

TC Document

I. Basic Information for TC

▪ Country/Region:	EL SALVADOR
▪ TC Name:	Support for the preparation of the Universal Access Program in El Salvador
▪ TC Number:	ES-T1358
▪ Team Leader/Members:	Jacome Montenegro, Carlos Alberto (INE/ENE) Team Leader; Cuervo, Javier (INE/ENE) Alternate Team Leader; Barragan Crespo, Enrique Ignacio (LEG/SGO); Edwin Mejia (INE/ENE); Hoffman, Nathalie Alexandra (SEC/TRD); Laura Hinestroza Olascuaga (INE/ENE); Loana Vega (INE/ENE)
▪ Taxonomy:	Operational Support
▪ Operation Supported by the TC:	ES-L1158.
▪ Date of TC Abstract authorization:	14 Nov 2022.
▪ Beneficiary:	Government of El Salvador
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	Low Carbon Energy Fund for People and Planet(LCE)
▪ IDB Funding Requested:	US\$300,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	30 months
▪ Required start date:	April 2023
▪ Types of consultants:	Consulting Firms; Individuals
▪ Prepared by Unit:	INE/ENE-Energy
▪ Unit of Disbursement Responsibility:	CID/CES-Country Office El Salvador
▪ TC included in Country Strategy (y/n):	Yes
▪ TC included in CPD (y/n):	Yes
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality; Productivity and innovation; Institutional capacity and rule of law; Environmental sustainability; Gender equality

II. Description of the Associated Loan

- 2.1 This Technical Cooperation (TC) is related to the loan operation [ES-L1158](#), which will support the Government of El Salvador's efforts in achieving 100% of electricity coverage by 2030, through the implementation of a Georeferenced Plan for Universal Energy Access (PGAU), ensuring sustainable electricity supply and maximizing the use of renewable resources available in the country.
- 2.2 The loan operation ES-L1158 was reviewed in the Eligibility Review Meeting (ERM) on December 15th, 2022 and it was eligible on February 3rd, 2023.

III. Objectives and Justification of the TC

- 3.1 **General objective.** The main purpose of this TC is to support the preparation and execution of the investment loan "Universal Energy Access Program in El Salvador" required to increase energy access in El Salvador by 2030. The specific objectives are to: (i) develop detailed technical, socioeconomic, financial, and environmental studies, at the department level, required for the implementation of the Universal Energy Access Georeferenced Plan (PGAU in Spanish) for El Salvador; and (ii) strengthen

the institutional framework and operational capacity of the CEL Group in the implementation of energy access programs.

- 3.2 **Context.** The Government of El Salvador (GoES) aims to achieve universal energy access by 2030. As of December 2020, about 35,000 households had no access to electricity and about 82% of them were located in rural and scattered areas of the country. Although the electrification rate in El Salvador has increased from 91.6% in 2010 to 97.8% in 2020, disparities still exist between rural and urban electrification rates, which correspond to 95.3% and 99.3%, respectively ([OLADE, 2022](#)).
- 3.3 For these unserved households, the lack of reliable electricity supply hampers rural productivity such as crop irrigation and post-harvest activities (i.e., food processing and storage) that rely heavily on the electricity service. Unfortunately, the private sector has shown no interest in electrifying communities beyond concession areas, mainly due to high investment and Operation & Maintenance (O&M) costs associated with the provision of electricity service in these remote areas of the country and a high-risk perception of the project's profitability. Therefore, the deployment of rural electrification in El Salvador has depended mainly on public investments and a subsidized model with resources from the [National Investment Fund in Electrification and Telephony \(FINET\)](#), created in 1998. This fund subsidized both the construction and improvement of infrastructure for the supply of electricity in rural areas and users' energy consumption. However, additional investment is required to achieve universal access to electricity.
- 3.4 In addition, the lack of access to electricity is also affected by the lack of a regulatory framework applied to off-grid electrification projects. Regulatory reforms are required to guarantee the sustainability of these projects, including the definition of effective tariffs, subsidies, and remuneration schemes for the energy service provided by off-grid energy systems that integrate renewable energy.
- 3.5 In order to support the GoES' efforts to close the energy access gap, the IDB, through the TC "Strengthening the Electrical Sector of El Salvador" ([ATN/OC-17159-ES](#)) financed the formulation of the Universal Access to Electricity Strategy in El Salvador. As a result, the PGAU was formulated, based on a geospatial planning model, the Reference Electrification Model (REM), which identifies households and community or productive sites without electricity service in the country and analyses three possible electrification alternatives, including grid extension and off-grid energy solutions such as mini-grids and stand-alone PV systems. The PGAU was prepared with the help of *Consejo Nacional de Energía*, which recently has been re-named as the *Dirección General de Energía, Minas e Hidrocarburos*.
- 3.6 This plan also proposes an investment plan required to achieve universal, sustainable, reliable, and economic access by 2030. Under a baseline scenario, the plan indicates that a total investment of about US\$65.7 million is required to achieve this purpose. This investment will allow providing electricity service to about 19,749 users (including households, schools, and small farms) that by 2030 will not be served by the distribution companies, as they are located more than 50 meters from the low voltage network and more than 500 meters from a medium/low voltage transformer.
- 3.7 This TC will support the implementation of this plan, by financing technical, socioeconomic, financial, and environmental studies, required for the preparation of the loan operation that will finance the plan. In addition, this operation will strengthen the institutional capacity of the subsidiary distribution company of the CEL Group, the entity responsible for the operation and maintenance of the new electrification projects.

The resources from this TC will be needed so as not to delay the preparation/execution of the associated loan operation [ES-L1158](#).

- 3.8 **Strategic Alignment.** This TC is aligned with the Bank's Second Update to the Institutional Strategy 2020-2023 (AB-3190-2), by addressing the development challenges of: (i) Social Inclusion and Equality, through the implementation of training programs that promote women empowerment; and (ii) Productivity and Innovation, by promoting innovative technologies and financial instruments for sustainable RE access projects; The TC is also aligned with the cross-cutting issues of: (i) Climate Change and Environmental Sustainability, by promoting the development of stand-alone PV and mini-grids systems that will reduce Greenhouse Gas (GHG) emissions from electricity generation compared to other electrification alternatives such as thermal-based mini-grids; (ii) Institutional Capacity and Rule of Law, by strengthen CEL's technical capacities for managing rural electrification projects; and (iii) Gender Equality and Diversity by implementing training programs that support the inclusion of women in the workforce. This operation is consistent with the Corporate Results Framework 2020-2023 (GN-2727-12), contributing to the indicators of: (i) number of households with access to energy services; (ii) number of women benefiting from economic improvement activities; and (iii) increase in installed capacity with RE. The TC is also consistent with the Climate Change Sector Framework Document (GN-2835-10) and with the Energy Sector Framework Document (GN-2830-8), specifically with three of its four thematic lines: (i) energy access – coverage, reliability, and affordability; (ii) energy sustainability – energy efficiency, renewable energy, and climate change; and (iii) energy governance – institutional framework, sectorial organization, and policies. This TC is also aligned with the Country Strategy with El Salvador 2020-2024 (GN-3046-1), by contributing to the strategic objectives of: (i) developing inclusive and sustainable infrastructure services, and (ii) increasing digital connectivity.
- 3.9 The project is aligned with the Low Carbon Energy Fund for People and Planet (LCE)'s purpose established in ¶2.1 of Annex I of the Agreement between the Global Energy Alliance for People and Planet (GEAPP) and the IDB, by supporting the installation of new sustainable energy solutions that contribute to increasing electricity access in the country through renewable energy systems and affordable tariffs. It is specifically aligned with the first specific objective of the fund: "increasing access to affordable, reliable, and modern energy services to underserved communities in LAC by expanding the use of Distributed Renewable Energy (DRE) services". The TC is also aligned with the fund's eligible pillar 1 (see ¶2.3 of Annex I of the Agreement) and its focus area for mini-grids: off-grid, decentralized, and grid-connected renewable or renewable-hybrid mini-grids of varying scales that provide reliable power to underserved communities and business in rural, peri-urban, and urban settings¹.
- 3.10 **IDB experience and knowledge of El Salvador's energy sector.** The IDB has been a key partner for the GoES through loans and TCs for generation, transmission, rural electrification, and institutional capacity-building projects. In the last decade, the Bank supported the strengthening of El Salvador's energy sector through the TC

¹ On October 2021, the IDB announced a new partnership with the Global Energy Alliance for People and Planet (GEAPP) fund that creates a financing instrument dedicated to expanding energy access, supporting energy transition, and protecting the climate in Latin America and the Caribbean (LAC). The financing instrument, which was formally announced at COP26, is managed by the IDB Group, and will make resources available in the form of investment grants and TCs.

([ATN/OC-17159-ES](#)) that finance studies for the formulation of the country's universal access plan and through regional technical assistance, including the Hydroelectric Modernization Program ([ATN/JF-19202-RG](#)) and the Hydrogen Decarbonization Program ([ATN/SX-19067-RG](#)). Between 1972 and 1992, the Bank supported the development of hydroelectric generation in the country, highlighting the San Lorenzo Hydroelectric Plant ([340/OC-ES](#)), and regarding the rural electrification sector, the Bank financed the Electricity Sector Expansion Program ([838/OC-ES](#)) and both operations were executed by CEL.

IV. Description of Activities/Components and Budget

- 4.1 **Component I. Assessments for Loan preparation (US\$ 180,000).** This component will finance the following activities: (i) preparation of technical, economic, financial, environmental, social inclusion, productivity, and legal studies to support the Loan preparation document; and (ii) field studies to verify the total number of beneficiaries, their socio-economic conditions and energy needs, which will help to validate the investment needs for the loan preparation.
- 4.2 **Component II. Support to strengthen the institutional capacity of the public sector institutions to guarantee the program's sustainability and the implementation of the PGAU (US \$120,000).** This component will finance the following activities: (i) design and definition of an institutional capacity program to support the CEL Group in the implementation of energy access programs including the design, build, operation, and maintenance of rural electrification projects; (ii) provide support to the executing agency in the procurement of good and services with experts for the development of mini-grids and stand-alone solar PV systems; and (iii) finance the design of regulations for rural electrification programs including subsidies, tariffs, and quality of service aspects considering there is no regulation for rural electrification in remote areas.
- 4.3 The total project's total cost is US\$ 300,000 to be funded by the LCE in the form of a non-reimbursable TC, administered by the IDB. The indicative budget is presented in the following table:

Indicative Budget

Activity/Component	Description	IDB/Fund Funding	Counterpart Funding	Total Funding
Component I. Assessments for loan preparation	Technical, economic, financial, environmental, social inclusion, productivity, and legal studies that support the Loan preparation document	US\$180,000	US\$0	US\$180,000
Component II. Support to strengthen the institutional capacity of the public sector institutions to guarantee the program's sustainability and the implementation of the PGAU	Institutional capacity program to support the CEL Group and design of regulations for rural electrification programs	US\$120,000	US\$0	US\$120,000
Total		US\$300,000	US\$0	US\$300,000

V. Executing Agency and Execution Structure

- 5.1 At the request of the beneficiaries, and in line with the Procedures for the Processing of Technical Cooperation Operations and Related Matters (OP-619-4), the Bank, through the Energy Division, will act as the Executing Agency (EA) for this TC due to its extensive experience in the sector in the preparation and development of technical and operational activities similar to those proposed for this operation, which will contribute more effectively to the achievement of the objectives in a timely manner.
- 5.2 The Bank will allow a better coordination with the preparation of the loan "Universal Energy Access Program in El Salvador" ([ES-L1158](#)), given the importance of addressing the technical, economic, financial, environmental, and social inclusion issues within the proposed timeline. More specifically, being the Bank the EA will: (i) guarantee the technical quality of the products and compliance with the standards necessary for the execution of the TC; (ii) facilitate the contracting and execution of studies and consultancies and (iii) maximize the benefits of IDB's technical knowledge in the different areas. This is also justified under Annex II, ¶2.1 of the document OP-619-4.
- 5.3 The execution period will be 30 months to accompany the implementation process after the elaboration and discussion of the studies. All knowledge products derived from this TC are the intellectual property of the Bank.
- 5.4 The CEL, through its subsidiary company, will designate focal points and key actors to attend to each of the topics supported by the TC.
- 5.5 **Procurement.** The IDB will be responsible for the selection and contracting of consulting firms and individual consultants. Activities to be executed are included in the Procurement Plan and will be contracted in accordance with Bank policies as follows: (i) Hiring of individual consultants, as established in the regulations AM-650; (ii) Policy for the Selection and Contracting of Consulting Firms for Bank-executed Operational Work according to GN-2765-4 and its associated operational guides (OP1155-4); and (iii) contracting of logistics services and other services other than consulting, according to the policy GN-2303-28.
- 5.6 A Single Source Selection (SSS) is contemplated in the Procurement Plan for the preparation of the social and environmental studies of the PGAU, considering the direct contract of the consultancy firm INAF S.A. This selection method is justified given the estimated value of the contract (US\$68,780) is below the limit for SSS established in the Operational Guidelines for the Selection and Contracting of Consulting Firms in Bank-Executed Operational Work (OP-1155-4).
- 5.7 **Monitoring and Evaluation.** Supervision and coordination of the consultant's work will be the responsibility of Carlos Jácome (INE/ENE), Team Leader, carlosja@iadb.org with the support of the INE/ENE team and the Country Office of El Salvador (CID/CES). The project will be monitored using the Bank's supervision instruments and the contract of consultants will comply with the Policies for the Selection and Contracting of Consultants Financed by the IDB (GN-2350-9). The team will hold regular meetings with the counterparty and report the progress of the TC, through the IDB standard system (Monitoring and Reporting System - M&R system); this will include information related to progress in delivering outputs and achieving results.

VI. Major Issues

- 6.1 The main risks of this TC are linked to possible problems and delays that could arise due to difficulties in coordination between the multiple counterpart stakeholders that depend on different ministries and public agencies, and the complexity of the technical aspects. The risks will be mitigated by coordinating with the executing agency of the loan program ES-L1158 and by involving counterparties from the beginning of the TC execution, presenting, and regularly discussing the progress of studies and consultancies. Furthermore, implementation from INE/ENE, with the support of specialized consultants, will help mitigate these potential risks. The IDB will also act as the executing agency of the TC generating the dialogue and the spaces of cooperation and coordination required among the institutions. Another risk for this TC is not having specific regulations and policies related to isolated systems. This risk will be mitigated by including activities, in both the TC and loan operation, that will support the design of regulations associated to the loan implementation.

VII. Environmental and Social Strategy

- 7.1 This TC will finance investment project feasibility studies and associated environmental and social studies, whose terms of reference and deliverables will be consistent with the applicable requirements of the Bank's Environmental and Social Policy Framework (ESPF). Environmental and Social Impact Classification for the TC does not apply. The environmental and social risk for this program is substantial.

Required Annexes:

[Request from the Client - ES-T1358](#)

[Results Matrix - ES-T1358](#)

[Terms of Reference - ES-T1358](#)

[Procurement Plan - ES-T1358](#)