

Technical Cooperation Document

I. Basic Information for TC

▪ Country/Region:	PERU
▪ TC Name:	Support to the Peruvian Energy Sector Transformation
▪ TC Number:	PE-T1449
▪ Team Leader/Members:	Echeverria, Carlos Bladimir (INE/ENE) Team Leader; Echevarria Barbero, Carlos Jose (INE/ENE) Alternate Team Leader; Baltodano Carrasquilla, Fabiola (INE/ENE); Barbosa Taves De Gouvea, Heleno (ORP/REM); Isabel Williamson, David Alejandro (ORP/GCM); Macias Parra, Ana Maria (INE/ENE); Negret Garrido, Cesar Andres (LEG/SGO) Echevarria Barbero, Carlos Jose (INE/ENE) Alternate Team Leader; Baltodano Carrasquilla, Fabiola (INE/ENE); Barbosa Taves De Gouvea, Heleno (ORP/REM); Isabel Williamson, David Alejandro (ORP/GCM); Macias Parra, Ana Maria (INE/ENE); Negret Garrido, Cesar Andres (LEG/SGO) Echevarria Barbero, Carlos Jose (INE/ENE) Alternate Team Leader; Barbosa Taves De Gouvea, Heleno (ORP/REM); Isabel Williamson, David Alejandro (ORP/GCM); Negret Garrido, Cesar Andres (LEG/SGO); Baltodano Carrasquilla, Fabiola (INE/ENE); Macias Parra, Ana Maria (INE/ENE)
▪ Taxonomy:	Client Support
▪ Operation Supported by the TC:	N/A
▪ Date of TC Abstract authorization:	N/A
▪ Beneficiary:	Ministry of Energy and Mines of Peru
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	Canada Cooperation Framework(CCF)
▪ IDB Funding Requested ¹ :	US\$387,834.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	36 months
▪ Required start date:	October 2020
▪ Types of consultants:	Individuals, Firms
▪ Prepared by Unit:	INE/ENE-Energy
▪ Unit of Disbursement Responsibility:	CAN/CPE-Country Office Peru
▪ 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:	Environmental sustainability; Institutional capacity and rule of law; Productivity and innovation

II. Objectives and Justification of the Technical Cooperation (TC)

- 2.1 **Energy Sector Transformation.** On March 28th, 2012, the Interamerican Development Bank (IDB) approved the Investment Grant “Program for Sustainable and Efficiency Management of Peruvian Energy Resources (PROSEMER) (ATN/CN-13202-PE). The Program’s main objectives were to contribute to a sound and

¹ These funds will be administered by the IDB through a Project-Specific Grant (PSG). Global Affairs Canada will contribute US\$387,834

sustainable management of Peru's energy resources by government entities involved in this sector, as well as other key stakeholders, and to strengthen the interaction and coordination between them with the ultimate goal of promoting sustainable economic growth.

- 2.2 PROSEMER was financed through a non-reimbursable contribution of C\$19,000,000 Canadian dollars. The Program's execution finished in 2019 and resulted in the following main outputs, among others: (i) an Energy Planning System that includes forecasting models; (ii) a study for a new institutional structure for energy planning that anticipated the creation of the Energy Planning and Information Unit (UPIE by its acronym in Spanish); (iii) a series of studies to estimate the potential for power generation of wind and hydropower; and (iv) a preliminary study of the 500 kV Ecuador - Peru interconnection project.
- 2.3 In 2019, the Government of Peru (GoP), in an effort to reform the energy sector, created the Multisectoral Commission for the Reform of the Electric Subsector (CRSE).² The CRSE was established by the Ministry of Energy and Mines (MINEM) following one of the recommendations of the PROSEMER studies. The CRSE's objective is to propose measures to ensure the sustainability and development of the electricity sector for the generation, transmission, distribution and commercialization of electricity. The CRSE's members consist of delegates from MINEM, the Supervisory Agency for Investment in Energy and Mining (OSINERGIM, by its acronym in Spanish) and the Ministry of Economy and Finance (MEF).
- 2.4 In the short term, the working plan and the roadmap, elaborated by the CRSE, has the objective of mitigating regulatory distortion while the structural sectoral reform is formulated by: (i) declaring a natural gas price regime; (ii) promoting Non-Conventional Renewable Energy (NCRE) in isolated areas; (iii) regulating rural electrification; (iv) designing an electricity supply bidding scheme; and (v) separating the purchases for electricity supply into power and energy. On the other hand, in the medium-long term, it has the objective of an electricity sector reform with a long-term sustainable regulatory model that includes: (i) institutional governance by the MINEM, Economic Operation Committee of the National Interconnected System (COES, by its acronym in Spanish) and OSINERGMIN; (ii) IT in the electricity sector; (iii) new generation, transmission and distribution regulation models; (iv) energy development by a Strategic Bidding Plan; and (v) power generation promotion with a capacity market.
- 2.5 An initial evaluation of Peru's electricity sector evidenced that the regulatory framework implemented by the Law of Electrical Concessions (DL 25844) and the Generation Efficient Development Law (Law 28832) do not contain the signs or measures to allow or promote the modernization of the electricity network.
- 2.6 Therefore, the CRSE has engaged in the development of the "White Paper" (WP), a framework to support the modernization of the sectoral regulatory framework, taking advantage of the studies carried out by the PROSEMER Program. This regulatory framework must include economic and regulatory signs, which drive the modernization, and resolve the challenges found in the electricity sector to integrate

² Supreme Resolution No. 006-2019-EM

renewable energy (wind and solar), smart metering, distributed generation, electromobility, as well as active participation of users in the electricity market, among others.

- 2.7 The CRSE aims at developing a conceptual framework and a legislative proposal with strong technical, economic and regulatory justification that allows the sectoral reform to achieve its goals. Therefore, the GoP requested the Bank's support for the development and implementation for the WP.
- 2.8 The general objective of this Technical Cooperation (TC) is to support the CRSE with the activities aimed at achieving the sector's reform. The specific objective of this TC is to provide technical assistance in the adoption of measures to guarantee the development and sustainability of the electricity sector in the generation, transmission, distribution, and commercialization of electricity.
- 2.9 **Strategic Alignment:** This TC is consistent with the Second Update of the Institutional Strategy 2010-2020 (AB-3190-2) and it is aligned with the development challenge of pushing forward productivity and innovation by identifying actions to guarantee the quality and coverage of electricity services in the medium and long terms. The TC also aligns with the cross-cutting areas of: (i) Climate Change and Environmental Sustainability, by supporting the design of a financial instrument to finance NCRE projects; and (ii) Institutions and the Rule of Law, by supporting the design of new policies and regulations to increase efficiency of electricity provision. The TC is also aligned with Peru's National Infrastructure Plan for Competitiveness (PNIC, by its official acronym in Spanish), given that the proposed reforms are expected to result in a strengthened power sector, allowing the country to advance with its infrastructure projects in generation, transmission and distribution, in a sustainable and harmonized way. This TC is also framed within the Country Strategy with Peru 2017–2021 (GN-2889) through the areas of: (i) institutional strengthening and basic service delivery, by developing a more coordinated and efficient regulatory framework of the electricity sector; and (ii) environmental sustainability and climate change, by supporting a policy reform oriented to reduce carbon emission. This TC is consistent with the Energy Sector Framework (GN-2830-8) in the thematic areas of sustainability, security, and governance, and with the Climate Change Sectorial Framework (GN-2835-3) in the mitigation aspect. Finally, the TC is also included in the Country Program Document 2020 (PE-O0003), although with a different original pipeline number (PE-T1443).

III. Description of components and budget

- 3.1 **Component I: Institutional and technical support to the electricity sector transformation.** This component will finance: (i) activities to develop the transformation of the electricity sector in Peru to adopt new technologies and the digitalization of the sector, including the revision of the regulatory framework from technical and economic perspectives; (ii) technical assistance to the CRSE to advance the working plan and roadmap (¶II.2.4); and (iii) contribute to the preparation of the WP and its corresponding regulatory and legal sectoral reforms. The WP will focus its analysis and recommendations, initially, on four priority thematic axes: (i) institutional, energy planning and sectorial structure; (ii) wholesale market, competition, ancillary services and storage; (iii) electrical transmission and interconnections; and (iv) electricity distribution (smart grids), distributed generation and retail competition.

- 3.2 **Activity 1.1 Strengthening of the institutional framework.** This activity will finance consultancy services for the adaptation of the energy institutional framework of Peru, which would result in a new sectoral and electricity market architecture, the consolidation of a comprehensive planning methodology, the revitalization of the natural gas market and its relationship with the electricity sector, and review of the administrative regime of public law electricity companies.
- 3.3 **Activity 1.2 Transformation of the electricity wholesale market.** This activity will support the development of needed reforms to allow the creation of new business models and the incorporation of new technologies to address the some of the CRSE's objectives, such as: (i) user empowerment for efficient consumption and access to new and better services; and (ii) introduction of efficient technologies to modernize the sector. Additionally, these reforms will face the challenges of the integration of NCRE, guarantee power supply at competitive prices. The reform is expected to redefine the short-term market and capacity market, to have an efficient adoption of NCRE sources and the digitalization of the sector, with energy storage and demand response systems, among other new technologies.
- 3.4 **Activity 1.3 Innovation in the distribution network and retail service.** This activity will support the development of a new economic and regulatory framework in the distribution and commercialization activities. The purpose of the new framework will be to provide proper market conditions that allows the adoption of NCRE, increased the energy access and improve the quality of service. Additionally, the new framework will define regulatory measures and market rules to stablish an open retail market in Peru and allow private sector investment.
- 3.5 **Activity 1.4 Restructure of the electricity transmission regulatory framework.** This activity will support activities to restructure the regulatory framework of the electricity transmission segment, to achieve the expected result of a more harmonized development of the whole power sector, taking into consideration regional interconnection schemes to improve the management of the national grid, in an efficient way.
- 3.6 The total cost of the TC is US\$387,834 to be financed by the Canadian Cooperation Framework (CCF). The costs breakdown is shown in table 1.

Table 1. Indicative Budget

Activity/Component	Description	IDB/Fund Funding	Total Funding
Component I: Institutional and technical support to the electricity sector transformation	Activity 1.1 Strengthening of the institutional framework	US\$100,000.00	US\$100,000.00
	Activity 1.2 Transformation of the electricity wholesale market.	US\$100,000.00	US\$100,000.00

	Activity 1.3 Innovation in the distribution network and retail service.	US\$100.000.00	US\$100.000.00
	Activity 1.4 Restructure of the electricity transmission regulatory framework.	US\$87,834.00	US\$87,834.00
Total		US\$387,834.00	US\$387,834.00

- 3.7 Resources of this project to be received from Global Affairs Canada through a Project Specific Grant (PSG). A PSG is administered by the Bank according to the “Report on COFABS, Ad-Hocs and CLFGS and a Proposal to Unify Them as Project Specific Grants (PSGs)” (Document SC-114). As contemplated in these procedures, the commitment by Global Affairs Canada will be established through a separate Administration Agreement. Under such agreement, the resources for this project will be administered by the Bank.³

IV. Executing agency and execution structure

- 4.1 By request of MINEM and in accordance with Annex 10 of the Operational Guidelines for Technical Cooperation Products (GN-2629-1), the TC will be executed by the Bank. The Bank will execute this TC to: (i) avoid lengthy internal budgeting procedures that can jeopardize the achievement of its objectives by delaying the start of TC execution and consultants’ payments, as the TC is not included in MINEM’s budget; and (ii) facilitate coordination between the different public-sector entities (MINEM, OSINERMIN and COES).
- 4.2 The Energy Division (INE/ENE) will be responsible for its execution, in coordination with the IDB Country Office in Peru (CAN/CPE). The IDB will contract individual consultants, consulting firms, and non-consulting services in accordance with the IDB’s current procurement policies and procedures: (i) the individual consultants will be hired in accordance with the guidelines set out in the AM-650; (ii) the procurement process for consulting firms will follow the IDB Policy for the Selection and Contracting of Consulting Firms for IDB-executed Operational Work (GN-2765-4) and the related Operational Guidelines (OP-1155-4); and (iii) the procurement of non-consultant services will follow the IDB Corporate Procurement Policy (GN-2303-28).
- 4.3 The technical responsibility will lie in INE/ENE. The focal point designated and sector specialist responsible for executing and supervising this TC will be the Team Leader,

³ This TC is being financed by the unspent and uncommitted balance of Canada’s contribution to the now completed PROSEMER, (ATN/CN-13202-PE). The payment of the 5% non-refundable administrative fee of the contribution has been charged by the Bank when Canada originally transferred the resources to the PROSEMER Program and therefore will not be charged in this instance.

with the support of the Bank's Country Office in Peru (CAN/CPE) and the INE/ENE Project Team.

- 4.4 The project team will be responsible for the preparation and submission to the donor of the project reporting. If at the end of project execution the project closed with a positive uncommitted and unspent balance, the project team will be responsible for informing ORP/GCM to transfer the unspent balance, as agreed to by the donor and the Bank, pursuant the terms of the PSG Administration Agreement.

V. Major issues

- 5.1 No major risks are anticipated for the development of the TC. A low risk has been anticipated related to eventual delays in the development, revision and approval of the studies due to potential difficulties in coordinating the different counterparts involved in the CRSE: MINEM, OSINERGMIN, MEF. The execution from INE/ENE, with the support of specialized consultants, will help to mitigate these potential risks. The draft for the Terms of Reference (ToR) of the key studies to be financed are under preparation by the Government Counterparts.

VI. Exceptions to IDB'S policy

- 6.1 No exceptions are foreseen to the IDB's policies.

VII. Environmental and Social Strategy

- 7.1 According to the Environmental and Safeguards Compliance Policy (OP-703), this TC has been classified as Category "C". The latter ratifies a negative minimum or inexistent environmental, social and/or cultural impact; therefore, no environmental assessment studies or consultations are required for Category "C" operations. (see Safeguard Policy Filter Report and Safeguard Screening Form Report).

Required Annexes:

[Request from the Client - PE-T1449](#)

[Results Matrix - PE-T1449](#)

[Terms of Reference - PE-T1449](#)

[Procurement Plan - PE-T1449](#)