

Luxembourg, 16.07.2025

Environmental and Social Data Sheet

Overview

Project Name:	STRATEGIC INTERCONNECTION AND TRANSMISSION LINES	
Project Number:	2024-0049	
Country:	Peru	
Project Description:	Investment loan for the Peruvian side of the Peru-Ecuador power interconnector line consisting in the 500 kV Piura Nueva-Frontera transmission line (270 km) and substation. The project also includes other strategic transmission lines, such as the 138 kV Puerto Maldonado transmission line (160 km) and the 220 kV Valle del Chira substation.	
EIA required:	Yes	
Project included in Carbon Footprint Exercise ¹ :	Yes	

Environmental and Social Assessment

Environmental Assessment

The operation follows a Project Finance modality and consists of three projects, in different stages of implementation:

- 220 kV Valle del Chira substation – construction finalised; located in Miguel Checa, Piura Region;
- the 138 kV Puerto Maldonado transmission line (160 km) – under construction; located in the Madre de Dios region;
- and the Peruvian side of the Peru-Ecuador power interconnector line consisting in the 500 kV Piura Nueva-Frontera transmission line (270 km) and substation – under permitting process; located in the Tumbes and Piura regions.

The main legislation governing the environmental impact assessment in Peru is represented by Law No. 27446/2001 (amended by Legislative Decree No. 1078 (2008)), which laid the bases for the EIA national system (Sistema Nacional de Evaluación de Impacto Ambiental/SEIA). Projects with likely significant impact are mandatorily subject to detailed Environmental Impact Assessment (EIA-d) and the permitting process is carried out by the national competent authority SENACE (Servicio Nacional de Certificación Ambiental para las Inversiones Sostenibles). For the rest of the projects, with likely low to medium impact, the permitting process is conducted by sectoral or regional authorities and entails the preparation of either a semi-detailed Environmental Impact Assessment (medium impact) or of an Environmental Impact Declaration (Declaración de Impacto Ambiental / DIA) (low impact).

Valle del Chira substation: was subject to the preparation of a DIA, which included information regarding baseline, identification of environmental impacts, and definition of mitigation measures, covering E&S risks across all phases of the project. The Certificate of Inexistence of Archaeological Remains (CIRA) was also obtained as part of the permitting process. The DIA was approved by MINEM through Resolución Directoral N° 0136-2022- MINEM/DGAEE,

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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issued on 19 August 2022. This was made available to the public on the website of the Ministry of Energy and Mining as issuing authority.

The substation has been in operation since December 2023 and is located in an area with low importance vegetation (mainly low-growing shrubs), confirmed also through monitoring activities. No significant risks or impacts to biodiversity are deemed to be evident.

Puerto Maldonado transmission line: was subject to detailed EIA (EIA-d), which included detailed baseline studies of the physical, biological, and socioeconomic environments, analysis of project alternatives, delineation of direct and indirect areas of influence, and assessment of potential impacts on community health and safety, biodiversity, protected areas, vulnerable groups, and Indigenous Peoples. The EIA-d was approved by SENACE through R.D. N° 00091-2024-SENACE-PE/DEIN, issued on 19 July 2024, and was made available to the public on the relevant website.

The project involved clearing of vegetation and forested areas, for which a vegetation removal authorisation (*autorización de desbosque*) was issued by the National Service for Forest and Forest Fauna (Servicio Nacional Forestal y de Fauna Silvestre SERFOR), on the condition that an ecological compensation plan must be implemented. The plan must be submitted to SERFOR. The associated revegetation and reforestation programme involves the reforestation of 88,449 hectares and the revegetation of 58,105 hectares.

According to the baseline information and field surveys, the project components are generally not located in areas highly significant for biodiversity. Species classified as vulnerable under the IUCN Redlist have been identified, however, the conclusion that they do not trigger critical habitat has been made against national criteria. Clarifications on whether they are likely to trigger critical habitat or high value biodiversity according to EIB criteria will need to be provided, together with the associated mitigation strategy, as the case may be.

Piura Nueva-Frontera transmission line and substation: The project is currently in the permitting phase, subject to detailed EIA (EIA-d), which included detailed baseline studies of the physical, biological, and socioeconomic environments, analysis of project alternatives, delineation of direct and indirect areas of influence, and assessment of potential impacts on community health and safety, biodiversity, protected areas, vulnerable groups, and Indigenous Peoples. The EIA-d has been prepared and submitted for the consultation process.

While the EIA-d is generally comprehensive, it lacks an analysis of cumulative impacts with other ongoing, or planned projects and plans in the project area.

In terms of biodiversity assessment, the interconnector crosses part of the protected areas of the Peruvian state of Coto de Caza El Angolo, including part of its buffer zone, as well as part of the buffer zone of the Cerros de Amotape National Park. It also crosses the Important Bird Conservation Sites of Coto de Caza El Angolo (102,788 ha of the Protected Area) and Talara (165,811 ha of the Protected Area). The project has received a favourable compatibility report with the National Park Protection Area (NPA) from the National Service of Natural Protected Areas.

The field surveys were performed and the baseline indicates that no critical habitat is triggered. As in the case of the Puerto Maldonado transmission line, the determination was made based on national requirements and additional efforts are required to confirm or amend the conclusions, by determining the presence and representativity of concerned species such as the Ecuadorian White-fronted Capuchin (*Cebus aequatorialis*, CR/IUCN), the Grey-backed Hawk (*Pseudastur occidentalis*, VU/IUCN), the Blunt-eared Bat (*Tomopeas ravus*, EN/IUCN), and the Blackish-headed Spinetail (*Synallaxis tithys*, VU/IUCN), among others, and propose avoidance/mitigation measures accordingly, including a Biodiversity Action Plan.

In terms of cultural heritage, so far there is no evidence of formal submission to obtain the Certificate for Inexistence of Archaeological Remains (CIRA) to be issued by the Ministry of Culture. In addition, no assessment of intangible cultural heritage (e.g., spiritual value, cultural landscapes, traditional knowledge) was performed as part of the EIA-d preparation.



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The monitoring activities are compiled in an Environmental Monitoring Plan (*Plan de Vigilancia Ambiental*), including actions to monitor environmental parameters throughout the project lifecycle, to verify compliance and the effectiveness of management measures.

EIB Carbon Footprint Exercise

In accordance with the Bank's current Carbon Footprint methodology, the project presents sources of CO₂ equivalent emissions from electric (ohmic) losses. These emissions are however largely offset by the indirect emission savings resulting from the reduction of inefficient fossil fuel generation and increase in renewable production (2030, base scenario) enabled by the major projects of the operation (the Peruvian side of the Peru-Ecuador power interconnector plus substation and the Valle de Chira substation). The total relative effect of the operation is a net annual reduction in CO₂ equivalent emissions by 557 kt CO₂-e per annum, which is considered as a good proxy (conservative value) for the operation and does not consider additional potential relative emission reductions from the Puerto Maldonado-Iberia transmission line.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

EIB Paris Alignment for Counterparties Framework

The operation has been assessed for its Paris alignment and it is considered to be aligned against low carbon and resilience goals in line with the policies set out in the Climate Bank Roadmap and with the EIB's Energy Lending Policy. The Borrower is a Special Purpose Vehicle with multiple shareholders and is not in scope of the PATH framework.

Social Assessment

The Borrower has put in place a framework for compensation and livelihood restoration, Programme for Land Use Rights and Compensation (*Programa de Constitución de Derechos sobre Tierras y Compensación Justa / PCDTyCJ*). The programme includes provisions prioritising voluntary, negotiated agreements and seeking to avoid physical displacement.

Substation Valle del Chira: The substation Valle del Chira is currently operational with a minimal workforce permanently based at the site, with subcontracted security agents providing rotating 24/7 surveillance under a formal contract.

According to the information provided by the Borrower, the substation involved no physical or economic displacement. However, no documentary evidence was provided to demonstrate the land acquisition or compensation process. Also, in the vicinity of the substation, informal houses are to be found. Whether inhabited or not, there is still a risk that the residential area may expand.

During the DIA preparation, no Indigenous Peoples or Native Communities were identified in the project's area of influence, nor Indigenous lands or ancestral territories.

Puerto Maldonado transmission line: The project is under construction (42% at the time of the appraisal mission), the EPC contractor being ELECNOR, supervised by the Sponsor of the operation, the Spanish company CELEO, employing a combination of qualified and unqualified labour, the majority of whom are men.

All agreements for the acquisition of easement rights for the transmission infrastructure and towers across private and State areas have been made through easement contracts in compliance with national legislation. No expropriations have been implemented. The rest of the



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land renters or land users (non-owners) have been compensated for their crops based on market prices and replacement costs. Currently, there is no formal Livelihood Restoration Plan (LRP) for this project nor any available information on whether there are specific mechanisms to deal with in the case of contracts affecting vulnerable population.

Piura Nueva-Frontera transmission line and substation: The project is at permitting stage, expected to be completed by August 2025, while the construction is foreseen to commence in November 2025. The same EPC contractor shall be in place, ELECNOR.

The project involves, as in the case of the Puerto Maldonado transmission line, establishment of easement rights for the transmission infrastructure across private and communal/statal lands. As is the case with the Puerto Maldonado transmission line, no LRP has been prepared.

In both cases, with the Puerto Maldonado transmission line and the Piura Nueva-Frontera transmission line and substation, the EIA-d concluded that no Indigenous Peoples are present within the formally defined direct or indirect areas of influence.

Peru has been a member of the ILO since 1919 and all core conventions have been ratified, in particular ILO 169, concerning Indigenous and Tribal Peoples in Independent Countries. CELEO and its contractor, ELECNOR, show overall compliance with Peruvian labour law. CELEO has internal labour standards, such as a Code of Conduct (Código Ético), an Equality Plan (Plan de Igualdad), and a Human Rights Policy (Política de Derechos Humanos).

As regards non-discrimination and equal opportunity, CELEO has in force a Código Ético and a Normativa de Prevención de Situaciones de Acoso o Discriminación. These documents establish a zero-tolerance approach toward any form of discrimination, harassment (including sexual harassment and mobbing), and emphasise the company's obligation to respect human dignity, equality, and diversity in the workplace.

Public Consultation and Stakeholder Engagement

Public participation is a mandatory component of the EIA-d process. The Terms of Reference for the preparation of the EIA require the preparation of a Citizen Participation Plan (*Plan de Participación Ciudadana* / PPC) outlining the mechanisms for the dissemination of project information and for community engagement activities. The project information must be publicly available through notices, brochures, and/or local media before holding formal events, such as public consultation workshops (*talleres de participación ciudadana*), where the public has the opportunity to comment on or ask for clarifications on the projects and the EIA reports.

Institutional stakeholders are identified by the competent authority leading the EIA process and are provided with project related documents. There are two types of such stakeholders involved in the process: binding entities (*entidades opinantes vinculantes*), whose opinion and conditions are binding to the project, such as SERFOR, SERNANP, ANA, and the Ministry of Culture and non-binding entities (*entidades opinantes no vinculantes*) that provide complementary input.

In the process of issuing the final decision, the competent authority considers the outcome of the EIA-d reports, all opinions issued by the institutional stakeholders and associated conditions and the feedback from the public consultation process. The national legislation does not foresee the obligation of stakeholder engagement during the construction and operation of the project, only during the permitting stage.

The only project currently in the process of consultation is the Piura Nueva-Frontera transmission line and substation.

It will be required that a SEP, including a grievance-redress mechanism, be prepared for each of the three projects to include the ongoing benefit to the community during the construction and operational phases of the projects. The main objectives of the SEP shall be to define the scope of engagement activities during the construction and operation stages. Its specific



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objectives shall be to (i) identify the stakeholders and the type and level of information necessary; (ii) set conditions for the organisation of the consultation process and access to information, ensuring accessible and transparent consultation with affected project-stakeholders; and (iii) to establish a relevant grievance mechanism.

Other Environmental and Social Aspects

CELEO has in place ISO certifications, such as ISO 14001 (Environmental Management), ISO 9001 (Quality Management), ISO 37001 (Anti-Bribery Management), and ISO 19601 (Compliance Management). Additionally, depending on the country of operation, the corporate management system is complemented by the adoption of environmental and social procedures required by the respective national legislation. ELECNOR, the EPC contractor, has an Integrated Management Policy that includes commitments to legal compliance, pollution prevention, occupational safety, and efficient resource use.

Both CELEO and ELECNOR have established robust Occupational Health and Safety (OHS) management systems aligned with international standards (e.g., ISO 45001, ISO 31000). The Peruvian EIA legislation does not cover risks and impacts related to occupational health and safety (OHS), which are regulated separately. In this context, both CELEO and ELECNOR have identified OHS risks associated with the Project's operation and construction phases, respectively. ELECNOR has prepared a specific set of risk identification and assessment and control measures (*Identificación de Peligros, Evaluación de Riesgos y Medidas de Control / IPERCs*) for each construction activity carried out for the Transmission Line and Substation construction.

Piura Nueva-Frontera transmission line and substation: The Ecuadorian section (Associated Facility of the project) of the interconnector has been permitted under the national legislation. It has also been approved for financing by the EIB, as investments targeted by the operation have been structured to meet the EIB E&S requirements and were not expected to have significant residual social and/or environmental impacts and risks, provided that all respective mitigation and remedial measures are implemented in full. A Binational Technical Working Group was created by the two countries in 2014 and includes representatives of the electricity sector of both countries, who periodically coordinate studies and activities, and jointly monitor the milestones that allow binational commitments to be met.

Conclusions and Recommendations

The Borrower has the capacity to implement the E&S requirements of the operation. The investments targeted by the operation have been structured to meet the EIB E&S requirements and are not expected to have significant residual social and/or environmental impacts and risks, provided that all respective mitigation and remedial measures are implemented in full.

At this stage, however, there is outstanding information preventing the Bank from completing its environmental and social due diligence. This will be carried out, based on the additional information received in due course, during the Stage II approval process. This information includes both the Puerto Maldonado transmission line and the Piura Nueva-Frontera transmission line and substation projects:

- preparation of Stakeholder Engagement Plans, including Grievance Redress Mechanism;
- development of the Livelihood Restoration Plans;
- analysis of cumulative impacts with other ongoing, or planned projects and plans in the project's area of impact (for the Piura Nueva-Frontera transmission line and substation project only),



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- confirmation related to critical habitat assessment and associated mitigation strategy, including Biodiversity Action Plan, as the case may be;
- A forest compensation plan (for Puerto Maldonado transmission line project only)
- Certificate of Inexistence of Archaeological Remains (CIRA) and a Report on intangible heritage assessment (for the Piura Nueva-Frontera transmission line and substation project only)

As a condition for first disbursement, the Borrower shall submit, to the satisfaction of the Bank, an updated Environmental and Social Action Plan (ESAP) designed to fill the gaps with the EIB's Environmental and Social standards.

Further conditions for signature and/or disbursement will be defined upon completion of the Bank's environmental and social due diligence for the operation.

Under these conditions, it is considered that this operation appropriately addresses environmental and social issues and meets the Bank's requirements.