

TC Document

I. Basic Information for TC

▪ Country/Region:	JAMAICA
▪ TC Name:	Implementation and Technical Support for the Energy Sector in Jamaica
▪ TC Number:	JA-T1206
▪ Team Leader/Members:	Aiello, Roberto Gabriel (INE/ENE) Team Leader; Alleng, Gerard P. (CSD/CCS) Alternate Team Leader; Persaud, Christopher (INE/TSP) Alternate Team Leader; Benedettelli, Veronica (VPC/FMP); Black, Kayson (VPC/FMP); Cuervo, Javier (INE/ENE); Foronda Nogales, Shirley Mabel (VPC/FMP); Jainauth-Umrao, Naveen (VPC/FMP); Johnson, Jodi (VPS/ESG); Johnson, Rochelle Simone (INE/ENE); Loana Vega (INE/ENE); Marquez Barroeta, Fidel (INE/ENE); Natalia Almeida (LEG/SGO); Nicolas Tulande (INE/ENE); Samuels, Rochelle Kaye (CCB/CJA).
▪ Taxonomy:	Client Support
▪ Operation Supported by the TC:	N/A
▪ Date of TC Abstract authorization:	04 Feb 2022
▪ Beneficiary:	Government of Jamaica
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	Low Carbon Energy Fund for People and Planet(LCE); OC SDP Window 2 - Infrastructure(W2B)
▪ IDB Funding Requested:	Low Carbon Energy Fund for People and Planet (LCE): US\$200,000.00 OC SDP Window 2 - Infrastructure (W2B): US\$200,000.00 Total: US\$400,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	36 months
▪ Required start date:	1 September 2022
▪ Types of consultants:	Firms and independent consultants
▪ Prepared by Unit:	INE/ENE-Energy
▪ Unit of Disbursement Responsibility:	CCB/CJA-Country Office Jamaica
▪ TC included in Country Strategy (y/n):	Yes
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2020-2030:	Productivity and innovation; Institutional capacity and rule of law; Environmental sustainability

II. Objectives and Justification of the TC

- 2.1 The objective of this Technical Cooperation (TC) is to support the Government of Jamaica (GOJ) by identifying potential opportunities to decarbonize and increase access to electricity while building resiliency and improving energy access through the development of policies and standards. The specific objectives of the TC are to:
- (i) provide diversification and decarbonization assessments of key infrastructure services;
 - (ii) support strategic planning for energy technology and access to electricity;
 - (iii) provide implementation and technical support to the executing unit of energy projects (JA-L1056 & JA-G1003) to assist with coordination and project execution; and
 - (iv) enhance knowledge sharing among stakeholders.

- 2.2 Like many Caribbean countries, Jamaica faces infrastructure, competitiveness, and sustainability challenges due to high electricity prices and losses; its heavy reliance on imported fossil fuels makes it vulnerable to climatic events. These challenges have serious implications for the government's fiscal capabilities as they represent a threat to the economic and environmental sustainability of the energy sector and more broadly, hinder the progress needed to achieve the country's Nationally Determined Contribution (NDC) commitment.
- 2.3 Jamaica has signaled its commitment to reduce Green House Gas (GHG) emissions, as described in its NDC. The NDC was developed by identifying and quantifying existing commitments to mitigation, including policies and strategies that target the implementation of low-carbon technologies and other measures to reduce emissions in energy-intensive sectors. In 2020, Jamaica updated its NDC doubling its ambition and moving towards an economy-wide target by adding the land-use change and forestry sector and deepening emission reductions in the energy sectors. By 2030, Jamaica foresees emission reductions covering these two sectors between 25.4% and 28.5%. The NDC promotes the benefits of shifting to cleaner energy and utilizing environmentally friendly technologies that support low-carbon and climate-resilient development. The GOJ is committed to implementing climate actions as indicated in the 2021 NDC Implementation Plan.
- 2.4 The NDC Implementation Plan (IP) has outlined 16 key commitments underpinning the emissions reductions to achieve the NDC target. Each commitment identifies one or multiple Key Performance Indicators (KPIs) that set out a trajectory consistent with the NDC and monitor progress to date. The KPIs include but are not limited to, (i) new RE capacity by type (MW); (ii) distributed solar capacity through net billing (MW); (iii) percentage of streetlights with LED lamps; (iv) number of buildings retrofitted with Energy Efficiency (EE); and (vii) percentage reduction in electricity intensity in the water sector. However, there are potential barriers that may hamper progress, including low stakeholder coordination, monitoring and compliance challenges, and limited funding sources to support each initiative. Despite all these challenges, the implementation plan seeks to prioritize resources to achieve its climate goals and maximize stakeholder engagement across key infrastructures.
- 2.5 In 2020, Jamaica spent approximately US\$1 billion on imported fossil fuels that represented 7% of the Gross Domestic Product (GDP). Additionally, 80% of the imported fossil fuels were consumed by the electricity and transport (land 34%, air 8% and maritime 17%) sectors. As such, Jamaica's ambitious NDC target involves tackling the nexus between the energy and transportation sectors to increase the co-benefits of mitigation and resilience to climatic shocks, strengthen climate-resilient infrastructure, and improve capacity building via a multi-sectorial approach.
- 2.6 The Jamaica Public Service (JPS) is the sole vertically integrated electric entity licensed to generate, transmit, distribute, and supply electricity in Jamaica. About 28% of the energy generated is recorded as losses (8% technical losses and 20% commercial). Since the utility operates on a price-based rate mechanism, losses are embedded in the tariff (US\$0.31/kWh on average). High tariffs affect the competitiveness of the productive sectors.
- 2.7 Currently, 18% of electricity is renewable. In 2018, the GOJ increased its Renewable Energy (RE) target from 20% to 50% by 2037 following the completion of the Integrated Resource Plan (IRP), financed with IDB's resources. The IRP shows there

is untapped renewable energy potential of more than 1300MW, which includes 1260MW of wind and solar, and 74MW of hydro, biomass, and waste energy.

- 2.8 Electricity coverage in Jamaica is currently at 96.8%, that represents close to 95,000 people with no access living in vulnerable conditions mostly in rural areas. The Ministry of Science, Energy, and Technology (MSET) seeks to undertake a study to develop a universal access to electricity plan with the goal of achieving 100% universal access by 2030. The implementation of the plan would benefit roughly 50,294 poor households that currently lack service or are underserved with low-quality service.
- 2.9 **Strategic Alignment.** The TC is aligned with the Bank's country strategy for Jamaica 2022-2026 (JA-P1165) to improve regulatory framework for doing business and increase the security of supply and diversification of the energy mix. The operation is also aligned with IDB Group's Vision 2025 by fostering climate change actions through the design of enabling policies and regulatory instruments to leverage private sector investment and promote climate-resilient development. The TC seeks to promote the implementation of non-conventional RE, EE, and clean technologies in Jamaica that will contribute to climate change mitigation and promote resilient infrastructure, directly aligning with the cross-cutting themes of Climate Change and Environmental Sustainability, which is a priority area under the OC-SDP Window 2 Infrastructure (W2B) (GN-2819-14). This TC is consistent with the Second Update of the Institutional Strategy 2020-2023 (AB-3190-2) and is aligned with the challenges of: (i) Social Inclusion and Equality, by supporting the increase in electricity service coverage in areas predominantly rural, with a high indigenous population, low human development indices and high migration; and (ii) Productivity and Innovation, given that the strengthening of the electricity sector infrastructure, improves energy security and quality, creating the conditions to increase the productivity, promote greater economic growth and favor the business environment in the intervened areas; and (iii) Institutional Capacity and Rule of Law by supporting the capacity building within the energy public sector agencies. This TC is also aligned with the Sustainable Infrastructure Strategy for Competitiveness and Inclusive Growth (document GN-2710-5), by supporting the modernization of infrastructure that contributes to meeting energy demand in a sustainable manner. It is aligned with the Energy Sector Framework (document GN-2830-3) priority areas of: (i) access, and (ii) energy security and sustainability. Finally, the TC is aligned the Low Carbon Energy Fund for People and Planet (GN-3073-1) as priority areas of providing expert services to support universal access planning including the use of innovative tools and modeling and policy dialogue, regulatory analysis, and community engagement which support Sustainable Development Goals #7 and #13.

III. Description of Activities/Components and Budget

- 3.1 **Component I. Support Decarbonization of Infrastructure Services.** Finance feasibility studies and analytical work that assess the decarbonization potential of key infrastructure services aligned with Jamaica's NDC Implementation Plan. The expected output of this component is to develop technical and feasibility studies.
- 3.2 **Component II. Universal Access to Electricity Implementation Plan.** Finance a comprehensive implementation plan for Jamaica that will utilize modeling tools as well as regulatory and community engagement to achieve 100% electrification across the island. This plan will support planning and development of enabling policies and regulations to promote access to electricity and decarbonization of infrastructure services through public and private low-carbon investments and technologies. The

expected output of this component is the Implementation Plan, which also considers energy demand for telecommunications.

- 3.3 **Component III. Implementation Support and Capacity Building.** Finance implementation support and capacity building within MSET as well as consultations and communication to address information gaps and ensure adequate stakeholders' engagement in sector reforms. It will also support workshops and public awareness campaigns to disseminate the results and lessons learned during the implementation of this TC. The expected output of this component is to prepare technical support reports and workshops on findings and lessons learned through the TC.
- 3.4 The total financing for this TC is US\$400,000, which will be financed with resources from the Low Carbon Energy Fund for People and Planet (LCE) and OC-SDP Window 2 - Infrastructure (W2B). The supervision will be the responsibility of the Energy Division (INE/ENE), in coordination with the Bank's Country Office in Jamaica (CCB/CJA).

Indicative Budget

Activity/Component	Description	IDB Funding	LCE Funding	Counterpart Funding	Total Funding
Component I. Support decarbonization of infrastructure services.	Technical studies	US\$150,000.00	US\$0.00	US\$0.00	US\$150,000.00
Component II. Universal access to electricity implementation plan.	Implementation Plan for Universal Access	US\$0.00	US\$200,000.00	US\$0.00	US\$200,000.00
Component III. Implementation support and capacity building.	Consultants, communications, workshops and technical notes.	US\$50,000.00	US\$0.00	US\$0.00	US\$50,000.00
Total		US\$200,000.00	US\$200,000.00	US\$0.00	US\$400,000.00

IV. Executing Agency and Execution Structure

- 4.1 At the request of the GOJ, the executing agency will be the Bank through the Energy Division (INE/ENE), with close support with the Ministry of Science, Energy and Technology (MSET) and the Planning Institute of Jamaica (PIOJ). The justification for this execution structure is: (i) the Bank has the technical experience to coordinate and execute the different activities included in the TC; (ii) TC will need an extensive coordination partnership with international different institutions organizations within Jamaica including, academic institutions, and private sector firms; and (iii) the beneficiaries requested the Bank to be the executor given the technical difficulties related to the project. Furthermore, the Bank is considered to have the adequate systems to guarantee the proper execution of the operation and ensure the sustainability of the implementation of the project in line with the "Operational Guidelines for Technical Cooperation Products" (GN-2629-1) and Procedures for the Processing of Technical Cooperation Operations and Related Matters (OP-619-4 Annex II, C 2.2). Likewise, the TC team has the necessary experience to ensure compliance with the relevant procurement policies and procedures.

- 4.2 The designated focal point and sector specialist responsible for the execution and supervision of the TC will be the Team Leader, Roberto Aiello (INE/ENE), based in Jamaica, with the support of the Bank's Country Office in Jamaica (CCB/CJA) and the INE/ENE team.
- 4.3 **Procurement Policies.** All activities to be executed under this TC have been included in the Procurement Plan (see Annex IV) and will be contracted in accordance with Bank policies as follows: (i) hiring of individual consultants, as established in the AM-650 standards; (ii) contracting of consulting firms for services of an intellectual nature according to GN-2765-4 and its associated Operational Guidelines (OP-1155-4); and (iii) contracting logistics and other related services, in accordance with policy GN-2303-28. In accordance with the Operational Guidelines for TC Products, revised version (GN-2629-1), this TC is classified as a Client Support product. The technical responsibility will be INE/ENE.
- 4.4 The execution and disbursement period for this TC is estimated to be 36 months.

V. Major Issues

- 5.1 A potential risk associated with this TC is related to the low coordination among different government entities and stakeholders in a timely fashion. This risk will be mitigated by undertaking inclusive consultations and close follow-up and coordination during the entire execution period.
- 5.2 Restrictions related to the COVID-19 pandemic can negatively impact some activities of the TC, including the dissemination activities. This risk will be mitigated using digital communication tools and adapting the activities to these restrictions.

VI. Environmental and Social Strategy

- 6.1 This TC will finance feasibility studies of investment projects which will not be associated with any environmental and social studies; therefore, it falls outside the scope of the Bank's Environmental and Social Policy Framework (ESPF).

Required Annexes:

[Request from the Client - JA-T1206](#)

[Results Matrix - JA-T1206](#)

[Terms of Reference - JA-T1206](#)

[Procurement Plan - JA-T1206](#)