement process. It will include a grievance mechanism to address concerns and grievances related to the involuntary resettlement process raised by the project affected persons, host communities or others.

Social Vulnerability & Gender

In the preliminary studies, the Promoter assessed impacts of the project on vulnerable categories and gender. According to the demand analysis, women are expected to represent 55% to 60% of the passengers. The preliminary study includes an Action Plan for addressing the social vulnerability and gender aspects during the design, construction and operation phases. The Action Plan outlines measures in relation to inclusiveness of the consultation processes, employment opportunities, support to women-led enterprises, security and accessibility of the tram-train system, prevention of sexual harassment.

More detailed analysis of vulnerable communities and gender-related aspects of the project will be carried out in the ESIA and RAP and the necessary measures will be defined in more detail at that stage.

Gender equality / Gender Tag: Significant Gender Equality Contribution. The project will significantly improve the public transport system in the Greater Metropolitan Area, especially benefiting women, who represent the majority of its users and have less access to the individual motorised transport than men. Furthermore, the preliminary studies included an analysis of best practices for addressing the social vulnerability and gender aspects during the design, construction and operation phases. It outlined measures in relation to inclusiveness of the consultation processes, employment opportunities, support to women-led enterprises, security and accessibility of the tram-train system and prevention of sexual harassment that will be integrated into the project.

Labour standards

Costa Rica ratified 8 of the 10 Fundamental Conventions and all 4 Governance Conventions of the International Labour Organisation (ILO). The national Labour Code includes provisions deriving from these conventions, as well as from the ILO Technical Conventions ratified by Costa Rica. In addition to the obligations stemming from the national Labour Code, the Promoter will require the contractors to comply with the Bank's Environmental and Social Standard 8 Labour Rights.

Accessibility of rail services

The construction of the new stations and modernisation of the existing ones included in the project will be carried out in conformity with the requirements concerning accessibility for persons with disabilities and persons with reduced mobility. The rolling stock characteristics will also be compliant with these requirements. Thus, the overall accessibility of the rail services will be improved.

Transport safety

Concerning the increase of road traffic (trucks and machinery) during construction, as well as disruption of the urban traffic, the related risks will be analysed and the corresponding mitigation measures will be defined in the ESIA.

In the operation phase, the project is expected to result in modal shift of passenger traffic from road to rail. In addition, the level crossings will be modernised or, in the case of those with heavy traffic, replaced by separate grade crossings. Thus, the project will improve the overall transport safety.

Cultural Heritage



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The project includes rehabilitation of some structures that are protected, architectural monuments, such as the buildings of the Pacífico, Atlántico, Cartago, Belén and Heredia stations, and works in the vicinity of protected monuments. Any works with potential impacts on these monuments will be coordinated from their design phase with the competent authority, the Centre of Investigation and Conservation of Heritage of the Ministry of Culture and Youth (*Centro de Investigación y Conservación del Patrimonio Cultural del Ministerio de Cultura y Juventud*).

The ESMP will include a procedure for properly protecting any archaeological findings.

Public Consultation and Stakeholder Engagement

The Promoter carried out initial consultations with some main stakeholders, in particular with the municipalities in which the project is located. Further engagement with the stakeholders will be carried out during the ESIA preparation, prior to the commencement of the works, as well during the project implementation and operation.

The Promoter will prepare a Stakeholder Engagement Plan (SEP) for the project, which will specify these further engagement activities, including consultations and communication campaigns.

As part of the stakeholder engagement process, the Promoter shall put in place a grievance mechanism for receiving any complaints related to environmental or social aspects of the project, as well as for dealing with them in an efficient and appropriate way in line with the Bank standards. The SEP will provide the details of the local grievance redress mechanism for the project as well as the contact details of the people responsible for addressing community issues. The Promoter will ensure the presence of field liaison officers to facilitate communication with the local communities.

Other Environmental and Social Aspects

A dedicated Project Implementation Unit (PIU) will be established in the Promoter's organisation. The PIU will receive assistance by consultants with international experience, including, among other, support in relation with the environmental and social aspects of the project implementation.

Conclusions and Recommendations

The project consists of a substantial reconstruction and upgrading of existing railway infrastructure and requires an ESIA in accordance with the national legislation and the Bank's Standards. At this stage a preliminary environmental and social analysis has been carried out. This analysis permitted outlining the main environmental and social impacts and risks of the project.

Overall, the project will substantially improve the public transport system in the Greater Metropolitan Area of Costa Rica, and is expected to result in modal shift from road to rail with the consequent reduction of energy consumption, noise, and emissions of pollutants and CO₂. All this should result in an improvement to the environmental situation in comparison to the "without project case".

According to the preliminary ESIA, the main residual negative impacts consist of some additional land take and resettlement of affected households. Other lesser impacts include some localised noise/vibration, occasionally dust and mud on the access roads during the construction. The impacts and the corresponding mitigation measures are to be further analysed at the full ESIA stage.

The Finance Contract will include the following conditions.



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Prior to the each disbursement of the loan for financing works and supplies, the Promoter shall provide to the Bank evidence that a Project Implementation Unit (PIU) are in operation with terms of reference, staff, resources and technical assistance, all to the Bank's satisfaction

Prior to the first disbursement of the loan for financing works and supplies, the Promoter shall:

- establish an integrated Environmental and Social Management System (ESMS) covering the activities of the project;
- establish a SEP;
- establish a Gender Action Plan;
- carry out a full ESIA in compliance with the national legislation and the Bank's standards, and provide evidence thereof, including environmental consent issued by the competent authority; the ESIA shall among other cover the aspects of biodiversity, social vulnerability and gender, road safety impact assessment, cultural heritage assessment;
- establish an ESMP; the ESMP shall among other cover the aspects of waste management, road traffic management, cultural heritage management, as well as any other relevant aspects identified in the ESIA;
- carry out a CRVA and provide evidence that appropriate measures have been included in the project design;
- prepare and implement a RAP, including livelihood restoration measures, in alignment with the RFP prepared in accordance with the Costa Rican legislation and the relevant EIB standards;
- provide evidence that the environmental and social impact mitigation measures, as well as other relevant aspects identified in the ESIA and CRVA have been included in the project works, supply and service contracts;
- establish grievance mechanisms related to the environmental and social performance of the project and to the involuntary resettlement process, the contact details of which shall be published on the Promoter's website, as well as on the billboards at the construction sites.
- establish a project workers grievance mechanism.

All the above documentation shall be in conformity with the national legislation, the Environmental and Social Standards of the Bank, and to the Bank's satisfaction.

Prior to each disbursement of the loan for financing works, the Promoter shall submit to the Bank evidence that ESMS, SEP, RAP and ESMP are being properly implemented, including completion of resettlement prior to commencement of works and a RAP completion audit by an independent / external third-party (once the RAP is fully implemented).

The Promoter shall keep the abovementioned PIU, grievance mechanisms and ESMS throughout the duration of the Project.

The Promoter shall regularly report on the activities carried out under the SEP, implementation of the ESMS, ESMPs, RAPs, and any other measures set out in the ESIA as well as on the implementation of the Gender Action Plan and sex disaggregated outcomes.

With these conditions in place, the project is acceptable for EIB financing in environmental and social terms.