



2019
Project Implementation Review (PIR)



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Jamaica Renewable Energy

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A. Basic Data

Project Information	
UNDP PIMS ID	4900
GEF ID	5843
Title	Deployment of Renewable Energy and Improvement of Energy Efficiency in the Public Sector
Country(ies)	Jamaica, Jamaica
UNDP-GEF Technical Team	Energy, Infrastructure, Transport and Technology
Project Implementing Partner	JAM10 (Jamaica)
Joint Agencies	<i>(not set or not applicable)</i>
Project Type	Medium Size

Project Description
<p>This project seeks to advance a low carbon development path and reduce Jamaica's public sector energy bill through the introduction of renewable energy (RE) and improvement in energy efficiency (EE) in the health sector. The project will build relevant capacity in the public sector by increasing the knowledge base of its operatives on matters pertinent to RE and EE as well as developing the appropriate technical skills necessary to support investments in the sector. It will strengthen the regulatory framework that governs the development and deployment of RE and EE technologies. The project will support an investigate a potential mechanism involving public private partnership (PPP) that will engender a greater uptake of RE and EE. The hospital sector has a high-energy demand and high operational costs and would benefit significantly for RE and EE applications.</p>

Project Contacts	
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Other Partners	Mr. Edison Galbraith (egalbraith@dbankjm.com)

B. Overall Ratings

Overall DO Rating	Moderately Unsatisfactory
Overall IP Rating	Moderately Unsatisfactory
Overall Risk Rating	Substantial

C. Development Progress

Description					
Objective					
To advance a low carbon development path and reduce Jamaica's public sector energy bill through the introduction of renewable energy (RE) and improvement in energy efficiency (EE) in the health sector.					
Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2018	Cumulative progress since project start
A. Total direct GHG emission reductions (ton CO ₂ eq);	A. No reductions (0 ton CO ₂ eq);	<i>(not set or not applicable)</i>	A. 16,919 ton CO ₂ eq (over lifetime);	0. Procurement of RE and EE equipment in progress that will result in reduce CO ₂ emissions.	92.39 ton CO ₂ to be reduced annually through a PV system installed at one facility. Procurement of RE and EE equipment for three (3) facilities in progress that will result in reduce CO ₂ emissions.
B. Volume of investment in RE and EE technologies mobilized (US\$/yr);	B. No investment mobilized (US\$ 0/y)	<i>(not set or not applicable)</i>	B. US\$ 6 mln per year (from DBJ);	0. Procurement of RE and EE equipment are in progress.	Procurement of RE and EE equipment in progress.
C. Extent to which EE policies and regulations are adopted and enforced (aligned with GEF CC tracking Tool).	C. "1" (no regulation)	<i>(not set or not applicable)</i>	C."3" (regulation proposed but not adopted)	Procurement of an ESCO Consultant in progress to further enhanced/enforced RE and RE policies and regulations to support ESCO Model	ESCO Consultant engaged to support plans and strategies to develop ESCO industry. Support being given to the Bureau of Standards Jamaica in revising and updating building codes aligned to the national context and support advancement of RE and EE
D. Annual electricity production (RE) and savings (EE) of installed demonstration pilots (MWh/yr);	D. No energy produced or saved (0 MWh/yr);	<i>(not set or not applicable)</i>	D. 3.583 MWh/yr;	No energy produced or saved yet.	Installation of a 76kWh Grid-Tied PV System in progress at May Pen Hospital in 2019. An estimated 116kWh/yr to be produced annually.
E. Number of beneficiaries with access to improved energy	E. No beneficiaries reached (0m; 0f).	<i>(not set or not applicable)</i>	E. 50 hospital clients per day	No beneficiaries reached as yet.	120 persons have benefitted from capacity building initiatives on

services in Jamaica's health sector (m/f).			(25m/25f).		Energy Management and Renewable Energy. However no beneficiaries have been reached yet through RE and EE Interventions. This should be achieved in the next PIR cycle.
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The progress of the objective can be described as: Off track

Outcome 1
Increased knowledge in RE and EE for individuals in the public sector and strong institutional capacity to support RE and EE development in Jamaica's public sector.

Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2018	Cumulative progress since project start
1a) Quality standards for RE and EE tertiary education formalized (y/n);	1a) No quality standards;	<i>(not set or not applicable)</i>	1a) Quality standards adopted by tertiary education sector and formalized by Government	Assessment of the sustainable energy curricula is in progress. Draft assessment report is due on August 7, 2018.	Recommendations for an improved RE and EE Education shared with the Jamaica Tertiary Education Commission (JTEC). JTEC is the local organization mandated by the Ministry of Education to formalized quality standards where Education is concern.
1b) Number of building managers and O&M staff certified (m/f);	1b) No people trained and certified (0);	<i>(not set or not applicable)</i>	1b) 20 people certified (26m/14f);	Training Needs assessment findings are being validated by a contracted consulting firm. Workshops and hands-on training in RE and EE is expected to commence in September 2018 as per schedule for over 20 people.	Thirty (30) technicians trained in energy management and solar PV operations and maintenance.
1c) Number of BSJ staff certified to	1c) No BSJ staff trained	<i>(not set or not applicable)</i>	(1c) 6 BSJ staff	BSJ staff trained in RE and EE	Three (3) BSJ Staff were certified

perform RE/EE compliance tests (m/f)	and certified (0).	<i>applicable</i>	certified (3m/3f)	Equipment testing by the R3E project. Procurement of required equipment to strengthen the BSJ's testing/compliance capacity is currently in progress by UNDP.	through the R3E Project. GEF5 Project strengthened the institutional capacity of the BSJ to undertake energy efficiency testing through the purchase of a generator.
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The progress of the objective can be described as: **On track**

Outcome 2
A supportive legal and regulatory framework to facilitate the deployment of small decentralised RE power generation (notably solar PV) and EE programmes in Jamaica's public sector.

Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2018	Cumulative progress since project start
2a) Implementation level of RE/EE regulation under national legislation including Electricity and Building Act;	2a) Legislation submitted for approval but no specific RE/EE regulation drafted	<i>(not set or not applicable)</i>	RE/EE regulation drafted and proposed for approval;	Discussions ongoing with key ministries to determine how best to support the advancement of RE/EE regulations.	Updating of the National Building Codes will be completed within the next PIR Period.
2b) Implementation status of green procurement in Jamaica's public sector.	2b) No guidelines for green procurement.	<i>(not set or not applicable)</i>	2b) Guidelines for green procurement proposed and accepted.	Guidelines for solar PV installation, maintenance and monitoring are being developed instead under a contracted consultant. Draft manual is expected to be developed in fourth quarter 2018.	National guidelines for solar PV operations and maintenance drafted and shared with Bureau of Standards Jamaica.

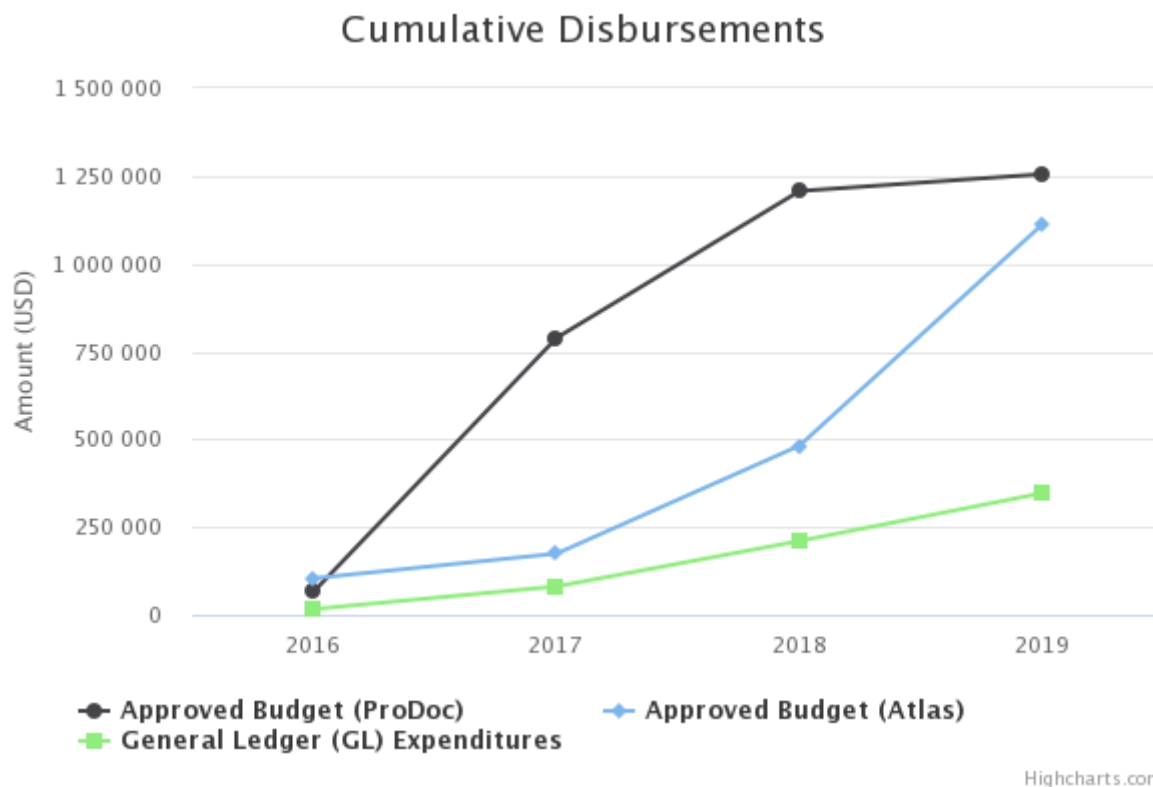
The progress of the objective can be described as: **On track**

Outcome 3
An operational Energy Performance Contracting mechanism to facilitate the development of ECSOs and their viability to support RE and EE scale-up in the public sector of Jamaica.

Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2018	Cumulative progress since project start
3a) EPC business model for RE/EE installation and operation	3a) No EPC models for RE/EE in place in	<i>(not set or not applicable)</i>	3a) EPC business models and	Design of EPC business model is in progress through the PCJ. An	Draft ESCO Business Model developed. Model procurement

designed and implemented (y/n);	Jamaica;	<i>applicable</i>	contracts for RE/EE implemented (tentatively: 5 contracts);	ESCO Consultant is anticipated to commence duties in August 2018 to further advance or improve this business model.	documents being drafted.
3b) Number of hospitals retrofitted with RE and EE Technologies	3b) No hospital retrofitted with RE and EE technologies	<i>(not set or not applicable)</i>	3b) Four hospitals retrofitted with RE and EE Technologies)	No hospital retrofitted with RE and EE technologies. Installation of Solar PVs is anticipated to commence at three (3) hospitals in 2018 (May Pen, National Chest and Sir John Golding). Air conditioning retrofits expected to commence at 2 out of 5 hospitals.	One hospital being retrofitted with Solar PV. Contract signature anticipated for late 4th quarter 2019 for lighting retrofits in 3 facilities. Contract signature anticipated late 4th quarter 2019 for solar pv intervention at another two hospitals.
The progress of the objective can be described as:		Off track			

D. Implementation Progress



Cumulative GL delivery against total approved amount (in prodoc):	27.6%
Cumulative GL delivery against expected delivery as of this year:	27.6%
Cumulative disbursement as of 30 June (note: amount to be updated in late August):	346,431

Key Financing Amounts	
PPG Amount	100,000
GEF Grant Amount	1,254,987
Co-financing	10,748,754

Key Project Dates	
PIF Approval Date	Jun 10, 2014
CEO Endorsement Date	Mar 23, 2016
Project Document Signature Date (project start date):	Jul 28, 2016
Date of Inception Workshop	Mar 24, 2017
Expected Date of Mid-term Review	<i>(not set or not applicable)</i>

Actual Date of Mid-term Review	<i>(not set or not applicable)</i>
Expected Date of Terminal Evaluation	Apr 28, 2020
Original Planned Closing Date	Jul 28, 2020
Revised Planned Closing Date	<i>(not set or not applicable)</i>

Dates of Project Steering Committee/Board Meetings during reporting period (30 June 2018 to 1 July 2019)
2018-07-04
2018-08-28
2018-12-20
2019-01-16
2019-02-19
2019-03-13

E. Critical Risk Management

Current Types of Critical Risks	Critical risk management measures undertaken this reporting period
Political	<p>Significant challenge being experienced by the PCJ in acquiring a commitment from Ministry of Finance (MOF) to the ESCO initiative, lack of political will and a common understanding of the mutual benefits of the ESCO industry and the role of MOF in the ESCO arrangement. Project significantly delayed in implementing outcome 3 in accordance with objectives as the PCJ is awaiting commitment from the MOF to remunerate them accordingly from the resulting monetary savings resulting from investments made in any renewable energy and energy efficiency project. Several meetings have been held with the PCJ to understand their intention and role as the super ESCO. A meeting was held with MOF in December 2018 and draft concept shared based on their request for savings to be used in social intervention programmes related to energy and not only physical installations. No official feedback has been received to date despite numerous follow-ups by the project and CO. PIOJ in the process of arranging a meeting with MOF in September 2018 and the project is in the process of arranging a high level energy forum with other IDPs, MOF, Ministry of Energy, other key public and private institutions. This forum would serve to discuss and chart a way forward with the government in securing Jamaica's Energy Future through a sustainable financing approach.</p>
Operational	<p>Delays in the Petroleum Corporation of Jamaica signing off on the final investment grade energy audit reports for the six targeted health facilities. This is due mainly to the below standard quality of the audit reports and the existing gap in the market to produce quality investment grade audit reports. This has resulted in significant delays in the implementation of RE and EE Retrofits under an ESCO -Type arrangement. The CO had engaged an ESCO consultant in November 2019 who provided a quick review of the revised reports in January 2019. The CO also had advised the PCJ through Project Board meetings that the ongoing issue with the audit reports and the resulting delays needed to be resolved urgently, and the fact that there was a six (6) months gap in communication between PCJ and the consulting firm regarding the revised reports submitted in June 2018. The CO also wrote a letter to the Ministry of Energy in March 2019 regarding the poor performance of the PCJ in effectively executing their role as the Responsible Party for achieving outcome 3. The issue surrounding the energy audits was eventually resolved in June 2019.</p>

F. Adjustments

Comments on delays in key project milestones

Project Manager: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.

1. Following the resignation of Finance and Admin Assistant at end of March 2018, UNDP CO experienced significant delays in filling the vacant post. A candidate was however selected in June 2019. A project officer was engaged in June 2018 but later resigned in March 2019. The PMU understands that delays are being experienced by the PCJ in acquiring the required approvals for advertising this position. With the numerous activities anticipated for the next year, it is important that the necessary resources are available to effectively and efficiently advance and monitor project activities.
2. Extensive delays experienced in commencing and finalizing the Investment Grade Energy Audits by the Petroleum Corporation of Jamaica (PCJ). This affected the significantly affected progression of activities under component 3 as it relates to the procurement of the RE and EE equipment which accounts for 50% of the GEF Funds. This issue was eventually resolved by the PCJ in June 2019 after much deliberations between both parties and also the steering committee.
3. A major delay hampering project milestones is the lack of a commitment from the Ministry of Finance regarding this ESCO initiative. The MOF is the main beneficiary of the ESCO and the saving as they are responsible for the payment of the utility bills for the health facilities. This was a major lesson learnt as the project should obtained a written commitment from the MOF as annex in the Prodoc. To this end, having a commitment from the MOF to utilize the savings to setup a revolving fund for energy projects is aggressively being pursued by the PMU and UNDP CO. The project drafted a proposal/concept on the ESCO to the MOF for their review and feedback. At the end of the PIR reporting period, UNDP CO was still awaiting a response form the MOF despite numerous follow-ups and requests for another meeting to resolve and queries regarding the concept.

Country Office: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.

N/A

UNDP-GEF Technical Adviser: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.

After some delays in starting implementation (PRODOC signed in July 2016) and inception workshop happened in March 2017, project is in full implementation and is planned to be finalized in July 2020.

G. Ratings and Overall Assessments

Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
Project Manager/Coordinator	Moderately Unsatisfactory	- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -
Overall Assessment	<p>The overall progress to date of the project remains moderately satisfactory, despite of the continued delays and challenges that are being experienced. Overall, progress on activities and indicators has significantly improved during the PIR reporting period specifically within Components 1 & 2. Overall progress on each component/outcome is as follows: Component 1 -90% complete and on-track, Component 2 - 52% complete and on-track, Component 3 -25% complete and off-track. The Project started 2019 on a strong note as it was able to execute numerous capacity building activities on renewable energy, energy management and Energy Performance Contracting (EPC). This was due mainly to adaptive management strategies that were introduced during the last PIR period to accelerate implementation.</p> <p>The 2018/19 annual work plan was not fully implemented due to the following reasons:</p> <ol style="list-style-type: none"> 1. Challenges and lengthy delays experienced by PCJ in finalizing the investment grade energy audit process with the contracted firm. This impacted project delivery where the ESCO related activities were concerned. 2. Delays experienced by the CO in finalizing the procurement process for engaging in a contractor for the May Pen Hospital Solar PV Project, project staffing and the timely acquisition of reputable consultant to execute the required activities. <p>As it relates to project staffing, it must be noted that the project was unable to operate at its full capacity for this reporting period as the Finance and Admin Assistant remained vacant. The CO was able to identify a candidate to commence duties in July 2019. The Project Officer who was engaged in June 2018, resigned in March 2019. The PMU understands that delays are being experienced by the PCJ in acquiring the required approvals for advertising this position. With the numerous activities anticipated for the next year, it is important that the necessary resources are available to effectively and efficiently advance and monitor project activities.</p> <p>Outcome 3 has experienced the most significant delays with failure to advance the ESCO model and contracting as well as installation of RE and EE technologies in the five (5) hospitals. This is largely due to challenges faced by the Responsible Party, Petroleum Corporation of Jamaica (PCJ). The PCJ faced significant challenges and delays in finalizing the investment grade energy audit process with the contracted firm Powergen Limited. This resulted in significant delays in advancing the ESCO initiatives under the project as no ESCO-related procurements could be initiated until final reports were approved by the PCJ. The PCJ eventually approved the final energy audit reports in June 2019, this after several meetings and advise by UNDP and the Project Board to urgently resolve the matter. Another major challenge faced by the project is in soliciting a positive feedback to the Ministry of Finance regarding this ESCO</p>	

initiative. The MOF is the main beneficiary of the ESCO and the saving as they are responsible for the payment of the utility bills for the health facilities. This was a major lesson learnt as the project should have obtained a written commitment from the MOF as annex in the Prodoc. To this end, having a commitment from the MOF to utilize the savings to setup a revolving fund for energy projects is aggressively being pursued by the PMU and UNDP CO. The project drafted a proposal/concept on the ESCO to the MOF for their review and feedback. At the end of the PIR reporting period, UNDP CO was still awaiting a response from the MOF despite numerous follow-ups and requests for another meeting to resolve and queries regarding the concept.

Notwithstanding the challenges, it must be noted that PMU remains resolute in advancing project implementation. As such, the ESCO Consultant is developing the required scope of work and supporting the development of the tender documents to pilot a miniature ESCO model over the next 12 months. Through this model the contractor would be guaranteeing the energy savings based on interventions and this would be achieved through measurement and verification after commissioning of equipment.

List of accomplishments during the PIR Reporting Period to date includes:

Component 1: Institutional Strengthening and Capacity Building

1. Engagement of an International Consulting Firm, Grue and Hornstrup, to assess the local sustainable energy education and make recommendations for an improved curriculum. This consultancy is completed, and the final report was shared with the Jamaica Tertiary Education Commission (JTEC) as they are the local regulatory and supervisory body for the tertiary sector.
2. Engagement of an International Consulting Firm, Grue and Hornstrup, to conduct a tailored training program in Renewable Energy and Energy Management. This consultancy was completed early 2019.
3. Conducted sensitization workshops in RE and EE for the health sector. Over 80 persons participated from Regional health Authorities, Hospitals, Clinics and NGOs.
5. Conducted 3-day training workshops in energy management and solar PV operations and maintenance. Over 30 technicians from the health sector received certifications through training conducted at the Wigton Renewable Energy Lab.
6. The institutional capacity of the Bureau of Standards Jamaica (BSJ) was strengthened through the provision/supply of a power generator. This allowed the BSJ's Energy Efficiency Lab to test equipment with frequencies of 50 and 60 Hz. This increased the BSJ's capacity to act as a Regional Testing Facility for EE.

Component 3: Economic and Fiscal Instruments:

1. National guidelines for solar PV operations and maintenance were also drafted during the reporting period and same was shared with the BSJ.
2. Support is to be given to the Bureau of Standards Jamaica (BSJ) in updating of the National Building Codes. BSJ is in the process of finalizing the contract with the selected consulting firm.

	<p>Component 3: Economic and Fiscal Instruments:</p> <p>1. Engagement of an International Consultant, from ECONOLER, to develop a sustainable ESCO Business Model and conduct tailored trainings on Energy Performance Contracting. This consultancy is ongoing and is anticipated to be completed late 4th quarter 2019. The consultant is in the process of developing the required EPC Tender documents.</p> <p>2. Engagement of an International Contractor, Enviroearth, to design, supply and install a grid-tied solar PV system at the May Pen Hospital. This contract is ongoing and is anticipated to be completed early 4th quarter 2019.</p>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
UNDP Country Office Programme Officer	Moderately Unsatisfactory	Moderately Unsatisfactory
Overall Assessment	<p>Through adaptive measures some progress has been made in project implementation. For example, the cumulative delivery up to June 2019 is approximately three times what it was in June 2018. This shows some improvement in project expenditure as well as achievements of some key activities. However, the overall cumulative delivery to June 2019 relative to amount in the project document is less than 30%. With the project now being implemented for three years, this delivery is low. Progress has been made in Components 1 and 2 and are on track to achieve the outputs. However, Component 3 which carries majority of the project's budget allocation is significantly delayed. One major achievement expected under this Component is the establishment of a sustainable finance mechanism associated with the ESCO concept. Advancing the ESCO arrangement has been challenges due to difficulties in approving the mechanism for PCJ to be a super ESCO by the Ministry of Finance. Despite several attempts, the CO has been unsuccessful in addressing this issue.</p> <p>UNDP, working with PCJ and other stakeholders will continue to lobby the Government for the setting up of the ESCO. This will require innovative and adaptive management. Greater efforts will have to be made to achieve the deliverables of the project. EE and RE retrofits are underway and should raise the delivery of the project during the next PIR period. It is anticipated that the project funds will be expended by next year. Despite the challenges, it is anticipated that the project will achieve its goals but this will require consistent adaptive management. This will include garnering greater support from project partners. UNDP will increase the frequency of meeting with the PCJ to monitor and mitigate risks (such as those mentioned in the PIR) and address implementation challenges.</p> <p>Given the low cumulative spend of the project my overall assessment of the project is that it is Moderately Unsatisfactory.</p>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating

GEF Operational Focal point	<i>(not set or not applicable)</i>	- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -
Overall Assessment	<i>(not set or not applicable)</i>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
Project Implementing Partner	<i>(not set or not applicable)</i>	- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -
Overall Assessment	<i>(not set or not applicable)</i>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
Other Partners	<i>(not set or not applicable)</i>	- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -
Overall Assessment	<i>(not set or not applicable)</i>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
UNDP-GEF Technical Adviser	Moderately Unsatisfactory	Moderately Unsatisfactory
Overall Assessment	<p>This is the second PIR of the project ' Deployment of Renewable Energy and Improvement of Energy Efficiency in the Public Sector' which objective is to advance a low carbon development path and reduce Jamaica's public sector energy bill through the introduction of renewable energy (RE) and improvement in energy efficiency (EE) in the health sector. After some delays in starting implementation (PRODOC signed in July 2016) and inception workshop happened in March 2017, project is in full implementation and is planned to be finalized in July 2020.</p> <p>The project has undergone some adjustments to indicators and specified the targets to adapt to National priorities and context since PRODOC signature. These minor adjustments did not demand GEF approval and were discussed and approved by RTA. Since its beginning, project team and country office have been proactive in sharing progress and in applying adaptive management measures to be able to implement activities and achieve targets.</p> <p>Components 1 and 2 are on track in implementation and based in building the appropriate technical skills necessary to support investments and in developing the regulatory framework that governs the deployment technologies in the RE and EE sectors. Component 3 is the big challenge of the project and aims to support an investigate a potential mechanism involving public private partnership (PPP) that will engender a greater uptake of RE and EE. The hospital sector has a high-energy demand and high operational costs and would benefit significantly for RE and EE applications.</p> <p>This PIR is poor in evidences, however project team has reported overall progress on Component 1 as 90% complete and on-track and Component 2 as 52% complete and on-track. Component 3 comprises more than 60% of project allocated resources in budget and is the main reason for project poor delivery rate with only 25% of progress in the third year of project implementation. This reporting period, Project has a cumulative delivery against total approved amount in prodoc of 27.6% and risks not to deliver Development objective</p>	

targets related to tons CO₂eq mitigated (16,919 over lifetime); leveraged investments (US\$ 6 mln per year) and MWh/yr of generated and saved energy (target 3.583).

RTA in line with project team country office rates DO rating as Moderately Unsatisfactory as Project is off track and is expected to partially achieve its end-of-project targets by project closure with significant shortcomings. UNDP as the implementing agency must structure a plan to guarantee that outcomes can be achieved at least partially as agreed with donor.

Implementation as well is not proceeding as planned and faces significant implementation issues. This is largely due to challenges faced by the Responsible Party of component 3: Petroleum Corporation of Jamaica (PCJ). The investment grade energy audits delayed significantly and were finalized in June 2019, which also delayed the advances on ESCO initiatives under the project. Another major challenge Project faces is the political support from the Ministry of Finance regarding the ESCO initiative. As MOF is the main beneficiary of the envisioned savings in the retrofit of health facilities, some agreement on the reinvestment of this savings is being pursued by project team, without success.

The project is not fully supported by all stakeholders involved and implementation progress cannot be improved if consistent adaptive management measures are undertaken immediately. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are significantly off track (the political risks management strategy seem to be from 2018 without 2019 update). Therefore, RTA in line with project team, considers Implementation Progress as Moderately Unsatisfactory.

In outcome 1, project has made recommendations for an improved RE and EE Education shared with the Jamaica Tertiary Education Commission (JTEC). Thirty (30) technicians trained in energy management and solar PV operations and maintenance. Three (3) BSJ (bureau Standards of Jamaica) staff were certified through the Project, that also enhanced the capacity of the institution to undertake tasks through the purchase of a generator (that must be appropriately installed yet).

A supportive legal and regulatory framework to facilitate the deployment of small decentralized RE power generation (notably solar PV) is the aim of outcome 2 and the updating of the National Building Codes are expected to be completed in the next PIR Period (by project end). The project also drafted and delivered to BSJ the National guidelines for solar PV operations and maintenance.

An operational Energy Performance Contracting mechanism to facilitate the development of ESCOs and their viability to support RE and EE scale-up in the public sector of Jamaica is the aim of outcome 3. The project drafted a proposal/concept on the ESCO Model to the MOF for their review and feedback. A commitment from the MOF to utilize the savings to setup a revolving fund for energy projects is being pursued by the PMU and UNDP CO. However, a strategy to move over without MOF and without the revolving fund (which might not be the most appropriate approach to start a performance mechanism) might have to be structured.

As this outcome is experiencing the most significant delays, with failure to advance the ESCO model and installing the technologies in the five (5) hospitals, project is taking a scaled down approach. The ongoing ESCO consultancy is developing the required scope of work and supporting the development of the tender documents to pilot a miniature ESCO model over the next 12months. In this model the contractor would be guaranteeing the energy

savings based on interventions and this would be achieved through measurement and verification after commissioning of equipment. This strategy, rightly shared with main stakeholders, considering a mix of grants and resources leveraged by JPC, might be a good approach considering the feasible outreach of the project.

In this last period of implementation project should invest more time and resources to communicate and disseminate its activities, achievements and results. The close monitoring and right communication of the designed ESCO model internally in the public sector and externally, can support an wider acceptance of the proposal and the buy-in of MOF. Other strategic public and private stakeholders might also be attracted and give more sustainability to actions after project ends. Project should also gather the evidences of capacity development activities to guarantee a transparent terminal evaluation. Hence, safeguards related to right disposal of waste that might be generated while implementing the retrofits and right and safe working conditions must be closely monitored by project team and UNDP CO.

H. Gender

Progress in Advancing Gender Equality and Women's Empowerment

This information is used in the UNDP-GEF Annual Performance Report, UNDP-GEF Annual Gender Report, reporting to the UNDP Gender Steering and Implementation Committee and for other internal and external communications and learning. The Project Manager and/or Project Gender Officer should complete this section with support from the UNDP Country Office.

Gender Analysis and Action Plan: <i>not available</i>
Please review the project's Gender Analysis and Action Plan. If the document is not attached or an updated Gender Analysis and/or Gender Action Plan is available please upload the document below or send to the Regional Programme Associate to upload in PIMS+. Please note that all projects approved since 1 July 2014 are required to carry out a gender analysis and all projects approved since 1 July 2018 are required to have a gender analysis and action plan.
<i>(not set or not applicable)</i>
Please indicate in which results areas the project is contributing to gender equality (you may select more than one results area, or select not applicable):
Contributing to closing gender gaps in access to and control over resources: Yes
Improving the participation and decision-making of women in natural resource governance: Yes
Targeting socio-economic benefits and services for women: No
Not applicable: No
Atlas Gender Marker Rating
GEN1: some contribution to gender equality
Please describe any experiences or linkages (direct or indirect) between project activities and gender-based violence (GBV). This information is for UNDP use only and will not be shared with GEF Secretariat.
The project have not contributed to actions that would indirectly or directly impact GBV.
Please specify results achieved this reporting period that focus on increasing gender equality and the empowerment of women.
Please explain how the results reported addressed the different needs of men or women, changed norms, values, and power structures, and/or contributed to transforming or challenging gender inequalities and discrimination.
A number of capacity development sessions have been held in the reporting period such as workshops in RE and EE for the health sector, workshops in energy management and sensitization sessions on Energy Performance Contracting. Both men (62%) and women (38%) working in the health sector participated in the workshops. The project supported recommendations for an improved curriculum on sustainable energy that would make energy education more attractive to women in

order to improve women's participation in the sector. The energy sector is currently dominated by men.

Please describe how work to advance gender equality and women's empowerment enhanced the project's environmental and/or resilience outcomes.

Please see above information.

I. Social and Environmental Standards

Social and Environmental Standards (Safeguards)

The Project Manager and/or the project's Safeguards Officer should complete this section of the PIR with support from the UNDP Country Office. The UNDP-GEF RTA should review to ensure it is complete and accurate.

1) Have any new social and/or environmental risks been identified during project implementation?
No
If any new social and/or environmental risks have been identified during project implementation please describe the new risk(s) and the response to it.
<i>(not set or not applicable)</i>
2) Have any existing social and/or environmental risks been escalated during the reporting period? For example, when a low risk increased to moderate, or a moderate risk increased to high.
No
If any existing social and/or environmental risks have been escalated during implementation please describe the change(s) and the response to it.
<i>(not set or not applicable)</i>
SESP: <i>not available</i>
Environmental and Social Management Plan/Framework: <i>not available</i>
For reference, please find below the project's safeguards screening (Social and Environmental Screening Procedure (SESP) or the old ESSP tool); management plans (if any); and its SESP categorization above. Please note that the SESP categorization might have been corrected during a centralized review.
<i>(not set or not applicable)</i>
3) Have any required social and environmental assessments and/or management plans been prepared in the reporting period? For example, an updated Stakeholder Engagement Plan, Environmental and Social Impact Assessment (ESIA) or Indigenous Peoples Plan.
No
If yes, please upload the document(s) above. If no, please explain when the required documents will be prepared.
<i>(not set or not applicable)</i>
4) Has the project received complaints related to social and/or environmental impacts (actual or potential)?
No
If yes, please describe the complaint(s) or grievance(s) in detail including the status,

significance, who was involved and what action was taken.

(not set or not applicable)

J. Communicating Impact

Tell us the story of the project focusing on how the project has helped to improve people's lives.

(This text will be used for UNDP corporate communications, the UNDP-GEF website, and/or other internal and external knowledge and learning efforts.)

Through the project, 120 persons have been trained in RE and EE which should significantly and positively impact energy management in selected healthcare facilities. The remaining installation of RE and EE technologies in 3 hospitals in the next PIR period should have a significant impact on reducing energy cost in the hospitals as well as improve the quality of service to the public.

Knowledge Management, Project Links and Social Media

Please describe knowledge activities / products as outlined in knowledge management approved at CEO Endorsement /Approval.

Please also include: project's website, project page on the UNDP website, blogs, photos stories (e.g. Exposure), Facebook, Twitter, Flickr, YouTube, as well as hyperlinks to any media coverage of the project, for example, stories written by an outside source. Please upload any supporting files, including photos, videos, stories, and other documents using the 'file library' button in the top right of the PIR.

UNDP & PCJ pilot innovative Energy Sector Company (ESCO) model to reduce energy costs in public hospitals:

<http://www.jm.undp.org/content/jamaica/en/home/presscenter/pressreleases/2016/11/30/undp-pcj-to-reduce-energy-costs-in-public-hospitals.html>

<http://www.jm.undp.org/content/jamaica/en/home/presscenter/articles/2019/jamaica-set-to-pilot-mechanism-to-stimulate-affordable-renewable.html>

K. Partnerships

Partnerships & Stakeholder Engagement

Please select yes or no whether the project is working with any of the following partners. Please also provide an update on stakeholder engagement. This information is used by the GEF and UNDP for reporting and is therefore very important! All sections must be completed by the Project Manager and reviewed by the CO and RTA.

Does the project work with any Civil Society Organisations and/or NGOs?
No
Does the project work with any Indigenous Peoples?
No
Does the project work with the Private Sector?
Yes
Does the project work with the GEF Small Grants Programme?
Yes
Does the project work with UN Volunteers?
No
Did the project support South-South Cooperation and/or Triangular Cooperation efforts in the reporting year?
No
Request for MSP Approval: PIMS 4900 Jamaica CEO ER 14-mar-2016.docx
Provide an update on progress, challenges and outcomes related to stakeholder engagement based on the description of the Stakeholder Engagement Plan as documented at CEO endorsement/approval (see document below). If any surveys have been conducted please upload all survey documents to the PIR file library.
The project sends monthly updates to key project stakeholders including updated risks, lessons learned and opportunities. The project was challenged with getting effective support from project board members. The Resident Representative of UNDP wrote to members regarding their participation in meetings and in lobbying for the project outside of meetings.

L. Annex - Ratings Definitions

Development Objective Progress Ratings Definitions

(HS) Highly Satisfactory: Project is on track to exceed its end-of-project targets, and is likely to achieve transformational change by project closure. The project can be presented as 'outstanding practice'.

(S) Satisfactory: Project is on track to fully achieve its end-of-project targets by project closure. The project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Project is on track to achieve its end-of-project targets by project closure with minor shortcomings only.

(MU) Moderately Unsatisfactory: Project is off track and is expected to partially achieve its end-of-project targets by project closure with significant shortcomings. Project results might be fully achieved by project closure if adaptive management is undertaken immediately.

(U) Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets by project closure. Project results might be partially achieved by project closure if major adaptive management is undertaken immediately.

(HU) Highly Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets without major restructuring.

Implementation Progress Ratings Definitions

(HS) Highly Satisfactory: Implementation is exceeding expectations. Cumulative financial delivery, timing of key implementation milestones, and risk management are fully on track. The project is managed extremely efficiently and effectively. The implementation of the project can be presented as 'outstanding practice'.

(S) Satisfactory: Implementation is proceeding as planned. Cumulative financial delivery, timing of key implementation milestones, and risk management are on track. The project is managed efficiently and effectively. The implementation of the project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Implementation is proceeding as planned with minor deviations. Cumulative financial delivery and management of risks are mostly on track, with minor delays. The project is managed well.

(MU) Moderately Unsatisfactory: Implementation is not proceeding as planned and faces significant implementation issues. Implementation progress could be improved if adaptive management is undertaken immediately. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are significantly off track. The project is not fully or well supported.

(U) Unsatisfactory: Implementation is not proceeding as planned and faces major implementation issues and restructuring may be necessary. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are off track with major issues and/or concerns. The project is not fully or well supported.

(HU) Highly Unsatisfactory: Implementation is seriously under performing and major restructuring is required. Cumulative financial delivery, timing of key implementation milestones (e.g. start of activities), and management of critical risks are severely off track with severe issues and/or concerns. The project is not effectively or efficiently supported.