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DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

JAMAICA

ENERGY MANAGEMENT AND EFFICIENCY PROGRAMME

(JA-L1056)

PROJECT PROFILE

The project team consisting of prepared this document: Malaika Masson (ENE/CJA) Team Leader; Christiaan Gischler (INE/ENE) Alternate Team Leader; José Antonio Urteaga (ENE/CME); René Cortes, Amado Crotte; (INE/TSP); Javier Cuervo; Joel Hernández; Javier García; Veronica Prado; Shohei Tada; Stephanie Suber (INE/ENE); Juan P. Schmid (CCB/CJA); Anaitée Mills (CSD/CCS); Rajiv Ebanks (CCB/CJA); Rene Herrera (FMP/CJA); Betina Hennig; Liza Lutz (LEG/SGO); under the supervision of Ariel Yépez (INE/ENE) and Therese Turner-Jones (CCB/CJA).

PROJECT PROFILE

I. BASIC DATA

Project name:	Energy Management and Efficiency Programme	
Project number:	JA-L1056	
Project team:	Malaika Masson (ENE/CJA) Team Leader; Christiaan Gischler (INE/ENE) Alternate Team Leader; José Antonio Urteaga (ENE/CME); René Cortes, Amado Crotte; (INE/TSP); Javier Cuervo; Joel Hernández; Javier García; Veronica Prado; Shohei Tada; Stephanie Suber (INE/ENE); Juan P. Schmid (CCB/CJA); Anaitée Mills (CSD/CCS); Rajiv Ebanks (CCB/CJA); Rene Herrera (FMP/CJA); Betina Hennig; Liza Lutz (LEG/SGO); under the supervision of Ariel Yépez (INE/ENE) and Therese Turner-Jones (CCB/CJA).	
Borrower:	Jamaica	
Executing agency:	Petroleum Corporation of Jamaica (PCJ)	
Financing plan:	IDB (OC):	US$15 million
	JICA (co-financing):	US$15 million
	Total:	US$30 million
Safeguards:	Policies triggered:	B.13 Low-medium risk
	Classification:	Category B

II. GENERAL JUSTIFICATION AND OBJECTIVES

A. Justification

2.1 Jamaica is the third largest island in the Caribbean region with an area of 11,000 square kilometers (km^2) and a population of 2.72 million people. Between 2011 and 2015, an average of 19.3 million barrels of petroleum products per year were imported to Jamaica, representing 95% of the country's energy needs. Transportation accounts for 46% of fuel imports (road and rail accounts for 28%) and most of the population commutes within urban centers, resulting in significant amount of congestion, lost time and wasted gasoline during idling or stalled traffic, especially the capital city Kingston. This wasted fuel also contributes to harmful Green House Gas (GHG) emissions.

2.2 In 2015, an estimated 5.6 million barrels of petroleum products (29% of the total imported) were used to generate 3,139 GWh of electricity[1], of which approximately 393 GWh (12.5% or 710,570 barrels of fuel oil) were consumed by Public Sector Facilities (PSF). With the price of a barrel of oil fluctuating from US$61 in 2009, US$94 in 2011, US$97 in 2013 and US$48 in 2015, the Government of Jamaica (GOJ) had to spend between US$34.1 million (2015)

[1] Total electricity generation were 5,345 GWh in 2015 (losses included).

and US$68.9 million (2013) on imported petroleum products that provided electricity to the PSFs.

2.3 In 2015, approximately 22.3% of the total PSF electricity bill (J$2.78 billion or US$22.1 million) came from the health, education and public agency facilities (HEPA) amounting to 0.17% of GDP. Reducing the government spend on electricity consumption could free up valuable resources for other priority social investments.

2.4 After decades of struggling with high debt levels (currently at 125%) and given progress with an International Monetary Fund (IMF) stabilization program, the current focus of GOJ is on strict fiscal policy measures and growth-promoting programs. Therefore, freeing resources through lower government electricity bills would free fiscal space.

2.5 Given Jamaica's dependence on imported energy, the country has to diversify its energy mix and improve the efficiency of energy consumption to reduce fuel imports. A current IMF study indicates that investments in energy efficiency (EE) are accompanied by a stronger increase in long-term GDP than would result from capital investment in other sectors.[2]

B. Government Initiatives in Energy Efficiency

2.6 The GOJ is keen to decrease the amount of fiscal resources spent on its own electricity bill and also to demonstrate the value and the public sector's commitment to EE and energy conservation (EC). The National Energy Conservation and Efficiency Policy 2010-2030 (NECEP) provides the overarching framework for EE in Jamaica, seeking a reduction in energy intensity and consumption across all sectors of the economy from 21,152 British Thermal Units (BTU) in 2009 to produce US$1 of output to 6,000 BTU/US$1 of output by 2030. By diversifying the country's fuel mix, the current National Energy Policy (NEP) seeks to create a modern, efficient, diversified and environmentally-sustainable energy sector for the island, and under the National Renewable Energy Policy 2010-2030 (NREP), the objective is that 20% of the country's energy mix should be derived from Renewable Energy (RE) by 2030, with Liquefied Natural Gas (LNG)[3] replacing oil as the main energy source. In the context of the Intended Nationally Determined Contributions (INDC), Jamaica has committed to conditionally reduce GHG emissions by 10% below the BAU scenario. This reduction target is based on the enhanced implementation of the NEP, and in particular on the expansion of EE initiatives in the electricity and transportation sectors.

2.7 In 2011, with support from the IDB, the GOJ established the "Energy Efficiency and Conservation Programme" (JA-L1025) aimed at enhancing Jamaica's EE potential through the design and implementation of cost saving in the public sector. This Programme was slow to disburse, did not complete and was

[2] IMF Working Paper: Caribbean Energy Macro-Related Challenges, 2015.

[3] US-based New Fortress Energy, is expected to supply LNG to the newly converted Bogue Power Plant (120MW) by mid-September 2016 and to Old Harbour (190MW) by 2018.

eventually cancelled[4]. Lessons learned include: the need to strengthen the capacity of the Project Executing Unit (PEU) particularly with regards to procurement, finance and project management; to strengthen institutions; to conduct comprehensive audits of all the buildings to be retrofitted and consider building envelop deficiencies, and to engage and train facility managers in EE measures. Upon closure of the Program, the Ministry of Science, Energy and Technology (MSET) continued pursuing the Program's objectives. According to MSET, installations that started at the end of 2012, with approximately US$1.8 million invested (over approximately 33 months) have saved an estimated US$310,000 per year.

2.8 This project proposes solutions that align with the NECEP goal, focusing on achieving a reduction in electricity consumption of up to 30%[5] within selected public sector HEPA facilities, producing saving the GOJ electricity bills and therefore in imported oil barrels for those public facilities. With regards to fuel efficiency, preliminary models show that mean speeds in main corridors of Kingston could be increased from the current 22 km/h to 28 km/h, and this would imply reducing the traffic fuel consumption in those corridors by 40% and associated harmful GHG emissions. Investments in traffic control management could therefore help reduce fuel imports for public transport (which currently accounts for 8% of total national fuel imports).

2.9 A key complement to these proposed initiatives is addressing institutional strengthening. Although Jamaica had been one of the most active countries in the Caribbean from an energy policy perspective, there is currently no Integrated Resource Plan to provide investor's confidence that supply and demand-side resources will meet forecasted demand to ensure reliability and low-cost of provision of electricity. This project will seek to address institutional capacity to improve planning and project implementation in the energy sector.

C. Objectives

2.10 The general objective of this project is to contribute to the government's NECEP target by reducing the GWh of electricity consumed in the public sector and by supporting Jamaica's 10% INDC target The project will support these targets through the design and implementation of EE and EC measures in government facilities and through fuel conservation in the transport sector. The specific objectives and expected results of this project are: (i) reduced electricity consumption within government facilities; (ii) decreased fuel consumption through improved traffic control management; (iii) reduced GHG emissions which can contribute to Jamaica's INDC commitment; and (iv) an increased capacity to promote and supervise electricity planning in Jamaica.

2.11 The project is aligned with the Updated Institutional Strategy (2016-2019) as it contributes to the cross-cutting issues of: (i) Climate Change & Environmental Sustainability; and (ii) Institutional Capacity to address low productivity and competitiveness in Jamaica. Additionally, the project will contribute to the

[4] The IDB loan disbursed only 23% of its US$20 million budget after 4 years, and in June 2015 the GOJ requested its cancellation.

[5] Depending on whether solar PV is selected for installation.

Corporate Results Framework 2016-2019 through the reduction of emissions with support of IDBG financing (annual million tons CO_2 equivalent). The project is in line with the Infrastructure Strategy (GN-2710-5), the Public Utilities Policy (GN-2716-6) and the Caribbean Strategic Agenda on Integration (SAI)[6]. The Project is also aligned with the Goals of the Country Strategy of Jamaica 2013-2014 (GN-2694-2)[7] with regards to (i) ensuring fiscal and debt sustainability; and (ii) facilitating the policy and institutional framework for business development.

III. COMPONENTS

3.1 This project will include the following components[8]:

a. **Component 1 (US$24 million) -** will finance EE and EC measures in a set of approximately 75[9] government facilities, concentrated in the health and education sectors. The buildings will be selected according to a pre-agreed set of criteria and on the results provided by comprehensive, investment-grade EE/RE audits. Activities include: (i) investment-grade audits; (ii) the purchase installation, maintenance and operation of appropriate EE and EC technologies and measures within selected government facilities including waste disposal actions[10]; (iii) technical expertise and support for the PEU including training in EE maintenance (highlighted by gender) that would be extended to facilities teams in each building; and (iv) the set-up of an instrument to manage the financial savings accruing from the reduction in energy consumption within government facilities.

b. **Component 2: Fuel Efficiency in the Transport Sector (US$2.8 million) -** will finance: (i) the purchase and installation of equipment to facilitate the implementation of an Urban Traffic Management System in Kingston such as fiber optic cables, traffic lights, cameras, sensors, planning software, communication technology maintenance equipment and training support; and (ii) a technical study to assess how the public transport sector, which is a fairly heavy user of oil and heavy fuel, can obtain EE from diversifying their fuel sources.

c. **Component 3: Support to Institutional Strengthening for Energy Planning (US$1.8 million):** Building on a studies commissioned by the IDB[11] regarding institutional weaknesses and gaps in systems and technical capacity for wider energy planning, this component will finance: information

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6 SAI provides the framework for identifying Sectors and Actions Lines in which Caribbean countries and the IDB can increase operational collaboration.

7 GN-2694-7 has been extended to Nov 1st, 2016.

8 Estimated contingencies of US$1.4million will be set aside for fluctuations in Yen currency and costs of waste disposal not covered by suppliers.

9 Approximately 25 buildings are being considered for deep, comprehensive retrofits utilizing EE, EC and RE measures and 50 buildings are being considered for LED-lighting retrofits.

10 A Waste Management Plan will guide actions to be taken by suppliers and relevant agencies.

11 DNV-GL (May, 2016) "Capacity Building for MSET's Energy Planning and Integrated Resource (Electricity) Plan for Jamaica"; Andres Garrett (May 2016) "Institutional Capacity Assessment of the Petroleum Corporation of Jamaica", Final Report; Jed Bailey (July 2016) "Contextual Report and Governance Manual to Support the Office of Utilities Regulation Governance Framework".

systems, training and technical support for energy planning in Jamaica with a particular focus on planning and supervision of EE and RE.

3.2 **Co-financing**. The project will receive co-financing from JICA, which will follow the terms and conditions set forth in the Framework Agreement between the IDB and JICA for Co-financing for Renewable Energy and Energy Efficiency (CORE), established in 2012 (GN-2656), as amended. These are essential to achieving the Project's objectives. It has been agreed that disbursements will be made on a pari-passu basis between the IDB and JICA and that the IDB will act as the project administrator under CORE. In addition, the project team will be exploring with the GOJ and representatives of the European Commission, the possibility of accessing grant funds from the European Union Caribbean Investment Facility (EU-CIF).

IV. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

4.1 The team will draw on lessons learned from JA-L1025 and from IDB operations that have highlighted EE measures within the public sector, performance based contracts, and reinvested part of the EE savings. For example: "The Energy Efficiency Program in Mexico" (ME0204); "The Sustainable Energy Investment Program (Smart Fund) in Barbados" (2485/OC-BA), and "The Public Sector Smart Energy Program" in Barbados (2748/OC-BA). Gender impacts will be incorporated via targeted training activities in all components of the project.

4.2 In Jamaica, the IDB's support to the energy sector includes technical assistance programs that are now complete: (i) Wind and Solar Development Program (JA-X1001); (ii) Support to Promote Energy Efficiency, Energy Conservation and Sustainable Energy (JA-T1031), and (iii) Wigton Wind Farm Limited and the Development Bank of Jamaica and Energy Efficiency and Conservation Technical Assistance—EECTA (JA-T1044). It also includes two loans: (i) one that has been cancelled "Energy Efficiency and Conservation Program: (JA-L1025) as referenced in ¶2.8; and (ii) one that provides substantial resources for EE in the water sector "Kingston Metropolitan Area Water Supply Improvement Programme" (JA-L1035). There are four technical cooperation operations currently in implementation from which Jamaica benefits: (i) Substitution of Fossil based Electricity Generation with Renewable Energy in Central America and the Caribbean (RG-T2376); (ii) Supporting Regulatory Capacity for the use of Natural Gas and Energy Diversification in the Caribbean (RG-T2694); (iii) Caribbean Hotel Energy Efficiency & Renewable Energy Action Advanced Program" (RG-T2015), and (iv) "Building Capacity and Regional Integration for the Development of a Generation of Entrepreneurs - BRIDGE (RG-T2179; RG-T2373, RG-T2374).

4.3 The Project Executing Agency (EA) will be the Petroleum Corporation of Jamaica (PCJ), a statutory corporation under MSET, mandated to develop and promote energy supply, diversification and EE. A subsidiary agreement between Ministry of Finance and PCJ will define the execution mechanism for the Project. The Project Execution Unit (PEU) within PCJ will need to be strengthened with regards to expertise in program management, procurement and financial management and will need to coordinate activities with other agencies, such as the National Works Agency, MSET's policy unit and other financing institutions

(e.g. JICA) participating in the Project. To mitigate against the lack of expertise and potential coordination risks, the IDB is proposing to support the PEU with an Operational Support Technical Cooperation (OS-TC): "Support to the Energy Management and Efficiency Program" (JA-T1120). Based on the recommendations of the Institutional Capacity Assessment System of PCJ, the OS-TC will ensure that the EA is equipped with the necessary expertise and with an operational manual that will outline both governance arrangements and coordination processes with related agencies.

V. ENVIRONMENTAL SAFEGUARDS AND FIDUCIARY SCREENING

5.1 According to the Safeguard Policy procedures the project is expected to be classified as low-medium risk Category "B" in that it does not pose any significant environmental and social risk. The risks that have been identified will need to be investigated further via an Environmental Assessment and the IDB will develop an Environmental and Social Management System. These risks include: (i) disposal of existing EE units/equipment in government facilities; (ii) climate risk/disaster risk mitigation for government facilities receiving the retrofits; and (iii) any minor civil works (e.g. ducting and trenching) that may need to be undertaken by GOJ in advance of the start of the project.

VI. RESOURCES AND TIMETABLE

6.1 The preparation of the project will require administrative sources for a total of US$94,950. The POD Due date is August 18th, 2016. The distribution of the Proposal for Operation Development (POD) to the Quality and Risk Review (QRR) is scheduled for September 19th, 2016 and consideration of the Loan Proposal by the Bank's Board of Executive Directors is expected by November 16th, 2016.

CONFIDENTIAL

[1] The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.

Safeguard Policy Filter Report

Operation Information

Operation		
JA-L1056 Energy Efficiency and Conservation program		
Environmental and Social Impact Category	High Risk Rating	
B	{Not Set}	
Country	Executing Agency	
JAMAICA	{Not Set}	
Organizational Unit	IDB Sector/Subsector	
Transport	ENERGY EFFICIENCY AND RENEWABLE ENERGY IN END USE	
Team Leader	ESG Lead Specialist	
MALAIKA EBONY ANIETIA MASSON	{Not Set}	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	$0	0.000 %
Assessment Date	Author	
5 May 2016	jgarciaf Team Member	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	27 Jun 2016	
QRR (Estimated)	29 Aug 2016	
Board Approval (Estimated)	{Not Set}	
Safeguard Performance Rating		
{Not Set}		
Rationale		
{Not Set}		

Safeguard Policy Items Identified

B.1 Bank Policies (Access to Information Policy– OP-102)

The Bank will make the relevant project documents available to the public.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The operation is in a geographical area exposed to natural hazards (Type 1 Disaster Risk Scenario). Climate change may increase the frequency and/or intensity of some hazards.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The sector of the operation is vulnerable to natural hazards. Climate change may increase the frequency and/or intensity of some hazards.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The operation includes activities related to climate change adaptation, but these are not the primary objective of the operation.

B.1 Bank Policies (Gender Equality Policy– OP-761)

The operation offers opportunities to promote gender equality or women's empowerment.

B.1 Bank Policies (Indigenous People Policy– OP-765)

The operation offers opportunities for indigenous peoples.

B.10. Hazardous Materials

The operation has the potential to impact the environment and occupational health and safety due to the production, procurement, use, and/or disposal of hazardous material, including organic and inorganic toxic substances, pesticides and persistent organic pollutants (POPs).

B.15. Co-financing Operations

The operation or any of its components is being co-financed.

B.16. In-country Systems

In-country systems will be used based on results from equivalency and acceptability analyses.

B.17. Procurement

Suitable safeguard provisions for the procurement of goods and services in Bank financed operation will be incorporated into project-specific loan agreements, operating regulations and bidding documents, as appropriate, to ensure environmentally responsible procurement.

B.2 Country Laws and Regulations

The operation is in compliance with laws and regulations of the country regarding specific women's rights, the environment, gender and indigenous peoples (including national obligations established under ratified multilateral environmental agreements).

B.3 Screening and Classification

The operation (including associated facilities) is screened and classified according to its potential environmental impacts.

B.4 Other Risk Factors

The borrower/executing agency exhibits weak institutional capacity for managing environmental and social issues.

B.4 Other Risk Factors

The operation includes activities to close current “adaptation deficits” or to increase the ability of society and ecological systems to adapt to a changing climate.

B.5 Environmental Assessment Requirements

An environmental assessment is required.

B.6 Consultations

Consultations with affected parties will be performed equitably and inclusively with the views of all stakeholders taken into account, including in particular: (a) equal participation by women and men, (b) socio-culturally appropriate participation of indigenous peoples and (c) mechanisms for equitable participation by vulnerable groups.

B.7 Supervision and Compliance

The Bank will monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.

Potential Safeguard Policy Items

[No potential issues identified]

Recommended Actions

Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR. The project triggered the Disaster Risk Management policy (OP-704) and this should be reflected in the Project Environmental and Social Strategy. A Disaster Risk Assessment (DRA) may be required (see Directive A-2 of the DRM Policy OP-704). Next, please complete a Disaster Risk Classification along with Impact Classification. Also: if the project needs to be modified to increase resilience to climate change, consider the (i) possibility of classification as adaptation project and (ii) additional financing options. Please consult with INE/CCS adaptation group for guidance. The project triggered the Other Risks policy (B.04): climate risk.

- Please include sections on how climate risk will be dealt with in the ESS as well as client documents (EIA, EA, etc);
- Recommend addressing risks from gradual changes in climate for the project in cost/benefit and credit risk analyses as well as TORs for engineering studies.

Additional Comments

[No additional comments]

Safeguard Screening Form

Operation Information

Operation		
JA-L1056 Energy Efficiency and Conservation program		
Environmental and Social Impact Category	High Risk Rating	
B	{Not Set}	
Country	Executing Agency	
JAMAICA	{Not Set}	
Organizational Unit	IDB Sector/Subsector	
Transport	ENERGY EFFICIENCY AND RENEWABLE ENERGY IN END USE	
Team Leader	ESG Lead Specialist	
MALAIKA EBONY ANIETIA MASSON	{Not Set}	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	$0	0.000 %
Assessment Date	Author	
5 May 2016	jgarciaf Team Member	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	27 Jun 2016	
QRR (Estimated)	29 Aug 2016	
Board Approval (Estimated)	{Not Set}	
Safeguard Performance Rating		
{Not Set}		
Rationale		
{Not Set}		

Operation Classification Summary

Overriden Rating	Overriden Justification
Comments	

Conditions / Recommendations

Category "B" operations require an environmental analysis (see Environment Policy Guideline: Directive B.5 for Environmental Analysis requirements)

The Project Team must send to ESR the PP (or equivalent) containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports. These operations will normally require an environmental and/or social impact analysis, according to, and focusing on, the specific issues identified in the screening process, and an environmental and social management plan (ESMP). However, these operations should also establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.) where necessary.

Summary of Impacts / Risks and Potential Solutions

Generation of solid waste is moderate in volume, does not include hazardous materials and follows standards recognized by multilateral development banks.

Solid Waste Management: The borrower should monitor and report on waste reduction, management and disposal and may also need to develop a Waste Management Plan (which could be included in the ESMP). Effort should be placed on reducing and re-cycling solid wastes. Specifically (if applicable) in the case that national legislations have no provisions for the disposal and destruction of hazardous materials, the applicable procedures established within the Rotterdam Convention, the Stockholm Convention, the Basel Convention, the WHO List on Banned Pesticides, and the Pollution Prevention and Abatement Handbook (PPAH), should be taken into consideration.

The project is located in an area prone to coastal flooding from storm surge, high wave activity, or erosion and the likely severity of the impacts to the project is moderate.

A Disaster Risk Assessment, that includes a Disaster Risk Management Plan (DRMP), may be necessary, depending on the complexity of the project and in cases where the vulnerability of a specific project component may compromise the whole operation. The DRMP should propose measures to manage or mitigate these risks to an acceptable level. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards, coastal retreat and other land use regulations and civil defense recommendations in coastal areas.

Disaster Risk Summary

Disaster Risk Level

Moderate

Disaster / Recommendations

The reports of the Safeguard Screening Form (i.e., of the Safeguards Policy Filter and the Safeguard Classification) constitute the Disaster Risk Profile to be included in the Environmental and Social Strategy (ESS). The Project Team must send the PP (or equivalent) containing the ESS to the ESR.<br/ ><br/ >
The Borrower prepares a Disaster Risk Management Summary, based on pertinent information, focusing on the specific moderate disaster and climate risks associated with the project and the proposed risk management measures. Operations classified to involve moderate disaster risk do not require a full Disaster Risk Assessment (see Directive A-2 of the DRM Policy OP-704).<br/ ><br/ >
The Project Team examines and adopts the DRM summary. The team remits the project risk reduction proposals from the DRMP to the engineering review by the sector expert or the independent engineer during project analysis or due diligence, and the financial protection proposals to the insurance review (if this is performed). The potential exacerbation of risks for the environment and population and the proposed risk preparedness or mitigation measures are included in the Environmental and Social Management Report (ESMR), and are reviewed by the ESG expert or environmental consultant. The results of these analyses are reflected in the general risk analysis for the project. Regarding the project implementation, monitoring and evaluation phases, the project team identifies and supervises the DRM approaches being applied by the project executing agency.<br/ ><br/ >
Climate change adaptation specialists in INE/CCS may be consulted for information regarding the influence of climate change on existing and new natural hazard risks. If the project requires modification or adjustments to increase its resilience to climate change, consider (i) the possibility of classification as an adaptation project and (ii) additional financing options. Please consult the INE/CCS adaptation group for guidance.

Disaster Summary

Details

The project is classified as moderate disaster risk because of the likely impact of at least one of the natural hazards is average.

Actions

Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.

JAMAICA

ENERGY MANAGEMENT AND EFFICIENCY PROGRAM (EMEP) (JA-L1056)

ENVIRONMENTAL AND SOCIAL STRATEGY

Project team:	Malaika Masson (ENE/CJA) Team Leader; Carlos Echeverria (ENE/CGY) Alternate Team Leader; José Antonio Urteaga (ENE/CME); Christiaan Gischler (INE/ENE); Javier Cuervo (INE/ENE); René Cortes (INE/TSP); Amado Crotte (TSP/CME); Anaitee Mills (CSD/CCS); Javier Cuervo (INE/ENE); Joel Hernández (INE/ENE); Javier García (INE/ENE); Veronica Prado (INE/ENE); Anaitée Mills (CSD/CCS); Shohei Tada (INE/ENE); Stephanie Suber (INE/ENE); Rajiv Ebanks (CCB/CJA); Rene Herrera (FMP/CJA); Betina Hennig (LEG/SGO), Liza Lutz (LEG/SGO); under the supervision of Ariel Yépez (INE/ENE) and Therese Turner-Jones (CCB/CJA).	
Borrower:	Government of Jamaica	
Executing agency:	Petroleum Corporation of Jamaica (PCJ)	
Financing plan:	IDB: JICA: Total:	US$ 15 million US$ 15 million **US$ 30 million**
Safeguards:	Policies triggered: Classification:	B.13 low risk Category B.

I. OVERVIEW

1.1 In Jamaica the energy imports are a substantial portion of its gross domestic product (GDP), representing 13% and costing the economy US$1.8 billion (in 2014). Such high energy imports significantly contribute to Jamaica's balance of payments deficits and places additional pressure on foreign exchange reserves and exchange rates in addition to exposing Jamaica to fluctuations in international oil prices. Whilst the transport and bauxite sectors are the main users of fuel imports approximately 28% of imports are used in power generation, and 95% of electricity generation is dependent on expensive petroleum fuel.

1.2 While Jamaica has no control over oil price movements, it can save over the longer run by diversifying its energy mix and improving the efficiency of energy consumption to reduce fuel imports, thereby limiting the impact of price shocks. The International Monetary Fund (IMF) estimates that an improvement of 1% in energy efficiency or conservation can be accompanied by an increase in GDP per capita by 0.2% in the long run. Energy efficiency measures (EE) are likely to be the most feasible short and medium term way to reduce energy costs.

1.3 In this regard, the Government of Jamaica (GOJ) is keen to demonstrate the public sector's commitment to EE both as a way of bringing down its own energy bill and therefore creating fiscal space for other social and economic priorities, but also to prove the benefits of energy conservation for households, businesses and consumers. The National Energy Conservation and Efficiency Policy 2010-2030 (NECEP) provides the

overarching framework for energy efficiency in Jamaica, seeking a 71% reduction in energy intensity by 2030.

1.4 By diversifying the country's fuel mix, the current National Energy Policy (NEP) seeks to create a modern, efficient, diversified and environmentally-sustainable energy sector for the island, and under the National Renewable Energy Policy 2010-2030 (NREP), the objective is that 20% of the country's energy mix should be derived from renewable energy (RE) by 2030, with LNG replacing oil as the main energy source. Considering these targets in dialogues at the international level, and in the context of the INDC, Jamaica committed to conditionally increase its ambition to reducing GHG missions by 10% below the BAU scenario. This reduction target is based on the enhanced implementation of the NEP, and in particular on the expansion of EE initiatives in the electricity and transportation sectors.

1.5 The objective of the proposed Project is to continue Jamaica's energy efficiency and energy conservation efforts through the design and implementation of energy efficiency (EE) and energy conservation (EC) measures in government facilities and within the transport sector. The expected results of this Project are: (i) reduced electricity consumption within government facilities; (ii) decreased fuel consumption through improved traffic control management (iii) reduced GHG emissions which can contribute to Jamaica's INDC commitment and (iv) an increased capacity to promote and supervise electricity planning in Jamaica.

II. ENVIRONMENTAL AND SOCIAL IMPACTS AND RISKS

2.1 According to the Safeguard Policy procedures the Program is expected to be classified as low-medium risk Category "B" in that it does not pose any significant environmental and social risk. The risks that have been identified will need to be investigated further via an Environmental Impact Assessment (EIA) and the IDB will develop a Mitigation Plan under the Environmental and Social System Management Plan (ESMP).

2.2 The purpose of the EIA is to provide an overview of the proposed project, its environmental and social setting, and the likely direct and indirect environmental, social, health and safety (ESHS) and labor impacts and risks that will be produced from the project. The analysis will be complemented by an ESMP to avoid, mitigate or compensate for specific impacts and risks for the life of the project.

2.3 The risks include: i) disposal of removal existing EE units/equipment in government facilities (oils, air conditioning gas refrigerants, etc.); (ii) climate risk/disaster risk mitigation for government facilities such hospitals and schools located near the coast and (iii) any minor civil works (e.g. ducting and trenching) that may need to be undertaken by GOJ in advance of the start of the implementation of the Urban Traffic Management System (UTMS) in Kingston City.

2.4 Risks associated with disposal of EE equipment: These could include with public buildings such as offices, hospitals and schools where existing equipment such as air conditioning systems, refrigerators, light lamps, insulating material, asbestos, pipes, metals, etc., that could cause environmental soil and atmospheric air impact by the lack of treatment of each material. In the case of refrigerant gases from different sources such as Hydrofluorocarbon (HFC) and Chlorofluorocarbon (CFC), specialized recovery process/treatment should be implemented in order to avoid gas leakage.

2.5 Climate and disaster risks: Risks associated with the buildings' locations and design, especially related with their capability to withstand eventual sea level rises and the effects of tropical storms and hurricanes. This entails an analysis of how potential risks and vulnerability could affect the implementation of policies, programs and projects. Concurrently, it also analyses how these, in turn, could have an impact on vulnerability to hazards. This analysis should lead on to the adoption of appropriate measures to reduce potential risks and vulnerability, where necessary, treating risk reduction and adaptation as an integral part of all program management processes rather than as an end in itself.

2.6 Impacts from minor civil works for traffic management system: This risk is associated to the civil works of ducting and trenching for the installation of the fiber optic cables in the current identified corridors in the city of Kingston. There may be specific environmental, social, health and safety (ESHS) and labor impacts should be responsibility of the National Works Agency (NWA) and managed through the operation and possible adjustments of their existing environmental and social management system.

2.7 The due diligence will determine with more certainty the extent of anticipated impacts of the Project. It is expected that the Borrower will apply mitigation measures that correspond to best practices for EE equipment management and civil works in traffic corridors.

III. STATUS AND COMPLIANCE

3.1 The project triggered the Disaster Risk Management policy (OP-704) and this should be reflected in the Project Environmental and Social Strategy. A Disaster Risk Assessment (DRA) may be required (see Directive A-2 of the DRM Policy OP-704).

IV. INSTITUTIONAL AND REGULATORY CONTEXT

4.1 In this regard, relevant laws to building and operating infrastructure in the energy sector, such as the implementation of EE programs in public buildings, include environmental and planning laws such as:

4.2 Town and Country Planning Act (1958) — Sets out the conditions under which planning permission is needed, and gives the Local Planning Authority and national Town and Country Planning Authority the power to authorize development;

4.3 Natural Resources Conservation Act (1991) — provides for the management and conservation of the environment and natural resources in Jamaica. The Act establishes the National Resources Conservation Authority (NCRA), and gives it the responsibility to set and enforce environmental standards. In 1991, the NCRA merged with other organizations to form the National Environmental and Planning Agency (NEPA), and NEPA currently has responsibility for enforcing this Act;

4.4 Wild Life Protection Act (1945) — provides for the protection of animals, especially animals identified as protected;

4.5 The Beach Control Act (1956) — sets out the requirements for licensing for development on the coast and sea floor;

4.6 Ambient Air Quality Standards (1996) — sets the standards for air quality that must be met in Jamaica;

4.7 NCRA Emissions Standards for New Sources (2006) — regulates emissions for electricity generators and industrial users that burn natural gas, oil products, and coal;

4.8 National Solid Waste Management Act (2001) — gives the National Solid Waste Management Authority (NSWMA) the power to regulate solid waste to safeguard public health, ensure that waste is collected, stored, transported, recycled, reused or disposed of in an environmentally sound manner, and promote safety. This includes solid waste generated as a result of construction activities;

4.9 The Parish Council Building Act (1901) — gives local authorities the power to regulate building standards.

4.10 On the other hand, the operation is in compliance with laws and regulations of the country regarding specific women's rights, the environment, gender and indigenous peoples (including national obligations established under ratified multilateral environmental agreements). In this regard, the Executing Agency will be in charge of gender aspects.

V. ENVIRONMENTAL AND SOCIAL DUE DILIGENCE STRATEGY

5.1 Based on the requirements outlined in IDB's OP-703 Environmental and Safeguards Compliance Policy, the Team proposes that the Energy Management and Efficiency Program (EMEP) project be classified as a Category B.

5.2 The Bank will perform an Environmental and Social Due Diligence ("ESDD") in order to confirm that all of the Project's relevant impacts and risks have been, or will be, properly and adequately evaluated, and mitigated.

5.3 The ESDD will specifically address the following aspects:

- Review the Project EIA and determine if additional physical, biological, and socio-economic baseline information is required;
- Assess potential adverse socio-economic impacts of construction and operation activities such as temporary, or permanent, noise, vehicular, or emissions impacts;
- Assess the adequacy and timely consultation and information dissemination process with affected parties of the current project;
- Assess the hazardous material management plan used by the public buildings;Assess the adequacy of the Traffic Plan to ensure road safety is maintained despite the temporary increase in traffic, particularly heavy trucks and equipment through traffic corridors;
- Assess the mitigation and management plans for the protection of coastal water quality;
- Assess the adequacy of the hazardous materials management plan with specific attention to spill management, handling, transportation, and disposal and tracking of hazardous wastes (e.g. gas refrigerants);
- Assess the adequacy of the health and safety procedures of the PCJ and NWA;
- Review the Environmental and Social Management Plan (ESMP) to ensure the avoidance, minimization, and mitigation of any potential impacts;

- Determine if the Project has been developed and implemented in compliance with the environmental laws and regulations of Jamaica;
- Assess the Project's compliance with IDB's Environmental and Safeguards Compliance Policy (OP-703) and the WB Environmental, Health and Safety Guidelines, and if needed develop an Action Plan in order to resolve any observed non-compliance.

5.4 An Environmental and Social Management Report (ESMR) will be prepared by the Project Team as part of the ESDD to analyze the management of the environmental and social aspects of the project.

INDEX FOR PROPOSED SECTOR WORK

Area	Study/Technical Support	Description of works	Dates	References and electronic links
Knowledge	Natural Gas in the Caribbean - Feasibility Studies; Revised Final Report; Vol I and Vol II, 30 June 2015, Castalia Strategic Advisors, Inc.	This study determine the feasibility of establishing a competitive commercial supply chain for natural gas in the Caribbean region. The first version of this study was completed and published in October 2014. The updated version, completed in June 2015, updates the studies costs estimates and overall conclusions based on recent changes in oil and natural gas prices and updated price projections. The study examines the feasibility of using natural	2015	file:///C:/Users/ssuber/Downloads/Natural_Gas_in_the_Caribbean%E2%80%94Feasibility_Studies_Final_Report_(Volume_I).pdf
Knowledge	"Capacity Building for MSET's Energy Planning and Integrated Resource (Electricity) Plan for Jamaica"	This report describes the existing expertise and technology gaps within MSET to develop and implement energy planning as it relates to an Integrated Resource Plan (IRP) for the electricity sector. It recommends training and software required to fill the capacity gaps.	2016	To be published in 2016
Knowledge	Energy Efficiency Measures in Government Buildings in Jamaica	This study will provide an analysis of the energy efficiency (EE) initiatives undertaken in Jamaica and previous work conducted within the context of IDB programs and government audits.	2016	To be published in 2016
Knowledge	Development of an Urban Traffic Management Program in Kingston	The report will analyse the current status of Kingston's Urban Traffic Management System (UTMS) identifying an approach towards the implementation of an intelligent and fully operationa urban traffic management system. It shows benefits in fuel savings in its implementation and identifies challenges and necessary next steps	2016	To be published in 2016
Banks Operations	Energy efficiency and conservation program (JA-T1120)	The general objective of this Operational Support (OS) Technical cooperation (TC) is to support the implementation of the Energy Management and Efficiency Program (EMEP) by strengthening the expertise and capacity of the Project Execution Unit (PEU) within PCJ to successfully implement the Program. It will also support the creation the Program's Operational Manual.	Estimated Approval 3 August, 2016	N/A
Missions	Evaluation & Analysis.	Estimated dates, August 2016.	2016	N/A
Missions	Negotiation.	Estimated dates, October 2016.	2016	N/A

CONFIDENTIAL

[1] The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.

TC DOCUMENT

I. BASIC PROJECT DATA

Country/Region	Jamaica
TC Name:	Support to the Energy Management and Efficiency Program
TC Number:	JA-T1120
Team Leader/Members:	Malaika Masson (ENE/CJA) Team Leader; Christiaan Gischler (INE/ENE) Alternate Team Leader; José Antonio Urteaga (ENE/CME); René Cortes (INE/TSP); Amado Crotte (TSP/CME); Javier Cuervo; Joel Hernández; Javier García; Veronica Prado; Shohei Tada; Stephanie Suber (INE/ENE); Juan P. Schmid (CCB/CJA); Anaitée Mills (CSD/CCS); Rajiv Ebanks (CCB/CJA); Rene Herrera (FMP/CJA); Betina Hennig; Liza Lutz (LEG/SGO); under the supervision of Ariel Yépez (INE/ENE) and Therese Turner-Jones (CCB/CJA).
TC Type	Operational Support
If Operational Support, give number and name of the Operation Supported by the TC	JA-L1056 – Energy Management and Efficiency Program
Reference to Request	18-April 2016 – IDBDdocs#40309891
Date of TC Abstract:	18-April 2016
Beneficiary:	Jamaica - Ministry of Science, Energy and Technology (MSET)
Executing Agency and contact name	Petroleum Corporation of Jamaica (PCJ) Contact: Winston Watson
Donors providing funding:	SECCI
IDB Funding requested:	US$340,000
Local counterpart, if any:	N/A
Disbursement period (including execution period):	36 Months
Required start date:	July 14th , 2016
Type of contractual (firms or individual contractual)	International and Local Firms and Individual Contractual
Prepared by Unit:	Energy Division (INE/ENE)
Unit of Disbursement Responsibility:	Country Office Jamaica
TC included in Country Strategy (y/n):	N.A.
TC included in CPD (y/n):	N.A.
Sectorial priority GCI-9:	Yes, (i) To protect the environment, respond to climate change and to promote renewable energy; (ii) to support infrastructure for competitiveness; and (iii) to provide preferential support to less developed countries from Latin America and the Caribbean (LAC)

II. JUSTIFICATION AND OBJECTIVE

2.1 Jamaica is the third largest island in the Caribbean region with an area of 11,000 square kilometers (km2) and a population of 2.72 million people. In 2015, an estimated 5.6 million barrels of petroleum products (30% of the total imported) were used to generate 3,139 GWh of electricity[1], of which approximately 393 GWh (12.5% or 710,570 barrels)

[1] Total electricity generation were 5,345 GWh in 2015 (losses included).

were consumed by Public Sector Facilities (PSF). With the price of a barrel of oil fluctuating from US$61 in 2009, US$94 in 2011, US$97 in 2013 and US$48 in 2015, the Government of Jamaica (GOJ) had to spend between US$34.1 million (2015) and US$68.9 million (2013) on imported petroleum products barrels that provided electricity to the PSFs. In 2015, approximately 22.3% of the total PSF electricity bill (J$2.78 billion or US$22.1mill) came from the health, education and public agency facilities (HEPA) amounting to 0.17% of GDP, reducing the spend on electricity consumption could free up valuable resources that could be used on priority social investments

2.2. While Jamaica has no control over oil price movements, it can save over the longer run by diversifying its energy mix and improving the efficiency of energy consumption to reduce fuel imports, thereby limiting the impact of price shocks. The GOJ is keen to decrease the amount of fiscal resources spent on its own electricity bill and also to demonstrate the value and the public sector's commitment to Energy Efficiency (EE) and Energy Conservation (EC). The National Energy Conservation and Efficiency Policy 2010-2030 (NECEP) provides the overarching framework for EE in Jamaica, seeking reduction in energy intensity and consumption across all sectors of the economy from 21,152 British Thermal Units (BTU) in 2009 to produce US$1 of output to 6,000 BTU/US$1 of output by 2030.

2.3. In 2011, with support from the IDB, the GOJ established the "Energy Efficiency and Conservation Programme" (JA-L1025) aimed at enhancing Jamaica's EE potential through the design and implementation of cost saving in the public sector. This Programme was slow to disburse, did not complete and was eventually cancelled . Lessons learned include: the need to strengthen the capacity of the Project Executing Unit (PEU) particularly with regards to procurement, finance and project management; to strengthen institutions; to conduct comprehensive audits of all the buildings to be retrofitted and consider building envelop deficiencies, and to engage and train facility managers in EE measures. Upon closure of the Program, the Ministry of Science, Energy and Technology (MSET) continued pursuing the Program's objectives.

2.4. The IDB is building on these initiatives, and supporting the GOJ with a new Project: "Energy Management and Efficiency Program (EMEP)". The general objective of the EMEP Project is to contribute to the Government's NECEP target by reducing the GWh of electricity consumed in the public sector and by supporting Jamaica's 10% by the Intended Nationally Determined Contributions (INDC) target. The project will support these targets through the design and implementation of EE and EC measures in government facilities and through fuel conservation in the transport sector. The specific objectives and expected results of this Project are: (i) reduced electricity consumption within government facilities; (ii) decreased fuel consumption through improved traffic control management (iii) reduced GHG emissions which can contribute to Jamaica's INDC commitment and (iv) an increased capacity to promote and supervise electricity planning in Jamaica.

2.5. In April 2016, the IDB conducted an Institutional Capacity Assessment System (ICAS)[2] and concluded that PCJ has the necessary institutional capacity to participate in the implementation of the EMEP and to undertake responsibilities as a Project Executing Agency (PEA). Nevertheless, based on the scope and reach of EMEP and taking into consideration the limited number of personnel in PCJ along with the scope of the inter-institutional coordination activities expected during the implementation of EMEP, the ICAS recommended that a PEU be established under the Office of the Group General

[2] Institutional Capacity Assessment Draft.

Manager. As part of the EMP preparation activities, the ICAS recommended that a plan be designed for the initial contracting of personnel with project resources and a gradual replacement and phase in with/of Corporation's resources. Therefore the skills related to procurement, financial administration and project management will need to be sourced and then integrated into the Renewable Energy and Energy Efficiency Department (REEED) within PCJ. This integration will need to take place via sharing and transfer of knowledge throughout the Department and for the length of the EMEP so as to strengthen institutional capacity in a more permanent way.

2.6. The ICAS also recommended that the fiduciary implementation of the EMEP take place through the deployment of the existing Enterprise Resource Planning System (EPR) which is important for budget, accounting, treasury and asset management as required by the IDB. In addition to securing internal control systems, the ICAS noted that various existing processes such as project management/gate procedures (selection, monitoring, evaluation, reporting) currently present within REEED could be effectively adapted to EMEP's characteristics and incorporated in the Program Operations Manual.

2.7. Therefore, in response to the recommendations of the ICAS and to mitigate against the lack of expertise and potential internal control and coordination risks, the IDB is proposing to support the PEU with this Operational Support Technical Cooperation (OS-TC): "Support to the Energy Management and Efficiency Program (EMEP)" (JA-T1120). The general objective of this OS-TC is to support the implementation of the EMEP by providing targeted and timely expertise and capacity building to enable the PEU to disburse project resources in a timely manner and in alignment with IDB procurement and fiduciary standards. The OS-TC will also support the creation the Program's Operational Manual which will detail arrangements on the processes required for executing the EMEP and ensuring appropriate coordination and reporting with the participating agencies and donors.

2.8. The TC is aligned with the Updated Institutional Strategy (2016-2019) as it contributes to the cross-cutting issues of: (i) Climate Change & Environmental Sustainability and (ii) Institutional Capacity. Additionally, the Project will contribute to the Corporate Results Framework 2016-2019 through the reduction of emissions with support of IDBG financing (annual million tons CO2 equivalent). The project is in line with the Infrastructure Strategy (GN-2710-5), the Public Utilities Policy (GN-2716-6) and the Caribbean Strategic Agenda on Integration (SAI)[3]. The Project is also aligned with the Goals of the Country Strategy of Jamaica 2013-2014 (GN-2694-2)[4] with regards to (i) ensuring fiscal and debt sustainability and (ii) facilitating the policy and institutional framework for business development.

III. DESCRIPTION OF ACTIVITIES AND RESULTS.

This TC Operational Support has three (3) major components as follows:

3.1. **Component 1: Strengthening Expertise within the PEU.** By utilizing PCJ's REEED technical staff in the PEU (engineering, renewable and energy efficiency expertise) the EMEP will capitalize on the growing and consolidated technical experience gained by PCJ over the past few years. The component will complement this expertise with the contracting of temporary consultancy services focused on (i) international procurement, (ii) financial administration and (iii) project management. The addition of this expertise

[3] SAI provides the framework for identifying Sectors and Actions Lines in which Caribbean countries and the IDB can increase operational collaboration.

[4] GN-2694-7 has been extended to Nov 1st , 2016.

for up to one-year, will enable the PEU to build the capabilities to start preparing requests for proposals and disbursing funds in a timely and efficient manner and in alignment with IDB standards and procedures. With IDB fiduciary team support, the contracted experts will also share expertise via on-the job training and provide a seminar within their subject area for staff within REEED and PCJ in order to allow for knowledge transfer and the integration of their expertise within the organization.

3.2. Component 2: Information Systems and Training for the PEU - will finance the purchase and training support related to the incorporation of planning, procurement and project management modules in PCJ's existing Enterprise Resource Planning System (EPR). This will enhance the overall efficiency of the administrative and control environment in PCJ through systems integration. In particular, the Component will support the purchase/renewal of license for the three additional modules from the local provider, including systems integration and training. Once implemented, this platform will be fully deployed by PCJ for the purpose of the technical and financial administration of the EMEP, and tailored to the specific IDB fiduciary requirements with respect to the chart of accounts and financial reporting, among others. Ultimately, this component will strengthen the capacity PCJ to discharge its planning, administrative, and monitoring and evaluation responsibilities with full integration with the financial management system under a single technology-based platform.

3.3. **Component 3: Development of an Operational Manual and the Review of existing Lighting Specifications -** support the (i) design and delivery of a Program's Operational Manual which will outline the detailed governance and organizational processes required for the execution of the EMEP such as: the financing, and procurement associated with each component; the optimization of procurement and contracting processes between IDB and GOJ that align with IDB processes and procedures; the formal agreements with related agencies such as NWA ad MSET and with JICA and the monitoring, reporting and evaluation of the program. The expected results is that the PEU will coordinate with and report to various agencies according to agreed guidelines in a timely manner. Ultimately this will help to ensure EMEP disbursements and reports are delivered on time. The component will also support a (ii) a brief review of an existing specifications and 'request for proposal (RFP)' as it relates to EE lighting retrofits in selected government buildings. The specification was prepared by MSET in 2014 but given lighting technology changes, the cost and savings assumptions will need to be updated. The expected result is that PCJ will be able to start procuring lighting utilizing EMEP resources for selected buildings as soon as the EMEP is approved.

V. RESULTS MATRIX

Component	Output	Unit	Target	Target year	Outcome	Source of Verification
Component I: Strengthening Expertise within the PEU	Contracted consultants with expertise in program management; financial management and international procurement	# persons contracted	3	2017	PEU disburses project resources in a timely manner and in alignment with IDB procurement and fiduciary standards.	Updates from the PEU semi-annual report

Component II: Information Systems and Training for the PEU	ERP system license renewed with added financial management & project management modules. Includes training support for PEU	# ERP system license with training support	1	2019	PEU improves integration of financial and project management planning and monitoring with PCJ	PCJ Operational Plan
Component III: Development of an Operational Manual and the Review of existing Lighting Specifications	Operational Manual	# manual	1	2017	PEU disburses project resources and provides reports in a timely manner.	Updates from the PEU semi-annual report
	(ii) Reviewed Lighting RFP	# RFP	1	2019	PEU utilizes EMEP resources to purchase EE lighting for selected government buildings	Updates from the PEU semi-annual report

V. BUDGET

As indicated in the table below, the total project cost is US$340,000 and this will be financed by SECCI

Component	Activity	IDB Funds and Total US$
Component I	Consultancy service in program management	80,000
	Consultancy service in financial management	60,000
	Consultancy service in International Procurement	60,000
Total Component I		**200,000**
Component II	ERP system license with training support	50,000
Total Component II		**50,000**
Component III	Review of Lighting RFP	20,000
	Operation Manual produced	40,000
Total Component III		**60,000**
Audit and Evaluation		30,000
Total		**US$340,000**

VI. EXECUTING AGENCY AND EXECUTION STRUCTURE

6.1. Upon request from the Government of Jamaica, the Petroleum Corporation of Jamaica (PCJ) will be the Executing Agency (EA) and will be responsible for the components under this TC. The PEU will be established within the REEED which is charged with the responsibility to drive energy conservation and savings for Jamaica. REEED has approximately 15 permanent staff of which 10 are engineers with knowledge and/or experience in energy efficiency and renewable energy operations.[5] The Manager of REEED will be in charge of preparing TORs and selecting consultants to complement the expertise of the PEU, in close collaboration with the IDB team from CJA/ENE. He will report on progress to the Group General Manager of PCJ. Individual consultants, consulting firms and non-consulting services will be procured in accordance with the

[5] PCJ has a total of 118 employees of which 101 are permanent staff, 17 contractual part-time and interns.

IDB's current procurement policies and procedures. The Bank will audit and evaluate all PEU activities.

VII. RISKS

7.1 The main risk associated to this TC would be delays resulting from the lack of coordination with and among multiple stakeholders. This risk will be mitigated by the close involvement of the CJA/ENE team with the counterpart regarding the preparation, beginning of the execution and progress of the components on a regular basis.

VIII. ENVIRONMENTAL AND SOCIAL STRATEGY

8.1 The TC is not expected to have negative social or environmental impact. The TC has been classified as Category C by according to the Safeguard Policy Filter Report (SPF) and the Safeguard Screening Form (SSF).

IX. Required Annexes.

- Annex I: Client request.
- Annex II: Terms of Reference for required activities.
  a) Consultancy service in Program management
  b) Consultancy service in Financial management
  c) Consultancy service in International Procurement
  d) Development of the Project's Operational Manual
- Annex III: Procurement Plan.