

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

## **URUGUAY**

### **CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS: SUPPORT FOR COMPLIANCE WITH URUGUAY'S CLIMATE COMMITMENTS (UR-O1160)**

**AND**

### **FIRST INDIVIDUAL OPERATION: SUPPORT FOR CONSOLIDATION OF THE COUNTRY'S LOW-CARBON ENERGY TRANSITION (UR-L1177)**

## **LOAN PROPOSAL**

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## ABBREVIATIONS

ADME	Administración del Mercado Eléctrico [Electricity Market Administration]
BEN	Balance Energético Nacional [National Energy Assessment]
CCLIP	Conditional Credit Line for Investment Projects
DLI	Disbursement-linked indicator
DNE	Dirección Nacional de Energía [National Energy Department]
EEC	Energy Efficiency Certificate
ESMS	Environmental and social management system
FUDAEE	Fideicomiso Uruguayo de Ahorro y Eficiencia Energética [Uruguayan Trust for Energy Saving and Efficiency]
ktoe	Kilotons of oil equivalent
LBR	Loan based on results
MAPS	Methodology for assessing procurement systems
MEF	Ministry of Economy and Finance
MIEM	Ministry of Industry, Energy, and Mining
NDC	Nationally Determined Contribution
NDC-1	First Nationally Determined Contribution
PCU	Project Coordination Unit
SNRCC	Sistema Nacional de Respuesta al Cambio Climático y Variabilidad [National Climate Change and Variability Response System]
UTE	Administración Nacional de Usinas y Transmisiones Eléctricas [National Administration of Power Plants and Electric Transmission]

## PROJECT SUMMARY

### URUGUAY CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS: SUPPORT FOR COMPLIANCE WITH URUGUAY'S CLIMATE COMMITMENTS (UR-O1160) AND FIRST INDIVIDUAL OPERATION: SUPPORT FOR CONSOLIDATION OF THE COUNTRY'S LOW-CARBON ENERGY TRANSITION (UR-L1177)

Financial Terms and Conditions					
Borrower:				Flexible Financing Facility <sup>(a)</sup>	
Eastern Republic of Uruguay				Amortization period:	25 years
Executing agency:				Disbursement period:	4 years
The borrower, through the Ministry of Economy and Finance, via the Project Coordination Unit				Grace period:	5.5 years <sup>(b)</sup>
Source	CCLIP (US\$)	First operation (US\$)	%	Interest rate:	SOFR-based
IDB (Ordinary Capital):	150 million	40 million	100	Credit fee:	(c)
				Inspection and supervision fee:	(c)
Total:	150 million	40 million	100	Weighted average life:	15.25 years
				Approval currency:	U.S. dollar
Program at a Glance					
<b>Objective of the conditional credit line for investment projects (CCLIP):</b> The general objective is to help the country achieve its climate and environmental sustainability targets in accordance with its Nationally Determined Contribution.					
<b>Objective of the first individual operation:</b> The general objective is to support the country in consolidating its inclusive, low-carbon energy transition. The specific objectives are to: (i) improve the economic, social, and institutional sustainability of the energy sector; (ii) foster investment in sustainable energy services, especially electric transportation and energy efficiency; and (iii) narrow the gap in access to electricity services with renewable energy.					
<b>Special contractual conditions precedent to the first disbursement of the loan proceeds:</b> Before the first disbursement of the loan proceeds, the borrower, through the executing agency, will submit evidence of the: (i) approval and entry into force of the program Operating Regulations ( <a href="#">optional link 4</a> ) in the terms previously agreed upon with the Bank; (ii) appointment or contracting, as applicable, of the program coordinator; and (iii) hiring of the independent verifier responsible for external verification of results, in accordance with the terms of reference previously agreed upon with the Bank (paragraph 3.7).					
<b>Special contractual conditions for execution:</b> Within six months of the entry into effect of the loan contract, the borrower, through the executing agency, will have signed interagency cooperation agreements with the National Administration of Power Plants and Electric Transmission and with the Ministry of Industry, Energy, and Mining, establishing the coordination arrangements, each party's responsibilities, and criteria for the verification of program results, and those agreements will have entered into effect, in the terms previously agreed upon with the Bank (paragraph 3.8).					
See the special environmental and social contractual conditions precedent to the first disbursement and execution in Annex B of the environmental and social review summary ( <a href="#">required link 2</a> ).					

<b>Exceptions to Bank policies:</b> The project team is requesting a partial waiver of the provisions of the Proposal to Establish the Bank's Sovereign Guaranteed Loan Based on Results (document GN-2869-1, paragraph 5.17) in order to include an individual contract for goods with an estimated value of over 25% of the total loan amount as part of the financing for the first individual operation under the CCLIP (paragraph <b>Error! Reference source not found.</b> ).			
<b>Strategic Alignment</b>			
<b>Challenges:</b> <sup>(d)</sup>	SI <input checked="" type="checkbox"/>	PI <input checked="" type="checkbox"/>	EI <input type="checkbox"/>
<b>Crosscutting themes:</b> <sup>(e)</sup>	GE <input checked="" type="checkbox"/> and DI <input checked="" type="checkbox"/>	CC <input checked="" type="checkbox"/> and ES <input checked="" type="checkbox"/>	IC <input checked="" type="checkbox"/>

- (a) 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, commodity, and catastrophe protection conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.
- (b) 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.
- (c) The credit fee and the 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 applicable policies.
- (d) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).
- (e) GE (Gender Equality) and DI (Diversity); CC (Climate Change) and ES (Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

## I. DESCRIPTION AND RESULTS MONITORING

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

- 1.1 **Institutional framework.** The Uruguayan Ministry of Economy and Finance (MEF) steers the country's economic, financial, and trade policy; coordinates, plans, programs, and oversees implementation of fiscal policy; and administers public resources. The MEF works to align public investment with national climate policy objectives and ensure that the technical measures to address climate change established by each ministry are included in budget planning.<sup>1,2</sup>
- 1.2 In Uruguay, the Ministry of the Environment coordinates public policy on climate through the National Climate Change and Variability Response System (SNRCC).<sup>3</sup> The Ministry of Industry, Energy, and Mining (MIEM) co-chairs the SNRCC and provides technical leadership for energy sector decarbonization measures under the framework of the National Policy on Climate Change, as reflected in the country's Nationally Determined Contribution (NDC) and guided by the Long-term Climate Strategy for 2050.
- 1.3 The MIEM, through the National Energy Department (DNE), proposes, prepares, and coordinates policies, plans, and regulations for the development and operation of Uruguay's energy sector, ensuring rational, efficient use of energy resources as well as universal access thereto for the entire population. Through its Energy Efficiency, Access, and Demand Division, the DNE establishes policy, regulations, infrastructure, and initiatives to promote the efficient use of energy.<sup>4</sup>
- 1.4 The National Administration of Power Plants and Electric Transmission (UTE) is a vertically integrated public enterprise governed by charter ([Law 15,031/80](#)). Its purpose is to provide electricity services under a framework of economic, social, and environmental sustainability, thereby facilitating safe, reliable electricity access for all households and businesses in the country, with a satisfactory level of quality at the lowest possible cost. The company has 1,570,000 customers countrywide.<sup>5</sup>
- 1.5 **Uruguay and its commitment to the Paris Agreement.** In 2016, Uruguay ratified the [Paris Agreement](#), and in 2017 it submitted its first NDC (NDC-1).<sup>6</sup> The NDC-1 sets the country's targets for greenhouse gas emission reductions per GDP unit,<sup>7</sup> which were determined through a crosscutting, consultative process anchored in the National Policy on Climate Change, and features over 100 specific climate action measures. These measures were defined through the SNRCC, with contributions from each ministry. The NDC-1 targets align with the country's Long-term Climate Strategy objective of decoupling economic growth from greenhouse gas emissions

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<sup>1</sup> Supported by the Inter-American Development Bank (IDB) through technical cooperation operation [ATN/AC-18245-RG](#) and [ATN/OC-18246-RG](#).

<sup>2</sup> [Budget Act \(Law 19,924\), Article 533](#).

<sup>3</sup> The SNRCC guarantees the design of crosscutting climate change mitigation and adaptation actions.

<sup>4</sup> [Energy Efficiency Act \(Law 18,597, 2009\)](#).

<sup>5</sup> [The UTE in figures 2021](#).

<sup>6</sup> Uruguay revised its NDC-1 in 2017. In 2022, it will set out measures for 2025-2030 under its NDC-2.

<sup>7</sup> [Decree 310/017](#). The NDC-1 set the following unconditional targets for emission reductions per GDP unit by 2025, relative to 1990 levels: carbon dioxide, 24%; methane, 57%; and nitrous oxide, 48%.

- by 2050.<sup>8</sup> In addition, the National Policy on Climate Change seeks to mainstream gender in the measures proposed by the SNRCC, framed by the [Gender and Climate Change Strategy 2020-2025](#) and the [Gender and Climate Change Action Plan 2020-2024](#), both of which are aligned with Uruguay's Gender Action Plan for 2025.
- 1.6 To improve public engagement, transparency, and policy-making in the area of climate, Uruguay strengthened its capacity for programming, monitoring, reporting, and verifying climate actions and developed a [greenhouse gas emissions and removals dashboard](#) to track compliance with the NDC-1.<sup>9</sup> The MEF and SNRCC stakeholders are working to: (i) mainstream the climate agenda in public investment; and (ii) leverage reporting and verification capacity to access financing for climate action.<sup>10</sup> In this context, the MEF and the SNRCC developed a roadmap for transforming the country's NDCs into fiscal planning documents for climate action. The MEF is also working on developing a new sovereign debt instrument whose performance will be contingent upon fulfillment of the NDC-1 targets.<sup>11</sup> Complying with the NDC-1 requires multisector action with an emphasis on the agriculture, forestry, energy, industrial processes, waste, transportation, tourism, and urban sectors.<sup>12</sup>
- 1.7 **The energy sector's role in achieving the NDC-1 commitments and establishing more ambitious targets.** Uruguay has made significant progress in decoupling its economic growth from greenhouse gas emissions. One of the main reasons it has achieved this objective was the transformation of the electricity mix, referred to as the first energy transition. This transformation entailed the diversification of the power generation mix through an increase in the use of renewable energies, especially variable renewable energies, shifting the mix from 35% fossil fuels in 2012 to an average of 3.3% between 2016 and 2020.<sup>13</sup> In 2021, power generation in the country came in at 14,033 gigawatt-hours,<sup>14</sup> of which 82.3% came from renewable sources (36.6% hydropower, 35.3% wind, 7.3% biomass, and 3.1% solar), while 17.7% was from fossil fuels. The increase in the share of fossil fuels relative to prior years was due to the particularly low levels of water availability in the region in 2021.<sup>15</sup>

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<sup>8</sup> The Long-term Climate Strategy is not binding and focuses on carbon dioxide emissions. The NDCs are binding.

<sup>9</sup> Supported by the IDB through technical cooperation operations [ATN/OC-18176-RG](#), [ATN/AC-18245-RG](#), and [ATN/OC-18246-RG](#).

<sup>10</sup> International capital from borrowing, grants, or concessional resources.

<sup>11</sup> With IDB support, Uruguay is developing a sovereign bond with indicators indexed to climate change and a mechanism for discounts on the interest rate for meeting NDC-1 targets and penalization for the failure to do so.

<sup>12</sup> Emissions are concentrated in forestry, land use, and the energy sector. [Fifth National Communication](#).

<sup>13</sup> [National Energy Assessment \(BEN\), 2020](#).

<sup>14</sup> Demand recovered from the effects of the pandemic. In 2020, it dropped 0.56% compared to 2019. In 2021, it was 2.07% higher than in 2020. [Electricity Market Administration \(ADME\) Annual Report, 2020](#).

<sup>15</sup> [ADME, 2021](#).



- 1.8 Nevertheless, the energy sector remains highly dependent on fossil fuels (40%), almost all of which Uruguay imports. Energy demand is highest in the industrial sector (44%), followed by the transportation sector (27%), the residential sector (18%), trade, services, and the public sector (7%), and agriculture (4%). As for emissions, the energy sector ranks second in the country on the [global warming potential](#) index, and carbon dioxide (CO<sub>2</sub>) is the main greenhouse gas, accounting for approximately 95% of sector emissions. Based on the [global temperature change potential](#) index, the energy sector has the highest emissions of CO<sub>2</sub> equivalents.<sup>16</sup> The transportation sector drives 51% of energy sector CO<sub>2</sub> emissions, followed by the industrial sector (13%) and the residential sector (6%).<sup>17</sup>
- 1.9 **Problem addressed.** Uruguay needs to move forward on consolidating its inclusive, low-carbon energy transition. Despite breakthroughs in decarbonizing the electricity mix, the energy sector's ability to sustainably satisfy demand is constrained by (i) economic, (ii) environmental, (iii) social, and (iv) institutional challenges.
- 1.10 **Economic challenge: Waste of surplus variable renewable energy due to the system's inflexibility and inefficiencies stemming from the obsolete process used to calculate consumption.** The high installed capacity for electricity generation from renewable sources means that periods with high water availability or low demand produce surpluses in available renewable energy that is left untapped. The system needs greater flexibility because generation must be restricted at times, such as during periods of low demand or high water availability (renewable generation was restricted 22% in 2017 and 1% in 2020), which leads to energy waste.<sup>18</sup> Moreover, the process used to collect data on electricity consumption for billing is still mostly manual (meter readings conducted by individuals), which leads to commercial and operational inefficiencies. Use of conventional power meters affects the quality of commercial electricity services (longer wait times for new user connections; more frequent power surges, outages, and reconnections; and longer response times for claims) and generates uncertainty regarding measurement collection and the precision thereof. Under the estimated billing system, users must be compensated monetarily when the targets established in the [Service Quality Regulations](#) are not met. It also means that users are less aware of their electricity consumption and less involved in managing consumption and implementing energy efficiency and/or savings measures.
- 1.11 **Environmental challenge: High emissions due to low energy efficiency and use of fossil fuels.** The energy sector emits high levels of greenhouse gases due to inefficient energy consumption in the various sectors and its marked dependence on fossil fuels (paragraph 1.8). The transportation sector depends on fossil fuels for 94% of its power, primarily diesel (48%) and automotive gasoline (46%).<sup>19</sup> In 2021, the [active automotive fleet](#) included over 953,000 four-wheeled vehicles, of which

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<sup>16</sup> Uruguay uses two metrics for greenhouse gas emissions, namely: (i) global warming potential; and (ii) global temperature change potential.

<sup>17</sup> [BEN, 2021](#).

<sup>18</sup> In 2020, water availability was low both within the country and in the region. As a result, hydropower resources were limited. [Ibid.](#) From 2017 to 2020 restrictions on generation led to waste valued at US\$34,775,000. [Ferrés, et al., 2022](#).

<sup>19</sup> [BEN, 2021](#).

- 99.5% had polluting,<sup>20</sup> inefficient<sup>21</sup> internal combustion engines (only 857 were electric vehicles and 3,823 were hybrids). The Long-term Climate Strategy sets the following targets for zero-emission vehicles: (i) by 2035, all new passenger vehicles; (ii) by 2040, all new light duty vehicles; and (iii) by 2045, all new cargo vehicles.
- 1.12 Uruguay has made significant efforts to foster energy efficiency, as one of the guidelines of its 2005-2030 Energy Policy is to promote energy efficiency in all sectors of domestic economic activity and for all energy uses. In 2009, [Law 18.597 on the Promotion of Efficient Energy Use](#) was enacted, and in 2015, the country approved its [2015-2024 National Energy Efficiency Plan](#), which included the target of avoiding<sup>22</sup> 1.69 million tons of oil equivalent for the period. The law also sets the foundation for implementing an [Energy Efficiency Certificate](#) (EEC) system, which incentivizes execution of energy efficiency projects that will help the country reach its established target. However, there are still barriers to overcome to foster investment, chief among them the cost of implementing energy efficiency measures.<sup>23</sup>
- 1.13 **Social challenge: Gaps in universal access and disparity in service quality.** Despite Uruguay having one of the [highest electrification rates in Latin America and the Caribbean](#), 2,500 households still do not have access to electric power (0.19% of the population). Connecting the “last mile” is the most difficult step in achieving universal electrification. Since dwellings are widely dispersed in the country’s remote areas, reaching those households with traditional power supply solutions, such as extending distribution networks, is extremely expensive. Furthermore, access varies significantly depending on household income; those who lack access are the country’s most vulnerable people,<sup>24</sup> who typically use alternative fuels that are less efficient and pollute more, like kerosene and wood.<sup>25,26</sup>
- 1.14 Though electricity services in Uruguay are among the most reliable in the region, outside the capital there are still users whose electricity is supplied with a radial topology grid with lengthy lines, which are susceptible to long service interruptions (more than double the country’s annual average) and issues with the voltage surpassing [acceptable limits](#). These problems in the power service adversely impact productive endeavors and residents’ quality of life. Women and children are the most affected because they spend more time at home; thus, they: (i) have less access to culture and the media, which holds back their empowerment; and (ii) are exposed to indoor pollution since they resort to using liquid fuels as a power source.<sup>27</sup>

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<sup>20</sup> These engines emit CO<sub>2</sub>, sulfur oxides, and nitrogen oxides, which adversely affects habitability and air quality in cities and contributes to respiratory and cardiovascular illnesses, cancer, and reproductive problems. (Viscidi & O’Connor, 2017).

<sup>21</sup> Internal combustion engine vehicles are three to five times less efficient than electric ones, [Albatayneh, Assaf, Alterman, & Jaradat, 2020](#).

<sup>22</sup> Energy not used due to the implementation of energy efficiency measures.

<sup>23</sup> [CAF, 2016](#).

<sup>24</sup> In all, 0.7% of quintile 1, 0.3% of quintile 2, 0.1% of quintiles 3 and 4, and 0% of quintile 5 do not have access to electricity. [Ministry of Social Development](#).

<sup>25</sup> [BEN, 2021](#).

<sup>26</sup> [IDB, 2021](#).

<sup>27</sup> [Jiménez Mori, 2020](#).

- 1.15 **Institutional challenge: Lack of diversity in the sector.** In the electricity sector, only 26% of decision-making positions at the UTE are held by women.<sup>28</sup> Women account for roughly the same percentage of total staff positions. Divisions with higher concentrations of women employees are corporate services, sales, and distribution.<sup>29</sup> Increased gender equity in the sector would help optimize sector management. In addition, one indicator of the inclusion gap for persons with disabilities in the country is their workforce participation rate, which, at 59.5%, trails the rate for people without disability (76%).<sup>30</sup> That said, progress has been made in workforce inclusion of persons with disabilities. Law 19,691 states that at least 4% of all staff members hired by private companies must be persons with disabilities. At present, the UTE employs 44 persons with disabilities (0.67% of its staff).<sup>31</sup>
- 1.16 **Sector strategy for the energy transition.** The UTE is forging ahead with three disruptive initiatives for the electricity sector: energy decarbonization, digitalization of the business model, and decentralization of energy sources.<sup>32</sup> It is currently implementing the Smart Grids Project, a crosscutting endeavor that involves the three aforementioned initiatives and includes the deployment of smart electricity meters and the “electric route,” a network of electric vehicle charging stations.<sup>33</sup> The objectives are to ensure that 100% of electricity customers have smart meters by 2025 and to continue deploying electric vehicle chargers. With IDB Lab support, the UTE is making headway on a pilot battery storage project, which will demonstrate the effectiveness of battery storage for improving grid service and service quality and making more efficient use of variable renewable energy. It is also making progress on the [Uruguay 100% Electrified](#) program, whose goal is to ensure that every household in the country has electricity. Moreover, under the framework of the [National Energy Efficiency Plan](#), since 2016 the DNE has been facilitating various actions, such as holding calls for participation and issuing [EECs](#), which were designed as a tool to encourage the creation and consolidation of energy service companies; promoting policy objectives; supporting the industry’s competitiveness; and generating data.<sup>34</sup>
- 1.17 **Rationale for the Conditional Credit Line for Investment Projects (CCLIP).** The CCLIP is designed to guarantee short- and medium-term financing for implementing critical policies that will demonstrate the feasibility of the country’s climate targets and for securing resources for fulfillment of the NDC.<sup>35</sup> The CCLIP is a suitable instrument that will allow the Bank to efficiently provide medium-term support and maintain a presence in sectors with decarbonization potential.

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<sup>28</sup> [El lugar de las mujeres uruguayas en cargos de decisión. United Nations, 2021.](#)

<sup>29</sup> UTE (2022) Administrative staff records.

<sup>30</sup> [World Bank, 2020.](#)

<sup>31</sup> [Law 18,651](#) states that a minimum of 4% of companies’ staff members must be persons with disabilities.

<sup>32</sup> [UTE 2020 Annual Report.](#)

<sup>33</sup> As of 2020, the UTE had procured 900,000 smart meters. By 2021 it had installed 711,000 of them and had set up 72 electric vehicle charging stations providing 972 megawatt hours (MWh) of energy. [UTE 2020 Annual Report.](#)

<sup>34</sup> Technical cooperation operation [ATN/ME-17851-UR](#). Project in the bidding stage.

<sup>35</sup> The CCLIP will support fulfillment of the NDC-1 targets (for 2025) and later NDCs for 2030.

- 1.18 **Rationale for the first individual loan operation.** The first individual loan operation under the CCLIP features: (i) deployment of electric vehicle charging infrastructure in public places; (ii) installation of stationary batteries in electricity distribution grids; (iii) deployment of smart electricity meters; (iv) actions to narrow the gender gap in the energy sector work force; (v) recognition of EEC certification to purchase energy saved thanks to energy efficiency measures; and (vi) deployment of sustainable stand-alone renewable energy solutions to electrify remote rural areas. The proposed actions support sector sustainability and the NDC-1 objectives, outperforming the NDC-1 targets for smart grids, electricity mix diversification, and issuance of EECs and meeting the targets for deployment of the charging network and raising the share of the private vehicle fleet comprising electric vehicles to 5% by 2025.<sup>36</sup>
- 1.19 **Theory of change.** The main problem identified by the project team is the sustainability of the energy sector, which the program will approach from four angles: economic-financial (paragraph 1.10), environmental (paragraph 1.11), social (paragraph 1.13), and institutional (paragraph 1.15). The first individual loan operation responds to these challenges by promoting new technologies and digitalization, and it proposes the following causal chain to tackle the problem: (i) the deployment of electric vehicle charging stations will allow for widespread e-mobility, by mitigating users' concerns about their vehicles' range (one of the main barriers to adoption),<sup>37</sup> thus helping to reduce sector emissions through increased efficiency and lower fossil fuel consumption (environmental sustainability); (ii) the installation of stationary batteries will facilitate management of surplus variable renewable energy, enhance system flexibility, help build related knowledge and capacity (economic sustainability), and improve electricity service quality and electricity system resilience in the area of influence (social sustainability); (iii) the smart electricity meters will record usage in minute-long intervals, providing insight into each user's demand profile; will make it possible to take power usage readings, send bills, and manage the service remotely; and will let customers view their usage data remotely and on a daily basis. The smart meters will contribute to system flexibility by making it possible to manage demand and enabling better use of renewable energy, through the promotion of more efficient uses of energy and expanded services with more value added, dynamic pricing, and better commercial management of electricity services (economic sustainability); (iv) the actions to narrow the gender gap in employment will facilitate progress toward the quality with gender equity certification and help shift work structures and staff management toward fairer, more equitable and more diverse arrangements (institutional sustainability); (v) the awarding of EECs for avoided energy usage will encourage energy efficiency measures by providing additional economic benefits and offsetting the high initial cost of these technologies (environmental sustainability); and (vi) the sustainable stand-alone renewable energy solutions will bring electricity access to

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<sup>36</sup> The measures used to define the NDC mitigation and adaptation targets and track progress toward their achievement can be found on the [Uruguay NDC dashboard](#), which was developed with IDB support.

<sup>37</sup> The government spearheads initiatives to reduce barriers to adoption. For example, an efficient and sustainable urban mobility project called [Proyecto Movés](#) includes technological tests, incentives to promote and encourage the shift to electric vehicles, and regulatory and policy development. The IDB is supporting technical capacity-building for electric vehicles through technical-cooperation operation UR-T1252.

rural households where the cost of conventional solutions for “last mile” connections to the system is high, thereby narrowing the gap in universal access to electricity (social sustainability) ([optional link 2](#)).

- 1.20 **Gender and diversity.** The UTE’s Gender Quality Committee is leading the utility’s effort to obtain its [quality with gender equity certification](#), issued by the National Institute for Women. The UTE has earned a level 1 certification and is working to advance to the next levels.<sup>38</sup> Trainings on the inclusion and rights of persons with disabilities will be provided to bolster monitoring and support for workers. The operation will support these efforts by performing impact assessments for the UTE’s in-house training sessions and adapting content for staff training sessions. In addition, a communications strategy with a gender and diversity perspective<sup>39</sup> will be developed for the [Uruguay 100% Electrified program](#), which will help the beneficiary women and persons with disabilities narrow gaps in their knowledge of safe, productive electricity use and address the distribution of housework. [Required link 1](#) shows the operation’s crosscutting gender and diversity outputs.
- 1.21 **Climate change.** The operation’s three components (paragraphs 1.32, 1.33, and 1.34) are directly aligned with the country’s climate targets and reflect policy measures established explicitly in connection with the formulation of Uruguay’s NDC-1.
- 1.22 **Innovation and digitalization.** The first individual loan operation is highly innovative since its actions are aligned with the energy sector’s future plans for promoting sustainable and innovative measures.<sup>40</sup> The project for installing batteries in power distribution grids will be the first pilot of this type in the country. This highly innovative endeavor will demonstrate the feasibility and effectiveness of this measure, build capacity, and eventually set in motion the replication of the project at the national and regional levels. Digitalization will transform the electricity sector, allowing consumers to become active agents through demand management and changes to the way services are delivered. The program will help ensure that 100% of electricity service users have smart meters, thereby cementing Uruguay’s status as a leader in the region in this area. The operation will facilitate adoption of electric vehicles through public charging stations and will support the development of digital tools for an improved user experience. The sustainable stand-alone renewable energy solutions incorporate new digital technologies to narrow gaps in access. At the same time, digitalization of the sector entails greater exposure to cyber risks. On that front, the Bank will provide support for staff training and implementation of best practices in this area.
- 1.23 **Sector knowledge and lessons learned.** The Bank provided support for transforming the country’s electricity mix through generation and transmission works. The IDB Group has fostered decarbonization and the resilience of the electricity system and has helped the country remain a net electricity exporter despite adverse hydrological conditions by financing projects for wind (loan [3453/CH-UR-1](#)), solar (loan [3454/CH-UR](#)) , and hydropower

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<sup>38</sup> [UTE certificada en el Nivel 1 en Equidad de Género.](#)

<sup>39</sup> Planned activities include the preparation of leaflets and a video and trainings for technical specialists for training and outreach sessions for rural families.

<sup>40</sup> [IDB, 2020.](#)



(loans [4694/OC-RG](#) and [4695/OC-RG](#)) energy, as well as firm power (loan [2894/OC-UR](#)).<sup>41,42</sup> Uruguay's generation capacity has increased from 3,989 MW in 2015 to 4,912 MW in 2021, and 98% of that increase can be attributed to operations supported by the IDB Group.<sup>43</sup> The IDB Group also supports various innovative initiatives through technical-cooperation funding, for example: storage in distribution grids (technical cooperation operation [ATN/ME-17851-UR](#), US\$1 million), pilot hydrogen project (technical cooperation operation [ATN/OC-17723-UR](#), US\$200,000), digitization of the MIEM's energy data (technical cooperation operation [ATN/OC-17271-UR](#), US\$600,000), and cybersecurity training (technical cooperation operations [ATN/FG-18850-RG](#) and [ATN/OC-18849-RG](#)). Moreover, the Bank is providing support for the establishment and fulfillment of climate change targets for Uruguay and its energy sector, and the mainstreaming of climate change in the MEF's actions (technical cooperation operations [ATN/AC-19523-UR](#) and [ATN/OC-19524-UR](#), US\$400,000; [ATN/OC-19541-UR](#), US\$500,000; [ATN/AC-18245-RG](#), [ATN/OC-18176-RG](#), [ATN/MC-15367-RG](#), and [ATN/MC-18254-RG](#)). This program will be complemented, through coordination of teams, by an investment attraction operation currently in the design stage (operation [UR-L1186](#)), which will promote policy actions to encourage the use of renewable energies, investments in e-mobility, and energy efficiency.

- 1.24 The Bank has extensive experience in energy sector decarbonization, digitalization, and decentralization programs. In Costa Rica it supported the installation of smart electricity meters and electric vehicle chargers, as well as the expansion of rural electrification through the installation of stand-alone generation systems (loans [2747/OC-CR](#)<sup>44</sup> and [3589/OC-CR](#)). In Barbados (loan [4865/OC-BA](#)), the Bank helped the government expand its electric vehicle fleet, including the respective charging stations. This operation will complement the pilot project for batteries in distribution grids (technical cooperation operation [ATN/ME-17851-UR](#)). IDB Lab has been supporting that project since the pilot's launch, which points up the joint work across the Bank's various windows. The Bank supported rural access programs in Ecuador (grant [GRT/FM-13784-EC](#)); Suriname (loans [4931/OC-SU](#), [4931/OC-SU-1](#), and [4931/OC-SU-2](#)); Panama (loans [3165/OC-PN](#) and [3166/CH-PN](#));<sup>45</sup> and Colombia (loan [3610/OC-CO](#)). The lessons learned that will be put into practice in this operation include the following: (i) energy efficiency actions should be promoted to make strides toward achievement of climate targets; (ii) it is important to promote the decarbonization of other sectors in addition to the electricity sector; (iii) market knowledge is essential when introducing specifications for innovative equipment and training users in the operation and maintenance of stand-alone renewable energy systems; (iv) from the predesign stage onward, it is crucial to communicate the benefits of new technologies to decision-makers and engage international experts for assistance with new technologies; and (v) it is important to

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<sup>41</sup> [Project completion report for operation UR-L1070](#).

<sup>42</sup> All told, 2,789 GWh were exported in 2021. [ADME, 2021](#)

<sup>43</sup> In all, 41% corresponds to variable renewable energy projects supported by IDB Invest.

<sup>44</sup> [Project completion report for operation CR-L1049](#).

<sup>45</sup> [Project completion report for operation PN-L1095](#).

take into account conditions in the areas where stand-alone renewable energy systems will be installed and mainstream gender in these rural projects.

- 1.25 The Bank has executed multiple loans based on results (LBRs) in Uruguay (loans [4290/OC-UR](#),<sup>46</sup> [4329/OC-UR](#), [4658/OC-UR](#), [4847/OC-UR](#), and [5565/OC-UR](#)). The following recommendations from those experiences have been taken into advisement: (i) record the data that is relevant to indicators and verification protocols and consider the feasibility of collecting such data during the design process; and (ii) analyze not only administrative procedures but indicators and monitoring procedures as well.
- 1.26 **IDB Group Strategy with Uruguay.** The operation is aligned with the priority areas of the IDB Group Country Strategy with Uruguay 2021-2025 (document GN-3056), namely: (i) sustainable productive development, through improvements in productive and resilient infrastructure that will help the country move toward energy decarbonization; (ii) public resource management, by supporting sustainable financing instruments; and (iii) equity and social inclusion, by supporting the most vulnerable populations' access to modern, sustainable energy services and promoting enhanced gender equality in the energy sector. The operation is included in the Update to Annex III of the 2022 Operational Program Report (document GN-3087-2).
- 1.27 **Strategic alignment.** The operation is aligned with the Update to the Institutional Strategy (document AB-3190-2), in particular the challenges of: (i) productivity and innovation, by fostering new technologies in the energy sector and digitalization of the electricity sector; and (ii) social inclusion and equality, by promoting initiatives to narrow the gap in access to electricity through renewable energies for remote populations, and by improving energy quality, thereby elevating the quality of life of those beneficiaries. The operation is aligned with the crosscutting issues of: (i) climate change and environmental sustainability, in that it promotes energy efficiency and decarbonization of the energy mix through the use of new technologies and supports the country's NDC targets; (ii) institutional capacity and rule of law, by building capacity for decision-making at the executing agency; and (iii) gender equality and diversity, by implementing gender equity and training sessions to empower women, as well as training sessions on the inclusion and rights of persons with disabilities. The operation will also contribute to the Corporate Results Framework 2020-2023 (document GN-2727-12) through the "emissions avoided (annual tons CO<sub>2</sub> equivalent)" and "households with improved access to energy services" indicators. Lastly, it is directly aligned with the IDB Group Climate Change Action Plan 2021-2025 (document GN-2848-9). According to the [joint methodology of the multilateral development banks for tracking climate finance](#), approximately 100% of the IDB resources are invested in climate change mitigation measures, due to the direct alignment of the operation's funds and outcome indicators with the targets set in Uruguay's NDC.
- 1.28 The operation aligns with the Sustainable Infrastructure for Competitiveness and Inclusive Growth IDB Infrastructure Strategy (document GN-2710-5), by fostering the adoption of modern technologies for managing infrastructure services, improving

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<sup>46</sup> [Project completion report for UR-L1141](#).

access and efficiency, and contributing to environmental sustainability, as well as bolstering the competitiveness of small and medium-sized enterprises through recognition of results achieved in the form of financial support for energy efficiency measures. The operation is also consistent with the Climate Change and Energy Sector Framework Documents (documents GN-2835-8 and GN-2830-8, respectively). It is aligned with the Gender and Diversity Sector Framework Document (document GN-2800-8), insofar as it includes specific actions to promote the participation of women and persons with disabilities in the work force and foster the gender perspective in training sessions for electricity service beneficiaries.

- 1.29 **Alignment with the Public Utilities Policy (document GN-2716-6) ([optional link 3](#))**. The operation is consistent with the Public Utilities Policy insofar as it: (i) helps the country meet basic needs in the area of electricity access by implementing sustainable stand-alone renewable energy solutions for people who lack access to electricity; and (ii) promotes innovation to enhance efficiency, access, and environmental sustainability by: (a) assisting the UTE with its digital transformation through the installation of smart energy meters to make operations more efficient and provide the system with more flexibility by managing demand; and (b) supporting the rollout of electric vehicle charging stations, thereby improving the sector's environmental sustainability by reducing emissions.

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

- 1.30 **General objective of the CCLIP**. The general objective is to help the country achieve its climate and environmental sustainability targets in accordance with its Nationally Determined Contribution.
- 1.31 **Objectives of the first individual loan operation under the CCLIP**. The general objective is to support Uruguay in consolidating its inclusive, low-carbon energy transition. The specific objectives are to: (i) improve the energy sector's economic, social, and institutional sustainability; (ii) foster investment in sustainable energy services, focused on electric transportation and energy efficiency; and (iii) narrow the gap in access to electricity services with renewable energy.
- 1.32 **Component I. Investments for efficient, sustainable energy supply (US\$33.5 million)**. This component is expected to further the development of e-mobility in the country and improve the energy sector's sustainability. It will finance the following actions: (i) installation of electric vehicle charging stations in public places (9,000 kW); (ii) installation of batteries in power distribution grids;<sup>47</sup> (iii) deployment of smart grids, including smart meters; and (iv) implementation of activities to narrow the gender gap in the UTE's work force with a view to the UTE obtaining the quality with gender equity certification, and institutional strengthening on the inclusion of persons with disabilities ([optional link 7](#)).
- 1.33 **Component II. Energy efficiency (US\$3 million)**. This component is expected to promote efficient energy consumption by fostering investments in energy efficiency and electric transportation. Results achieved will be recognized through the issuance of [EECs](#), which provide monetary compensation for the energy usage

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<sup>47</sup> With an estimated 35 MWh of storage.



avoided thanks to the successful implementation of energy efficiency measures<sup>48</sup> under the framework of Law 18,597 and the associated promotional tools (paragraphs 1.11 and 1.16). The [EECs](#) are proportional to the total units of energy avoided weighted over the life of the project, and the MIEM sets their economic value in each call for participation.<sup>49</sup>

- 1.34 **Component III. Investments to achieve universal access to electricity using renewable energy sources (US\$3.25 million).** This component is expected to narrow the gap in electricity access, with a gender and disability perspective, by providing services with renewable energies as well as training sessions for beneficiaries on such topics as the productive, safe use of electricity. The component will finance actions associated with execution of the [Uruguay 100% Electrified](#) program, namely the deployment of sustainable stand-alone renewable energy solutions, such as installation of stand-alone renewable energy systems, including procurement of batteries and efficient refrigerators for households, and connections within homes.<sup>50</sup> These solutions will reach rural households that are not connected to the electricity system because their distance from the grid means it is hard to reach them with conventional service. The disability perspective will be incorporated into the program through institutional strengthening, including training sessions for project staff on this topic.<sup>51</sup>
- 1.35 **Program administration and management expenses (US\$250,000).** This will cover the costs of the independent external verifications of outcome fulfillment, auditing, and program management.

**C. Key results indicators**

- 1.36 **Expected impacts and outcomes.** The program will positively impact the intensity of the country's gross greenhouse gas emissions (in CO<sub>2</sub> equivalents) per real GDP unit as well as the country's electrification rate. In addition to the disbursement-linked indicators (DLIs) listed in Table 1, the program will measure achievement of specific objective 1 through contracted demand subject to hourly rates and progress toward the UTE earning its quality with gender equity certification.

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<sup>48</sup> The most impactful energy efficiency measures are associated with steam generation, direct heat, and lighting.

<sup>49</sup> An energy efficiency measure can receive CEEs worth up to 30% of the value of the investment.

<sup>50</sup> Procurement of solar panels is not anticipated for this operation. However, compliance with document GN-3062-1 will be verified for the panels associated with the component (paragraph 2.5).

<sup>51</sup> See [required link 1](#), Table 8.

**Table 1. Disbursement-linked indicators**

Indicator	Unit of measure	Baseline (year)	Year 1	Year 2	Year 3	Year 4	Program end	DLI	Comments
<b>Component I: Investments for efficient, sustainable energy supply</b>									
1. Electricity service billing through smart meters	% of bills	45% (2021)	51%	61%	76%	86%	86%	Yes	Cumulative annual figures over all billed customers
2. Annual availability of the battery bank	% of hours	0% (2021)	0%	0%	45%	90%	90%	Yes	Hours over total hours in the year
3. Charging capacity of the public electric vehicle charging system	kW	4,300 (2021)	5,600	7,300	10,300	13,300	13,300	Yes	Cumulative annual values
<b>Component II: Energy efficiency</b>									
4. Energy consumption avoided thanks to energy efficiency actions	ktoe avoided	0 (2021)	2.5	0.00	3.50	4.00	10.00	Yes	Certified avoided energy consumption. Annual values are not cumulative. Program-end value is the sum total of the annual values.
<b>Component III: Investments to achieve universal access to electricity using renewable energy sources</b>									
5. Dwellings without access to electricity that benefit from sustainable stand-alone electrification solutions	# of dwellings	0 (2022)	100	100	200	200	600	Yes	These dwellings are located far away from conventional line-based connections. Annual values are not cumulative. Program end value is the sum total of the annual values.

1.37 **Economic analysis.** The project team performed a cost-benefit analysis for Components I and II, with a time frame up to the amortization value of the equipment (calculated at 10 years), with the exception of the battery systems (calculated at 15 years). This evaluation shows that the program has a positive net present value of US\$9,800,332 using a discount rate of 12%, and an internal rate of return of 16.2%. The analysis considered the investment costs and economic benefits of the: (i) reductions in greenhouse gas emissions and operating costs due to the use of electric vehicles and chargers; (ii) improved quality of the electricity service and electricity price arbitrage for the battery banks; (iii) costs and energy savings due to the use of smart electricity meters; and (iv) reduction in greenhouse gas emissions and energy savings for the EECs. Sensitivity tests were performed to evaluate the effects of increases and reductions in the main cost and benefit values, with positive results.

1.38 For Component III (universal access), the analysis used a cost-effectiveness methodology ([optional link 1](#)), which assumes that the public is aware of and desires the benefits and that the option provided should be justified as the lowest-cost solution among available alternatives. The analysis found that the present value cost of the stand-alone renewable energy solution was 1.5 times lower than the cost of distributing diesel generators and 15 times lower than the cost of extending the distribution lines, factoring in all costs that would be taken on by the parties involved, which proves the advantages of the proposed solution.

- 1.39 **Beneficiaries.** The country's population will benefit from the improved efficiency of the energy sector and the decrease in environmental pollution resulting from lower greenhouse gas emissions. In addition, 700,000 users of the electricity service will benefit from smart meters, 600 vulnerable households will benefit from access to electricity, and 300 applicants<sup>52</sup> who receive EECs will benefit from the resulting productivity gains. Furthermore, some 22,500 users of the electricity service supplied by the Valentines Substation, a high percentage of whom are low-income households, will receive improved electricity services as a result of the batteries project.<sup>53</sup>

## II. FINANCING STRUCTURE AND MAIN RISKS

### A. Financing instruments

- 2.1 The proposal is for a Multisector Modality II CCLIP, as per the operational guidelines for CCLIPs (document GN-2246-15) and the respective operational policies (document OP-1622-3), with an estimated duration of 15 years, for up to US\$150 million, to be disbursed through at least three individual loan operations. The CCLIP liaison agency will be the MEF, acting through its Multilateral Organizations Unit, which is authorized to perform this role due to its institutional mandate to coordinate, monitor, and evaluate projects financed with multilateral development organization funds, which it has been successfully doing on an ongoing basis in recent years. The Multisector Modality II CCLIP is the right instrument for this operation since it provides a technical framework for joint work and timely financing. It will lend long-term continuity to the investments and ensure that the Bank provides effective, sustained technical support to the country, including ongoing institutional analysis. The CCLIP includes the priority sectors identified by Uruguay in its fifth national communication to the United Nations Framework Convention for Climate Change; the first group of priority sectors includes:<sup>54</sup> energy, transportation, agriculture and livestock, waste, and housing, and other sectors associated with the program objectives. The first individual loan operation is a loan based on results (LBR) double-booked by the Energy, Climate Change, and Transportation Divisions, given the operation's multidimensional nature and the importance of the inclusion of these sectors for design and supervision. Use of the LBR instrument for the first individual loan operation is justified because it strengthens results-based management, helping to overcome the challenges identified in the operation's diagnostic assessment. Use of the LBR was conceived in connection with the gradual process of consolidating the country's inclusive, low-carbon energy transition through the development of technical capacities and information systems on which a results-based management model can feasibly be based. The estimated amount of the first individual loan operation is up to

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<sup>52</sup> Estimated average based on the number of applicants in the past four years.

<sup>53</sup> Based on data from the 2011 census. In 2016, 55% of households in the Valentines Substation area of influence earned less than the Uruguayan average household income. Source: Calculations based on the [Continuous Household Survey 2016](#).

<sup>54</sup> Economic sectors that generate the most greenhouse gases.

US\$40 million financed with the Bank's ordinary capital resources.<sup>55</sup> Table 2 shows the budget broken down by component. The disbursement period will be four years.

**Table 2. Estimated program costs (US\$ millions)<sup>56</sup>**

Component	IDB	%
Component I. Investments for efficient, sustainable energy supply	33.50	83.75
Subcomponent I.1. Deployment of smart meters	27.00	67.5%
Subcomponent I.2. Pilot battery bank project	4.00	10.0%
Subcomponent I.3. Deployment of electric vehicle charging stations	2.50	6.25%
Component II. Energy efficiency	3.00	7.50
Component III. Investments to achieve universal access to electricity using renewable energy sources	3.25	8.12
Program administration and management expenses	0.25	0.63
<b>Total</b>	<b>40.00</b>	<b>100.00</b>

**Table 3. Disbursement schedule and tranches (millions of US\$)**

Category	Year 1	Year 2	Year 3	Year 4	Total
IDB (Ordinary Capital)	6.00 <sup>57</sup>	7.45	14.91	11.64	40.00
Percentage (%)	15	19	37	29	100

- 2.2 **Eligibility criteria for the CCLIP and for the first individual loan operation.** The CCLIP Multisector Modality II complies with the provisions of paragraphs 3.2, 3.4, 3.6, and 3.7 of document GN-2246-15 inasmuch as: (i) its objectives are among the priorities defined in the IDB Group Country Strategy with Uruguay (paragraph **Error! Reference source not found.**); and (ii) the liaison agency has the authority to coordinate and monitor the program in all sectors included in the CCLIP. Likewise, the first individual loan operation satisfies the criteria specified in paragraph 3.9 of document GN-2246-15, in that it falls under a sector defined in the CCLIP and will support the objective of reducing the energy sector's CO<sub>2</sub> emissions, one of the principal challenges of the NDC. The project team performed an analysis of the capacities of the executing agency (MEF) and of the technical agencies participating in the program (the MIEM and the UTE), using the streamlined assessment mechanism, and the operation includes specific actions to improve capacity at the executing agency in line with the recommendations made in the analysis. The main recommendations are to: (i) clearly establish the intra and interagency communication mechanisms; (ii) appoint a technical contact for program activities; and (iii) ensure the creation of a work team with the profiles needed for execution. To implement these recommendations, the executing agency will sign interagency

<sup>55</sup> If the IDB Board of Executive Directors approves a special mechanism to compensate climate action in Bank-financed operations that contribute to achieving the climate targets set by the countries in their NDCs, this project would be able to benefit from it.

<sup>56</sup> Costs for the main activities and subcomponents are indicative.

<sup>57</sup> Financing in year 1 of prior outcomes equivalent to less than 15% of the total loan amount.

cooperation agreements with the MIEM and the UTE, a program coordinator will be appointed, and the program Operating Regulations ([optional link 4](#)) will include the key profiles and point persons at the MIEM and the UTE.

- 2.3 **Fulfillment of the requirements for use of the LBR instrument.** The components of the first individual loan operation fulfill the conditions and requirements set forth in the Proposal to Establish the Bank's Sovereign Guaranteed Loan Based on Results (document GN-2869-1) and the Guidelines to Process Loans Based on Results (document GN-2869-3): (i) they back existing government programs for smart grids, energy efficiency, and rural access, like the Smart Grids Project, Uruguay 100% Electrified, and the National Energy Efficiency Plan (paragraph 1.16); (ii) they improve these programs by incorporating good practices and focusing them on achieving results; (iii) they promote the use of the executing agency's fiduciary systems; and (iv) they ensure that management systems are in place for successful technical and fiduciary execution of the program. The Bank's value-added rests in its technical assistance support for the borrower and the agencies participating in the program.<sup>58</sup> The institutional capacity analysis of the executing agency found that it has the necessary legal and governance powers and duties as well as a suitable institutional environment and sufficient technical and management capacity to administer an LBR. The executing agency's procurement and financial management systems were assessed and were found to be compatible with fiduciary principles and good practices. The executing agency was shown to have appropriate governance and internal control mechanisms and regulations for managing integrity risks. The project team also analyzed institutional capacity at both the UTE and the MIEM and found that the two agencies have sufficient institutional capacity to make technical contributions to program execution. In view of these institutional characteristics, the project team has determined that the program complies with the requirements for the use of an LBR (document GN-2869-1 and associated guidelines set out in document GN-2869-3).

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

- 2.4 Pursuant to the Bank's Environmental and Social Policy Framework (document GN-2965-23) and based on the assessments performed during the due diligence process, this LBR is classified as a "Category B" operation, since the activities to be carried out will have moderate, localized, short-term negative environmental and social impacts, such as construction-related impacts like dust, air pollution, waste, nuisances to neighbors, and traffic interruptions. Mitigation measures are available for occupational risks and the hazardous waste that will be generated. The team has prepared an environmental and social management system (ESMS) ([optional link 6](#)), which contains the specific framework for the program; an identification of risks and impacts; plans for managing them; organizational capacity and areas of responsibility; emergency preparedness and response; stakeholder engagement and consultation; and monitoring and evaluation. Because the operation is an LBR, the ESMS also includes a strategic environmental and social assessment ([optional link 5](#)) and corresponding integrated

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<sup>58</sup> Support will be provided through technical-cooperation operations [RG-T3893](#) and [RG-T3890](#); and a new operation is being prepared to support the MEF, MIEM, and UTE in strategic areas (technical cooperation operation UR-T1286).

strategic environmental and social management plan for all project investments. The ESMS sets out the eligibility criteria with which the investments must comply in order to be included in the program. The environmental and social risk rating ([required link 2](#)) was set at moderate, since the context is stable and the executing agency's performance is good. The disaster and climate change risk has also been classified as moderate, in view of the threat of river floods that could occur on the property in San Gregorio de Polanco that may receive funds for installation of one of the battery banks. Fit-for-use versions of the ESMS, strategic environmental and social assessment, and strategic environmental and social management plan were published prior to the analysis mission, and the final versions of these documents have been posted.

- 2.5 Subcomponent I.2, which entails installation of the battery bank, will be the only subcomponent that will require an environmental and social analysis as well as a meaningful consultation in order to be eligible for program financing ([required link 2](#)). For Component III, the Bank team verified, during the due diligence review, that to the best of its knowledge, the solar panels involved in the program (paragraph 1.34) comply with: (i) the new requirements of the IDB Environmental and Social Policy Framework (document GN-2965-23); and (ii) the IDB Group Measures to Address Risk of Forced Labor in the Supply Chain of Silicon-Based Solar Modules (document GN-3062-1).

**C. Fiduciary risks**

- 2.6 During preparation, the team found no fiduciary risks that would adversely affect execution of the operation. The risk identification and management process will be kept up throughout program execution. The team is requesting a partial waiver of the LBR policy and guidelines for one procurement process.

**D. Other key issues and risks**

- 2.7 There is a medium-high risk related to the economic-financial climate, insofar as problems in the supply chain stemming from global geopolitical conditions could lead to cost overruns in procurement and delays in the manufacturing and delivery of the equipment to be purchased. This could affect Components I and III and will be mitigated by including an amount for contingencies to cover cost overruns in the budget request as needed. Similarly, electric vehicle supply chain problems may delay the expected adoption of this technology, adversely affecting use of the charging stations. However, those conditions are expected to be short-term, and the government has made it a priority to promote electromobility through the rollout of the public charging network.

### **III. IMPLEMENTATION AND MANAGEMENT PLAN**

**A. Summary of implementation arrangements**

- 3.1 **Execution mechanism.** The borrower will be the Eastern Republic of Uruguay, and the executing agency will be the Ministry of Economy and Finance (MEF), due to its strategic role in public policy on climate (paragraph 1.1). The MEF will act through the project coordination unit (PCU). The executing agency will be responsible for reporting on attainment of the actions under the program and for coordinating actions



with the technical agencies involved in the program: (i) the UTE for activities under Components I and III; and (ii) the MIEM for the Component II activities.

- 3.2 **Program administration and execution mechanism.** The MEF's PCU has extensive experience implementing Bank-financed investment projects, including loans [3161/OC-UR](#), [3398/OC-UR](#), and [4705/OC-UR](#), currently in execution. However, the first individual loan operation would be the first time that the PCU is responsible for execution of an LBR, whose arrangements differ from the ones under loans previously executed by the unit. The LBR execution mechanism includes attainment of outcomes (both disbursement-linked and non-disbursement-linked) by technical agencies involved in the program. In view of the nature of the operation, the project team has planned to provide the PCU with LBR-related fiduciary and operational training and support prior to and during execution, which will be financed out of the operation proceeds.
- 3.3 For program execution, a coordinator and an environmental specialist will be appointed, and they will be supported by the PCU's financial/accounting and procurement specialists. The executing agency, through the PCU, will be responsible for: (i) complying with the contractual provisions for which the program executing agency is responsible vis-à-vis the Bank; (ii) coordinating program execution and conducting liaison and formal communication with the Bank; (iii) consolidating reports on achievement of results with inputs from the technical agencies; (iv) consolidating, preparing, and submitting disbursement requests to the Bank; (v) submitting financial reports for submission to the independent audit firm, pursuant to the loan contract, and to the Bank; and (vi) conducting monitoring activities, including preparation of the program semiannual reports. The executing agency, via the PCU and its professional team and tools, will promote coordination among the various stakeholders. The specific roles and responsibilities held by the PCU and by each of the technical agencies will be specified in the program Operating Regulations ([optional link 4](#)). The UTE and the MIEM, as the technical agencies assisting with the program and pursuant to the respective interagency cooperation agreements with the executing agency, will support execution of their respective components, provide the executing agency with technical data at the time of verification of program results, and assist the executing agency and the independent verifier with external verification of results, among other duties and roles established in the program Operating Regulations ([optional link 4](#)). Each technical agency will appoint a point person responsible for centralizing the necessary information, monitoring execution, and cooperating in the programming and organization of activities, evaluation of results, and fulfillment of the interagency cooperation agreement.
- 3.4 **Partial waiver of the LBR policy.** The project team is requesting a partial waiver of paragraph 5.17 of the Proposal to Establish the Bank's Sovereign Guaranteed Loan Based on Results (document GN-2869-1) from the Board of Executive Directors in order to include an individual contract for goods with an estimated value of over 25% of the total loan amount as part of the financing for the first individual operation under the CCLIP (the policy indicates that no contract should exceed 25%). Component I of the first individual loan operation calls for, in one single contract, procurement (through a competitive process) of smart electricity meters, for US\$20 million, or 50% of the total loan amount. This procurement will make it possible to complete the installation of smart meters for all electricity service users. The smart meters:

- (i) represent a substantial change in the country's ability to define energy policies; and (ii) are a necessary condition for Uruguay to meet its NDC-1 targets (paragraph 1.19). This procurement is necessary to attain the objective of improving the sector's economic sustainability and achieve both indicator 1 from Table 1 and the "contracted demand subject to hourly rates" indicator, which is not a DLI. Since this is a PBR, disbursements will be processed in accordance with the verification of the results achieved. The partial waiver is justified since this procurement: (i) will be carried out under a public procurement system that has been validated according to LBR policies and guidelines, and the responsible agency has a high level of institutional capacity;<sup>59</sup> (ii) will be carried out by an agency with experience with this type of equipment and broad knowledge of the required technical and operational specifications for the smart meters; and (iii) is designed to ensure quick progress on installation. This single procurement process will thus contribute to the desired pace of progress and reduce the associated transactional costs.
- 3.5 **Program Operating Regulations.** Execution of the first individual loan operation will be governed by the provisions of the loan contract and the program Operating Regulations ([optional link 4](#)), which will include, at a minimum: (i) the program's organizational structure; (ii) the technical and operational arrangements for execution; (iii) the specific roles and responsibilities of the PCU and the technical agencies, as well as the key profiles and point persons at the MIEM and the UTE; (iv) the mechanism for coordination between the PCU and the technical agencies; (v) the arrangements for programming, monitoring, and evaluation of results; and (vi) a detailed description of the DLIs and their respective verification protocols. The program Operating Regulations ([optional link 4](#)) include the criteria for external verification of program results.
- 3.6 **External verification of results.** An independent verifier (firm, specialized consultants, or government agency) will perform the independent evaluation of achievement of results. This verifier will be responsible for submitting a results verification report to the Bank before each disbursement request. The external verification of achievement of results will focus on two objectives: (i) issuing an opinion on the accuracy, reliability, validity, and consistency of the results data; and (ii) determining the value of the DLIs established for each disbursement tranche.
- 3.7 **Special contractual conditions precedent to the first disbursement of the loan.** Before the first disbursement of the loan proceeds, the borrower, through the executing agency, will submit evidence of the: (i) approval and entry into force of the program Operating Regulations ([optional link 4](#)) in the terms previously agreed upon with the Bank; (ii) appointment or contracting, as applicable, of the program coordinator; and (iii) hiring of the independent verifier responsible for external verification of results, in accordance with the terms of reference previously agreed upon with the Bank. Condition (i) is necessary to ensure that the executing agency has been provided with detailed regulations that

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<sup>59</sup> The smart meters will be procured by the UTE using Uruguay's country procurement system, which the Bank has already validated. The procurement system is considered trustworthy and is aligned with the principles of accepted good practices that will ensure the loan proceeds will be used appropriately. According to the analysis performed, the UTE has a high level of institutional capacity, so the level of risk for the execution of this bidding process is low.



- establish the necessary guidelines for and responsibilities of every actor involved, for successful program execution. Condition (ii) makes it possible to formalize the PCU, which is fundamental to ensuring execution by a coordinator with the requisite experience. Condition (iii) is necessary to enable verification of results pursuant to the provisions of the Proposal to Establish the Bank's Sovereign Guaranteed Loan Based on Results (document GN-2869-1).
- 3.8 **Special contractual condition for execution.** Within six months of the entry into effect of the loan contract, the borrower, through the executing agency, will have signed interagency cooperation agreements with the UTE and with the MIEM establishing the coordination arrangements, each party's responsibilities, and criteria for the verification of program results, and those agreements will have entered into effect, in the terms previously agreed upon with the Bank. This condition is necessary to establish the necessary provisions regarding the technical agencies' involvement in the program.
- 3.9 **Fiduciary agreements and requirements.** Annex III discusses the guidelines for financial management and procurement execution that will apply to the program. Procurements made directly by the executing agency will be governed by the systems and procedures set forth in the executing agency's policies. The policy set forth in document GN-2350-15 will apply to the processes identified in Annex III. Financial management will be subject to the guidelines set out in document OP-273-12. The disbursement of funds to the executing agency under the program will be managed according to the procedures established in the program Operating Regulations ([optional link 4](#)).
- 3.10 **Financing of results achieved prior to eligibility.** The Bank may retroactively finance, against the loan proceeds, results related to DLIs 1, 3, 4, and 5 (see Table 1) achieved by the borrower between the project profile approval date (29 July 2022) and the loan eligibility date, up to an amount equal to US\$6 million (15% of the total loan), which corresponds to the first portion of the loan. These results will be subject to an independent assessment as per the applicable verification protocol (see Annex II). More specifically, the prior results eligible for financing are as follows: raising the percentage of electricity billing that uses smart meters to 51%; purchasing 2.5 ktoe of avoided energy, increasing the capacity of the public electric vehicle charging system to 5,600 kW, and providing access to electricity to 100 dwellings using sustainable stand-alone electrification solutions. The expenses associated with these outcomes must be eligible under the program and attributable to achievement thereof.
- B. Summary of arrangements for monitoring results**
- 3.11 **Monitoring and evaluation.** The executing agency and the Bank have agreed upon a protocol for verifying each DLI in Annex II, which defines the indicators, their fulfillment, deadlines, and sources, semiannual progress reports, and supervision visits. The executing agency will send a progress monitoring report to the IDB no later than 60 days after the end of each calendar six-month period. The monitoring and evaluation plan ([required link 1](#)) provides more details on the protocols for DLI verification and reporting. A before-and-after evaluation will be performed to assess achievement of program results based on the results matrix indicators. An economic evaluation will be performed using an ex post cost-benefit analysis at 90 days after the final disbursement. These evaluations will be financed with loan proceeds.

Development Effectiveness Matrix		
Summary		UR-L1177
I. Corporate and Country Priorities		
Section 1. IDB Group Strategic Priorities and CRF Indicators		
Development Challenges & Cross-cutting Issues	-Social Inclusion and Equality -Productivity and Innovation -Gender Equality and Diversity -Climate Change -Institutional Capacity and the Rule of Law	
CRF Level 2 Indicators: IDB Group Contributions to Development Results	-Households with improved access to energy services (#) -Emissions avoided (annual tons CO2 equivalent)	
2. Country Development Objectives		
Country Strategy Results Matrix	GN-3056	Productive Sustainable Development, Public Resources Management
Country Program Results Matrix	GN-3087-2	The intervention is included in the 2022 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		10.0
3.1 Program Diagnosis		2.5
3.2 Proposed Interventions or Solutions		3.5
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		9.5
5.1 Monitoring Mechanisms		4.0
5.2 Evaluation Plan		5.5
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood		Medium High
Environmental & social risk classification		B
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, External Control, Internal Audit.  Procurement: Information System, Price Comparison, Contracting Individual Consultant, National Public Bidding.
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		

The general objective of the CCLIP is to contribute to the fulfillment of the climate and environmental sustainability goals of the country in accordance with the provisions of the Contributions Determined at the National Level (CDN). The general objective of the first individual operation is to support the country in consolidating the inclusive and low-carbon energy transition. The specific objectives are: (i) improve the economic, social, and institutional sustainability of the energy sector; (ii) promote investments in sustainable energy services, focused on electric transport and energy efficiency; and (iii) reduce the gap in access to electricity service from renewable energy sources. The instrument to finance this operation is a Loan Based on Results.

The Theory of Change, which is the basis for defining the disbursement indicators for the LBR instrument, is clear and based on evidence. The project has an adequate diagnosis for the Uruguayan context. The problems and their determinants are correctly identified and quantified. The relation between the main obstacles for the consolidation of the energy transition in Uruguay, its determinants, and the proposed interventions presented in the vertical logic is clear and supported by evidence. The results matrix is consistent with the vertical logic. The disbursement indicators measure results, are SMART, and have time-bounded goals.

The ex-ante economic evaluation of the program implements a Cost-Benefit Analysis (CBA) methodology for components I and II, and a Cost-Effectiveness Analysis (CEA) for component III. According to the sensitivity analyses presented, the economic viability results are robust to expected changes in the key variables for the quantification of costs and benefits.

The Monitoring and Evaluation plan meets the requirements for a PBR. The plan includes a description of the sources of information and means of verification, assigns a budget for monitoring and evaluation, and assigns responsibilities for such tasks. To measure the achievement of the objectives, a before and after methodology without attribution is proposed.

## RESULTS MATRIX<sup>1</sup>

<b>Project objective:</b>	The specific objectives for this operation are to: (i) improve the economic, social, and institutional sustainability of the energy sector; (ii) foster investment in sustainable energy services, especially electric transportation and energy efficiency; and (iii) narrow the gap in access to electricity services with renewable energy. Achievement of these objectives will contribute to the general objective of supporting the country in consolidating its inclusive, low-carbon energy transition.
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### GENERAL DEVELOPMENT OBJECTIVE

Indicator	Unit of measure	Baseline	Expected year achieved	Target	Means of verification	Comments
<b>General development objective: Support the country in consolidating its inclusive, low-carbon energy transition</b>						
Change in the intensity of gross greenhouse gas emissions (in CO <sub>2</sub> equivalents) per real GDP unit relative to 1990	%	-47 <sup>2</sup> (2019)	2025	-50	MEF report and United Nations Development Programme external verification report	To be evaluated at project end. The 2025 value of the indicator is established in Uruguay's <a href="#">First Nationally Determined Contribution to the Paris Agreement</a> . See calculation methodology in Annex 1 of <a href="#">required link 1</a> .
Rural dwellings without access to electricity	#	2,500 (2021)	2025	1,060	UTE report	To be evaluated at project end.

<sup>1</sup> See crosscutting output indicators in [required link 1](#).

<sup>2</sup> Most recent data available for this indicator.

**SPECIFIC DEVELOPMENT OBJECTIVES**

Indicator	Unit of measure	Baseline (year)	Year 1	Year 2	Year 3	Year 4	Project end	DLI	Comments
<b>Specific development objective 1: Improve the economic, social, and institutional sustainability of the energy sector</b>									
1.1 Contracted demand subject to hourly rates	MW	1,304 (2022)	1,304	1,788	2,271	2,658	2,658	No	Cumulative annual values.
1.2 Electricity service billing through smart meters	% of bills	45 (2021)	51	61	76	86	86	Yes	Cumulative annual values over all billed customers.
1.3 Annual availability of the battery bank	% of hours	0 (2021)	0	0	45	90	90	Yes	Hours over total hours in the year.
1.4 Quality with gender equity certification	# of levels	2 (2022)	2	2	3	3	3	No	Cumulative annual values.
<b>Specific development objective 2: Foster investment in sustainable energy services, especially electric transportation and energy efficiency</b>									
2.1 Energy consumption avoided thanks to energy efficiency actions	ktoe avoided	0 (2021)	2.50	0	3.50	4.00	10	Yes	Certified avoided energy consumption. Annual values are not cumulative. Project-end value is the sum total of the annual values.
2.2 Charging capacity of the public electric vehicle charging system	kW	4,300 (2021)	5,600	7,300	10,300	13,300	13,300	Yes	Cumulative annual values.
<b>Specific development objective 3: Narrow the gap in access to electricity with renewable energies</b>									
3.1 Dwellings without access to electricity that benefit from sustainable stand-alone, electrification solutions	# of dwellings	0 (2022)	100	100	200	200	600	Yes	These dwellings are located far away from conventional line-based connections. Annual values are not cumulative. Project-end value is the sum total of the annual values.

The output table is found in the [monitoring and evaluation plan](#), as established in the guidelines for preparing loans based on results.

**DISBURSEMENT-LINKED INDICATORS MATRIX**  
**(AMOUNTS IN MILLIONS OF U.S. DOLLARS)**

Outcome indicator	Baseline	Year 1		Year 2		Year 3		Year 4		Project end	
		Target	Associated amount	Target	Associated amount	Target	Associated amount	Target	Associated amount	Target	Associated amount
Electricity service billing through smart meters (% of bills)	45.00	51.30	4.21	61.00	6.44	76.00	10.00	86.00	6.60	86.00	27.25
Annual availability of the battery bank (% of hours)	0.00	0.00	0.00	0.00	0.00	45.00	2.00	90.00	2.00	90.00	4.00
Charging capacity of the public electric vehicle charging system (kW)	4,300	5,600	0.37	7,300	0.47	10,300	0.83	13,300	0.83	13,300	2.50
Energy consumption avoided thanks to energy efficiency actions (ktoe)	0.00	2.50	0.88	0.00	0.00	3.50	1.00	4.00	1.12	10.00	3.00
Dwellings without access to electricity that benefit from sustainable stand-alone, electrification solutions (#)	0.00	100	0.54	100	0.54	200	1.08	200	1.09	600	3.25
<b>Total</b>			<b>6.00</b>		<b>7.45</b>		<b>14.91</b>		<b>11.64</b>		<b>40.00</b>

**PROTOCOL FOR VERIFYING DISBURSEMENT INDICATORS**

<b>Indicator</b>	<b>Definition/calculation methodology</b>	<b>Means of verification</b>	<b>Verifier</b>	<b>Verification protocol</b>
1.2	Percentage of bills issued using smart meter data over the total number of bills issued, measured the last month of the year	UTE report	Verifying consultant or firm	The verifier will review the UTE billing report and conduct a field visit to a sample of the installed meters.
1.3	Percentage of hours in which the battery bank is available over the total number of hours in the year	UTE report	Verifying consultant or firm	The verifier will review the UTE report and conduct a field visit.
2.1	Sum total of the energy avoided annually thanks to the certified energy efficiency measures. All projects that obtain Energy Efficiency Certificates (EECs) will be included in the year in which certification is awarded.	EEC report for the respective year, from the National Energy Department (DNE)	Verifying consultant or firm	The verifier will review the DNE report and verify the record of cash transfers associated with the certificates issued.
2.2	Sum total of the power available simultaneously from the UTE electric vehicle charging network at the end of the year	UTE report	Verifying consultant or firm	The verifier will review the UTE report that includes the baseline information from before the program as well as the provisional acceptance information for the new installed chargers. The verifier will also conduct a field visit.
3.1	Number of dwellings that receive sustainable stand-alone electrification systems in the year in question	UTE report	Verifying consultant or firm	The verifier will review the UTE report and the acceptance certificates for the installed systems and conduct a field visit to a sample of the dwellings.

**Country:** Uruguay      **Division:** INE      **Operation no.:** UR-L1177      **Year:** 2022

## FIDUCIARY AGREEMENTS AND REQUIREMENTS

**Executing agency:** The borrower, through the Ministry of Economy and Finance (MEF), via the Project Coordination Unit (PCU)

**Operation name:** Support for Consolidation of the Country's Low-Carbon Energy Transition - First Individual Operation under Conditional Credit Line for Investment Projects (CCLIP) UR-O1160

### I. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

#### 1. Use of the country system in the operation<sup>1</sup>

<input checked="" type="checkbox"/> Budget	<input checked="" type="checkbox"/> Reports	<input checked="" type="checkbox"/> Information system	<input type="checkbox"/> National competitive bidding
<input checked="" type="checkbox"/> Treasury	<input checked="" type="checkbox"/> Internal audit	<input checked="" type="checkbox"/> Shopping	
<input checked="" type="checkbox"/> Accounting	<input checked="" type="checkbox"/> External control	<input checked="" type="checkbox"/> Individual consultants	

#### 2. Fiduciary execution mechanism

<input checked="" type="checkbox"/>	Special features of fiduciary execution	First individual operation under the CCLIP using the loan based on results (LBR) modality. The execution arrangements do not call for the transfer of loan proceeds to the National Administration of Power Plants and Electric Transmission (UTE) or to the Ministry of Industry, Energy, and Mining (MIEM), the agencies responsible for achievement of outcomes tied to the disbursement-linked indicators (DLIs). The MEF, as executing agency, will be the final recipient of the funds. This operation does not include a local contribution.
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#### 3. Fiduciary capacity

Fiduciary capacity of the executing agency	The borrower is the Eastern Republic of Uruguay, and the executing agency will be the Project Coordination Unit (PCU) reporting to the MEF, whose organizational and administrative structure is suitable for execution of the operation. Although the PCU has not previously executed an LBR, the Fiduciary Agreements and Requirements established for the operation do take into account the PCU's experience as the executing agency of loans 3161/OC-UR, 3398/OC-UR, 4705/OC-UR, and 5105/OC-UR. Furthermore, in August 2022, the Bank performed institutional capacity analyses of the PCU, the UTE, and the
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<sup>1</sup> Any system or subsystem approved subsequently may be applicable to this operation pursuant to the terms of the Bank's approval.

	<p>MIEM (the latter two in their capacity as the agencies responsible for achieving DLI outcomes), yielding satisfactory results. The PCU will coordinate program actions and will prepare a consolidated report on the independent verification of the results achieved by the UTE (Components I and III) and the MIEM (Component II). As required for the LBR instrument, the project team performed fiduciary assessments (of financial management and procurement) and found that the UTE and the MIEM have established fiduciary systems that are adequate for ensuring that management will support achievement of the expected results. In conclusion, the institutional and operational conditions for fiduciary management reflect adequate fiduciary capacity at the executing agency, the UTE, and the MIEM for this operation; accordingly, the fiduciary risk is considered to be low.</p>
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4. Fiduciary risks and risk response

Risk classification	Risk	Risk level	Risk response
Internal processes	If the PCU does not receive training on the fiduciary management of LBRs prior to project implementation, delays in execution of the fiduciary processes may arise due to the learning curve.	Low	The Bank project team will provide training on LBRs.

5. Policies and guidelines applicable to the operation: For financial management: Document OP-273-12 or the most recent version of the guidelines.
6. Exceptions to policies and guidelines: Not applicable.

## II. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF THE LOAN CONTRACT

<p><b>Exchange rate:</b> For the purposes of Article 4.10 of the General Conditions, the parties agree that the applicable exchange rate will be the one indicated in Article 4.10(b)(ii). Therefore, the agreed-upon exchange rate will be the prevailing rate on the effective date on which the borrower, the executing agency, or any other person or legal entity delegated the authority to incur expenses makes the respective payment to the contractor, vendor, or beneficiary.</p>
<p><b>Audit type:</b> The external financial audit report and other reports that, as of the loan contract signing date, have been identified as necessary for supervision of the financial management of the program are the assurance reports on the expenses incurred by the Uruguayan Trust for Energy Saving and Efficiency (FUDAEE), by order and on behalf of the MIEM, and on the expenses incurred by the UTE in order to achieve the agreed-upon program outcomes. The executing agency will submit these reports to the Bank within 180 days after the end of the executing agency's fiscal year. The reports will have been duly reviewed by a Bank-acceptable independent audit firm. The executing agency will submit the final assurance report to the Bank within 180 days after the end of the original disbursement period or any extension thereof. During program execution, the executing agency may submit a request to the Bank for the Bank's no objection to submitting the FUDAEE audit report issued by a Bank-acceptable independent audit firm in lieu of the assurance report on the expenses incurred by FUDAEE by order and on behalf of the MIEM in order to achieve the agreed-upon program outcomes.</p>



### III. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

<input checked="" type="checkbox"/>	<p>Use of country systems</p>	<p>In accordance with the Guidelines to Process the Bank's Sovereign Guaranteed Loan Based on Results (document GN-2869-3) and based on the corresponding evaluation, the executing agency will use its own procurement and contracting systems based on the national procurement law (Consolidated Code of Accounting and Financial Administration, TOCAF) for LBRs. The Bank evaluated the executing agency's procurement system using the methodology for assessing procurement systems (MAPS), establishing the technical foundation that would then be used in February 2022 to support validation of the use of the country procurement system, as it was considered to adhere to internationally accepted principles, practices, and standards for all procurement methods and offer the potential for bidders from all countries to participate. The country system will be used for the procurement of goods, nonconsulting services, and consulting services (firms and individuals).</p>
<input checked="" type="checkbox"/>	<p>Special procurement provisions applicable to the operation and request for waiver of the LBR policy</p>	<p>An independent verifier (firm, specialized consultants, or government agency) will be hired in accordance with the provisions of the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-15).</p> <p>Procurement processes will be supervised through the audits envisaged by the program, except for the aforementioned process, in which ex post supervision will apply above the following threshold:</p> <p>Consulting services: US\$200,000</p> <p>The first individual operation requires procurement (via competitive process) and installation of smart electricity meters in one single contract for US\$20 million (50% of the total loan amount) under Component 1. This component (investments for efficient, sustainable energy supply) is expected to contribute to the development of e-mobility in the country and to improve the sustainability of the energy sector. Accordingly, it will finance such actions as the deployment of smart grids, including smart electricity meters. The UTE, the technical agency assisting the program executing agency, has purchased smart electricity meters in the past, having procured around 900,000 meters. Therefore, the Uruguayan agency has extensive knowledge of the market and the product. Through this new individual contract valued at US\$20 million, the UTE will procure some 700,000 additional smart electricity meters.</p> <p>The MAPS analysis performed in 2019 in response to the request to validate the country's procurement system for use in Bank-financed operations found that the system had a high level of compliance with the indicators assessed and, by extension, with the general principles of public procurement set forth in Section 1 of the Bank's procurement policies (document GN-2349-15). Accordingly, on 26 February 2020, the Bank's Board of Executive Directors approved the recommendations of the Report on Acceptance of Full Use of the Eastern Republic of Uruguay's Public Procurement System (document GN-2538-32). For this case, in view of the analysis performed, the project team took into account the Bank-validated evaluation of the Eastern Republic of Uruguay's country procurement</p>

		<p>system to determine that both the executing agency and the UTE have reliable procurement systems that align with the generally accepted principles of good practices and will ensure that the loan proceeds are used in such a way as to achieve the outcomes. Therefore, the conditions of paragraph 5.12 of the Proposal to Establish the Bank's Sovereign Guaranteed Loan Based on Results (document GN-2869-1) and paragraph 2.44 of the Guidelines to Process the Bank's Sovereign Guaranteed Loan Based on Results (document GN-2869-3) are met.</p> <p>This procurement will make it possible to complete the installation of smart meters for 100% of the users of the country's interconnected electricity system, and it represents: (i) a highly significant material change in the country's ability to define energy use policies; and (ii) a necessary condition for Uruguay to meet the targets of its first Nationally Determined Contribution (NDC) to the Paris Agreement on climate change by 2025. Procurement of the smart electricity meters is necessary to attain the objective of improving the sector's economic sustainability and achieve both the "electricity service billing through smart meters (% of bills)" DLI as well as the "contracted demand subject to hourly rates" indicator, which is not a DLI.</p>
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#### IV. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

<input checked="" type="checkbox"/>	Programming and budget	The MEF PCU uses the country budget system through the integrated financial information system. The UTE follows a procedure for drawing up its annual strategic and operational planning. Although it does not use the country system for budget records, it is included in the national budget and the annual financial reporting. The MIEM follows the central government's five-year budget law and annual financial reporting process. Accordingly, it uses the integrated financial information system as the country budget system.
<input checked="" type="checkbox"/>	Treasury and disbursement management	<p>The loan proceeds will be made available to the MEF. The operation does not anticipate any transfer of funds to either the UTE or the MIEM. The MEF will advise the Bank of the bank account set up to receive the loan proceeds. No initial disbursement is planned. The operation does anticipate up to 15% of the total loan amount in retroactive financing of results. The estimated flow of funds (up to US\$40 million over the course of the program) is presented below:</p> <p>Year 1: US\$6 million - 15%</p> <p>Year 2: US\$7.45 million - 19%</p> <p>Year 3: US\$14.91 million - 37%</p> <p>Year 4: US\$11.64 million - 29%</p>
<input checked="" type="checkbox"/>	Accounting, information systems, and reporting	The MEF PCU uses country systems and the Memory accounting system for accrual accounting based on the account plans agreed upon for each project. The UTE uses SAP to record all transactions and prepares its financial statements in accordance with international accounting standards. As is required for all issuers of public securities

		on the Uruguayan stock market, the UTE also prepares quarterly financial statements with a compilation report or limited review in the midterm periods and submits these documents for publication by the Central Bank of Uruguay. The MIEM has adopted the Odoo comprehensive management system in addition to the integrated financial information system. The Odoo system communicates with the integrated financial information system and has been implemented by government bodies. The three agencies are subject to the intervention of the Office of the Auditor General of the Republic.
<input checked="" type="checkbox"/>	Internal control and internal auditing	The country's Internal Audit Office is responsible for establishing guidelines for autonomous bodies like the UTE. Likewise, the MIEM, as a central government body, is subject to internal auditing by the Internal Audit Office. The Internal Audit Office reports to the MEF, to which the program execution unit also reports. The Operating Regulations are expected to establish the applicable financial management framework pursuant to Bank guidelines and instructions, supplemented by the financial processes that govern the MEF PCU, UTE, and MIEM as per applicable local regulations.
<input checked="" type="checkbox"/>	External control and financial reports	In view of the fact that the operation does not call for any transfer of funds to the UTE or the MIEM or for the consolidation of UTE and MIEM financial information, for program purposes it is agreed that the assurance reports on (i) expenses incurred by the FUDAE by order and on behalf of the MIEM; and (ii) expenses incurred by the UTE to achieve the agreed-upon program outcomes will be sufficient for contractual compliance as required by the Bank, provided that: (i) the audit firm is Bank-eligible; (ii) the terms of reference were agreed upon with the Bank; and (iii) international audit standards are enforced. The FUDAE audit report may also be accepted provided it is issued by a Bank-acceptable independent audit firm. Cutoff dates and submission deadlines are set out in Section II.
<input checked="" type="checkbox"/>	Financial supervision of the operation	The financial supervision plan may be adjusted based on program execution and the audited financial statements. The following activities are anticipated: monitoring of program progress, review of disbursement requests, and visits (in-person or virtual)