

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**ECUADOR**

**CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS (CCLIP) FOR  
ELECTRIC MOBILITY**

**(EC-O0009)**

**AND**

**FIRST INDIVIDUAL OPERATION UNDER THE CCLIP FOR THE FINANCING OF  
SUSTAINABLE ELECTRIC TRANSPORTATION IN ECUADOR**

**(EC-L1268)**

**LOAN PROPOSAL**

This document was prepared by the project team consisting of: Joan Prats (IFD/CMF), Project Team Leader; Jean Pol Armijos (INE/TSP), Alternate Project Team Leader; Benoit Lefevre (CSD/CCS), Alternate Project Team Leader; Francisco Demichelis, Maria Netto, Isabelle Braly-Cartillier, Claudia Márquez, Sebastián Vargas, and Cecilia Bernedo (IFD/CMF); Amanda Beaujon, Carlos Echeverría, Marcelino Madrigal, and Kenol Thys (INE/ENE); Pablo Guerrero (INE/TSP); Claudio Alatorre (CSD/CCS); Karina Calahorrano and Alexandra Sánchez (CAN/CEC); Pilar Jiménez de Arechaga (LEG/SGO); Oscar Mitnik (SPD/SDV); and Carolina Escudero and Juan Carlos Dugand (VPC/FMP).

This document is being released to the public and distributed to the Bank's Board of Executive Directors simultaneously. This document has not been approved by the Board. Should the Board approve the document with amendments, a revised version will be made available to the public, thus superseding and replacing the original version.

## CONTENTS

### PROJECT SUMMARY

I.	DESCRIPTION AND RESULTS MONITORING.....	1
A.	Background, problem addressed, and rationale.....	1
B.	Objectives, components, and cost.....	11
C.	Key results indicators .....	13
II.	FINANCING STRUCTURE AND MAIN RISKS.....	14
A.	Financing instruments .....	14
B.	Environmental and social safeguard risks.....	16
C.	Other key issues and risks.....	16
III.	IMPLEMENTATION AND MANAGEMENT PLAN .....	17
A.	Summary of implementation arrangements .....	17
B.	Summary of arrangements for monitoring results .....	19
IV.	ELIGIBILITY CRITERIA .....	20

## APPENDICES

Proposed resolution

ANNEXES	
Annex I	Summary Development Effectiveness Matrix (DEM)
Annex II	Results Matrix
Annex III	Fiduciary Agreements and Requirements

LINKS
<b>REQUIRED</b>
1. <a href="#">Monitoring and Evaluation Plan</a>
2. <a href="#">Environmental and Social Management Report</a>
<b>OPTIONAL</b>
1. <a href="#">Economic Analysis</a>
2. <a href="#">Program Operating Regulations</a>
3. <a href="#">Cover Page presenting the Clean Technology Fund and the corresponding approval</a>
4. <a href="#">Demand study for electric vehicles in Ecuador and Peru</a>
5. <a href="#">Gender and Electric Transportation Annex</a>
6. <a href="#">Safeguard Policy Filter</a>

## ABBREVIATIONS

AWP	Annual work plan
ARCONEL	Agencia de Regulación y Control de Electricidad [Electricity Regulation and Control Agency]
CAPEX	Capital expenditures
CFN	Corporación Financiera Nacional B.P.
CGE	Contraloría General del Estado [Office of the Comptroller General]
COPLAFIP	Código Orgánico de Planificación y Finanzas Públicas [Organic Code of Planning and Public Finances]
CTF	Clean Technology Fund
DPSP	Dedicated Private Sector Programs
e-SIGEF	Sistema Integrado de Gestión Financiera [Integrated Financial Management System]
ESMR	Environmental and Social Management Report
ESMS	Environmental and Social Management System
GHG	Greenhouse gas
ICAP	Institutional Capacity Assessment Platform
ICB	International competitive bidding
ICV	Internal combustion vehicle
IMF	International Monetary Fund
INEC	Instituto Nacional de Estadísticas y Censos [National Statistics and Census Institute]
MEF	Ministry of Economy and Finance
MM-I	Multisector Modality I
MSMEs	Micro, small, and medium-sized enterprises
NCB	National competitive bidding
OPEX	Operating expenses
PCU	Program coordination unit
SNCP	Sistema Nacional de Contratación Pública [National Public Procurement System]
tCO <sub>2</sub> e	Tons of carbon dioxide equivalent

# PROJECT SUMMARY

ECUADOR

CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS (CCLIP) FOR ELECTRIC MOBILITY

(EC-O0009)

AND

FIRST INDIVIDUAL OPERATION UNDER THE CCLIP FOR THE FINANCING OF SUSTAINABLE ELECTRIC  
TRANSPORTATION IN ECUADOR

(EC-L1268)

Financial Terms and Conditions							
<b>Borrower:</b>						<b>Flexible Financing Facility<sup>(c)</sup></b>	<b>IDB Clean Technology Fund</b>
Republic of Ecuador							
<b>Executing agency:</b>				<b>Amortization period:</b>		25 years	40 years
Corporación Financiera Nacional B.P. (CFN) and Ministry of Transportation and Public Works (MTO)				<b>Disbursement period:</b>		5 years	5 years
Source	CCLIP US\$ million	First operation			<b>Grace period:</b>	6 years <sup>(d)</sup>	10.5 years
		US\$ million		%	<b>Interest rate:</b>	LIBOR-based	n/a
<b>IDB (Ordinary Capital and other sources):</b> <sup>(a), (b)</sup>	43	<b>Ordinary Capital</b>	10	30	<b>Credit fee:</b>	<sup>(e)</sup>	n/a
		<b>Clean Technology Fund</b>	23	70	<b>Inspection and supervision fee:</b>	<sup>(e)</sup>	n/a
<b>Total</b>	<b>43</b>		<b>33</b>	<b>100</b>	<b>Weighted average life:</b>	15.14 years	n/a
					<b>Service fees:</b> <sup>(f)</sup>	<sup>(e)</sup>	Fixed 0.25%
					<b>Administrative fee:</b>	n/a	0.45%
					<b>Currency:</b>	U.S. dollars	
Project Summary							
<b>Objective of the CCLIP:</b> The objective of the CCLIP is to reduce fossil fuel consumption and greenhouse gas emissions in Ecuador by encouraging investment in electric vehicles.							
<b>Objective of the first individual operation under the CCLIP:</b> The specific objectives for this operation are to: (i) stimulate financing for private investment in electric vehicles and (ii) encourage the replacement of internal combustion vehicles. The achievement of these objectives will support the general objective of reducing fossil fuel consumption and greenhouse gas emissions in Ecuador by promoting low-carbon mobility.							
<b>Special contractual conditions precedent to the first disbursement of the loan:</b> As special contractual conditions precedent to the first loan disbursement, the borrower will provide evidence of: (i) the approval and entry into force of the program <a href="#">Operating Regulations</a> under the terms previously agreed upon with the Bank, (ii) entry into force of a resource transfer agreement between the Ministry of Economy and Finance and CFN whereby the transfer will occur within 15 days of receipt; and (iii) creation by the CFN of a bank account exclusively to receive program resources from the MEF (paragraph 3.5).							
<b>Exceptions to Bank policies:</b> None.							
Strategic Alignment							
<b>Challenges:</b> <sup>(g)</sup>		SI	<input type="checkbox"/>	PI	<input checked="" type="checkbox"/>	EI	<input type="checkbox"/>
<b>Crosscutting themes:</b> <sup>(h)</sup>		GD	<input checked="" type="checkbox"/>	CC	<input checked="" type="checkbox"/>	IC	<input type="checkbox"/>

- (a) Document GN-2571. Proposal for the Creation of a Clean Technology Fund in the IDB.
- (b) The total amount of the CCLIP available for financing individual operations thereunder may be drawn from the Bank's Ordinary Capital resources or from resources administered by the Bank. The amount and source of the funding concerned will be determined in context of each individual operation, together with the applicable financial terms and conditions. In calculating the total amount available under the CCLIP, the amount of each individual operation financed from the Bank's Ordinary Capital or from resources administered by the Bank will be computed.
- (c) Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency, interest rate, and commodity conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.
- (d) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.
- (e) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the relevant policies.
- (f) This will be a one-time fee payable 60 days after the effective date of the loan.
- (g) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).
- (h) GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, problem addressed, and rationale

- 1.1 **Macroeconomic context in Ecuador.** GDP per capita in Ecuador grew at an annual average of 4.7% from 2008 to 2014, above the regional average of 3.2%. In recent years, however, the country has experienced lower economic growth due to a fall in oil prices and appreciation of the U.S. dollar. Average annual GDP growth in the 2015-2018 period was 0.6%. The crisis created by the COVID-19 pandemic, however, could lead to growth of up to -10.9% in 2020 (International Monetary Fund (IMF), 2020), with a smaller recovery of approximately 4.7% in 2021 and growth rates under 2% through 2025. In turn, the drop of more than 60% in the price of oil from January to April 2020 has affected the country's revenue. Thus, fiscal deficits of 7.5% and 4.8% are expected in 2020 and 2021, respectively. Lastly, overall debt increased from 24% of GDP in 2014 to 45% in 2017 and is expected to reach 64.6% of GDP in 2020 due to the COVID-19 situation. Before the pandemic outbreak, the Government of Ecuador was meeting the targets established in the program signed with the IMF in March 2019. This was canceled and a new agreement reached in August 2020, with special access to funding of US\$6.5 billion over the next 27 months.
- 1.2 **Technological innovations in response to climate change.** The electrification of transportation systems and changes in power generation with zero carbon are two of the pillars for achieving the United Nations' Sustainable Development Goals.<sup>1</sup> In Latin America and the Caribbean, 36% of greenhouse gas (GHG) emissions are from the transportation sector<sup>2</sup> (compared to an average of 23% worldwide).<sup>3</sup> Low-emission technology innovations in the area of transportation offer the prospect of achieving environmental goals alongside economic benefits and social progress.
- 1.3 **The market for electric vehicles.** Electric vehicles have emerged as one of the key technologies for reducing pollution in the transportation sector, as well as increasing energy efficiency. As compared to internal combustion vehicles (ICVs), electric vehicles have propulsion systems and configurations that are more efficient in terms of energy consumption, while no emissions are generated through their operation. As a result, GHG emissions are effectively reduced when ICVs are replaced by electric vehicles.
- 1.4 **Financial barriers to the development of electric vehicles.** The existing literature considers electric vehicles to be less costly to operate than ICVs.<sup>4</sup> Operating expenses (OPEX) decrease not only due to the difference between electricity rates and the cost of fossil fuels, but also to lower maintenance costs.

---

<sup>1</sup> Jaramillo, M., [Is It Possible to Achieve Carbon-free Prosperity?](#), 2019.

<sup>2</sup> Martínez, 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, 2018.

<sup>3</sup> United Nations, [Mobilizing Sustainable Transport for Development](#), 2016.

<sup>4</sup> California Air Resource Board, Battery-Electric Truck and Bus Energy Efficiency Compared to Conventional Diesel Vehicles, 2018.

Electric vehicle technology is much more efficient than combustion engines.<sup>5</sup> Nonetheless, despite the expected operating savings, initial capital investment (CAPEX) can be significantly higher than for ICVs. This means that although lower OPEX should be sufficient to pay for the investment over the long term, the repayment period for an electric vehicle is comparatively longer (as much as 14 years for buses,<sup>6</sup> compared to 7 to 8 years for ICVs). For this reason, investments in electric vehicles require financing that can be repaid on terms tailored to their cost structure, so that financial viability can be achieved without affecting profitability.

- 1.5 **Strategy for developing electric vehicles.** In emerging economies, where the electric vehicle ecosystem is incipient, the financial viability of electric vehicle projects is dependent on the existence of incentives to compensate for the incremental investment compared to ICVs. According to Yang et al. (2016), financial incentives (particularly initial subsidies or tax exemptions) are increasingly being used to promote the rapid adoption of electric vehicles.<sup>7</sup>
- 1.6 **Ecuador's transportation sector.** The transportation sector accounts for 6.7% of Ecuador's GDP<sup>8</sup> and employs 5.4% of the country's total labor force.<sup>9</sup> Carbon dioxide (CO<sub>2</sub>) emissions have increased over the last 10 years in Ecuador and were 30% higher in 2018 than in 2009.<sup>10</sup> The transportation sector accounted for 41.9% of emissions in 2018.<sup>11</sup> What's more, CO<sub>2</sub> emissions from the transportation sector increased by 78% in the same period, from 10.43 million tCO<sub>2</sub>e to 18.6 million. Should this trend continue, CO<sub>2</sub> emissions in Ecuador are expected to rise by 30% over the next decade.<sup>12</sup>
- 1.7 Ecuador's vehicle fleet has undergone significant expansion over the last decade, increasing from 0.9 million registered vehicles in 2008 to 2.4 million in 2018, with an average annual growth rate of 10.7%.<sup>13</sup> Of the total daily number of motor vehicle trips in Quito, the public transportation system accounts for 2.8 million (72.7%), facilitated primarily by around 3,000 buses.<sup>14</sup> These units are

---

<sup>5</sup> United States Department of Energy (Office of Energy Efficiency and Renewable Energy) and United States Environmental Protection Agency, 2018.

<sup>6</sup> Collantes, Gustavo (2020). [Demanda de Vehículos Eléctricos en Ecuador y Perú](#). Report 1.

<sup>7</sup> See Yang, Z., et al. (2016). [Principles for effective electric vehicle incentive design](#). International Council on Clean Transportation White Paper.

<sup>8</sup> Central Bank of Ecuador (2017).

<sup>9</sup> National Statistics and Census Institute (INEC) (2019).

<sup>10</sup> Although per capita emissions in Ecuador (2.5 Co<sub>2</sub>t/capita) are below the average for OECD countries (8.9 Co<sub>2</sub>t/capita), they have been trending markedly upward in recent decades. (World Bank – World Development Indicators. 2016 data).

<sup>11</sup> From 1990 to 2018, CO<sub>2</sub> emissions from the transportation sector rose by 137%. See Crippa, M., et al., Fossil CO<sub>2</sub> and GHG emissions of all world countries: 2019 Report, Publications Office of the EU.

<sup>12</sup> Arroyo, F. and L. Miguel, Análisis de la Variación de las Emisiones de CO<sub>2</sub> y Posibles Escenarios al 2030 en Ecuador. Espacios, Vol. 40 (13) 2019: 5.

<sup>13</sup> INEC, Anuario de Estadísticas de Transporte 2018, 2019. There are 2.1 million light vehicles and 0.3 million commercial vehicles; approximately 36,362 of the latter are buses.

<sup>14</sup> Municipio of the District of Quito, Visión Estratégica de la Movilidad para el Distrito Metropolitano de Quito 2015-2030. Department of Mobility, 2015.



- distributed among 59 private operators and 1 municipal operator.<sup>15</sup> At the same time, a recent study found that there are 16,024 taxis operating formally in the city, while the number of informal units totals 13,323. The formal units belong to a total of 325 private companies and cooperatives and have an estimated demand of 226,352 taxi trips per day.<sup>16</sup>
- 1.8 **Effects of the COVID-19 crisis on the transportation sector.** Although the measures adopted in response to the COVID-19 crisis have led to a reduction in demand for public transportation in 2020, that demand is expected to have returned to levels closer to the pre-crisis scenario by the time the first investments associated with this program are made.<sup>17</sup> Bus operators are expected to try to improve service levels, while biosafety measures will be adopted to reduce the number of passengers on each bus, potentially creating a need to increase bus service frequencies to meet demand. Both factors mean that electric transport will be more efficient, as it provides better service and is more economical to operate over longer routes.
- 1.9 **Electric vehicles in Ecuador's transportation sector.** The presence of electric vehicles in Ecuador's public transportation is incipient, and only a small number of electric vehicles are in transit under current pilot programs. In 2017, Corporación Financiera Nacional B.P. (CFN) financed the purchase of 50 electric taxis for a private operator in the city of Loja. It also provided US\$7.6 million in financing for the purchase of 18 electric buses by a private operator in Guayaquil.<sup>18,19</sup> Other municipios, such as Galápagos and Portoviejo, have shown an interest in this type of investment.
- 1.10 **Challenges in financing for electric vehicles in Ecuador.** Investment in electric vehicles represents a challenge for transportation authorities and operators alike. In the case of electric buses, the initial investment is estimated at approximately US\$380,000, while diesel bus prices start at US\$170,000. For taxis, the initial price for an electric unit is estimated at US\$35,400, compared to an average of US\$22,000 for a conventional unit.<sup>20</sup> Moreover, the introduction of electric vehicles also entails investment in other elements that are essential for their operation, such as charging infrastructure. In the case of Guayaquil, charging stations were provided through a public-private agreement between the municipios and the infrastructure provider. This model is expected to be replicated in other investments in the major cities.
- 1.11 For public transportation operators, electric vehicle technology offers the potential for significant operational savings, in particular for buses, given that fuel

---

<sup>15</sup> Ibid.

<sup>16</sup> GSD, Propraxis, Estudio para Determinar la Oferta y Demanda del Servicio de Taxi en el Distrito Metropolitano de Quito. Estimación de la Demanda Actual y Oferta Necesaria para Cubrirla, Quito City Hall, 2017.

<sup>17</sup> The first investments are expected to take place 1-2 years after the approval of this operation.

<sup>18</sup> Ibid.

<sup>19</sup> These loans are currently active, and their performance is satisfactory.

<sup>20</sup> See the demand study prepared for this project. [Demanda de Vehículos Eléctricos en Ecuador y Perú](#). Report 1. Collantes (2020).

and maintenance represent a considerable share of annual costs for ICVs. Despite high hydrocarbon subsidies in Ecuador, the energy cost per kilometer for an electric bus is estimated at approximately one third of the equivalent for a conventional bus (US\$0.05/km vs. US\$0.15/km). Similarly, the cost per kilometer for electric taxis is less than one quarter of that for a gasoline taxi (US\$0.009/km versus US\$0.04/km).<sup>21</sup> Likewise, maintenance costs for electric buses and taxis are estimated at half those for ICVs (US\$0.15/km versus US\$0.30/km and US\$0.03/km versus US\$0.06/km, respectively).<sup>22</sup> Current electricity costs (which are relevant to the cost of charging) could underpin commercial success for electric vehicles at the local level if accompanied by incentives to reduce cost of capital, such as scrappage payments<sup>23</sup> or the availability of credit at rates and maturities that make investments viable (paragraph 1.17).<sup>24</sup>

- 1.12 From an environmental standpoint, an essential issue to bear in mind how the electricity is produced. Ecuador's power generation matrix is mostly clean, with renewable energy accounting for 83.2%;<sup>25</sup> this means that the indirect emissions of an electric vehicle will be lower than those of an ICV, leading to positive net reductions in emissions.<sup>26,27</sup> Nonetheless, if operators don't eliminate the ICVs that are replaced and they continue to operate alongside the new electric vehicles, then net environmental benefits are diminished. As a result, policies such as payments to buyers of electric vehicles in return for them scrapping their old vehicles has the potential to encourage real substitution while helping to pay the cost of investment in electric vehicles.<sup>28</sup>
- 1.13 In addition, from a fiscal standpoint, the introduction of electric vehicles will lead to substantial savings on the hydrocarbon subsidies. For example, the current diesel price is US\$1.07 per gallon, while the unsubsidized price is US\$2.38 per gallon.<sup>29</sup> This could yield fiscal savings from subsidies of at least US\$160,108 over the life of the vehicle.<sup>30</sup>

---

<sup>21</sup> See [Collantes \(2020\)](#) and the program's economic analysis ([optional link 1](#)).

<sup>22</sup> Ibid.

<sup>23</sup> Yang, Z., et al. (2016). Op. cit. The authors highlight the importance of providing up-front incentives that are clearly quantified at the time the investment is made. Scrappage payments are suitable for this design.

<sup>24</sup> Gómez-Gelvez, et al. (2016). Op. cit.

<sup>25</sup> Electricity Regulation and Control Agency (ARCONEL), Estadística Anual y Multianual del Sector Eléctrico Ecuatoriano, 2018.

<sup>26</sup> The potential for renewable electricity generation in Ecuador is very high, opening up opportunities for the development of mobility systems with almost zero climate impact. The country has extensive potential for hydroelectric generation, with estimated capacity of 74,000 MW. [Collantes \(2020\)](#).

<sup>27</sup> In addition, the use of digital platforms for routing could contribute to this end. An analysis of the use of these platforms will be one of the technical cooperation activities supporting the program (paragraph 1.39).

<sup>28</sup> Yang, Z., et al. (2016). Op. cit.

<sup>29</sup> Prices provided by ARCONEL and the Ministry of Transportation.

<sup>30</sup> See Economic Analysis ([optional link 1](#)).

- 1.14 From a socioeconomic perspective, then, potential long-term savings plus positive environmental externalities and fiscal savings can offset the incremental costs of an electric vehicle.
- 1.15 **The financial system and electric vehicle financing in Ecuador.** Ecuador's banking system comprises 3 public banks and 24 private ones. As of March 2020, 58% of its total loan portfolio had maturities of less than 360 days. The private banks' gross portfolio in the same month was US\$28.222 billion, concentrated in commercial loans (43.9%) and consumer credit (39.8%).
- 1.16 Though stable, Ecuador's financial system has difficulty providing sufficient long-term credit to the private sector of the kind required to invest in electric vehicles.<sup>31</sup> As a percentage of GDP, credit to the private sector is 35%—below the average of 54% for Latin America and the Caribbean.<sup>32</sup> Long-term financing is scarce as the financial sector itself experiences difficulties in accessing lengthier maturities. This is a result of structural factors, such as low levels of long-term savings and deposits; a weaker presence in the money, debt, and capital markets;<sup>33</sup> and the nascent level of development of institutional investors needing to make long-term investments.
- 1.17 Current conditions in Ecuador's financial system have created a mismatch between the terms of available long-term financing and the payment structure required to minimize the impact of the financial cost of electric vehicle projects. In the private financial system, an electric vehicle loan attracts a rate of approximately 13% to 16%, with an average term of 5 years<sup>34</sup> and a required initial down payment of between 20% and 25%. For diesel or gasoline vehicles the interest rate is around 13%.<sup>35</sup> With support from this program, the aim is to reduce rates to around 6% for buses and 9% for taxis, with an average term of 10 to 15 years depending on the loan; this will allow investors to align payment flows with income flows over the useful life of the vehicles, which is estimated at 15 years for buses and 10 years for electric taxis.<sup>36</sup>
- 1.18 **Government plans and policy achievements.** To reduce GHG emissions in the transportation sector, the government is working on a regulatory framework to promote electric vehicle investment and use by means of technical standards and tax incentives.<sup>37</sup> Thus, the Vehicle Renewal Plan (RENOVA) was implemented in 2008 with the aim of replacing units in the public and commercial transportation sectors. By 2014, 19,614 new units had been introduced and 16,123 had been scrapped.<sup>38</sup> The Ministry of Transportation and Public Works

---

<sup>31</sup> The COVID-19 crisis will affect the supply of credit from the financial system, meaning that programs to promote financing for medium- to long-term investments—such as this one—become more important for the country.

<sup>32</sup> World Bank, World Development Indicators.

<sup>33</sup> Banking Superintendency of Ecuador, Boletines financieros.

<sup>34</sup> [Collantes \(2020\)](#). Op. cit.

<sup>35</sup> See, for example, the [rates offered by BanEcuador](#).

<sup>36</sup> See Economic Analysis ([optional link 1](#)).

<sup>37</sup> Including tax exemptions on imports and value-added tax exemptions in some cases.

<sup>38</sup> National Energy Efficiency Plan (2016).

(MTOP) has been a key player in these policies, as the regulator and supervisor of RENOVA. In accordance with government directives, the Electricity Regulation and Control Agency (ARCONEL), in turn, has introduced differentiated electricity rates for charging electric vehicles.<sup>39</sup> There are also plans to develop a National Electric Mobility Strategy and Action Plan. These measures are based on the guiding principles set out in the [National Energy Efficiency Plan 2016-2035](#), the [Energy Efficiency Act](#), and the [National Development Plan 2017-2021](#).<sup>40</sup>

- 1.19 **Gender gaps.** There is evidence of differences in access to finance between men and women in Ecuador. According to data from the Global Financial Inclusion database,<sup>41</sup> 60% of men in Ecuador have accounts in financial institutions, compared to 42% of women. Moreover, two thirds (65%) of women are unable to access emergency funding; this is far higher than the proportion of men (45%) and represents a significantly wider gap than in upper-middle income countries (47% of women versus 39% of men).<sup>42</sup> Similarly, a higher proportion of men took out loans from financial institutions (16% and 8%, respectively). In terms of financing specifically for businesses, access among men is double that for women (10% versus 5%). Likewise, only 5% of women have started, operated, or expanded a business—half the level for men (10%) and a wider gap than in upper-middle-income countries (10% for women versus 13% of men). Efforts under this program to facilitate financing for women drivers to purchase electric taxis (thereby supporting these economic endeavors) respond to the identified needs and gaps in Ecuador.

---

<sup>39</sup> Energy Efficiency Act (2019) and National Energy Efficiency Plan (2016).

<sup>40</sup> HINICIO, Consultoría en innovación del sistema de transporte terrestre y movilidad sostenible para el archipiélago de Galápagos. Diagnostic assessment, 2019.

<sup>41</sup> World Bank (2017). Global Financial Inclusion (Global Findex) database 2017.

<sup>42</sup> Ibid.

**Figure 1. Financial and economic gender gaps in Ecuador**



Source: Global Findex-Ecuador.

1.20 In addition, by helping to address the lack of financing for this type of project (paragraphs 1.4 and 1.10) the program is expected to contribute indirectly to addressing the labor gender gap in the transportation sector. Women have less access to formal employment in Ecuador, holding less than 40% of the jobs registered with the National Statistics and Census Institute (INEC) (1.19 million women and 1.81 million men). In the case of the taxi sector, gender gaps in access to employment are wider due to a combination of factors, such as selection, safety, and access to finance.<sup>43</sup> The Government of Quito has stipulated that a minimum of 10% of partners, shareholders, and drivers in taxi companies must be women (Metropolitan Ordinance 0177).<sup>44</sup> However, only 8% of the professional licenses issued by the National Transit Agency (ANT) in 2019 were for women (see Gender and Electric Transportation Annex, [optional link 5](#)).<sup>45</sup>

1.21 **Problems addressed by the program and proposed framework for intervention.** The program offers an integrated approach to the financing of electric vehicles. Firstly, it addresses the problem of insufficient long-term credit

<sup>43</sup> In Argentina, for example, only 3% of taxi drivers are women, while women account for 12% of license holders. (Information from the Government of the City of Buenos Aires, October 2019. [Link](#)). In the European Union, women are estimated to account for only 21% of the labor force in the transportation sector (see Allen, H. et al., 2018). [Ella se mueve segura. Un estudio sobre la seguridad personal de las mujeres y el transporte público en tres ciudades de América Latina.](#)

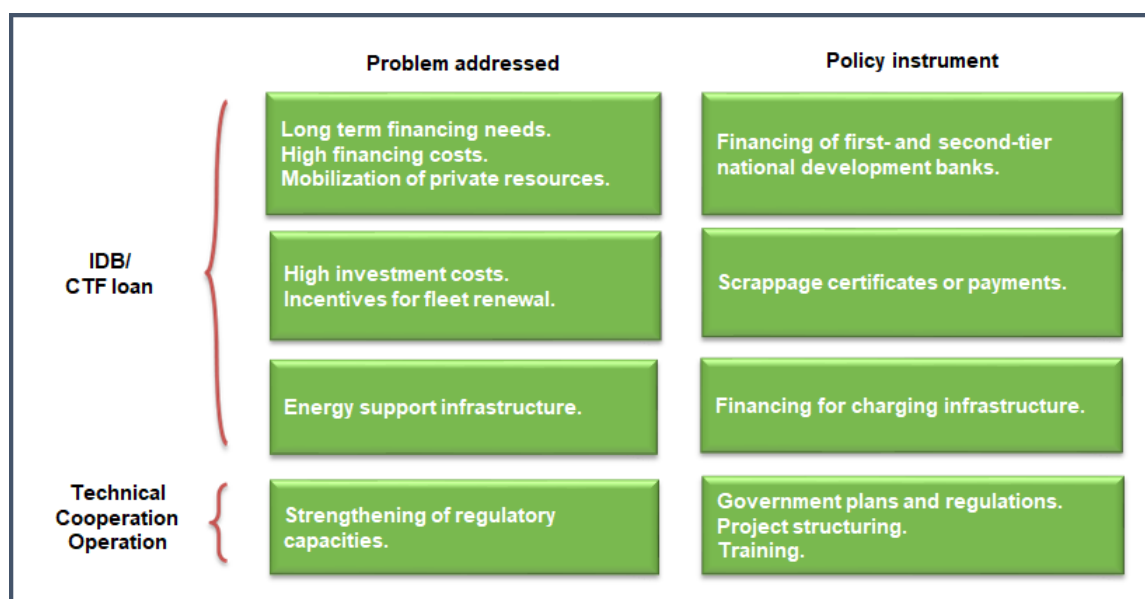
<sup>44</sup> Quito Metropolitan Council, Ordinance 0177, 14 July 2017.

<sup>45</sup> National Transportation Agency and authors' calculations.

to allow cash flows from electric vehicle projects to be effectively adjusted to loan payments in a context of high CAPEX. To this end, support will be provided to facilitate concessional funding and mobilize private resources to expand the supply of financing from first- and second-tier public development banks. Secondly, it will also address the need to offer financial incentives for the renewal of ICV fleets by providing scrappage payments to transportation operators; that process will be executed by the MTOP and regulated in the program Operating Regulations (paragraphs 1.36 and 1.37).

- 1.22 Lastly, complementary activities under the technical cooperation operation currently being prepared will help, among other things, to reduce risk perceptions surrounding this type of investment and contribute to the success of the program (paragraph 1.39).
- 1.23 Eliminating the financial barriers to investment is expected to have a dual effect: (i) catalyzing investments in electric vehicle projects, and (ii) producing projects that demonstrate the financial viability of the technology at the local level. If Ecuador progresses along the learning curve for electric vehicles and the supply of credit grows sufficiently, the financing arrangements could be expanded to support additional investments in electric vehicles in the future.

Figure 2. Proposed conceptual framework for the intervention



Source: Project team.

- 1.24 **Corporación Financiera Nacional.** Efforts to reduce major financing gaps have led to a steady expansion in the role of public development banks across the region.<sup>46</sup> In Ecuador, Corporación Financiera Nacional (CFN) is a first- and

<sup>46</sup> De Olloqui, F. et al., [Bancos Públicos de Desarrollo ¿Hacia Un Nuevo Paradigma?](#), IDB, 2013; Chelsky, J. et al., [Investment Financing in the Wake of the Crisis: The Role of Multilateral Development Banks](#), World Bank, 2013.



second-tier public development bank serving the entire country. Its current products include a credit line for electric vehicle financing in the public and commercial transportation sectors, and it played an essential role as a lender and provider of technical assistance for the first investments in buses and electric vehicles for transportation in the country (paragraph 1.9). In addition, it has recently organized seminars with private operators and municipal authorities throughout the country aimed at identifying and promoting potential projects with electric vehicles.

- 1.25 **Operation size.** Given the recent passage of national legislation ([Energy Efficiency Act](#)), which requires that all urban public transportation vehicles in continental Ecuador be electric by 2025, a window of opportunity has been opened to promote the adoption of electric vehicles, developing innovative business models and offering financial support. The legislation does not make any financing provisions for the required electric fleet, meaning that the financing gap will persist in the absence of programs to promote these investments. This becomes even more critical given that a significant proportion of the public transportation fleet is close to the end of its useful life in several of Ecuador's cities.
- 1.26 **IDB sector knowledge and lessons learned.** The IDB has successfully implemented several loan operations involving first- and second-tier credits channeled through climate funds in public development banks in various Latin American and Caribbean countries; in many cases, these have been complemented by technical cooperation operations to support training, coordination, policy-making, and monitoring. Evidence-based analyses suggest that these programs have positive effects in terms of expanding the project portfolio in sectors such as renewable energy (Nacional Financiera, [2843/OC-ME](#)) and energy efficiency (Bancóldex, [2983/TC-CO](#) and [3661/TC-CO](#)). The results suggest that climate funds are effective in demonstrating the financial viability of clean technologies, eliminating barriers to the adoption of the new technology. They also facilitate the mobilization of local funds, increasing the probability that more investment will flow into successful projects.
- 1.27 The IDB has experience with similar programs in the region. Under a dedicated electric mobility initiative, the IDB has supported pilot projects for the purchase of electric fleets and the deployment of charging infrastructure, as well as the formulation of electric mobility policies and strategies in several countries in the region, including Barbados ([3843/OC-BA](#), [2748/OC-BA](#), [4865/OC-BA](#)), Costa Rica ([2747/OC-CR](#), [3589/OC-CR](#) and [ATN/OC-14497-CR](#), [ATN/FM-14595-CR](#)), and the Dominican Republic ([ATN/OC-17390-RG](#)). In addition, the IDB provided direct support under a regional technical cooperation operation ([ATN/AC-16601-RG](#), [ATN/OC-16602-RG](#), [ATN/OC-16603-RG](#)) to 11 cities and 6 countries to promote the fiscal and economic viability of investments in electric buses, together with business models to support them.
- 1.28 In particular, in 2013 the IDB approved loan [3003/TC-CO](#), financed with resources from the Clean Technology Fund ([CTE](#)), to support the financing of low-carbon buses for Bogota's integrated public transportation system, with the participation of Bancóldex (Colombia's national development bank). Bancóldex channeled resources through local first-tier financial intermediaries to private

concession-holders for investment in electric and hybrid buses. It used US\$18.5 million of the US\$40 million in CTF funds to finance 180 hybrid buses. The low level of demand was due to a combination of factors, including devaluation of the Colombia peso, overexposure of Colombia's financial system to the urban transportation sector, and the lack of a specific quota for buses with clean technology in bids issued by Transmilenio. It should be noted that these are not factors in the context of the current operation.

- 1.29 In light of these experiences, special emphasis has been placed on incorporating the following lessons learned: (i) focusing on a wider range of beneficiaries, including public and private transportation service providers operating in Ecuador and also charging infrastructure (paragraph 1.38); (ii) strengthening the favorable context for the increased adoption of electric vehicles in Ecuador; (iii) ensuring close coordination with the different sectors involved and agencies working toward the same objectives (paragraphs 3.3 and 3.4); and (iv) closely monitoring execution of the loans based on simple criteria and easily measurable indicators (paragraph 1.40), with the aim of identifying and disseminating the benefits of adopting the electric vehicle technology favored under the program and increasing the appetite of relevant interested actors (in transportation, energy, and finance) to invest in electric mobility. Under the technical cooperation operation that is currently being prepared (paragraph 1.39), support will be provided to the CFN, municipal authorities, electricity companies, and transportation operators for structuring projects. The program will focus on a wider market for potential beneficiaries, including public transportation vehicles, taxis, infrastructure development, and innovation/enterprise investments.
- 1.30 **Strategic alignment.** The project is consistent with the second Update to the Institutional Strategy: Development Solutions that Accelerate Growth and Improve Lives (document AB-3190-2), particularly the challenge of productivity and innovation (through its financing for small and medium-sized enterprises investing in technological innovation, modernization, and more efficient processes resulting from the electric vehicles mobilized under the program), as well as the following crosscutting issues: (i) climate change, through a reduction in CO<sub>2</sub> emissions as a result of energy efficiency in the transportation sector. It is estimated that 100% of IDB financing for this project will be invested in climate change mitigation activities, as defined in the [multilateral development banks' joint methodology](#), and these resources contribute to the IDB Group's goal of increasing financing for climate change-related projects to 30% of approvals in volume terms by 2020; and (ii) gender equality, by creating the conditions for ensuring financing for women entrepreneurs in the transportation sector (paragraph 1.32). It also supports the Corporate Results Framework 2020-2023 (document GN-2727-12), through the following indicators: (i) micro, small, or medium-sized enterprises financed, (ii) women beneficiaries of economic empowerment initiatives, and (iii) emissions avoided (annual tons CO<sub>2</sub> equivalent). It is consistent with the Support to SMEs and Financial Access/Supervision Sector Framework Document (document GN-2768-7), under the pillar of improving the efficiency and scope of bank credit intermediation to the productive sector, and also the Transportation Sector Framework Document (document GN-2740-7), under the dimension of new technologies in the sector. Similarly, it is aligned with the goal of reducing CO<sub>2</sub> emissions contained in the



Sustainable Infrastructure Strategy for Competitiveness and Inclusive Growth (document GN-2710-5), and with the strategic lines of expanding credit and scaling up investments in key sectors included in the Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy (document GN-2609-1). Likewise, the project is aligned with the IDB's efforts to promote a green recovery of Latin American economies and societies in the post-COVID-19 era, with support for the replacement of fossil fuel-driven public transportation vehicle fleets with others based on clean technology.

- 1.31 The project is also aligned with the IDB Group's country strategy with Ecuador 2018-2021 (document GN-2924) through the following strategic objectives: (i) moving forward on Ecuador's energy reform, (ii) boosting the contribution of private investment and productivity to economic growth, and (iii) facilitating access to investment financing. Lastly, the operation is included in the Update of the Annex III of the 2020 Operational Program Report (document GN-2991-3).
- 1.32 **Gender considerations.** Special provisions will be incorporated to address the gender gaps in access to finance and labor opportunities (paragraphs 1.19 and 1.20) and improve the inclusivity of the program, including (i) creating a system of targets for credit placement to ensure that women have access to the loans; (ii) ensuring that the selected electric vehicles to be procured using the loan proceeds (standard buses) take into account universal accessibility standards and the differentiated use of public transportation by men and women; and (iii) financing the design of a campaign and strategy against harassment and gender-based violence in public transportation, to be implemented by the concession-holders that receive financing. These measures will be addressed in the dialogue with the executing agency through the program Operating Regulations, and with financing under the technical cooperation operation that is being prepared (specifically for measures (ii) and (iii); see paragraph 1.39).

**B. Objectives, components, and cost**

- 1.33 **Objective of the conditional credit line for investment projects (CCLIP).** The objective of the CCLIP is to reduce fossil fuel consumption and GHG emissions in Ecuador by promoting investment in electric vehicles. The CCLIP will have the following characteristics:

- a. **Modality:** The CCLIP will have the MM-II modality, as this gives greater execution authority to the CFN and MTOP in their respective components, leveraging both institutions' experience in the sector. The MEF will be the liaison agency, given its coordination and supervision capacity and prior experience with IDB operations.
- b. **Rationale:** The CCLIP is the Bank's most appropriate operational instrument for supporting the government, by providing a longer runway for promoting initiatives associated with its long-term plans in the transportation sector.
- c. **Sectors:** The CCLIP encompasses the following sectors: financial (by facilitating finance) and transportation and energy (because of the technology involved in the vehicles being financed).

- 1.34 **Objective of the first individual operation under the CCLIP:** The specific objectives for this operation are to: (i) stimulate financing for private investment in electric vehicles, and (ii) encourage the replacement of ICVs. The achievement of these objectives will support the general objective of reducing fossil fuel consumption and greenhouse gas emissions in Ecuador by promoting low-carbon mobility.
- 1.35 **Component 1: Electric vehicle financing (US\$30 million).** This component will use concessional resources from the [CTF](#)<sup>47</sup> alongside the IDB's Ordinary Capital to provide long-term loans for financing the purchase of electric vehicles.<sup>48</sup> These loans will also have an inclusive orientation with respect to women entrepreneurs in the taxi sector (see Gender and Electric Transportation Annex, [optional link 5](#)).<sup>49</sup> The CFN, which will be the executing agency for this component, will channel these funds through second-tier loans to financial intermediaries (paragraph 2.3).
- 1.36 **Component 2: Promoting the replacement of ICVs (US\$3 million).** This component will use the [CTF](#) and IDB resources to provide scrappage certificates or payments to beneficiaries under the first component who certify that they will eliminate the ICVs replaced by the electric vehicles. Payments will be administered by the MTOP, as executing agency for the component, consistent with the guidelines contained in the program [Operating Regulations](#).
- 1.37 Except for the eligibility limits established in the program [Operating Regulations](#), the program does not impose any restrictions on the specific type of vehicle or the location in which it will be operated. Likewise, it does not establish any specific amounts to be allocated to each type of eligible loan or subloan within

---

<sup>47</sup> CTF financing for this program was approved under the third phase of the Dedicated Private Sector Programs, the objective of which is to use an array of financing instruments to shoulder risks that commercial lenders are unable to assume.

<sup>48</sup> These loans can include financing for charging stations for the new electric vehicle fleets (buses and taxis) where necessary. The CFN estimates that only a small amount of financing will be required for this purpose—no more than 6% of the value of the investment.

<sup>49</sup> In particular, the program Operating Regulations will stipulate that 10% of loans to the taxi sector will be allocated to women and will establish arrangements for the monitoring and supervision of this target.

the framework of the program. The program [Operating Regulations](#) provide further details regarding the supervision of the financial intermediaries and financial intermediation, as well as the process of awarding scrappage payments.

- 1.38 **Beneficiaries.** It is estimated that approximately 78 buses and 370 taxis will be financed.<sup>50</sup> Planned beneficiaries under the program are transportation concession holders, as well as the providers and operators of electric vehicles in Ecuador and their users.
- 1.39 **Technical cooperation activities for operational support.** The CTF resources will also finance complementary technical cooperation activities to support general implementation of the program, including the development of a suitably favorable context, capacity-building for the CFN, the MTOP, and other government actors, and activities contributing to gender issues in the transportation sector (paragraph 1.32). To this end, support will be provided to improve regulation, the policy framework, and business models, as well as building capacities among municipalities, transportation sector authorities, vehicle manufacturers, operators, regulators, and financial intermediaries, among others. Technical support will be provided to interested municipios and transportation companies for the structuring of projects on a case-by-case basis. These resources will also finance activities to support program implementation in the areas of demand creation, the technical structuring of projects, risk mitigation, and the efficient delivery of loans and subloans; to ensure coordination and promotion of the project among public entities, private technology providers, and financial intermediaries; and to implement the recommendations of the institutional assessment of the CFN.

### C. Key results indicators

- 1.40 The outcome indicators for the first specific objective under the program are as follows: (i) total investment in electric vehicle projects financed by the CFN; (ii) the percentage of electric vehicle units financed by the program that are in operation; (iii) the difference between the interest rate on electric vehicle loans financed with program resources and the reference rate for ICVs; (iv) the difference between the maturity of electric vehicle loans financed with program resources and the reference maturity for ICVs; (v) the CFN's electric vehicle loan portfolio; (vi) the percentage of electric taxis financed by the program that are driven by women; and (vii) the number of women as a share of the total number of individuals purchasing electric taxis using program financing. The indicator for the second specific objective is the number of vehicles scrapped as a percentage of the total number of vehicles financed under the program. The impact indicator measures the total reduction in GHG emissions by the electric vehicles financed under the program.<sup>51</sup>
- 1.41 **Economic analysis.** A cost-benefit analysis was used to calculate the net benefits of the program. Based on this analysis, net benefits were estimated as a function of projected savings in operating and maintenance costs associated with the electric vehicles, as well as the economic value of net emissions avoided due

---

<sup>50</sup> Based on 70% financing under the program. See paragraph 2.3 for additional details.

<sup>51</sup> For further details, see the Results Matrix (Annex II).

to the replacement of ICVs by electric vehicle technology. The net present value (NPV) of the program is calculated at US\$1.7 million, and the internal rate of return (IRR) is 9.1%. It is estimated that the project will help to eliminate 35.8 tons of CO<sub>2</sub> emissions during the execution period and 116,050 tons of CO<sub>2</sub> over the useful life of the vehicles purchased. A sensitivity analysis was performed to test the robustness of the results (see Economic Analysis—[optional link 1](#)).

## II. FINANCING STRUCTURE AND MAIN RISKS

### A. Financing instruments

- 2.1 **CCLIP.** The total amount of the CCLIP will be US\$43 million, which will be used to finance individual operations under the credit line. The CCLIP period will be 10 years, and there will be two operations. The total amount of the CCLIP may be drawn from the Bank's Ordinary Capital resources or from resources administered by the Bank.<sup>52</sup> The amount and source of the funding concerned will be determined in context of each individual operation, together with the applicable financial terms and conditions. In calculating the total amount available under the CCLIP, the amount of each individual operation financed from the Bank's Ordinary Capital or from resources administered by the Bank will be computed. The second operation under the CCLIP is expected in 2023, and it will also have a five-year execution period.
- 2.2 **First individual operation under the CCLIP.** The first operation will consist of a Global Credit Program for US\$33 million, including US\$10 million in resources from the IDB's Ordinary Capital and US\$23 million from the CTF. This modality is appropriate given that the program objectives are aligned with those of the instrument in terms of promoting financing for MSMEs, fostering the efficient placement of resources through financial intermediaries in the local financial system, and strengthening those financial intermediaries with a view to building a sustainable supply of financing in the long term. In addition, funding under the technical cooperation operation currently being prepared (paragraph 1.39) will provide support for structuring the electric vehicle projects through the CFN. The disbursement period for the program will be five years from the date on which the IDB and the Republic of Ecuador sign the loan contract.

**Table 1. Estimated costs of the first program under the CCLIP (US\$ million)**

Components	IDB (Total)	%
Component 1. Electric vehicle financing	30.0	90.9
Component 2. Promoting the replacement of ICVs	3.0	9.1
<b>Total</b>	<b>33.0</b>	<b>100.0</b>

<sup>52</sup> Individual operations under the CCLIP may be financed with resources administered by the Bank from other sources of financing. This will give the CFN the option of accessing financing on concessional terms (blended financing) where appropriate, with the aim of increasing the mobilization of private resources to finance investments with a development impact, particularly in sectors such as environmental sustainability.

- 2.3 Funding for Component 1 will be channeled through the CFN, which is expected to place most of the resources through second-tier loans to financial intermediaries. The eligibility of participating intermediaries will be determined based on the CFN's credit assessment criteria, which stipulate—among other things—a minimum credit rating that must be met.<sup>53</sup> Nonetheless, the CFN may also lend directly to transportation operators. The average loan size is expected to be equivalent to US\$266,000 for buses and US\$24,780 for taxis.<sup>54</sup> This loan may also include the installation of charging stations required for implementation.<sup>55</sup> With respect to Component 2, the final value of the scrappage payments is subject to market conditions at the time the investments are made but is estimated in the range of 5% to 20% of the final investment amount for buses and taxis.<sup>56</sup>

**Table 2. Disbursement plan (US\$ million)**

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total
IDB	0.1	0.5	2.9	3.0	3.5	<b>10</b>
Clean Technology Fund	0.23	1.07	6.7	6.9	8.1	<b>23</b>
<b>Total: financing volume awarded to electric vehicle projects under the MEF credit line</b>	<b>0.33</b>	<b>1.57</b>	<b>9.6</b>	<b>9.9</b>	<b>11.6</b>	<b>33</b>

- 2.4 The CTF provides scaled-up financing for public and private sector projects that contribute to the demonstration, deployment, and transfer of low-carbon technologies with significant potential for long-term greenhouse gas emissions savings. Investments to promote renewable energy, sustainable transportation, and energy efficiency are eligible within the CTF framework. CTF funds are transferred to the IDB, which acts as an implementing agency and are administered by the IDB through the IDB-CTF Trust Fund. The concessional nature of CTF resources is needed to support access to finance on the terms (interest rates and tenors) required for the projects to be viable. CTF financing for this program has been included in the third phase of the Dedicated Private Sector Programs (DPSP), which include sustainable transportation as a thematic area. In accordance with CTF practice, the objective of the DPSP is to use a range of financing instruments to shoulder risks that commercial lenders are unable to assume.

<sup>53</sup> See the program [Operating Regulations](#) for additional details.

<sup>54</sup> These amounts represent 70% of the total value of the investment (paragraph 1.10). The remainder will be financed by the beneficiaries with their own funds.

<sup>55</sup> Agreements have been applied in Ecuador between municipalities and infrastructure providers with a view to installing charging stations to provide these public goods. The program could potentially support such initiatives in investment scenarios involving small municipios, in accordance with the planned guidelines in the Environmental and Social Management Report ([ESMR](#)) (see also paragraphs 2.5-2.8).

<sup>56</sup> The program's [Economic Analysis](#) assumes amounts of US\$30,000 for buses and US\$2,000 for taxis.

## **B. Environmental and social safeguard risks**

- 2.5 In accordance with Directive B.13 of the IDB's Environment and Safeguards Compliance Policy (Operational Policy OP-703), this operation falls into the category of financial intermediation. Consistent with the conclusions of environmental and social due diligence and the planned use of the loan proceeds, the operation is classified as low risk. Eligible projects under this program will achieve long-term reductions in GHG emissions and are considered environmentally sustainable as they entail cleaner energy production and lower energy consumption. Although the risks are assumed to be low, some of the projects eligible for financing may have environmental or social impacts that will need to be assessed and managed on a project-by-project basis.
- 2.6 Projects financed under this program will exclude those involving (i) involuntary resettlement of individuals; (ii) potentially negative impacts on indigenous communities and/or peoples, (iii) the conversion or degradation of natural habitats or critical cultural sites, (iv) potentially adverse impacts on protected areas or wetland areas under the Ramsar Convention;<sup>57</sup> (v) land acquisitions; or (vi) the purchase of two-wheeled vehicles (see also the [program exclusion list in Annex C of the ESMR](#)). Projects in categories "A" and "B" will be ineligible.
- 2.7 The program will be managed using an Environmental and Social Management System (ESMS) that will be agreed between the IDB and the executing agencies and fully integrated into the program [Operating Regulations](#). The ESMS includes all applicable Ecuadorian regulations and contains (i) the exclusion list and eligibility criteria for the program, and (ii) procedures and guidance for the selection, evaluation, and management of environmental and social issues for each type of eligible subproject.
- 2.8 The executing agencies will be responsible for establishing all of the interagency arrangements necessary to effectively implement the ESMS and will ensure that the projects financed comply with the ESMS. The due diligence process concluded that the executing agencies have the necessary institutional capacity to manage a portfolio of projects with the levels of risk identified.

## **C. Other key issues and risks**

- 2.9 **Economic and financial risk.** A medium-high risk was identified that a sharper deterioration in macroeconomic conditions could adversely affect private investment and the demand and volume of credit for electric vehicles. This impact could be curtailed by the high demand for electric vehicles identified in the program as compared to available funding. Transportation services are largely inelastic to economic conditions, given that they are an essential part of daily life. As a result, in a scenario of post-COVID-19 recovery, the urban transportation sector is expected to recover in the medium term. Moreover, the project does not depend on any additional fiscal contributions from the government. The program will also benefit from a technical cooperation operation currently being prepared (paragraph 1.39), which will support activities to structure suitable projects (particularly in terms of their financial, legal, and technical conditions) and

---

<sup>57</sup> Law 352/94 on Protected Wild Areas and its specific decrees/regulations.

promote the program to local financial institutions and potential beneficiaries. The IDB will supervise execution of the program on an ongoing basis.

- 2.10 **Natural risk.** The COVID-19 crisis led to a significant reduction in public transportation demand during the first few months in which public social distancing measures were in place. There is a medium-high risk that the effects of COVID-19 on the transportation sector will be higher than expected, dissuading companies from making major fleet investments due to expectations of low demand, government measures to limit the number of passengers per bus, and an inability to raise fares. This risk will be mitigated because (i) the urban transportation sector is critical to the country's economy and is expected to recover in tandem with the economy; (ii) high revealed demand for fleet investments exceeds program resources and has remained high despite the situation created by COVID-19; (iii) program execution takes into account recovery times for the economy and the transportation sector (the first investments are expected to take place in early 2022); and (iv) the amount of the scrappage payment can be adjusted to mitigate the effects of potentially lower demand in the long term.
- 2.11 **Sustainability risk.** There is a medium-high risk that project sustainability may be affected if the government, in response to high levels of investment in electric vehicles, discontinues its policy of support for these vehicles, particularly if the impact of COVID-19 deepens. A number of factors mitigate this problem. The Government of Ecuador is working on a policy to support electric vehicles with ambitious targets established in the Energy Efficiency Act (paragraph 1.18). The program will establish precedents that will illustrate the economic and financial viability of electric vehicles (paragraph 1.9), thus creating a demonstration effect. The technical cooperation operation being prepared (paragraphs 1.22 and 3.3) will finance activities to explain how the program works and stimulate demand.

### III. IMPLEMENTATION AND MANAGEMENT PLAN

#### A. Summary of implementation arrangements

- 3.1 **Borrower and executing agencies.** The Republic of Ecuador will be the borrower and the CFN and MTOP the executing agencies for the program. The MEF, in its capacity as liaison agency under the CCLIP, will manage and monitor the program.
- 3.2 **Execution and administration.** Given that the CFN has not had any recent operations with the IDB, a full assessment was performed of its institutional capacity, and its capacity to manage IDB fiduciary requirements was validated. The main recommendations of this assessment were as follows: training in the use of IDB systems and processes; the inclusion of key aspects of project management in the program Operating Regulations, such as definition of the roles and responsibilities of relevant actors, and the management and mitigation of potential risks. The MTOP, in turn, has recent experience with the IDB (loan [4938/OC-RG](#)) and other multilaterals. The full institutional capacity assessment of the MTOP performed for loan [4938/OC-RG](#) highlighted its prior experience with multilaterals and its institutional and technical capacity to satisfactorily execute programs of this nature. It also identified and addressed areas for



institutional improvement, particularly in the area of project management and human resources management. These challenges were addressed, and the MTOP is considered to be in a position to satisfactorily implement the corresponding component.

- 3.3 **Strategic coordination arrangements.** Under its current organizational structure, the MEF, as the liaison agency, will ensure the availability of all administrative and monitoring arrangements necessary for supervision of the appropriate use of program resources. Managerial support for implementation of these actions and those mentioned in paragraph 1.39 will be provided by the Executive Roundtable on Electric Mobility. The latter comprises various public bodies belonging to the transportation, energy, and financial sectors.<sup>58</sup> The MEF, as the liaison agency, will ensure program coordination, to include coordinating the program monitoring reports, supervising proper fulfillment of the program Operating Regulations, and notifying the IDB of any changes that may be necessary to improve the attainment of program objectives.
- 3.4 The provisions governing general program coordination, execution, the intermediation system, and the eligibility of each project/beneficiary to be financed with program funds will be stipulated in the program [Operating Regulations](#) agreed upon between the Bank and the executing agencies, in accordance with their policies and procedures. These Operating Regulations consist of specific procedures, conditions, and requirements for the use of program resources, including (i) technical, regulatory, and financial criteria for accessing the loans, subloans, and scrappage payments; (ii) disbursement mechanisms; (iii) environmental and social safeguards; and (iv) supervision and monitoring arrangements and evaluation requirements. The CFN, in coordination with the MEF, will conduct the supervision process for eligible expenditures, allowing effective verification of the use of the resources by the end beneficiaries.
- 3.5 **Special contractual conditions precedent to the first disbursement of the loan. As special contractual conditions precedent to the first loan disbursement, the borrower will provide evidence of (i) the approval and entry into force of the program [Operating Regulations](#) under the terms previously agreed upon with the Bank: this condition will allow the executing agencies to adjust its internal processes to the requirements of the program and is justified by the critical nature of the program Operating Regulations for general program execution; (ii) entry into force of a resource transfer agreement between the MEF and CFN whereby the transfer will occur within 15 days of receipt; these conditions will allow formalization of the arrangements for transferring funds between the MEF and CFN in the execution of Component 1; and (iii) creation by the CFN of a bank account exclusively to receive program resources from the MEF.** This condition is necessary to guarantee that program resources transferred to the CFN are managed independently and their use can be tracked.
- 3.6 **Disbursements.** Program disbursements will be made through reimbursements, direct payments, or advances of funds, as established in the Financial

---

<sup>58</sup> See the program [Operating Regulations](#) for additional details.



Management Guidelines for IDB-financed Projects (document OP-273-12). Justification must be provided for at least 80% of the balance of previous fund advances before a new advance can be requested.

- 3.7 **Auditing.** The CFN will prepare and submit annual program financial statements and program expenditures duly audited by an independent audit firm acceptable to the Bank. The audit firm will be hired by the CFN in accordance with the terms of reference agreed with the Bank and can be funded with proceeds from the loan. The audit firm will be hired at least 120 days prior to the end of each fiscal year. The audited annual reports will be submitted to the Bank within 120 days of the end of the CFN's fiscal year, and the final audit will be submitted to the Bank 120 days after the date of the last disbursement.
- 3.8 **Procurement.** The program will be governed by the Policies for the Procurement of Works and Goods Financed by the Inter-American Development Bank (document GN-2349-15), as it will be executed in the form of a global investment credit operation and no procurement of works, goods, services, or consulting services is planned. In particular, it will ensure compliance with the provisions of Section I of the aforementioned policies, as described in the program [Operating Regulations](#). With the exception of the financial audit, initially no procurement is planned under this operation, which will consist only of loans, subloans, and scrappage payments; where necessary, however, the policies stipulated in Annex III will be applied. The CFN will be responsible for updating the Procurement Plan at least once a year through the Procurement Plan Execution System (SEPA).

**B. Summary of arrangements for monitoring results**

- 3.9 For the duration of the loan disbursement period, the MEF, in coordination with the two executing agencies, will prepare an annual work plan (AWP) for each calendar year and submit this to the IDB by 30 November of the prior year. The first AWP will be submitted prior to the first disbursement. These reports will contain projections for the disbursements to be made over the course of the following calendar year, including a schedule and estimated costs.
- 3.10 **Monitoring and provisions of the evaluation.** The MEF will submit periodic reports (annual, midterm, and final) regarding program execution in accordance with a predetermined timeline, including all required operational and results data and any additional information that may be relevant for general evaluation of the attainment of program targets and objectives. To that end, the CFN, in collaboration with the MTOP, will compile and maintain the information and indicators necessary to prepare these reports, following the requirements of the IDB and the CTF. In general, these reports will provide evidence of at least the following: (i) the general execution status of activities under the program, the problems and/or risks identified, and the actions recommended to mitigate and overcome them; (ii) compliance with environmental and social safeguards and the management of program risks; (iii) the attainment of targets for the indicators included in the Results Matrix (Annex II); and (iv) an operational and financial evaluation of the portfolio of loans and subloans financed under the program, including (but not limited to) the characteristics of the subloans (maturities, interest rates, use of resources) and the end beneficiaries. Lastly, an ex post cost-benefit analysis will be conducted to evaluate the impact of the program on

operating and maintenance cost savings and reductions in GHG emissions, based on the methodology proposed by the ex ante cost-benefit analysis and the terms stipulated in the Monitoring and Evaluation Plan ([MEP](#)). Expenses relating to these activities will be covered with the executing agency's funds.

#### IV. ELIGIBILITY CRITERIA

- 4.1 **CCLIP eligibility.** The CCLIP fulfills the eligibility conditions established in policy document GN-2246-13 for Multisector Modality II (MM-II):
- a. The objective of the CCLIP is included in the priorities listed in the IDB Group's country strategy with Ecuador 2018-2021 (document GN-2924) (paragraph 1.31).
  - b. The MEF, as the liaison agency, has the authority to coordinate and monitor the program, to ensure its objectives are attained (paragraph 1.33).
- 4.2 **Eligibility of the first program under the CCLIP.** The first operation fulfills the eligibility conditions for individual operations established in policy document GN-2246-13, as follows:
- a. The executing agencies are sound with adequate technical and administrative capacities for executing the program. A full assessment of their institutional capacity was performed using the ICAP methodology, through which its capacity to manage IDB requirements was validated (paragraph 3.2).
  - b. The objective of the first program contributes to the achievement of the multisector objective of the CCLIP (paragraph 1.33).
  - c. The first program is included in the sectors to be supported by the CCLIP (paragraph 1.33).
  - d. The first program includes actions to be undertaken to mitigate risks identified in the institutional capacity assessment of the two executing agencies (paragraph 1.39, paragraph 3.2, and program [Operating Regulations](#) (Sections 2, 3, and 8-12)).

Development Effectiveness Matrix		
Summary		EC-L1268
I. Corporate and Country Priorities		
Section 1. IDB Group Strategic Priorities and CRF Indicators		
Development Challenges & Cross-cutting Issues	-Productivity and Innovation -Gender Equality and Diversity -Climate Change	
CRF Level 2 Indicators: IDB Group Contributions to Development Results	-Micro / small / medium enterprises financed (#) -Women beneficiaries of economic empowerment initiatives (#) -Emissions avoided (annual tons CO2 equivalent)	
2. Country Development Objectives		
Country Strategy Results Matrix	GN-2924	(i) move forward on Ecuador’s energy reform; (ii) boost the contribution of private investment and productivity to economic growth; and (iii) facilitate access to investment financing.
Country Program Results Matrix	GN-2991-3	The intervention is included in the 2020 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution	8.1	
3.1 Program Diagnosis	2.5	
3.2 Proposed Interventions or Solutions	1.6	
3.3 Results Matrix Quality	4.0	
4. Ex ante Economic Analysis	10.0	
4.1 Program has an ERR/NPV, or key outcomes identified for CEA	1.5	
4.2 Identified and Quantified Benefits and Costs	3.0	
4.3 Reasonable Assumptions	2.5	
4.4 Sensitivity Analysis	2.0	
4.5 Consistency with results matrix	1.0	
5. Monitoring and Evaluation	8.4	
5.1 Monitoring Mechanisms	2.8	
5.2 Evaluation Plan	5.5	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Medium Low	
Environmental & social risk classification	B.13	
IV. IDB’s Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting.
Non-Fiduciary		
The IDB’s involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	Project execution will be supported by activities financed by the technical cooperation EC-T1452.

**Evaluability Assessment Note:**

This is a CCLIP of US\$43mm, with the objective of reducing the consumption of fossil fuels and Greenhouse Gas (GHG) emissions in Ecuador by promoting investments in Electric Vehicles (EV). The first operation of US\$33mm has as specific objectives: (i) to stimulate the financing of private investments in EV; and (ii) promote the replacement of Internal Combustion Vehicles (ICV). Carbon dioxide (CO2) emissions in Ecuador have increased in the last ten years, with an increase of 30% in 2018 compared to 2009. The transport sector explains 41.9% of emissions in 2018, and they increased by 78% during the 2009-2018 period. The electrification of transportation systems has a high potential to reduce GHG emissions. An essential factor is the way in which electricity is produced; Ecuador's electricity generation matrix is clean for the most part, with a proportion of 83.2% renewable energy, which means that indirect emissions from an EV will be lower than those from an ICV. Additionally, EV have operating costs that are lower than ICV, although capital expenditures for EV are much higher than for ICV. This means that EV investments require a longer payback period and lower interest rates to be profitable. This program will finance a line of credit that will offer better conditions (longer term and lower interest rates) for investments in EV. In addition, it will provide scrap bonds for transport operators, who seek to have the replaced VCI's retired from circulation. The results matrix measures the investments in EV generated, the operation of EV and the differences in financing conditions (term, interest rates). GHG emissions will be measured as impacts. Additionally, indicators associated with the gender actions of the program are included.

The ex-ante economic analysis of the program is appropriate, with reasonable and standard assumptions and with reasonable sensitivity analyses. The net present value of the project is US\$ 1.7 million (based on an 8% discount rate) and the expected internal rate of return is 9.1%.

The evaluation plan proposes to carry out an ex-post economic analysis at the end of the program, which will include information on the actual use of EV (based on a survey). Although this exercise does not allow for the empirical attribution of results, it is very useful since, in an innovative project like this, establishing ex-post that EV investments are profitable, and that EV are used as expected, is very relevant.

## RESULTS MATRIX

<b>Project objective:</b>	The specific objectives for this operation are to: (i) stimulate financing for private investment in electric vehicles, and (ii) encourage the replacement of internal combustion vehicles (ICVs). The achievement of these objectives will support the general objective of reducing fossil fuel consumption and greenhouse gas emissions in Ecuador by promoting low-carbon mobility.
---------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

### GENERAL DEVELOPMENT OBJECTIVE

Indicators	Unit of measurement	Baseline (2020)	Expected year of achievement	Targets	Means of verification	Comments
<b>General development objective: Reduce fossil fuel consumption and greenhouse gas (GHG) emissions in Ecuador by promoting low-carbon mobility</b>						
GHG emissions avoided by the electric vehicles financed by the program.	Thousands of tons of CO <sub>2</sub> avoided	0	2026	35.8	CFN monitoring reports	This indicator measures the sum of all GHG emissions avoided by the electric vehicles financed by the program. Although the indicator is directly associated with the number of electric vehicles financed and the distance traveled, the distribution of these investments over the execution period will determine whether this cumulative amount is achieved in the target year. This indicator will be measured using monitoring data on the effective use of the vehicles financed.

**SPECIFIC DEVELOPMENT OBJECTIVES**

Indicators	Unit of measurement	Baseline (2020)	Project completion (2025)	Means of verification	Comments
<b>Specific development objective 1: Stimulate financing for private investment in electric vehicles</b>					
Total investment in electric vehicle projects financed by the CFN.	US\$ million	0	42.8	CFN monitoring reports	This indicator measures total investment in electric vehicles projects financed by the CFN. It includes the leveraging of private funds equivalent to 30% of total investment.
Percentage of electric vehicle units financed by the program that are in operation.	%	0	100	CFN monitoring reports	This indicator measures the percentage of electric vehicles financed by the program that are in operation at the time the indicator is measured.
Difference between the interest rate on electric vehicle loans financed with program resources and the reference interest rate for ICVs.	Basis points	550	550	CFN monitoring reports	The baseline is the rate facilitated by the CFN in its 2017 electric vehicle program: 7.5% for electric vehicle loans and a market rate of 13% for ICVs. The program is expected to achieve the same differentials as in 2017.
Difference between the maturity of vehicle loans financed with program resources and the reference maturity for ICVs.	Years	5	5	CFN monitoring reports	The baseline is the maturity facilitated by the CFN in its 2017 electric vehicle program: 10 years versus a market maturity of 5 years for ICVs. The program is expected to achieve the same differentials as in 2017.
CFN electric vehicle loan portfolio.	US\$ million	7.8	37.8	CFN monitoring reports	This indicator measures the value of the CFN's portfolio of loans financing electric vehicles. The baseline reflects the August 2020 value of the CFN's electric vehicle portfolio, which includes loans for buses and taxis.

Indicators	Unit of measurement	Baseline (2020)	Project completion (2025)	Means of verification	Comments
Percentage of electric vehicles financed by the program that are driven by women.	%	8	10	CFN monitoring reports	Pro-gender indicator. This indicator measures the percentage of drivers of electric taxis purchased through the program that are women. The baseline reflects the share of women in the total number of type "C" licenses (required to drive taxis) issued to women in 2019 by the National Transit Agency. The target is the same as the proportion currently required by the Government of Quito. This proportion is expected to be achieved in the other cities in which electric vehicles will be financed. In the event that additional information on women drivers becomes available prior to the launch of the operation, the baseline will be adjusted accordingly.
Share of women in the total number of individuals purchasing an electric taxi due to financing under the program.	%	0	10	CFN monitoring reports	Pro-gender indicator. This indicator will be measured as the number of women purchasing electric taxis due to financing under the program as a proportion of the total number of individuals purchasing electric taxis through the program. The target reflects the estimate for the end of the program.
<b>Specific development objective 2: Encourage the replacement of ICVs</b>					
Vehicles scrapped as a percentage of the total number of vehicles financed under the program.	%	0	100	CFN and Ministry of Transportation and Public Works monitoring reports	This indicator seeks to measure the effectiveness of scrappage payments in promoting the replacement of fossil fuel-driven vehicles with electric vehicles.

OUTPUTS

Indicators	Unit of measurement	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Project completion	Means of verification	Comments
<b>Component 1: Electric vehicle financing</b>										
Program funds allocated to support investments in electric vehicles.	US\$ million	0	0.3	1.5	8.7	9.0	10.5	30	CFN monitoring reports	This indicator measures the annual allocation of project funds to finance electric vehicle investments. The final value for the project is the cumulative amount.
<b>Component 2: Promoting the replacement of ICVs</b>										
Program funds allocated to the award of scrappage payments.	US\$ million	0	0.03	0.07	0.9	0.9	1.1	3	CFN monitoring reports	This indicator measures the annual allocation of project funds to scrappage payments. The final value for the project is the cumulative amount.

## FIDUCIARY AGREEMENTS AND REQUIREMENTS

<b>Country:</b>	Ecuador
<b>Project:</b>	EC-L1268
<b>Name:</b>	First Individual Operation under the CCLIP for the Financing of Sustainable Electric Transportation in Ecuador
<b>Liaison agency:</b>	Ministry of Economy and Finance (MEF)
<b>Executing agencies:</b>	Corporación Financiera Nacional B.P.(CFN) and Ministry of Transportation of Public Works (MTOP)
<b>Prepared by:</b>	Carolina Escudero and Juan Carlos Dugand (FMP/CEC)

### I. SUMMARY

- 1.1 This document contains the fiduciary agreements in the areas of procurement and financial management for program execution, prepared on the basis of (i) the country's fiduciary context, (ii) an evaluation of fiduciary risks, (iii) an institutional capacity assessment of the CFN and MTOP, and (iv) inputs from meetings with teams and entities involved.

### II. THE COUNTRY'S FIDUCIARY CONTEXT

- 2.1 **Country procurement system.** Pursuant to document GN-2680-2 approved by the IDB Board of Executive Directors, the first agreement for the use of Ecuador's National Public Procurement System (SNCP) in IDB-financed projects was signed on 13 May 2014 by the Ministry of Economy and Finance (MEF), the National Public Procurement System of Ecuador (SERCOP), and the IDB. Section 3.2 of the agreement provided for the use of the SNCP in seven projects, as well as its gradual expansion. The first agreement concluded on 31 December 2018 and a new one is currently being prepared. Once this has been signed, the SNCP may be used and this will be reflected in the approved procurement plan for the program.
- 2.2 **Financial management system.** Central government entities use the e-SIGEF financial administration system, which integrates budgeting, accounting, and treasury processes. Government entities are subject to control and supervision by the Office of the Comptroller General (CGE). Development of national financial management systems is generally adequate, but needs to be supplemented in the areas of financial reporting and external audits, with the use of off-book records and auditing firms eligible for Bank-financed projects, respectively. A Treasury Single Account (TSA) is in place, but there are difficulties in maintaining individual records where several executing agencies participate in a single program. The government plans to replace the e-SIGEF with a new system in 2021.



### III. THE EXECUTING AGENCIES' FIDUCIARY CONTEXT

- 3.1 The CFN is a public financial institution with administrative, financial, and legal autonomy, and it is subject to control and surveillance by the Superintendency for Banking and Insurance (SBS). In addition to conducting first- and second-tier operations, it administers fiduciary businesses, and it has a guarantee fund. CFN procurement using fiscal resources is subject to Articles 1 and 2 of the National Public Procurement System Act (LOSNC). In the area of financial management, it uses its own financial information systems. It has an internal audit unit attached to senior management and is also subject to the external control of the Office of the Comptroller General. CFN does not have any recent experience executing IDB-financed operations, but it has executed operations with Germany's Kreditanstalt für Wiederaufbau (KfW), the Development Bank of Latin America (CAF), and the Agence Française de Développement (AFD). An institutional capacity assessment (ICAP) was performed in June 2020 during preparation of this operation.
- 3.2 The MTOP is the executing agency for the Border Integration Project - Axis Road 4 Bellavista-Zumba-La Balza Zamora-Chinchipe Province (loan 4938/OC-RG). The Organic Law of the SNCP applies for procurements with tax funds, and the procedures set forth for the central government must be followed. In 2019, during program preparation, an institutional capacity assessment (ICAP) was performed. The MTOP has execution capacity for this program.

### IV. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

- 4.1 One medium-low risk is that program resources (scrappage payments and CFN loans) may not flow in a timely manner, causing delays in execution and difficulties rendering accounts. As a mitigation measure, a deadline will be set for the MEF to transfer disbursements to the CFN; the CFN will be required to manage the resources in an independent bank account; and the payment process for the scrappage payments will be spelled out in detail in the program Operating Regulations.

### V. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF CONTRACTS

- 5.1 The subsidiary agreement between the MEF and CFN, which is a condition precedent to the first disbursement, will stipulate that the funds disbursed to the MEF corresponding to the CFN are to be transferred within 15 calendar days, and will require that the CFN open a bank account exclusively for managing program funds.
- 5.2 The firm that will audit the program financial statements is to be hired for the entire program by the CFN, including the resources executed by the MTOP, and can be financed from the loan.

### VI. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 6.1 **Procurement execution.** With the exception of the financial audit, no procurement is planned under this operation, which will consist only of loans, subloans, and scrappage payments. Where necessary, however, the policies stipulated in this Annex will be applied. The executing agencies will be responsible for updating the

procurement plan at least once a year through the Procurement Plan Execution System (SEPA).

- a. **Procurement of goods, works, and nonconsulting services.** Procurement will be executed using IDB policies, and any of the methods described in document GN-2349-15 may be used.<sup>1</sup> Table 1 lists the contract thresholds.
- b. **Selection and contracting of consultants (firms).** Contracts for consulting services will be executed using the Bank's Standard Request for Proposals, and any of the methods described in policy document GN-2350-15 may be used.<sup>2</sup> Table 1 indicates the threshold for the inclusion of international consultants in shortlists.<sup>3</sup>
- c. **Selection of individual consultants:** The provisions of Section V of the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-15) will apply.
- d. **Use of country procurement systems.** The SNCP will be used pursuant to the new agreement on its use mentioned in paragraph 2.1.
- e. **Domestic preference (paragraphs 2.64 and 2.65 of document GN-2349-15).** The borrower has not requested the application of domestic preference, and its use during program execution is therefore not anticipated.

**Box 1. Thresholds (US\$)**

Works			Goods			Consultancies	
ICB	NCB	Shopping	ICB	NCB	Shopping	International advertising, consultancies	Shortlist 100% National
≥3,000,000	<3,000,000 ≥250,000	< 250,000	≥250,000	<250,000 ≥50,000	< 50,000	≥200,000	<200,000

- 6.2 **Procurement supervision.** The procurement plan will stipulate the IDB supervision method to be used. Ex post reviews will be conducted annually as provided for in Appendix 1 of the Bank's policies and will include physical inspections at the Bank's discretion.

**Box 2. Threshold for ex post review (US\$)**

Works	Goods	Consulting Services	Individual Consultants
< 3,000,000	<250,000	< 200,000	< 50,000

Note: Ex post review thresholds are applied as a function of the executing agency's fiduciary capacity. They may be modified by the Bank as a result of changes in fiduciary capacity.

<sup>1</sup> Document [GN-2349-15](#), approved in May 2019 and in force since January 2020 (nonconsulting services are treated as goods).

<sup>2</sup> Document [GN-2350-15](#).

<sup>3</sup> For contracts below US\$200,000, shortlists may consist entirely of local consulting firms.

- 6.3 **Records and files.** The executing agencies will maintain order and integrity in the filing system, organizing files chronologically, independently, by process, and by source of financing.
- 6.4 **Projects with financial intermediaries.** As this loan is for global credit programs and other operations in which resources are provided to financial intermediaries that will in turn issue subloans or resources via other onlending modalities, it will be stipulated that the Bank's prohibited practices clauses are to be included in the agreements between the borrower and its financial intermediaries, and those between the latter and the subborrowers. Alternatively, if the effective inclusion of these clauses in the aforementioned contracts is not possible or practical in view of the program's circumstances, the project team may examine other mechanisms to adopt acceptable controls and duly bind the relevant third parties to the Sanctions Procedures. These mechanisms, the design of which will be coordinated with the Bank's Office of Institutional Integrity (OII), with support from the Bank's Legal Department, will be spelled out in the program Operating Regulations.

## **VII. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS**

- 7.1 **Programming and budget.** The Planning and Public Finance Code (COPLAFIP) establishes the rules governing budget programming, formulation, approval, execution, control, evaluation, and settlement. The MTOP and CFN, in coordination with the MEF, will prepare the investment program needed to allocate budgetary resources to the program. Although the CFN has administrative and financial autonomy, it must follow the provisions of the COPLAFIP. The Board of Directors of the CFN approves the necessary budget allocations.
- 7.2 **Accounting and information systems.** Program accounts will be maintained using the e-SIGEF or any system replacing it, for the scrappage payments and MTOP expenditures; and using CFN systems for loans granted by that institution.
- 7.3 **Disbursements and cash flow.** In 2008, the Government of Ecuador installed the Single Treasury Account, unifying treasury management of all central government entities.
- 7.4 Implementation of this mechanism did not eliminate the special accounts or specific-purpose accounts system, which are managed in the Central Bank of Ecuador (BCE) to receive proceeds from multilateral loans. An exclusive account will be made available for the program in the Central Bank of Ecuador, and loan funds will be disbursed into this account.
- 7.5 Program funds will be disbursed to the special account mentioned above and transferred from there to the Single Treasury Account. Subsequently, the MEF will transfer, within 15 days, the corresponding funds to the bank account the CFN will maintain for use exclusively in this program. The scrappage payments will be made from the Single Treasury Account, and the program Operating Regulations will lay out the specific conditions for those payments.
- 7.6 The IDB will disburse loan funds in the form of advances of funds in accordance with actual liquidity needs, based on a financial plan and detailed cash flow for a period of up to six months. At the borrower's request, the Bank may also make direct payments to suppliers or reimburse expenses.

- 7.7 Supporting justification for advances will be provided pursuant to the provisions of the Financial Management Guidelines for IDB-Financed Projects (document OP-273-12), which state that new disbursements may be made once the executing agencies have justified at least 80% of the balance of previous advances.
- 7.8 Following the disbursement of funds, the supporting documentation for payments issued will be subject to ex post review by the Bank and/or the external auditors.
- 7.9 **Internal control and audit.** Ecuador's constitution identifies the CGE as the lead agency for the system of public sector controls. As part of this sector, the executing agencies have their own internal audit unit.
- 7.10 **External control and reports.** Although the CGE is empowered to conduct audits of public sector entities, projects are not necessarily included in the annual audit plan. External audit for the program will be carried out by independent auditors acceptable to the IDB, in accordance with document OP-273-12. The audit firm will be hired by the CFN for the entire program based on terms of reference previously agreed with the Bank, and the contract can be funded with proceeds from the loan. The audit firm will be hired at least 120 days prior to the end of each fiscal year. During execution, audited program financial statements will be submitted on an annual basis within 120 days of the close of each fiscal year or, in the case of the final audit, the date of the final disbursement. The executing agencies will prepare program financial reports, and the audit firm will be asked to provide an opinion thereon.
- 7.11 There is no national policy governing the publication of audit reports; however, audited program financial statements will be published in IDB systems pursuant to the current policy on information access and disclosure.

**Box 3. Supervision plan**

Supervision activity	Nature and scope	Frequency	Responsible party	
			Bank	Third party
Operational	Review of the progress report	Semiannual	Project team	
	Portfolio review with the executing agency and the MEF	Consistent with MEF requirements	Project team	Executing agency
Financial	Review of cash flow programming and disbursement execution	At the Bank's request, with each request for an advance of funds, or in portfolio reviews or supervision visits	Project team	Executing agency / auditors
	Supervision visits or meetings	Annual	Fiduciary specialist	Executing agency
	Review of audited and unaudited financial statements	Annual	Fiduciary specialist and project team leader	Executing agency

Supervision activity	Nature and scope	Frequency	Responsible party	
			Bank	Third party
	Review of disbursement requests	Periodic	Fiduciary and sector team	Executing agency
Procurement	Ex post procurement review	According to the supervision plan	Project team leader and fiduciary specialist	Executing agency
	Ex ante procurement review	According to the procurement plan	Project team leader with support of procurement specialist	Executing agency
	Procurement plan update	Annual	Project team leader with support of procurement specialist	Executing agency
Compliance	Compliance with conditions precedent	Once	Project team	Executing agency/MEF
	Review of budget allocation	Annual	Project team	Executing agency/MEF
	Submission of audited financial statements	Annual	Project team leader and fiduciary specialist	Executing agency / auditors

7.12 **Execution mechanism.** See paragraphs 3.1 to 3.9 of the loan document.

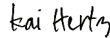
**FINANCING SUSTAINABLE ELECTRIC TRANSPORT IN ECUADOR****EC-L1268****CERTIFICATION**

The Grants and Co-Financing Management Unit (ORP/GCM) certifies that the referenced operation<sup>1</sup> will be financed through:

<b>Funding Source</b>	<b>Fund Code</b>	<b>Currency</b>	<b>Amount Up to</b>
Clean Technology Fund	CTF	USD	23,000,000

Certified by:

DocuSigned by:



A284C95CC1DB4A2

Maria Fernanda García

Chief

Grants and Co-Financing Management Unit  
ORP/GCM

September 24, 2020 | 4:54 PM

Date

<sup>1</sup> In case of Project Specific Grants (PSG) or Financial Intermediary Fund (FIF), the availability of resources is contingent upon the signature of the agreement between the Donor and the Bank and the receipt of the resources.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/20

Ecuador. Conditional Credit Line for Investment Projects (CCLIP)  
for Electric Mobility EC-O0009

The Board of Executive Directors

RESOLVES:

1. To authorize the President of the Bank, or such representative as he shall designate, to enter into such agreement or agreements as may be necessary with the Republic of Ecuador to establish the Conditional Credit Line for Investment Projects (CCLIP) for Electric Mobility EC-O0009, for the amount of up to US\$43,000,000 chargeable to the resources of the Bank's Ordinary Capital and other sources, to cooperate in the execution of projects to promote investment in electric vehicles.

2. To determine that the resources allocated to the above-mentioned Conditional Credit Line (CCLIP) EC-O0009 shall be used to finance individual loan operations in accordance with: (a) the objectives and regulations of the Conditional Credit Line for Investment Projects approved by Resolution DE-58/03, as amended by Resolutions DE-10/07, DE-164/07, DE-86/16, and DE-98/19; (b) the provisions set forth in documents GN-2564-3 and GN-2246-13; and (c) the terms and conditions included in the Loan Proposal for the corresponding individual operation.

(Adopted on \_\_\_\_ 2020)

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/20

Ecuador. Loan \_\_\_\_/OC-EC to the Republic of Ecuador. Financing of Sustainable Electric Transportation in Ecuador. First Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) EC-O0009

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Ecuador, as borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the project "Financing of Sustainable Electric Transportation in Ecuador", which constitutes the first individual operation under the Conditional Credit Line for Investment Projects (CCLIP) EC-O0009 approved on \_\_\_\_\_ 2020 by Resolution DE-\_\_\_/20. Such financing will be for the amount of up to US\$10,000,000, from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_ \_\_\_\_\_ 2020)



DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/20

Ecuador. Loan \_\_\_\_/TC-EC to the Republic of Ecuador. Financing of Sustainable Electric Transportation in Ecuador. First Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) EC-O0009

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, in its capacity as Implementing Entity for the Clean Technology Fund, to enter into such contract or contracts as may be necessary with the Republic of Ecuador, as borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the project "Financing of Sustainable Electric Transportation in Ecuador", which constitutes the first individual operation under the Conditional Credit Line for Investment Projects (CCLIP) EC-O0009 approved on \_\_\_\_\_ 2020 by Resolution DE-\_\_\_/20. Such financing will be for the amount of up to US\$23,000,000 from the resources of the Clean Technology Fund, administered by the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_ \_\_\_\_\_ 2020)