DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

Peru

FINANCING SUSTAINABLE ELECTRIC TRANSPORT SOLUTIONS IN PERU

(PE-L1254)

PROJECT PROFILE

This document was prepared by the project team consisting of: LEADER Project Team Leader; Maria Netto (IFD/CMF), Team Leader; Benoit Lefevre (CSD/CCS), Alternate Team Leader; Agustina Calatayud, Alternate Team Leader (INE/TSP); Rafael Capristán (INE/TSP); Enrique Nieto, Rodrigo Chaparro, Francisco Demichelis, Isabelle Braly-Cartillier, Cecilia Bernedo, (IFD/CMF); Jose Carlos Echeverria, (INE/ENE): Jaime Fernandez (CSD/CCS); Claudio Alatorre y Javier Jimenez (LEG/SGO); Bernardo Deregibus (ORP/ORP); Andres Suarez (FMP/CPE).

Under the Access to Information Policy, this document is subject to Public Disclosure.

PROJECT PROFILE

Peru

I. BASIC DATA

Project Name: Project Number:	ame: Financing Sustainable Electric Transport Solutions in Peru umber: PE-L1254				
Project Team:	Maria Netto (IFD/CMF), Team Leader (CSD/CCS), Alternate Team Leader; A Alternate Team Leader (INE/TSP); Rafael (Enrique Nieto, Rodrigo Chaparro, Francisco Braly-Cartillier, Cecilia Bernedo, (IFD/C Echeverria, (INE/ENE): Jaime Fernandez Alatorre y Javier Jimenez (LEG/SGO); (ORP/ORP); Andres Suarez (FMP/CPE).	 r; Benoit Lefevre Agustina Calatayud, Capristán (INE/TSP); Demichelis, Isabelle CMF); Jose Carlos (CSD/CCS); Claudio Bernardo Deregibus 			
Borrower	Republic of Peru				
Executing Agency:	Corporación Financiera de Desarrollo S.A. (COFIDE)				
Financial Plan:	IDB (CTF) ¹ – Loan:	US\$ 9.5 million			
	IDB (CTF) – Grant:	US\$ 0.477 million			
	IDB (Ordinary Capital) – Loan:	US\$10.5 million			
	Total:	US\$20.477 million			
Safeguards:	Policies triggered: OP-102, OP-703 (B1, B2 B13).	έ, B3, B7, B.10, B.11,			
	Classification: B.13 – FI-2 to be confirmed of	during due diligence.			

II. GENERAL JUSTIFICATION AND OBJECTIVES

A. Background and justification

- 2.1 Transport accounts for 23% of global energy-related Greenhouse Gas (GHG) emissions.² In Latin America and the Caribbean (LAC), this share is 36%.³ The decarbonization of the transport systems will require widespread adoption of available clean technologies, as well as strong policies to ensure full utilization of these advances and rapid uptake at a scale.
- 2.2 Innovations in low-emission technologies for urban transport offer the potential to achieve environmental objectives, with economic gains. Improving the fuel and vehicle efficiency of the transport system is a key action assisting LAC countries in meeting their Paris Climate Agreement objectives (Nationally Determined Contributions or NDCs).⁴

¹ Clean Technology Fund (CTF) funding for this program is expected to be submitted for approval by November 2019, and will be subject to the Financial Procedures Agreement between IDB and CTF.

² <u>Mobilizing Sustainable Transport for Development</u>, Analysis and Policy Recommendations from the United Nations Secretary-General's High-Level Advisory Group on Sustainable Transport, United Nations, 2016.

³ Martinez, H. <u>El Desafío del Sector Transporte en el Contexto del Cumplimiento de las Contribuciones</u> <u>Determinadas a Nivel Nacional de América Latina</u>. Economic Commission for Latin America and the Caribbean (ECLAC), 2018.

⁴ GHG emissions reduction and energy efficiency in the transport sector is stated in NDCs from these countries: Argentina, Brazil, Colombia, Mexico, Paraguay and Peru.

- 2.3 Electric Vehicles (EV) have emerged as one of the key technologies contributing to decarbonization and lowering local pollution. These benefits can be extended to increasing energy security, as reducing the use of fuel oils can guarantee the stability of energy supplies, ever more relevant in countries dependent on imports. Existing literature suggests that operating an EV should be far less expensive than a conventional vehicle. The problem remains the initial investment, which may be significantly higher. In emerging economies where EV technology is still nascent, its financial viability is more likely to be contingent to the existence of incentives that can offset the incremental investment vis-à-vis a conventional vehicle, and to various technical, economic, cultural and regulatory factors prevailing in the context in which the technology is being introduced. Technological migration of vehicles must overcome these barriers, if the path to sustainable mobility is to be achieved in the near future.
- 2.4 **Macroeconomic context and the transport sector in Peru.** Energy and GHG emission in the transport sector are strongly linked to rising population and income. Over the past decade, Peru's economic outlook has been promising. Amidst recent difficulties in the political context, GDP grew 2.5% in 2017, followed by an economy recovery in 2018 with a 4% growth rate.⁵
- 2.5 Alas, CO₂ emissions have also increased in the past five years, with a 18% increase in 2016 compared to 2012. In a Business-As-Usual scenario, emissions from road transport in Peru are expected to rise fivefold by 2050, from 15.8 million of tCO₂e in 2010 to 79 million tCO₂e in 2050.⁶ Compared to its regional peers, Peru has the highest concentration of atmospheric Particulate Matter in both urban and rural areas.⁷
- 2.6 Mini-buses and other small-capacity vehicles are the primary mode of urban public transport in Peru. These are mostly unregulated, informally operated by private companies or individuals, with little coordination of services and poor vehicle standards. Three-wheeled vehicles (moto-taxis) are often used for short distances in many municipalities of Lima and provinces throughout the country.
- 2.7 In order to improve urban mobility and reduce GHG emissions, the Government of Peru has been giving high priority to electromobility solutions including reference to it as a public policy in its recently approved the Competitiveness National Plan, as well as adopting new legislation allowing for transportation subsidies. It has also developed a <u>Nationally Appropriate Mitigation Actions (NAMA)</u> for the transformation to a clean energy matrix through the use of clean transport, setting specific goals and actions to promote electromobility.⁸ Finally, specific actions are also being taken by the government to improve situations in cities such as Lima and Callao, by creating the *Autoridad de Transporte Única* to manage all city transport.

⁵ <u>Instituto Nacional de Estadística e Información</u> (INEI), accessed on June 2019; <u>Peru 2018 -Article IV</u> <u>Consultation Staff Report</u>, International Monetary Fund (IMF), July 2018; *Perspectivas de la Economía Mundial* (IMF), July 2019.

⁶ Proyecto Planificación ante el Cambio Climático, 2014.

⁷ Estudio de Diagnóstico, Evaluación, Análisis y Propuesta para Apoyar la NAMA de Preparación del Sector Energético para la Transformación hacia una Matriz Energética Limpia a través del uso de Transporte Limpio en el Perú, Hinicio Latin America, comissioned by MEM, July 2017.

⁸ The UNFCCC defines NAMAs as "any action that reduces emissions in developing countries and is prepared under the umbrella of a national governmental initiative."

- 2.8 From a financial point of view, the introduction of EV technology in urban transport can have important operational savings potential. This is particularly relevant in the case of buses, as fuel constitutes a substantial part of the annual costs of owning and operating a bus. An analysis with support from IDB commissioned by the Ministry of Energy and Mines⁹, found that fuel savings can be around 37% and 18% for taxis and moto-taxis, respectively, and as much as 72% for buses, when compared to gasoline or diesel operated vehicles. Although actual savings will vary depending on the distance traveled and fuel used, the results of analysis undertaken suggest that the economic case for taxis, moto-taxis and buses is strong.
- 2.9 Further, another essential factor to consider for the implementation of EVs, is the way in which electricity is produced. Peru's energy matrix is relatively clean, with a 52% share of renewable energy (including large hydro) and the relatively low cost of electricity might be sufficient to allow EVs to achieve commercial success locally, if coupled with incentives associated to reducing the cost of capital and capacity building.¹⁰
- 2.10 Despite its environmental benefits, efficiency and technical viability, upfront investment of EV compared to conventional vehicles is high. The acquisition price of an EV in Peru is estimated to be 11% and 25% higher for taxis and moto-taxis, respectively. In the case of buses, the price results 76% more costly.¹¹ Moreover, the introduction of EV technology also involves investing capital in other essential elements to its operation, such as charging infrastructure, to guarantee similar operating conditions with the replaced technologies. These incremental costs are one of the main barriers to its uptake, especially in developing markets where an EV market at scale has not yet materialized. As public passenger transport services rely on private actors, promoting their migration to EV technology also requires maintaining the profitability of the economic model for the private party, for whom operating these vehicles is its business.
- 2.11 **The financial barrier to EV development.** As described above, one of the most significant factors limiting the uptake of the EV technology is its high initial cost. Even though the lower Operational Cost (OPEX) of an EV is sufficient to payback the investment, the Capital Expenditure (CAPEX) is much higher compared to a conventional vehicle, which means the payback period of an EV is comparatively much longer, between 10 to 14 years in average, compared to 7 to 8 years in conventional vehicles.¹² Consistently, to compete with the latter, EV investments require funding that can be repaid at terms that match their payback structure and that minimize the impact of financial costs in the overall costs of the project, so that financial viability can be achieved without risking profitability.

⁹ The Basel Agency for Sustainable Energy. <u>Análisis y Diseños de Modelo de Negocio y Mecanismo de Financiación para Buses Eléctricos en Lima</u>, Perú. July 2019.

¹⁰ Ibid [9], BASE (2019).

¹¹ Ibid [9]. Hinicio Latin America (2017).

¹² Ibid [9], BASE (2019) and Ibid [7] Hinicio Latin America (2017).

- 2.12 The Peruvian banking system is considered to be highly resilient, well capitalized and profitable. Credit to the private sector (as a percentage of Gross Domestic Product) has been expanding from 28% in 2000 to 40% in 2017.¹³
- 2.13 Despite its robustness, the local financial system is still underdeveloped, and its deposit structure is mainly short term (overnight deposits and savings account for a 29.3% and 29% share of deposits, respectively), with aversion by banks to allocate capital on riskier, longer-term assets.¹⁴ This directly affects the general ability of the banking system to provide long-term credit, as their core funding is mainly short-term. In addition, more rigorous financial regulation increases aversion by banks to allocate capital on riskier, longer-term assets.
- 2.14 Moreover, risk analysis and financing decisions for EVs must be based on a holistic understanding of the complex nature of these investments and the long-term benefits associated to them, which the financial system is yet to acquire due to the nascent stage of the market. Besides the lack of familiarity with the performance of this technology other factors accentuate perceptions of risk, such as the potential impact of regulation in tariffs and project returns, the still limited number of suppliers of EV products and services and uncertainty about the future development of EV infrastructure and services, due to the current dominance of diesel/gas technology in the sector. All these can further hinder the provision of credit or, at any rate, increase its costs.
- 2.15 In sum, long-term private credit does not currently exist for EV, which has to do with both the funding structure of the financial system and risk characteristics inherent to the EV investment itself.
- 2.16 The program intends to ease the impact of the higher CAPEX on overall project return profile, better matching project cash flows to the repayments of the financing. In parallel to the financing of the projects per se, complementary Technical Cooperation (TC) activities (see ¶2.20) will support the enhancement of regulation and business models, as well as the building of capacities, to reduce perception of risk.

B. Intervention proposed and program objectives

- 2.17 The general objective of the program is to reduce fossil fuel consumption and GHG emissions through the promotion of low-carbon mobility solutions in Peru.¹⁵ The specific objective is to stimulate and demonstrate financial viability private investments in EVs.
- 2.18 <u>Clean Technology Fund</u> (CTF)¹⁶ concessional loan resources will be channeled by IDB via COFIDE, Peru's second-tier national development bank, and blended with IDB's resources to provide long-term financing for EV projects, including:

¹³ <u>Peru 2018 Article IV Consultation Staff Report</u>, IMF, July 2018; <u>Sistema Financiero Peruano</u>, SBS, February 2019.

¹⁴ <u>Evolución del Sistema Financiero</u>, December 2018, SBS, last updated in May 2019.

¹⁵ Private-led projects are those developed by private operators, concessionaires, technology providers or other private firms.

¹⁶ CTF funding for this program was approved under the 3rd phase of the Dedicated Private Sector Programs, which is intended to make use of a range of financing instruments taking risks that commercial lenders are not able to bear.

(i) replacement of diesel/gasoline operated vehicles and new fleets with EVs;¹⁷ and (ii) power generation for green mobility solutions, mainly EV charging stations (preferably solar-powered). Financing will be delivered to final beneficiaries through first-tier FIs. Studies have already identified potential projects and operators, technology providers and concessionaries for buses, taxis and mototaxis.¹⁸

- 2.19 The program will combine the concessional loan instrument with the use of adapted risk transfer mechanisms, such as guarantees and insurance¹⁹. The employment of these mechanisms will be discretionary, and loans will not be subject to its use.
- 2.20 CTF resources will also finance complementary TC activities to support the overall implementation of the program, including awareness, capacity building, evaluation of business models, monitoring, and reporting within COFIDE, and knowledge sharing.
- 2.21 The program is expected to have a transformational and long-term impact since FIs and vehicle operators will be encouraged to further support these investments, once its viability and profitability has been demonstrated²⁰. Program activities can also contribute to ongoing government efforts towards formalizing and improving public transport.

III. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

- 3.1 The program will be executed under a sole financing component by which COFIDE will use IDB (US\$10.5 million) and CTF (US\$9.5 million) loan resources²¹ to provide long-term financial support to private-led EV projects for urban transport.²² Funds will be channeled via second-tier loans.
- 3.2 The program intends to demonstrate the financial viability of these projects and the potential of scaling up public and private efforts to develop green mobility solutions, familiarizing market actors (operators, banks and financial intermediaries, insurers) with EV investments, and mobilizing capital to expand the industry in the long term (demonstration and sustainability effect).
- 3.3 The proposal builds on prior engagement of IDB with the national government and the Municipality of Lima to support the adoption of electric buses by private operators²³ and a dialogue with relevant actors, public and private, including

¹⁷ For the purpose of the program, EVs include buses, taxis, and three-wheeled vehicles (moto-taxis). The program does not consider private light vehicles. The disposal of vehicles replaced will be treated in the safeguards of the program.

¹⁸ See Ibid [9], BASE (2019) and Ibid [7]. Hinicio Latin America (2017), these assessments will be further detailed in additional market analysis underway.

¹⁹ Guarantees can be provided from CRECER Fund (Law Decree No. 1399, 2018) managed by COFIDE. Local insurance is supported with TC <u>Regional Energy Savings Insurance and Risk Management Program</u> (<u>ATN/CF-15453-RG</u>).

²⁰ Ibid [9], BASE (2019).

²¹ The leverage ratio of the component requires that the CTF resources be matched with at least equal amounts from the IDB and from local resources.

²² Projects will be deemed eligible based on conditions established in the Operating Regulations, to be agreed between IDB and COFIDE.

²³ See TC <u>Accelerating NDC implementation</u>. Unlocking clean buses in LAC (ATN/AC-16601-RG, <u>ATN/OC-16602-RG, ATN/OC-16603-RG</u>).

banks, operators, concessionaires, the *Instituto Metropolitano Protransporte de Lima* and sector ministries. It also builds on existing IDB initiatives with COFIDE in assessing the potential of investments in electric taxis and moto-taxis,²⁴ as well as IDB experience with similar programs with National Development Banks in the region.²⁵ In this context, the program benefits from previous studies considering: (i) market assessment of potential financiers: evaluations of possible opportunities and restrictions for financing the acquisition and incorporation of electric vehicles; (ii) technical and economic feasibility on operation: profitability analysis of electric vehicles; (iii) business models and potential financing mechanisms; and (iv) risk matrix and implementation strategy. A detailed market assessment, considering previous studies and findings, will be developed in support to the program preparation. The program will be executed by COFIDE, a second-tier development bank that promotes and finances productive investment and infrastructure throughout Peru, including initiatives with social and environmental impact.²⁶

3.4 **Program alignment.** The program is consistent with the Update to the Institutional Strategy (UIS) 2010-2020 (AB-3008), with the challenge of Productivity and Innovation through the financing of investments from third parties mobilized by the project, and with the crosscutting theme of Climate Change (CC) and Environmental Sustainability through promotion of the EV relaying on renewable energy projects. Following the joint MDB approach on climate finance tracking, an estimated 100% of IDB funding for this program will be invested in CC mitigation activities and will contribute to the IDB Group's climate finance goal of 30% of operational approvals by year's end 2020. Additionally, it will contribute to the Corporate Results Framework (CRF) 2016-2019 (GN-2727-6) in the performance indicators of reduction of emissions, and MSMEs financed. The program is also aligned with the objectives of improvement of productivity, institutional strengthening and environmental sustainability and climate change of the IDB Country Strategy for Peru 2017-2021 (GN-2889). It is consistent with the Support to SMEs and Financial Access/Supervision Sector Framework Document (GN-2768-7), the Sustainable Infrastructure for Competitiveness and Inclusive Growth Strategy (GN-2710-5), and the Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and RE (GN-2609-1). The operation will be in the Operational Program Report for 2020.

IV. ENVIRONMENTAL SAFEGUARDS AND FIDUCIARY SCREENING

4.1 As per IDB Directive B.13 of the Environment and Safeguards Compliance Policy (OP-703), the program does not require classification ex ante. Consistent with the approach to financial intermediation operations, the IDB will conduct the analysis of the proposed program at two levels: (i) corporate level, specifically COFIDE's ability to manage and apply IDB's environmental and social safeguards, identifying the capacity of areas within the entity to allow safeguards to be applied to investments to be financed with IDB resources; and (ii) in the analysis of specific sub-projects or investments. The results of the analysis of the operation will be summarized in the Environmental and Social Management Report that will define

²⁴ See TC <u>ATN/CF-15453-RG</u>.

²⁵ In 2013, IDB approved the "Bogota's Integrated Public Transit System Transformation Program" (<u>3003/TC-CO</u>), funded with CTF resources, to support the financing of low carbon buses for Bogota's Sistema Integrado de Transporte Público via Colombia's national development bank, Bancóldex.

²⁶ Such as the COFIGAS program.

the environmental and social requirements of the program. This set of requirements will be integrate into the program's Operating Regulations.

4.2 A fiduciary institutional assessment of COFIDE will be undertaken in preparation of the program.

V. RESOURCES AND TIMETABLE

5.1 Distribution of the POD for Quality and Risk Review (QRR) is expected on October 17, 2019; the approval of the Draft Loan Proposal by the Operations Policy Committee (OPC) on February 14, 2020, and the consideration of the Loan Proposal by the Executive Board of Directors is expected by March 25, 2020. An estimated budget of US\$120,000 (US\$65,510 from administrative funds and US\$54,490 from CTF) and 1.244 FTEs are required to complete preparation of the proposal (see Annex V).

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.



Safeguard Policy Filter Report

Operation Information

Operation						
PE-L1254 Financing Sustainable Electric Transport Solutions in Peru						
Environmental and Social Impact Category	High Risk Rating					
B13						
Country	Executing Agency					
PERU	PE-COFIDE - CORPOR DE DESARROLLO	PE-COFIDE - CORPORACION FINANCIERA DE DESARROLLO				
Organizational Unit	IDB Sector/Subsector					
Connectivity Markets and Finance Division	FINANCIAL MARKETS					
Team Leader	ESG Primary Team Mer	nber				
MARIA E. NETTO DE A. C. SCHNEIDER						
Type of Operation	Original IDB Amount	% Disbursed				
Loan Operation	\$20,477,000	0.000 %				
Assessment Date	Author					
16 Sep 2019	ceciliabe Project Assista	ceciliabe Project Assistant				
Operation Cycle Stage	Completion Date					
ERM (Estimated)	9 Sep 2019					
QRR (Estimated)	17 Oct 2019					
Board Approval (Estimated)	25 Mar 2020					
Safeguard Performance Rating						
Rationale						



Safeguard Policy Filter Report

Safeguard Policy Items Identified

B.1 Bank Policies (Access to Information Policy- OP-102)

The Bank will make the relevant project documents available to the public.

B.2 Country Laws and Regulations

The operation is expected to be in compliance with laws and regulations of the country regarding specific women's rights, the environment, gender and indigenous peoples (including national obligations established under ratified multilateral environmental agreements).

B.3 Screening and Classification

The operation (including <u>associated facilities</u>) is screened and classified according to its potential environmental impacts.

B.7 Supervision and Compliance

The Bank is expected to monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.

B.13. Noninvestment Lending and Flexible Lending Instruments

Ex-ante impact classification may not be feasible for this type of operation. This includes: policy-based loans, Financial Intermediaries (FIs) or loans that are based on performance criteria, sector-based approaches, and conditional credit lines for investment operations.

Potential Safeguard Policy Items

B.10. Hazardous Materials

The operation has the potential to impact the environment and occupational health and safety due to the production, procurement, use, and/or disposal of hazardous material, including organic and inorganic toxic substances, pesticides and persistent organic pollutants (POPs).

B.11. Pollution Prevention and Abatement

The operation has the potential to pollute the environment (e.g. air, soil, water, greenhouse gases).

Recommended Actions

Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.

Additional Comments

This operation is a financial intermediation operation B.13. Consistent with the approach to financial intermediation operations, the Bank will conduct the analysis of the proposed program at two levels; one at the corporate level, specifically CODIFE's ability to manage and apply the Bank's environmental and social safeguards, identifying the capacity and expertise of areas within the entity to allow safeguards to be applied to projects and investments to be financed with IDB resources. The other level is in the analysis of specific sub-projects or investments.

Environmental and Social Strategy (ESS)				
Operation Name	Financing Sustainable Electric Transport Solutions in Peru			
Operation Number	PE-L1154			
Prepared by	Isabelle Braly-Cartillier- IFD/CMF			
Operation Details				
IDB Sector	IFD/CMF			
Type of Operation	Loan Operation (Financial Intermediation)			
Environmental and Social Classification	B.13 (FI-2 to be confirmed during due diligence)			
Disaster Risk Rating	N/A			
Borrower	Corporación Financiera de Desarrollo S.A. (COFIDE)			
Executing Agency	COFIDE			
IDB Loan US\$ (and total project cost)	IDB (CTF) – Loan: US\$ 9.5 million IDB (CTF) – Grant: US\$ 0.477 million <u>IDB (OC) – Loan: US\$10.5 million</u> TOTAL: US\$20,477 million			
Applicable Policies/Directives	OP-102, OP-703 (B1, B2, B3, B7, B.10, B.11, B13)			
Operation Description				

The general objective of the program is to reduce fossil fuel consumption and GHG emissions through the promotion of low-carbon mobility solutions in Peru.¹ The specific objective is to stimulate and demonstrate financial viability private investments in EVs.

<u>Clean Technology Fund</u> (CTF)² concessional loan resources will be channeled by IDB via COFIDE, Peru's second-tier national development bank, and blended with IDB's resources to provide long-term financing for EV projects, including: (i) replacement of diesel/gasoline operated vehicles with EVs;³ and (ii) power generation for green mobility solutions, mainly EV charging stations (preferably solar-powered). Financing will be delivered to final beneficiaries through first-tier FIs regulated by the Central Bank and co-financed with FIs own resources.

The program will be executed under a sole financing component by which COFIDE will use IDB (US\$10.5 million) and CTF (US\$9.5 million) loan resources to provide long-term financial support to private-led EV projects for public transport. Additional CTF grant resources (US\$0.477 million) will finance TC activities to support the implementation of the program, with regards to demand creation and the efficient provision of loans.

COFIDE, the executing agency of the program, has been a long-time partner of IFD/CMF. It recently benefited from technical assistance to issue its first sustainable bond on the local market. The issuance received a positive Second Party Opinion from the renowned company Vigeo. It is worth mentioning that the SPO includes a review of COFIDE sustainable practices.

¹ Private-led projects are those developed by private operators, concessionaires, technology providers or other private firms.

² CTF funding for this program was approved under the 3rd phase of the Dedicated Private Sector Programs (DPSP), which is intended to make use of a range of financing instruments taking risks that commercial lenders are not able to bear.

³ For the purpose of the program, EVs include buses, taxis, and three-wheeled vehicles (moto-taxis). The program does not consider private light vehicles.

Key Potential ESHS⁴ Risks and Impacts

As advanced before, the project aims at promoting low carbon transport and GHG emission reductions. Beyond those positive impacts, it is expected that the market structuring efforts and risk mitigation tools to be piloted under the Project could also result in increased market confidence regarding those activities, paving the way for future replication of the Project.

Nevertheless, the subprojects that will be eligible for financing under the program could have some potential E&S risks and impacts. Those risks and impacts are expected to be low or moderate, mainly linked to the construction phase of the EV charging stations and to the disposal of the non EV vehicles replaced. Subprojects to be eligible for financing will only be of Category B or C, no Category A subproject will be eligible. Subprojects involving involuntary resettlement, or any negative impact on natural habitats, cultural heritage sites or indigenous people will not be eligible for financing.

Executing agency institutional capacity – COFIDE has not been executing IDB loans recently and for that reason a detailed assessment of their capacity to manage E&S risks will be realized during due diligence.

Information Gaps and Strategy for Analysis and Management

Due to its financial intermediation structure and following Directive B.13 of the Environment and Safeguards Compliance Policy (OP-703), the program does not require classification ex-ante. Consistent with the approach to financial intermediation operations, the Bank will conduct the analysis of the proposed program at two levels; one at the corporate level, specifically COFIDE's ability to manage and apply the Bank's environmental and social safeguards, identifying the capacity and expertise of areas within the entity to allow safeguards to be applied to projects and investments to be financed with IDB resources. The other level is in the analysis of specific sub-projects or investments.

In any case, during the environmental and social analysis of the program (E&S due diligence) the following topics will be analyzed:

a) Normativity applicable to the project and gap analysis of such normativity with the IDB safeguards

- b) Institutional capacity of COFIDE in the management of environmental and social risks
- c) Identification of potential E&S risks and impacts of eligible subprojects
- d) Confirmation of FI-2 categorization

d) Management procedures to be applied by COFIDE to assess eligibility and mitigate the potential environmental risks of sub-projects that could be identified.

The results of the analysis of the operation will be summarized in the Environmental and Social Management Report (ESMS – IGAS in Spanish) that will define the environmental and social requirements of the program. This set of requirements (E&S Management System or ESMS) will be integrate into the Program's Operating Regulations.

Opportunities for IDB Additionality on Environment and Social matters

No opportunities for additionality was identified at this stage.

⁴ Environment, Social, Health and Safety.

Annex Table: Operation Compliance with IDB Safeguard Policies

To be prepared during due diligence.

Additional Appendices (if any)

N/A

Policies / Directives	Policy / Directive Applicable?	Rationale for applicability of Policy / Directive	Actions required during Preparation & Analysis
OP-703 Environment and Safeg	guards Complia	ance Policy	
B.2 Country Laws and Regulations	Yes		
B.3 Screening and Classification	Yes		
B.4 Other Risk Factors	No		
B.5 Environmental Assessment and Plans Requirements	No		
B.5 Social Assessment and Plans Requirements (including Livelihood Restauration Plan ⁵)	No		
B.6 Consultation	No		
B.7 Supervision and Compliance	Yes		
B.8 Transboundary Impacts	No		
B.9 Natural Habitats	No		
B.9 Invasive Species	No		
B.9 Cultural Sites	No		
B.10 Hazardous Materials	Yes		
B.11 Pollution Prevention and Abatement	Yes		
B.12 Projects Under Construction	No		

Annex Table: Operation Compliance with IDB Safeguard Policies

⁵ OP-703 applies when livelihood impacts are not significant and don't lead to physical displacement (see *Transitional Guidance in instruments for Physical Displacement, Economic Displacement and Economic Losses under OP-710 and OP-703* (TG-005) for more information).

Policies / Directives	Policy / Directive Applicable?	Rationale for applicability of Policy / Directive	Actions required during Preparation & Analysis
B.13 Noninvestment Lending and Flexible Lending Instruments	Yes		
B.14 Multiple Phase and Repeat Loans	No		
B.15 Co-financing Operations	No		
B.16 In-Country Systems	No		
B.17 Procurement	No		
OP-704 Natural Disaster Risk M	lanagement Po	blicy	
A.2 Analysis and management of Type 2 risk scenario	No		
A.2 Contingency planning (Emergency response plan, Community health and safety plan, Occupational health and safety plan)	No		
OP-710 Operational Policy on I	nvoluntary Res	settlement	
Resettlement Minimization	No		
Resettlement Plan Consultations	No		
Impoverishment Risk Analysis	No		
Resettlement Plan and/or Resettlement Framework Requirement	No		
Livelihood Restoration Program Requirement ⁶	No		

⁶ OP-710 applies when livelihood impacts lead to physical displacement (see Transitional Guidance in instruments for Physical Displacement, Economic Displacement and Economic Losses under OP-710 and OP-703 (TG-005) for more information).

Policies / Directives	Policy / Directive Applicable?	Rationale for applicability of Policy / Directive	Actions required during Preparation & Analysis
Consent (Indigenous Peoples			
and other Rural Ethnic			
OP-765 Operational Policy on I	ndigenous Peo	pples	
Sociocultural Evaluation Requirement	No	• 	
Good-faith Negotiations and proper documentation	No		
Agreement with Affected Indigenous Peoples	No		
Indigenous Peoples Compensation, and Development Plan and/or Framework Requirement	No		
Discrimination Issues	No		
Transborder Impacts	No		
Impacts on Isolated Indigenous Peoples	No		
OP-761 Operational Policy on 0	Gender Equalit	y in Development	
Consultation and effective participation of women and men	No		
Application of safeguard and risk ⁷ analysis	No		
OP-102 Access to Information	Policy		
Disclosure of relevant Environmental and Social	No		

⁷ Risks may include: (i) unequal access to project benefits/ compensation measures; (ii) men or women disproportionally affected due to gender factors, (iii) non-compliance with applicable legislation related to equality between men and women; (iv) increased risk of gender-based violence, including sexual exploitation, human trafficking and sexually transmitted diseases, and (v) disregard of women's ownership rights.

Policies / Directives	Policy / Directive Applicable?	Rationale for applicability of Policy / Directive	Actions required during Preparation & Analysis
Assessments Prior to Analysis			
Mission, QRR, OPC and			
submission of the operation for			
Board consideration			
Provisions for Disclosure of			
Environmental and Social	Voc		
Documents during Project	103		
Implementation			

Appendix 1: Maps

Feb 19	Feb 26	Mar 5	Mar 12	Mar 19	Mar 26	Apr 2	Apr 9	Apr 16	Apr 23	Apr 30	May 7	May 14
		ESIA Up	date			*	E Disclosure	of ESHS Docu	ments		7	QRR
			RAP developn	nent			🏳 ESIA ar	nd RAP Consu	Itation			
			DRA	developmen	t			A	nalysis Misisor			
									ESIA Upda	ate post-consu	Itation	
									RAP upda	ite post-consul	Itation	

Appendix 2 (optional): Tentative Timeline for ESHS Documents development

INDEX OF SECTOR STUDIES

Studies	Date	References and Links
Kreuzer, F. and Wilmsmeier, G., <i>Eficiencia</i> <i>energética y movilidad en América Latina y el</i> <i>Caribe</i> , ECLAC	2014	https://www.cepal.org/es/publicaciones/36798-eficiencia- energetica-movilidad-america-latina-caribe-hoja-ruta-la
Analysis of the ESI. Micale, Stadelmann, Boni.	2015	Energy Savings Insurance: Pilot Progress, Lessons Learned, and Replication Plan, Global Innovation Lab for Climate Finance Lab.
Mobilizing Sustainable Transport for Development, Analysis and Policy Recommendations from the United Nations Secretary-General's High-Level Advisory Group on Sustainable Transport, United Nations.	2016	https://sustainabledevelopment.un.org/content/documents/237 5Mobilizing Sustainable Transport.pdf
Vogt-Schilb, A and Hallegatte, S. Climate Policies and Nationally Determined Contributions: Reconciling the Needed Ambition with the Political Economy.	2017	http://dx.doi.org/10.18235/0000714
Estudio de Diagnóstico, Evaluación, Análisis y Propuesta para Apoyar la NAMA de Preparación del Sector Energético para la Transformación hacia una Matriz Energética Limpia a Través del uso de Transporte Limpio en el Perú.	2017	http://namasenergia.minem.gob.pe//Content/fileman/Uploads/I mages/menu- centroinformacion/Diagn%C3%B3stico%20NAMA%20Transpo rte%20Limpio.pdf
Vehículos eléctricos e híbridos: aspectos conceptuales, legislación nacional y comparada.	2018	Congreso de la Republica. DIDP. Gabriel Duarte.
Martinez, H. El desafío del sector transporte en el contexto del cumplimiento de las contribuciones determinadas a nivel nacional de América Latina. Economic Commission for Latin America and the Caribbean (ECLAC).	2018	https://www.cepal.org/es/publicaciones/44344-desafio-sector- transporte-contexto-cumplimiento-contribuciones- determinadas

Studies	Date	References and Links
Peru 2018 -Article IV Consultation Staff Report, International Monetary Fund (IMF).	2018	https://www.imf.org/en/Publications/CR/Issues/2018/07/25/Per u-2018-Article-IV-Consultation-Press-Release-Staff-Report- and-Statement-by-the-Executive-46099
Evolución del Sistema Financiero, SBS.	2018	https://intranet2.sbs.gob.pe/estadistica/financiera/2018/Diciem bre/SF-2103-di2018.PDF
Sistema Financiero Peruano, SBS.	2019	https://intranet2.sbs.gob.pe/estadistica/financiera/2019/Febrero//SF-0003-fe2019.PDF
Estudio de mercado sobre mototaxis eléctricos em Peru.	2019	Resumen en Powerpoint. Consultoría elaborada por Engie.
Análisis y diseños de modelo de negocio y mecanismo de financiación para buses eléctricos en Lima, Perú.	2019	BASE. Consultoría para IDB. Borrador en Revision.
Jaramillo, M. Is it possible to achieve carbon-free prosperity?	2019	http://bit.ly/IDB-Cfree
Plan Nacional de Infraestructura para la Competitividad.	2019	https://www.mef.gob.pe/contenidos/inv_privada/planes/PNIC_2 019.pdf
Análisis de potencial cartera de proyectos e inversiones más atractivos en iniciativas relacionadas con vehículos eléctricos principalmente buses, taxis, mototaxis y estaciones de carga—que pueden ser financiados con la operación BID PE-L-1254.	2019	Estudio de Mercado, en preparación. Gustavo Collantes. Consultoría para el BID
Estudio sobre el sistema financiero peruano y las condiciones de financiamiento de mediano y largo plazo a inversiones productivas en Perú.	2019	Análisis del sistema financiero, en preparación. Juan Rodríguez. Consultoría para el BID
Estudio de costo beneficio sobre la adicionalidad del programa.	2019	Estudio de costo beneficio, en preparación. Maria Isabel Haro. Consultoría para el BID

Studies	Date	References and Links
<u>A</u> nálisis preliminar de riesgos asociados a las inversiones en VE y la legislación de Perú.	2019	Gestión de riesgos socioambientales, en preparación. Fred Seifert. Consultoría para el BID
Análisis la capacidad institucional de COFIDE bajo la modalidad SECI.	2019	Análisis la capacidad institucional de COFIDE, en preparación. Patricia Nardelli. Consultoría para el BID

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