

MINISTRY OF SCIENCE, ENERGY AND TECHNOLOGY (MSET)

FIRST QUARTER (APRIL 2018 – JUNE 2018) PERFORMANCE REVIEW REPORT



i. INTRODUCTION

This report covers the performance of the Ministry of Science, Energy and Technology(MSET's) three (3) portfolio areas for the **FIRST** quarter, (April – June) of the 2018 – 2019 financial year. The performance report highlights and assesses performance based on the monitoring of plans for policies, programmes and projects identified from the Ministry's Business and Operational Plans for the 2018 - 2019 financial year.

The plans reflect the mandate of the Ministry, along with the national priorities, policies and programmes that fall under this Ministry's portfolio. These include some of the priorities, programmes and outcomes identified under the National Development Plan Vision 2030, and include the sector outcomes that Jamaica's economy is prosperous, through energy security and efficiency, and that Jamaica is a technology enabled society, with internationally competitive industry structures.

The three (3) years Medium Term Socio-Economic Policy Framework 2015 – 2018 has specifically identified the priority outcomes, strategies and actions to be taken now to further advance the implementation of Vision 2030. It is based on these immediate priorities, activities and targets that the Ministry's current performance and trajectory is being monitored and assessed.

ii. HIGHLIGHTS OF MAIN ACHIEVEMENTS / MILESTONES DURING FY 2018-2019

The main achievements/milestones during the year included:

ENERGY SECTOR

Energy Division Jamalco CHP 100MW Power Plant

- Pursuant to a Cabinet Decision, Jamalco engaged New Fortress Energy (NFE) to build, maintain and operate a Combined Heat and Power (CHP) facility
 that will supply steam for Jamalco and electricity to JPS. NFE commenced project development process and has secured a Generation Licence, Power
 Purchase Agreement and Gas Supply Agreement. The project is scheduled for commercial operation in 2020 and is estimated to cost in excess of
 US\$300M.
- Wigton started to explore refinancing of the US\$ loan to J\$ then the Enterprise Team looking at the sale of shares took over this process. Two bid rounds were conducted by the Enterprise team and negotiations are ongoing with the preferred bidder Jamaica National.

SCIENCE SECTOR

Scientific Research Council

Under the Objective: Customer productivity is increased and the quality of goods and services is improved through the provision of S & T solutions

<u>The agency developed 30 new personal care products to support MSME's</u>

• Twenty-five (25) active projects are in progress; Steady progress has been made with eight (8) projects; three Certificate of Analyses (COA) completed

TECHNOLOGY SECTOR

e-GovUnder the initiative, Provide project management, application integration and infrastructure support services

• Workshops are being held during which the project team evaluates the various proposals and systems to make a selection. Members of the eGovJa team are an integral part of the process and have been onsite participating in the workshops as well.

1.0 ENERGY PORTFOLIO: MAIN DRIVERS: Energy Division, World Bank Project, PCJ, PETROJAM, PETCOM, WIGTON, NESoL, and the GEI

1.1 INTRODUCTION

The energy priorities include reducing the county's dependence on fossil fuels, improving efficiency levels and sourcing cheaper fuels. In addition to this, MSET and its partners seek to advance the development and growth into renewable energy sources, investments in modern and electricity generation plants, pursue energy efficiency and conservation through energy efficient systems and enforcement of an updated building code.

Under the Medium Term Socio-Economic Framework 2015-2018, the priorities for the Energy Sector are to:

- Advance the implementation of the LNG fuel diversification project;
- Complete the development of the Energy Policy Framework including the sub-policies;
- Expand the contribution of renewable energy sources;
- Promote energy conservation and efficiency; and
- Lower the cost of electricity through increased efficiency, competition and fuel source diversification.

The fuel diversification strategy pursued, seeks to reduce the current heavy dependence on oil for Jamaica's energy usage. The diversification activities pursued centred on the introduction of an alternative and cheaper fuel such as liquefied natural gas (LNG). A decision was taken in 2013 to facilitate, rather than take the lead in the introduction of LNG as a fuel choice and further leave other fuel options open to the private sector and this has continued to date.

1.2 THE ENERGY DIVISION

The Energy Division continued to pursue various programmes in achieving the 7 main goals in keeping with the National Energy Policy (NEP). Some of the activities undertaken during the quarter included the creation of a National Energy Awareness Campaign, the monitoring of energy consumption at various agencies across the public sector, promulgation of the Electricity Act 2015 and expansion of the renewable energy sources. The Division also continued to promote industrial harmony in the petroleum industry and ongoing registration of tanker drivers, haulage contractors, and petroleum bulk distributors. The energy division reported under the major goals and objectives of the NEP

GOAL 1 - Energy Conservation and Efficiency

Objective: Expand the Appliances Labelling and Testing Programmes of the Bureau of Standards Jamaica BSJ

- BSJ in consultation with consultants carried out further calibration testing with the intention to complete same during the second quarter of 2018/2019.
- Two engineers from BSJ received training in Mexico during the quarter to facilitate testing and labelling of equipment for the Eastern Caribbean.

Objective: To Monitor and Coordinate National Energy Efficiency Efforts Across all Sectors of the Society

- The Energy Division will support the efforts of the Policy Division in finalizing all sub policies under the National Energy Policy 2009-2030.
- A project monitoring and evaluation tool was developed in consultation with Meister Consultant to assess and track the economic and financial impact of various energy projects as well monitor implementation of energy sector projects.
- The Committee for Review of Energy, Technology Tax Incentives (CRETTI) did not meet during the period. However, the Ministry, through the MFAFT and MICAF, made a submission to the CARICOM - Council for Trade and Economic Development (COTED) in May for an additional five year Common External Tariff (CET) suspension on a list of selected energy efficient and renewable energy items that expired December 31, 2017.
- The COTED agreed to a three (3) year CET suspension effective June 1, 2018.
- Due to the limited human and technical resources, the Energy Division's monitoring of project implementation by the PCJ is limited to the Energy Management and Efficiency Programme (IDB, JICA and EU) and Energy Efficiency and Conservation Programme (GOJ).
- Reports are submitted to the Policy Division of the ministry and updates provided via committee meetings on an ongoing basis
- Feedback from MOFPS regarding an additional list of items for CET and GCT exemption, which was submitted in December 2017, is still pending.

Objective: To Implement a National Energy Awareness Campaign (Energy Efficiency and Conservation Program)

Strategy: Implement public awareness initiatives and deliver a minimum of two stakeholder workshops

Energy Awareness Campaign

- The EECP commenced the 2018/2019 EEC Awareness workshops with three being successfully staged during the quarter. The workshops were held in Ocho Rios, Kingston and Montego Bay on May 9 2018, June 13, 2018 and June 28, 2018 respectively. There were 154 participants from a total of 70 entities. The remaining EEC Awareness Workshops planned for the 2018/2019 financial year are slated for:
 Sept. 5 Mandeville Sept 26 Kingston
- The 2018/2019 GOJ/PCJ Energy Champion Competition was officially launched on 13th June 2018 at the Jamaica Pegasus Hotel. Entities were encouraged to complete entry form on the PCJ website, www.pcj.com .

Objective: To Reduce Energy Consumption and Increase Efficiency

• The MOTM advised that the proposed work programme for the National Transport Policy has been approved and that the commencement of the Steering Committee is anticipated for September 2018.

• The Petroleum Use Reduction Plan is expected to be completed by the end of July 2018

GOAL 2 - Modernized Energy Infrastructure

Objective: To Improve System Reliability and Reduce System Cost

• Validation of the final report from Consultants DNV-GL continued during the first quarter by ABB and Energy Exemplar. The output during this quarter included a new base case and high and low economic growth scenarios. Transmission and Distribution Impact, assessment of tariff impacts and allocation of upgrade costs and the final IRP report are outstanding

Objective: To Replace/Upgrade Old and Inefficient Plants (Generation and Refinery)

- JPS/SJPC 190MW Upgrade Project to be powered by LNG still continues
- Petrojam received approval from the Board to proceed with the Vacuum Distillation Unit (VDU) Phase One
- US\$100M loan approved and disbursed by MOFP in support of the VDU project.

Objective: To Ensure Safe Reliable and Efficient Supply and Distribution of Energy

- JPS continued its loss reduction efforts during the period under review. Overall loss reduction strategies for the period 2017-2021 include:
- Counter Intelligence Program
- Advanced Automated Theft Detection Tool
- Aggregate Transformer Meter Installation
- More frequent Customer Audits
- Strike Force Operations
- Community Renewal Programmes
- NESOL to provide update

Objective: To Increase Capacity Utilization of the Refinery and Optimize Efficiencies

• Petrojam to provide update on Refinery Upgrade Project (RUP)

GOAL 3 - Renewable Energy

Objective: To Identify and Develop Indigenous Energy Sources

• The pursuit of this activity is awaiting the completion of the Integrated Resource Plan which encountered further delay and should be completed in the second quarter of 2018/2019.

Finalize a National Renewable Energy Policy

• The Energy Division will support the efforts of the Policy Division in finalizing all sub policies under the National Energy Policy 2009-2030

Develop an Environment that will facilitate the Development and Connection of Renewable Energy Systems to the Electricity Grid

- The Energy Licences Administration Office (ELAO) for the period April to June 2018 issued:
 - 21 Net Billing Licences
 - 1 Auxiliary Connections Licence
- The total number of Net Billing Licences issued since the start of the Net Billing Pilot Programme, May 2012 is 682.
- The total number of Auxiliary Connections Licences issued since January 2017 is twelve (12). No Power Wheeling Licence issued to-date
- Following the completion of the Survey of Renewable Energy penetration the Ministry will work with stakeholders in the industry for periodic updates
- The entire amount available for loans, i.e. US\$5.384M under the ESEEP, which ended October 31, 2017, has been disbursed to SMEs to implement energy efficiency and conservation projects
- No loans have been issued under the line since 1st April 2018.
- DBJ is expected to provide information on net-reflows in due course.

Build the Capacity of Local Human Resources to Develop, Design, Install, Maintain and Operate Renewable Energy Plants/Systems

• The Ministry continues to maintain its membership in the International Renewable Energy Agency (IRENA) and the OLADE.

Expand the Local Capacity of RE Penetration in Jamaica through the Provision of Line of Credits and Incentives

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Conduct and make available feasibility studies and assessment of the country's renewable energy resources/potentials and make investment ready

• This activity is awaiting the completion of the Integrated Resource Plan which encountered further delay and should be completed in the second quarter of 2018/2019.

Goal 4 – Energy Security

Objective: To supply natural gas to the power generation and bauxite/alumina sectors. JPS/SJPC 190MW Project

• JPS through its subsidiary South Jamaica Power Company Limited (SJPC) is in the execution phase for the 190MW Old Harbour Project. SJPC contracted TSK an Engineering, Procurement and Construction (EPC) contractor who is currently conducting construction activities.

- The entity executed a Gas Supply Agreement in December 2016 and reached financial closure in March 2017. The project is scheduled for commercial operation by June 2019 and is estimated to cost US\$331 million.
- During this quarter SJPC:
- Civil works in progress
- Natural Gas Pipeline permit approved by NEPA
- Electrical works in progress
- Procurement activities in progress

Jamalco CHP 100MW Power Plant

Pursuant to a Cabinet Decision, Jamalco engaged New Fortress Energy (NFE) to build, maintain and operate a Combined Heat and Power (CHP) facility
that will supply steam for Jamalco and electricity to JPS. NFE commenced project development process and has secured a Generation Licence, Power
Purchase Agreement and Gas Supply Agreement. The project is scheduled for commercial operation in 2020 and is estimated to cost in excess of
US\$300M.

During this quarter:

- Engineering works in progress
- o Community engagement progresses
- Project management/execution setup & staffing in progress
- o Initial natural gas pipeline routing survey completed
- Transmission line interconnection route approved
- o Procurement activities in progress

GOAL 5 - Governance and Regulatory Framework

Objective: To Improve the Efficiency of the Petroleum Licencing and Renewal Process and Promote Industrial Harmony among Players in the Petroleum Industry Registration and or licenses issued during the period were:

- Efforts were made to avert strike action by tanker drivers. Drivers are restive because their application for a change in their union representation is taking an extra-long time to be processed at the Ministry of Labour without any proper explanation.
- Registration and or licenses issued during the period were:
- Three (3) haulage contractors registered and issued with licenses
- Twelve (12) tanker drivers registered
- Two (2) marketing companies issued with license
- Twenty-nine (29) Trade Board letters were prepared and distributed to facilitate the export of fuel samples
- Petroleum Database updated with information from applications.
- Meetings with the Legal Department and a Consultant to revise the current application forms, as well as, the new Petroleum Downstream Activities Bill and Regulations

Objective: To Facilitate Greater Compliance of all Petroleum Licensees to Regulations (Health, Safety and Quality Standards and Environmental Integrity)

- Quality testing of imported petroleum products ongoing by the NCRA. The NCRA sampled and tested the following imported petroleum products during the period:
 - o 8 Shipments of imported ADO
 - 2 Shipments of imported ULSD
 - o 5 Shipments of imported Ethanol
 - 9 Shipments of imported 87 Octane Gasoline
 - o 12 Shipments of imported 90 Octane Gasoline
- No meetings were held but the CAC had ongoing discussions with the Marketing Companies to try and resolve the 'bad gas' compensation impasse
- Consultation for the New Downstream Petroleum Activities Act will be conducted as soon as the first draft is completed by the consultant. The new Bill will replace the PQCA and the Petroleum Oils and Fuel Landing and storage Act
- Due to funding constraints the third National Energy Action Plan (NEAP III) was not developed in FY 2017/18 as planned. However, efforts are underway to have the NEAP III incorporated under the comprehensive framework of an Integrated Energy Plan (IEP), which should include the establishment of targets and indictors for the Energy Policy. Support for these initiatives is being explored under the Energy Management and Efficiency Programme (EMEP) currently financed by loan (IDB and JICA) and grant (EU Partnership).
- A TOR for consultancy services aimed at developing the IEP has been drafted and procurement of services is expected to commence in the 2nd Quarter of FY 2018/19.
- Component 3 of the EMEP (support for electricity planning) provides MSET with additional expertise and systems capacity aimed at resourcing an IRP Unit. In particular:
- contracting of technical experts knowledgeable in EE and demand side management, electricity sales and rates, and transmission and distribution to supplement MSET expertise and providing on-the-job training
- preparing technical studies to support the implementation of the IRP
- preparing a diagnostic study to understand the most appropriate software/IT platform
- purchasing and installation of appropriate software/IT for IRP implementation
- The support staff for IRP is at was 40% with (two of five experts) have been employed at the end of the quarter.

Objective: Strengthen the Governance, Institutional, Legal and Regulatory Framework for the Energy Sector

• This activity will be guided by the new Downstream Petroleum Activities Act that is being drafted by a consultant.

Objective: To Provide Energy Information that is Timely/Accurate and Necessary for Informing Policy Decisions

• Data providers are compliant in the submission of data via emails and updating of the Energy Database Management Information System (EDMIS).

- Review of the system is ongoing.
- Several issues are currently being addressed by the UTech team and weekly meetings held to provide updates.
- Login and system related issues were raised with OLADE during the period. Updates to commence in 2nd Quarter while OLADE proceeds with the implementation of an upgrade National Energy Information System (SIEN) for Jamaica.

Objective: To Establish a Robust Project Management Framework Driven by Best Practices

- The Energy Efficiency and Conservation Programme delivered three monthly reports for this quarter and the quarterly report. Review indicates that the schedule spending is just ahead of target however there is slippage in the procurement schedule which has implications for the project completion timeline set for March 31, 2019. Efforts will be made to address the slippage.
- EMEP delivered two monthly reports and are on schedule overall in terms of procurement and spend.

GOAL 6 - Government is a Leader in Energy Conservation

Objective: To Implement Public Sector Programme on Energy Conservation and Efficiency Data Consumption Report: May 2018:

- The following represents savings under the EECP project up to May 2018:
- Total savings to May 2018: 6,619,995.16 kWh
- Energy expenses reduction (US\$/year): USD\$2,034,985.05
- CO2 emissions of the public sector reduced:5,270.18 tonnesCO2
- # Oil barrels reduced:4,097.78 barrels

Air Conditioning Retrofits

Ministry of Education (MOE)

• Work continues to progress without any significant delays or incidents. Electrical and civil work is progressing steadily and the installation of AC infrastructure has started. Work is focused on Building Two and already the Third Floor of that Building is being cooled on a trial basis. The removal of existing AC infrastructure has been completed on Building 1, Two and The Annex. Site meetings are being held with stakeholders every two weeks

May Pen Hospital (MPH)

The MOU remains an outstanding activity. The installation of AC equipment for the Clarendon Health Department has started. All mini-split units have been installed where possible. Only locations requiring additional electrical work remain outstanding. AC installation on the Accident and Emergency (A&E) Department was started but had to be suspended due to the objection of the Hospital Staff to the routing of proposed ducts

Jamaica Cultural Development Commission (JCDC)

The JCDC contract continues with bi-weekly site visits with representatives from all key stakeholders present. No major installation activities have begun. At the moment, the main activities revolve around discussions on equipment storage, cool roofing solutions (CRS) and the required electrical retrofit. JCDC is expected to procure containers for storage.

All roofs at the target JCDC property were identified to be leaking which prevent the CRS proposed in the Bid from being applied without compromising its lifespan. JCDC has since completed repair of the roof on Building 2, and is exploring options to carry out the remainder of repairs. The AC retrofit was originally expected to close on September 15, 2018 is experiencing delays primarily due to the need to execute an electrical upgrade as recommended by the Government Electrical Inspectorate (GEI).

Jamaica Constabulary Force (JCF)

The Evaluation Report was submitted for consideration of the National Contracts Commission (NCC) on April 17, 2018 and the NCC advised of a one-month duration for their review. The EECP attended to a request from the NCC on Wednesday May 30th and is still awaiting approval. The next step after endorsement by the NCC is to obtain approval from the Infrastructure Committee of the Cabinet

Post and Telecommunications Department (POSTEL)

- The evaluation committee submitted their scores and the evaluation report was completed and submitted to the PCJ Procurement Committee for endorsement. The PCJ Procurement Committee has recommended revisions to the Evaluation Report.
- The next steps after endorsement by the PCJ committee; Goods Sector Procurement Committee, National Contracts Commission and Infrastructure Committee of the Cabinet.

Component 1 - Retrofitting of GOJ Facilities (Budget - US\$30.87 Million)

• Procurement process underway -

Deep retrofitting of Three (3) Hospitals (KPH/Victoria Jubilee, Mandeville and Falmouth), Marcus Garvey High School and Ebony Park Heart Academy

- Award of Contract to be issued for Investment Grade Audit (EU funded 7 Hospital)
- Expression of Interest (EOI) applications received for Lighting Audit of 50 GOJ Facilities
- Shortlisting of Applicants for Training of Facilities' Managers & Operators
- Expression of Interest (EOI) applications Consultancy for Engineering Design & Supervision Services.

Component 2 - Urban Traffic Management System (Budget - US\$3.5 Million)

• Urban Traffic Management System - Bidding process commenced on May 10, 2018 with return scheduled for June 25, 2018.

Component 3 - Electricity & Energy Planning (Budget - US\$2.03 Million)

• Terms of Reference for Diagnostic Study for MSET IT System and Technical Study to Support the IRP in MSET completed.

Air Conditioning Retrofits

• The project schedules in respect of the Ministry of Education and May Pen Hospital are on track. Air conditioners have been procured. *Jamaica Cultural Development Commission (JCDC):*

Contract awarded to CAC2000 Limited for a duration of nine (9) months. Stakeholder Meeting and bi-weekly site meetings have been held. Based on a
report from the Government Electrical Inspectorate (GEI), an electrical upgrade is required for the facility and the electrical design is now being reviewed
by the parties.

Jamaica Constabulary Force (JCF):

- The Request for Proposals for AC retrofits at the JCF was issued on November 15, 2017. The bid submission deadline was extended to April 16, 2018.
- Terms of Reference for Diagnostic Study for MSET IT System and Technical Study to Support the IRP in MSET completed

GOAL 7- Eco-efficiency in Industry

Objective: Facilitate Private Investment in Industry Conduct Detailed Energy Audits and Analysis of Energy Consumption Patterns for Jamaica

• Support provided to the MDAs where required

1.3 WIGTON

Wind Energy

Objective: Diversify Energy Mix Strategy: Efficiently Operate Wind Energy Facility (WIGTON I, II & III)

- Wigton I = 93.4%
- Wigton II = 82.8%
- Wigton III = 87.8%

Objective: Increase renewable energy penetration towards fulfilment of Energy Policy target of 30% Renewable Energy by 2030 Strategies: Bid for Wigton IV Project (24 - 35 MW)

• Awaiting finalisation of the Ministry of Energy's Integrated Resource Plan (IRP) then Generation Procurement Entity's review of the IRP and subsequent call for renewable energy generation for the grid.

Operational Efficiency

Objective: Reduce foreign exchange exposure in loan by reducing debt and increasing local equity

Strategy: Explore lowering finance charges possibly through shares options (Enterprise Team action item)

• Wigton started to explore refinancing of the US\$ loan to J\$ then the Enterprise Team looking at the sale of shares took over this process. Two bid rounds were conducted by the Enterprise team and negotiations are ongoing with the preferred bidder Jamaica National.

Solar Energy

Objective: Increase renewable energy penetration

Strategy: Bid for Solar Project within Wigton Windfarm layout (10 -30 MW)

• Wigton explored the feasibility of a solar PV wind plant interspersed on the Wigton wind farm lands. However, as with wind projects, await the Ministry of Energy's Integrated Resource Plan (IRP) then Generation Procurement Entity's review of the IRP and subsequent call for renewable energy generation for the grid.

Strategy: Collaboration with Petroleum Corporation of Jamaica and National Water Commission to Implement Floating Solar at NWC facilities

• PCJ is conducting the feasibility. At implementation phase, it is envisaged that Wigton could do implementation for PCJ

Green House Gas Reductions and Use of Distributed Renewable Energy

Objective: Increase renewable energy penetration and lower greenhouse gas emissions

Strategy: Demonstrate Electric Vehicle (EV) use for Wigton's bearer vehicle and power the EV with distributed solar PV with storage in collaboration with PCJ

• Plans were in place to partner with PCJ and use their slated 10 kW system on the Wigton Kingston office roof. However, that was changed where their panels would be placed on the PCJ building therefore, Wigton will obtain the items in July 2018.

Off Shore Wind Energy Research & Development

Objective: Increase renewable energy penetration

Strategy: Collaboration with Petroleum Corporation of Jamaica

• PCJ and Wigton are to sign off on the milestones of the US Trade Department funded feasibility study. Feasibility study completion expected first quarter 2019. On track.

Wind Energy

Objective: Operational Efficiency

Strategy: Repowering of Wigton I Site

• Generation Procurement Entity Chairman advised not to repower unless can recover costs within the current PPA term expiring 2024. GPE is awaiting IRP to know how retirement dates set etc.

Renewable Energy (Not on central government budget)

Objective: Capacity Development and Technology Transfer to Jamaicans Strategy: Facilitate Training of the Wider Public through a resource centre

• Continue to train own staff to operate the plants 100% with local engineers.

• Training the public in renewable energy to support the Energy Policy drive and targets for 20% renewable energy and 30-40% Renewable energy in the grid. See list of courses below.

1.4 NATIONAL ENERGY SOLUTIONS LIMITED (NESOL)

The National Energy Solutions Limited (NESoL) (formerly Rural Electrification Programme Ltd.) has three main programmes: Constructing Single Phase Distribution Pole Lines, House Wiring and Special Projects.

The agency has embarked on Special Projects geared towards the reformation of the rural electrification programme across these communities. A current project under this initiative is the implementation of Lightening Protection System at various libraries such as the Jamaica Library Services, of which an estimate was provided and presented for their response.

Diversification of Services

Objective: To Provide Renewable Energy Solutions, Energy Audits and Pole Line Design Services

Strategies: Research, develop and implement cutting edge renewable technology for wind and solar/Provide energy audits for governmental and private sector stakeholders/ Provide pole line design services/ Enter into contractual arrangements with JPS for the provision of maintenance services

- A total of 4.79km pole line extensions have been constructed
- **Variance**: Awaiting funds to procure additional electrical materials

Objective: To Have Houses Wired in Keeping with Electricity Standards

Strategy: Engage Contractors for House Wiring Services

• To date 169 houses have been wired

Variance: Anticipating disbursement of funds to facilitate procurement of electrical materials

Marketing of Pole Line Extensions and House Wiring Services

Objectives: To Inform and Educate Community Members about New Electricity Supply in their Respective Communities/To ensure that Residents effect Application for Access to Electricity Supply from Newly Installed Pole Line Infrastructure/Minimize Non-Technical Losses from JPS Electricity

Distribution System

Strategies: Conduct Survey and Determine Easements/Highlight Benefits of Extension to Customers/Secure Applications for House Wiring and Subsequent Deposits by Customers/to Follow through with Engineering/Department to Ensure that Required Services are Delivered

• To date, 3.10km of pole line construction have started. All poles have been planted at Grange- St. James. The stringing of conductors has been effected and is awaiting JPS RAMI system for metering. Phase A of Barrett Hall has been completed and certified as a special project for NWA.

Variance: Awaiting the RAMI system that JPS needs to procure. Awaiting survey results for boundaries at Barrett Hall.

Implement Renewable Energy Project at Key Government Entities

Objectives: <u>To Assist in the Expansion in the use of Renewable Energy Technology in Jamaica/Ensure a more Diversified Mix of Energy Sources/Contribute to the Reduction in the Cost of Electricity Supply in Jamaica</u> Strategies: Provide Training to Current Staff Members/Recruit New Skill Sets/Develop Standards, Policy and Operational Framework for

Implementation of Solar Energy Projects

- Completed a total of five (5) Cap sites to date.
- **Variance**: Shortage of materials from Consultants

1.5 PETROLEUM CORPORATION OF JAMAICA (PCJ)

The PCJ continued to take the lead in driving the implementation of the National Energy Policy 2009-2030 and in its operations, is guided by the priorities, objectives and targets in the Medium Term Socio-Economic Policy Framework 2015-2018.

Lighting Audit Review & Upgrade of 50 GOJ buildings, Health, Education & Public Agency Facilities Objective: Contract duly signed with consultant for the lighting audit review for the 50 facilities

• Shortlisting of consultants is currently in progress. Only one bidder showed interest

****Variance**:** Bidding process was delayed due to changes in the 50 selected facilities Major challenge is garnering the interest of the market and receiving quality proposals

Consultancy Service for Conducting of Investment Grade Audits (7 Hospitals)

Objective: Prepare Evaluation Report & receive IDB no-objection

Currently finalizing evaluation report to submit to IDB for no-objection

Consultancy Service for Engineering & Supervision Service for the Deep Retrofitting Works Objective: Obtain IDB no-objection of Technical Evaluation Report

• EOI Evaluation report sent to IDB for no-objection

Consultancy to collect & properly dispose of hazardous waste taken from facilities during works implementation Objective: Prepare Evaluation Report with recommendation for award of contract

• Awaiting IDB no-objection to direct contract UWI to handle mercury.

Training of Facilities Managers/Operators – Consultancy Objective: Prepare Evaluation Report

• EOI Evaluation report sent to IDB for no-objection

Implementation of an Urban Traffic Management System (UTMS) in Kingston Metropolitan Area Objective: Prepare Evaluation Report for UTMS and receive IDB no-objection of recommendation

Bidding process in progress

Variance: The start of procurement process for the UTMS was delayed due to change in scope made by NWA. Works originally planned under UTMS were implemented (emergency) by NWA/MNS

Engage five (5) experts to support the completion of IRP Objective: Engage experts

• Only three suitable candidates were identified following interviews for all positions.

Variance: There will be a retender exercise for the unfilled two positions. There is a challenge in finding suitable individuals to fill these technical roles.

Diagnostic Study for IT Platform within MSET

Objective: Receive IDB no-objection on draft RFP

Awaiting TOR from MSET to commence bidding process

Variance: Challenge in interest of the market as well as suitable firms/individuals to provide this service

Technical Study to support Integrated Resource Plan

Objective: Receive IDB no-objection on draft RFP

Awaiting TOR from MSET to commence bidding process

Variance: Challenge is interest of the market as well as suitable firms/individuals to provide this service.

Deep retrofitting of 30 GOJ buildings (EE & RE Measures), consisting of Health, Education & Public Agency Facilities

Objective: Prepare Evaluation Report for the retrofitting of Marcus Garvey High School & Ebony Park Heart Academy for approval. Opening of bids for deep retrofitting of 4 hospitals

• Proposals for Ebony Heart Academy scheduled for return June 29. Marcus Garvey High School project has to retender. Three Hospitals is currently being evaluated.

Variance: Bidding process for the three projects were extended to allow bidders adequate to provide Proposals. Major challenge is garnering the interest of the market and receiving quality proposals

Lighting Audit Review & Upgrade of 50 GOJ buildings, Health, Education & Public Agency Facilities Objective: Contract duly signed with consultant for the lighting audit review for the 50 facilities

• Shortlisting of consultants is currently in progress. Only one bidder showed interest

Consultancy Service for conducting of Investment Grade Audits (7 Hospitals) Objective: Prepare Evaluation Report & receive IDB no-objection

• Currently finalizing evaluation report to submit IDB for no-objection

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Consultancy to collect & properly dispose of hazardous waste taken from facilities during works implementation Target: Prepare Evaluation Report with recommendation for award of contract

• Awaiting IDB no-objection to direct contract UWI to handle mercury

Training of Facilities Managers/Operators – Consultancy

Target: Prepare Evaluation Report

• EOI Evaluation report sent to IDB for no-objection

Implementation of an Urban Traffic Management System (UTMS) in Kingston Metropolitan Area Target: Prepare Evaluation Report for UTMS and receive IDB no-objection of recommendation

• Bidding process in progress

Variance: The start of procurement process for the UTMS was delayed due to change in scope made by NWA. Works originally planned under UTMS was implemented (emergency) by NWA/MNS

Energy Intervention EECP - May Pen Hospital

Target 1: The removal of existing non-performing or inefficient components

- Variable Refrigerant Flow (VRF) at 30% completion
- Target 2: Replacement with efficient HVAC systems as specified in the schedule of requirements
 - All mini split units up

Target 3: Removal of any existing AC infrastructure not required in the final cooling configuration

- All equipment delivered
- Target 4: Supply and Installation of Energy Efficient Air-Conditioning Solution
 - 30% Completion in retrofits since April 2018
 - Removal of AC infrastructure

Energy Intervention EECP - Ministry of Education

Target 1: The removal of existing non-performing or inefficient components

• Building 2 AC installations complete

Target 2: Replacement with efficient HVAC systems as specified in the schedule of requirements

• Building 1 AC Installation at 30% completion

Target 3: Removal of any existing AC infrastructure not required in the final cooling configuration

• Building Annex Installation at 75% completion

Target 4: Supply and Installation of Energy Efficient Air-Conditioning Solution

• Removal of AC infrastructure

Energy Intervention EECP - Jamaica Cultural Development Commission (JCDC)

Target: Assessment of the existing Cooling Solution and determination of adequately and inadequately performing components

• Assessment of the existing Cooling Solution and determination of adequately and inadequately performing components completed ****Variance**:** Electrical upgrade of facility needed before AC retrofitting can take place

Energy Intervention EECP - Jamaica Constabulary Force (JCF) National Police College, Mobile Reserve Unit, May Pen Divisional HQ Target: National Contracts Commission (NCC) Approval

- Endorsement from Goods Sector Committee
- Submission to the NCC for approval

**Variance"": Evaluation report submitted to the NCC on April 17, 2018. Decision Pending

Energy Intervention EECP - Post and Telecommunications Department (POSTEL) Target: Goods Sector Committee Endorsement

• Evaluation in progress. To be presented to the PCJ Procurement Committee by June 30, 2018

Impact Assessment of the EECP

Target: Issue the Request for Proposal for consultancy services

• Request for Proposal issued

Increase Energy Efficiency and Conservation (EEC) awareness in the public sector Target: Launch of Energy Champion Competition

- Successful launch of 2018 Energy Champion Competition
- Target: Presentation to the Permanent Secretary's (PS) Board
 - Presentation to the PS Board
- Target: Convene EEC Awareness workshop in Ocho Rios, Kingston and Montego Bay
 - Workshop held in Ocho Rios and Kingston

Variance: Mobilizing participation for the Energy Champion Competition

Bio Fuels: Medium Scale Biodiesel Processing & Validation

Target: April 2018 - Contract mobilization and inception report/June 2018 - Purchase of castor oil seeds and oil extraction

• Utech advised the PCJ in April 2018 that they are unable to undertake the project within PCJ's budget. PCJ plans to retender pending sign off from the GGM.

****Variance**:** Major schedule delays due to protracted negotiations.

ESEEP: Hydropower Pre-Feasibility and Feasibility Studies for Six Sites (Phase II)

Target: April 2018: Close Energy Security and Efficiency Enhancement project (ESEEP) with MSET and the World Bank

 The Project which was completed between 2011 and 2017, delivered One (1) Prefeasibility Study for Morgan's River, Ten (10) Full Feasibility Studies for Negro River, Martha Brae River, Spanish River, Rio Cobre, Green River, Wild Cane River, Swift River, Rio Grande & II and Rio Cobre at Angels. A website model, promotional materials, Hydropower RFP, Financial model documents and other investment promotion tools were provided under this Project. The total hydropower potential identified was 26 MW and 78,300 MWh. The Project costs disbursed by MSET's Project Executing Unit was US\$2,725,755 for the PCJ's Subcomponent

Variance: The Integrated Resource Plan (IRP) is currently being developed by MSET to define the hydropower generation requirements for the expansion of the national grid along with other Technologies.

Small Hydropower Development Projects

• Land acquisition database prepared for hydropower sites. Interconnection meetings held with JPS for all 3 sites. Drone photography procurement completed and bidder selected

****Variance**:** The land owners are reluctant to grant permission for drone photographer to access site.

Corporate Social Responsibility - Energy and Energy Efficient Technologies so as to reduce Energy Consumption in the Public Sector Target: June 2018: 3 CSR interventions to be completed by the end of the 1st quarter

- The team has been able to complete the below:
- PCJ Building Solar PV 20KW
- Bustamante Children Hospital Solar Water Heaters
- Investment Grade Audit For the Jamaica Foundation For Life Long Learning

Energy Services Company - Energy and Energy Efficient Technologies so as to reduce Energy Consumption in the Public Sector Target: June 2018: Contracts to be in place for NWC, Petrojam, DBJ and Old Harbour High

- Contract with DBJ signed, however we are awaiting amendments that are being made to the final contract to proceed.
- PCJ is currently in negotiations with NWC, Petrojam and Old Harbour High for ESCO Contracts

Install Solar PV Panels to Underserved Communities not connected to the National Electricity Grid Target 1: RFQ prepared and issued to bidders to supply 45 Solar PV Panels for pilot

- Limited tender conducted.
- Target 2: Bids received and evaluated for pilot
 - Bids being evaluated

Replacement of open flames with Solar Lamps in Underserved households not connected to the National Electric Grid Target: 5000 Solar Lamps handed over to SDC for distribution

• Solar Lamps handed over to SDC subsequent to handover Ceremony at the OPM

Biofuels Development Programme/Establish Biodiesel Plant for introducing Biodiesel to the Jamaican Market Font Hill Target: Font Hill Lease negotiated

• Font Hill Lease negotiated

Solar PV Development Programme

Target: Installation of Solar PV Panels by Q2 at the OPM

- Solar PV Equipment shipped by SOHS to Jamaica.
- Installation scheduled to begin end of June 2018
- Should be completed in July 2018

Research and Development/Off Shore Wind Feasibility study in Portland Cays with the United States Trade and Development Agency and Keystone Engineering

Target: USTDA and Keystone Engineering have Policy meeting with Stakeholders at PCJ

• Policy meeting held with Stakeholders at PCJ in May 2018

Variance: Wind Resource Assessment and Site Assessment Reports behind schedule

Research and Development/Investigation of Potential Energy Projects with Inventors external to the PCJ with a view to Commercializing Feasible Projects

Target: Proposal Received/Evaluation Underway

- Unsolicited proposal received
- Evaluation underway

Variance: Detailed clarifications requested of proposer

Research and Development/Investigation of Potential Energy Projects with inventors external to the PCJ with a view to commercializing feasible projects

Target: Credible claims investigated

- Fuel sample being investigated.
- Preliminary tests conducted by Petrojam
- Further tests to be conducted

Project Funding/Project proposals prepared and submitted to international funding agencies to attract funding so that PCJ can expand its interventions

Target: One (1) Proposal submitted to funding agency

• Proposal submitted to National Appropriate Mitigation Action (NAMA) for 12.1 M Euro funding for Rural Electrification project. Not successful, however Proposal being prepared for UAE funding (\$4M USD) in Q2.

Project Funding/Prepare for discussion with MOFP, list of projects to replace/extend current EECP Project Target: Preliminary meeting with MOFP to discuss proposal idea.

Meeting held with MOFP

ESCO (Energy Services Company) Initiative/ PCJ to provide paid services to Self-Financing Government entities to implementing Renewable Energy and Energy Efficiency projects on their behalf

Target: Ongoing dialogue with NWC re PCJ being engaged to do projects on their behalf

• MOU signed with NWC FY 2017-2018. Ongoing dialogue re the funding mechanism for more than twenty (20) projects discussed

Project Funding/Project proposals prepared and submitted to international funding agencies to attract funding so that PCJ can expand its interventions

Target: One (1) Proposal submitted to funding agency

- Proposal submitted to National Appropriate Mitigation Action (NAMA) for 12.1 M Euro funding for Rural Electrification project. Not successful, however.
- Proposal being prepared for UAE funding (\$4M USD) in Q2.

Tullow PSA Management

Target: 3D Survey

• Completion of geological analysis, 2D and 3D surveys off the south coast of Jamaica. Beginning of the processing of 3D data to identify reserves and increase chance of success.

Variance: Identification of Commercial quantities of hydrocarbons

Repsol PSA Negotiations

Target: Continued Negotiations

- Remains a Work in Progress however moving ahead
- **Variance**: Agreeing to contract conditions

Database Management System for Hydrocarbon Data

Target: Negotiations with contractor to ensure software requirements and data is present in the correct formats

Approval from Procurement and the start of discussions with the chosen company

LNG Work Programme- Strategic Business Partner identified

Target: Effective Negotiations

• Work in progress negotiations

Variance: To identify genuine demand at an effective price and finalize location logistics

1.7 PETROJAM

Petrojam is jointly owned by the government of Jamaica through the Petroleum Corporation of Jamaica (51%) and PDV Caribe S.A, an affiliate company of Petroleos de Venezuela S.A. (49%). The entity supplies the country with a full range of domestic, transportation and industrial petroleum products. The core

business function is the purchasing and refining of crude oil into finished petroleum products among other by-products including, gasoline, automotive diesel oil, jet fuel, liquefied petroleum gas, heavy fuel oil and asphalt.

Petrojam continues to implement strategic initiatives towards improving their productivity and profitability. Some of the achievements during the quarter are as follows:

Strategy: Implement Refinery Upgrade Project/ Vacuum Distillation Unit Project (VDU)

- Contract negotiation still in progress with Sinohydro.
- In January 2017, Cabinet authorized the Minister of Science, Energy and Technology and the Petroleum Corporation of Jamaica to execute an Agreement with the Bolivarian Republic of Venezuela and Petróleos De Venezuela for SINOHYDRO Corporation Limited to undertake the Petrojam Refinery Expansion Project.
- Petrojam Board of Directors gave its approval to proceed with the Vacuum Distillation Unit (VDU) Phase One September 22, 2017, which will allow the refinery to operate until the full upgrade is approved. The current forecast commissioning date for the VDU is October 2020.

Major Projects

Objective: Maintain Customer Confidence/Loyalty

Obtain ISO Accreditation for the petroleum testing laboratory – (Construct new petroleum testing laboratory)

• External/grounds works being done

Complete construction of Wastewater Treatment Plant

- Installation 75% complete.
- Electrical works outstanding

PETROJAM ETHANOL LIMITED (PEL)

Explore the possibility of growing local feedstock/Looking at Cassava as a possible source of ethanol

Strategy: To meet with stakeholders/gather data

• Meeting of June 8, 2018 with Red stripe /Heineken representatives to form support and commence case study on the achievements of growing Cassava locally for blending of alcoholic beverage.

Variance: Stakeholder support lacking

2.0 SCIENCE PORTFOLIO:

MAIN DRIVERS: Scientific Research Council (SRC), International Centre for Environmental and Nuclear Sciences (ICENS) and National Commission on Science and Technology (NCST)

2.1 INTRODUCTION

The science and technology interventions and projects pursued by the main drivers in this sector reflect the goals and objectives of the Government of Jamaica (GOJ) and are implemented within the framework of the National Policy on Science and Technology and also Vision 2030 under outcome #11: A technology enabled society through the integration of Science and Technology into all areas of development. The entities sought in carrying out their mandates to build awareness of the relevance and importance of science and technology in influencing Jamaica's growth and development.

2.2 NATIONAL COMMISSION ON SCIENCE AND TECHNOLOGY (NCST)

The agency has responsibility to promote the sustainable development and the utilization of local science and technology capabilities for competitive and profitable production through education of the populace, partnership of the government, private sector, academic institutions and such other bodies. These are to be promulgated through established priority programmes and key initiatives alike.

Development of new Science, Technology and Innovation Policy aligned to Vision 2030 National Development Plan (YEDAIP supported) Target: Complete the revision of the document and submission of request from Cabinet for input and public consultations

• Document is being finalized by Ministry of Science, Energy and Technology Policy Unit

International Scientific and Technological Bilateral Cooperation between Jamaica & South Africa (SA)

Target: Monitoring of Research Activities of local researchers

Variance: Timely allocation of resources

Execution of the MOU with BioJam Industrial Research and Development-BIRD Planning and Execution to undertake Feasibility Study for the Establishment of Science and Technology Park

Target: Establish methodology for study, plan data collection and stakeholder engagement activities

- Feasibility study methodology developed and planned stakeholder engagement activities;
- Online portal developed for data collection

Variance: Coordinating plans and activities with overseas partners scheduling conflicts

Establish the Framework for a Functional and Sustainable National Nutraceutical Industry (NNI)

Target: Prepare drafting instructions to the Chief Parliamentary Council (CPC) for the amendment to the FDA and its regulations

• Drafting instructions prepared for CPC for the Amendment to the FDA; feedback received and response prepared

Variance: Coordination of key stakeholder schedules to undertake amendments and drafting instructions

Implement key recommendation emerging from Audit of GOJ Labs: Promote improvement and infrastructure development Target: Cabinet Approval for the implementation of HALWAC recommendations

Cabinet submission outlining request: Signing of MOU with Caribbean Cement Company for incineration of certain classes of chemical; Identification of site for hazardous waste and implementation of framework to govern the management of chemicals and chemical waste

Variance: Clarity on best approaches. Identification of resources to execute required activities

2.3 SCIENTIFIC RESEARCH COUNCIL (SRC)

The SRC was established by an Act of Parliament in 1960 and the Government through the Minister of Science, Energy and Technology (MSET), has mandated the Scientific Research Council (SRC) to contribute to economic growth through the application of Science, Technology and Innovation (STI). The SRC is guided by the Ministry's priorities which are aligned to the National Development Plan (Vision 2030).

Noel Homes/Lucea Hospital -	98% complete;
Ulster Spring -	98% complete
Savanna la mar Hospital -	99% complete; corrective work commenced at Savana-la-mar Hospital Issues with contractors accepting liability with poor flow of system at the Savanna hospital
Hampton Court, St. Thomas -	98% complete; Site visited was conducted to assess the status of site. Poor responsiveness from the contractors engaged by the MOA and low occupancy of sites to allow for flow
Golden Grove, St. Thomas -	99% complete; Site visit was conducted to assess the status of site.
Spring Field Clarendon -	98% complete; The bed is flooded and the chlorination chamber remains blocked with soil.
Barham Phase II -	36% complete. Provided a design change to the BST to avoid possible leakages; Contract not yet finalized with the NHT
Church of the Living God- Windward Road-	97% complete. Awaiting client instructions. Technical supervision offered
May Pen Tax Administration-	95% complete; BST was resealed and system connected, Construction delayed by May rains
Carron Hall High School-	99% complete. Phase II Project has been put on hold due to financial constraints.
Massemure Phase 2 Westmoreland -	Still awaiting final contract from NHT
Stanmore, St. Ann	Still awaiting contractual agreement to conduct the performance monitoring analysis
Guardsman Group Ltd	Commissioning of the system continues
Salvation Army -	Sampling of the system continues

BUILD, COMMISSION AND MONITOR WASTEWATER TREATMENT SYSTEMS IN THE REGION

Ministry of Science, Energy and Technology – Quarterly Performance Progress Report (April 2018 - June 2017)

Wolmers' Boys -Berger, 256 Spanish Town Road -Caribbean Products Company Limited -

Westmoreland Fire Station -

System is stilled being monitored 100% complete; Reeds are yet to be replanted The Up-Flow Anaerobic Sludge Blanket (UASB) is currently processing 80% of the plant effluent. Sample collected and is being analysed to check the quality of the final effluent leaving the Plant Still awaiting client's feedback regarding connection of the existing system to the newly constructed one in order to acquire a flow.

Provide Food Technology Services to MSMEs to support Market Access and Competitiveness

- Renovation work continues to upgrade the Food Pilot Plant for HACCP recertification
- GAP audit report received. Corrective Action Plan (CAP) developed to correct non-conformances; work has commenced by the team assigned to implement CAP

Variance: Several delays faced due to unavailability of contractors and late disbursement of April revenue from CONSOL Fund*

- Average of fifteen (15) clients utilized the Pilot Plant for production of products monthly. Products include-juices, water, sauce, seasoning, liqueurs, jams, jellies syrup, Solomon Grundy, drinks etc.)
- Eleven (11) clients received support with packaging and milling
- Facilitated FDA filing for one (1) client
- Retort inspection report prepared for one (1) client

** Variance**: Plant was undergoing renovation to facilitate HACCP certification resulting in reduced availability of production space**

Support the growth and development of MSMEs through the provision of Analytical and Consultancy Services

Objective: Reduce outsourcing of tests to increase turn-around time and increase revenue stream

- Atomic Absorption Spectrophotometer inspected by Technician from Analogic solutions
- · Procurement of heavy metal lamps and AA mother-board replacement from analogic solutions
- Ion Chromatograph installed; awaiting commissioning and training from the Analogic solutions Technician

Objective: At least 1200 samples are analysed each quarter for microbiological and chemical parameters

- For the period 656 samples were received and tested (average of 330/month); 536 involved microbial analyses
- Fats, Oils and grease samples are tested in house

**Variance: Malfunctioned AA Spectrophotometer affects the output on the amount and type of tests to be done in-house

Objective: Turnaround time is improved. At least 80% of requests are satisfied within two weeks of receipt of requests

- Average in-house turnaround time for the period was 70.5%; overall 59%
- Outsourced tests continue to affect turnaround time
- Challenges with preparation of reports

• Several power surges affected the equipment

Objective: Customer productivity is increased and the quality of goods and services is improved through the provision of S & T solutions Develop 30 new personal care products to support MSME's

- Twenty-five (25) active projects are in progress; Steady progress has been made with eight (8) projects; three Certificate of Analyses (COA) completed
- Seven (7) projects are on hold
- Two (2) clarification meetings held; one (1) Letter of Intent Issued

Variances: Delay in the supply of ingredients by clients; delay in feedback from clients as well as technical challenges in product formulation affecting timely completion of some projects

Support the growth and development of Agriculture through provision of techniques leading to disease free plants and disease resistant ginger and sweet yam.

• Five Hundred and Twenty-four (524) (three plants per jar) were obtained after subculture during the period for exportation to the IAEA for irradiation ****Variance**: Challenges with Identifying Fellowship host for 1 staff through IAEA project**

- Two Hundred and Seventy one (271) tubes of sweet potato obtained after subculture during the period
- **Variance: Challenges in acquiring disease free plants for initiation**
 - Maintenance continued and plants labelled with D2O. Harvesting completed.

**Variance: High mortality rates at start-up as such plants were removed from greenhouse and grown outdoor.

Objective: Develop 30 new Food products valuing \$2 M to support MSMEs

• Identified two (2) value added products for development; conducted two (2) sensory evaluations

Objective: Continual sensitization on the importance and value of S&T to the nation, through the activities of the Science & Technology Education Unit (STEU)

Strategy: S & T Fair (2018) hosted with at least 30 entries and at least 1500 participants

- Ideation sessions held in Montego Bay, Mandeville and Kingston; fifty-six (56), seventy-two (72) and Twenty-nine (29) respectively persons in attendance respectively
- Thirty six (36) entries received. Event was a huge success with over 4000 participants

Variance: Low interest from schools. Activity funded by YEDAI project as such there should be increase in interest for the FY 2019/20 round

- Camp dates finalize as follows:
 - Mandeville Catholic College July 16-20
 - Hope Complex: July 30 August 3
 - GK/Parade Gardens: August 13 17

- o Sponsorship received from one company
- Competitions were executed and Awards Ceremony held on April 26, 2018 at Stella Maris Church Hall with 169 teachers and students participating
 Objective: Finalise activities under INVOCAB Funded project
 - Editing of five (5) of the nine (9) manuals; cover drafted for the science manuals
 - Internal and external data collated and formatted for analysis
 - Data analysis identified
 - Internal Writing Committee identified
 - Finalize topics for the project papers

Variance: Inability to find suitable Journals for the papers

Continual sensitization on the importance and value of S&T to the nation, region and internationally Objective: Use S&T to support reform of incarcerated persons through the Department for Correctional Services St.Catherine

• Awaiting feedback from the skills assessment questionnaire **Variance: Changes in the Director of Rehabilitation cause delay**

2.4 THE INTERNATIONAL CENTRE FOR ENVIRONMENTAL AND NUCLEAR SCIENCES (ICENS)

A Healthy and Stable Population / World-Class Education and Training

Objective: Strengthen the linkages between health and the environment/Ensure that adequate and high quality tertiary education is provided/ Integrate science and technology into all areas of development

- Target: Official participation in RLA 7023 and PTXRFIAEA 14 / Commencing with analysis after microbalance is set up
- In- kind donation of a Microbalance to do analysis was delivered as expected.
- Awaiting delivery of air filters in the subsequent quarters

Objective: Strengthen disease surveillance, mitigation, risk reduction and the responsiveness of the health system Target: Soil samples to be collected and analysed for various heavy metals

- Field trips conducted in several locales, samples submitted and analysed
- Target: Lead Care 2 testing system and two associated test kits to be acquired
 - Lead care 2 system delivered and awaiting clearance

Comment: No additional action is necessary at this point.

Target: Expected acquisition of Direct Mercury Analyzer (DMA) for analysis

• Arrangements underway for preparation of laboratory area for DMA and visit of instrument technician to install technique

Security and Safety

Improve the security of the border and territorial waters/Strengthen the anti-crime capability of law enforcement agencies

• Final draft of meeting report for coordination meeting delivered to the International Atomic Energy Agency (IAEA)

World-Class Education and Training

Objective: Ensure adequate and high quality tertiary education Target: Multi-element analysis of UWI sludge samples and evaluation of results

• Samples have been analysed. Data to be submitted in the following quarter

Technology-Enabled Society

Objective: Integrate science and technology into all areas of Development / Manage all forms of waste effectively Target: Completion of ICENS Quality Manual and associated documents

Reassignment of duties postponed as short staffed

****Variance**:** Difficulty acquiring additional staff with right competency

Hazard risk reduction

Objective: Develop measures to adapt to climate change

Target: Schedule field data collection, soil samples and prepare geochemical analysis

- Geochemical analysis completed, data analysis in progress.
- Soil carbon maps finalized and published by the FAO under the Global Soil Organic Carbon map (GSOC map) project

Create a dynamic and responsive National Innovation System

Target: Field equipment to be acquired from IAEA and delivered under the project

Received Handheld device and Backpack Radiation Detector BRD -AT6101C to detect, locate, measure, and identify radioactive sources including maliciously introduced sources

Establish ICENS as an Inter-Regional resource hub in Nuclear Technology for Small Island Developing States

Target: IAEA international subject matter experts scheduled to visit ICENS at to provide input on the way forward

• Visit was completed and the report done and circulated to the Minister and other collaborators

3.0 TECHNOLOGY PORTFOLIO:

Main Drivers: MSTEM, Spectrum Management Authority, Universal Service Fund, e-Learning Jamaica, Post and Telecommunications

3.1 INTRODUCTION

One of the main issues related to the development of the Information and Communications Technology Sector includes making the sector attractive by implementing the requisite regulations and legislations were absent. Some of the key priorities for this sector in this financial year are:

- Government of Jamaica ICT Transformation Programme;
- Strengthening of the cyber security systems and framework;
- Facilitating job creation in ICT through the Youth Employment in the Digital and Animation Industry Project; and
- Promulgation of the e-Learning projects to impact educational development.

3.2 ICT DIVISION

As the Ministry with responsibility for technology, the Division seeks to make the Ministry an exemplar user of ICTs to improve visibility of the Ministry's portfolio areas and to improve the level of service to internal and external stakeholders.

Objective: Improve Legal and Regulatory Framework

Legal and Regulatory Framework for the ICT Sector

- Stakeholders consulted and invited to provide comments on the Policy.
- Current policy reviewed jointly by the ICT and the Policy Planning Development and Evaluation ("Policy") Divisions.
- Draft concept note for revised Policy prepared by the Policy Division.

Objective: Develop a Spectrum Management Policy

Target not met

Objective: Develop a Postal Sector Policy

• Requests for Proposals (RFP) issued to the public and two responses received

Variance: Evaluation Committee to review responses; contract to be awarded to successful bidder, if any; preliminary meetings to be held with Consultant; and stakeholder invitations disseminated

Objective: Promulgate a new ICT Act

Target not met

Variance: Drafting instructions to be issued by the end of the second quarter.

Objective: Promulgate Data Protection Act

- Target exceeded
- Deliberations completed.

• A matrix of the comments received, prepared by the Division.

Variance: Further research to be conducted based on the comments and objections raised to specific provisions; as means of guiding the Committee on proposed amendments to the Bill to address these concerns.

Objective: Provide inputs to support the promulgation of Regulations for the management, reuse and disposal of electronic waste (e-Waste)

- Target met
- The final Report on the e-Waste Policy and Regulatory Framework for Jamaica prepared by Consultants and approved by Division.
- A copy of Report forwarded to the Ministry with responsibility for solid waste management to assist in/inform legislative and policy development.

Improve the Integration and Delivery of Public Services Using ICTs

Objective: Development of an Open Data Policy

• Policy circulated for limited stakeholder review, vide, the Open Data Committee ("ODC")

Variance: Sections of the policy related to the legal framework; and information technology, among others, to be further reviewed by the ODC.

Increase Security of ICT Infrastructure and Electronic Communication

Objective: Implementation of the National Cyber Security Strategy which is aimed at pursuing activities to address technical, measures, legal and regulatory framework, human resource and capacity and public education and awareness, by:

- a) Implementing Government wide Information Technology and Information Security standards
- Target not met.

Improve legal and regulatory framework for the ICT Sector

Strategy: Establish a single ICT Regulator

- Target not met
- Cabinet Submission withdrawn from the Cabinet's agenda by the Cabinet Secretary. Further consultations were held with the MOEYI and a draft joint Cabinet Submission prepared

Variance: Cabinet Submission to be settled for resubmission to the Cabinet by the end of the second quarter.

Establish Office of the Information/Data Commissioner

- Consultant engaged through the International Telecommunication Union (ITU) to design structure of the Office of the Information Commissioner (OIC) and to amalgamate the existing functions related to Access to Information
- Terms of Reference to be developed for a study tour to the United Kingdom's OIC to assist in the development of the proposed structure of the OIC.

Ensure technical and policy input provided to MDAs regarding government ICT initiatives and the interest of Jamaica as appropriate advanced in ICT related regional and international fora.

Objective: Participate in consultation; provide comments on legislative, policy and other government initiatives

Human Resource – Performance Management and Appraisal System (PMAS)

- Finalized JDs for the Division's Staff
- Finalized Individual Work Plans and the Division's Unit Plan in preparation for PMAS
 Accessible Americas V
- Participated in planning meetings held with the ITU for the Accessible Americas V Workshop to be held in Jamaica in November 2018. **Technology**
 - Organized forum for MIS Officers across the GOJ.

Office of the Chief Information Officer Jamaica Cyber Incident Response Team

• Assisted in the completion of survey requested by the Organization of American States on cyber security awareness and readiness in Jamaica **Strategy:** Participate in consultation; provide comments on legislative, policy and other government initiatives

Public Appropriations and Audit Committee (PAAC) of the Houses of Parliament

• Coordinated responses to requests made by the PAAC in relation to operations at the SMA; USF; PostCorp; eGovJa and eLJAM.

Cabinet Office/Ministry of Education, Youth and Information

Reviewed and provided comments on the draft Data Collection and Information Sharing Policy.

PostCorp/eLJam /Office of Utilities Regulation

• Participated in Number Plan Area Relief Planning Committee

National Commission on Science and Technology / Ministry of Labour and Social Security

- Participated in Work Permit Committee Meetings
- General Procurement Entity (GPE)
- o Attended meeting of the GPE

Office of Disaster Preparedness and Emergency Management

Participated in the consultations regarding the Continuity of Governance Plan for Government of Jamaica

Ensure proper administration of the telecommunications sector

Objective: Prepare and issue all licences for which recommendations have been received from the Regulators

Internet Service Provider Licence prepared in relation to:

• Solar Internet Repairs SIR Tech Jamaica

Variance: Recommendation for the renewal of Internet Services (Subscriber Television) licence for Logic One, returned to the Office of Utilities Regulation for further clarity.

Strategy: Prepare requisitions for members of the Telecommunications Appeal Tribunal and ICT Advisory Council and submit same to the Accounts Department for payment.

- Target not met
- **Variance**: Requisition to be prepared and submitted in July 2018 for payment to the Telecommunications Appeal Tribunal, for period April 3 to July 2, 2018. No payments are made to the ICT Advisory Council

Objective: Monitor compliance by Regulators and Agencies with the Public Bodies Management and Accountability Act and other relevant legislation <u>Board Meetings</u>

- Attended meeting of the Boards of Management for the:
- Universal Service Fund (USF)
- National Information and Communications Technology Advisory Council
- Postal Corporation of Jamaica (PostCorp)
- Spectrum Management Authority (SMA)
- e-Learning Jamaica Company Limited (eLJam); and provided Corporate Secretary support
- e-Gov Jamaica Limited (eGovJa)

3.3 E-GOV JAMAICA LIMITED The former Fiscal Services Limited's (now e-Gov Jamaica Limited) mandate was expanded from its current provision of fiscal services through ICT to include the implementation of Information and Communications Technology (ICT) projects into the operations of the GOJ. The roles and functions also include being the provider of IT as a shared service to the GOJ, as well as providing management oversight and master planning for GOJ/ ICT investments and assets.

Modernization of GOJ ICT Infrastructure

Objective: GIT1 to contribute to the modernization of the GOJ ICT Governance Framework

- Draft outline of MDA guideline is 20% completed
- 3 assessments were done in quarter 1.
- (1 submission withdrawn by PIMSEC; Of the other two, 1 recorded turnaround time of 8 days and the other, received June 12, is in-progress.)

Strategy: GIT1.2 Develop IT Policy Governance Framework to contribute to the build out of the GOJ ICT Management Framework

• Monitoring & Evaluation (M&E) framework not started; M&E Services not yet offered

Objective: GIT 2. To Modernize the GOJ ICT Infrastructure to Allow for High Speed, High Quality and Low Cost Communication, with Widespread Use Across all MDAs over the Next Three (3) Years.

Strategy: GIT 2.1 Design and Implementation of the Government Wide Area Network (GovNet)

• No activity planned for the quarter

Strategy: GIT2.2 Achieve Tier 3 Data Centre Standard

• No activity planned for the quarter

GIT 3: Support the development and implementation of Core and Common GOJ ICT

• No activity for the reporting period

Strategy: GIT 3.2 Provide project management, application integration and infrastructure support services

- Workshops are being held during which the project team evaluates the various proposals and systems to make a selection. Members of the eGovJa team are an integral part of the process and have been onsite participating in the workshops as well.
- Resources required (2 Business Analysts & 2 Developers) to support MyHR+ have been provided. Work needed to support the project has been concluded. No major activities during the period.
- Resources required (1 Developer) to support PEPAS have been provided and the work needed to support the project has been concluded. The vulnerability scans were run and all critical, high and medium priority issues were identified and repaired. Scans to confirm the status with medium priority issues to be run.
- Resources required (1 Business Analyst & 1 Quality Assurance Analyst) to support ECM have been provided and the work needed to support the project have been concluded. MOU for ECM drafted and discussions to conclude are underway.

GOJ Transformation Programme

Strategy: GIT 3.3 Provide project management support to the establishment of the new ICT Authority (ENICTA)

- Project Work plan approved;
- Draft current state assessment with preliminary recommendations provided by PWC;
- Communication Plan developed and execution proceeded as scheduled
 - ****Variance**:** Final Report outlining the target operating model is delayed.

To minimize the impact of the delays, critical path activities will be executed in parallel and changes will be made to the team composition by PWC.

Strategy: GIT 3.4 Development of an Enterprise Architecture (EA) capability within eGovJa

- Network Service Dept has started the use of a FOSS network management tool. Easy Redmine & PostGres implementation
- TOGAF Level 1 Training completed.
- Architecture Domain Overview Documentation is 75% completed

Strategy: GIT 3.5 GIT3.5 Fostering strategic partnerships to aid in the research and innovation process

- Whitepapers being developed for:
- Block chain facilitating connected government
- - eParticipation: A Means of Gaining Citizen Involvement

Strategy: GIT3.6 Development of solutions/prototypes to address problems identified

- Prototype developed for Motor Vehicle Registration App
- GOJ Mobile App prototype being developed

Customer Experience Programme

Strategy: CSE 1.1 Improving our Service Delivery Culture

- Annual Customer Survey published to 151 clients in April 2018; survey remains open at end of Q1.
- Customer Delight Index Survey conducted with 3 external and 3 internal clients. Four responses received and analyzed showing average score of 60.25%

Objective: OE1 Increase software delivery efficiency from 34% to 62% over the next three (3) years

OE1.1 Implement BizDevOps

- 10% of Beginner Level attained
- Completion of Base Level components is a pre-requisite for completion of each corresponding Beginner Level component. 85% of Base Level has been attained. Base Level is still being implemented even as Beginner commences

3.5 E-LEARNING JAMAICA COMPANY

The e-Learning Jamaica Company continued its implementation of e-learning projects in collaboration with the Ministry of Education as well as promoting technology in the education system. The main programmes were the e-Learning High School and Tablets in Schools Pilot Project. Approximately \$485M was allocated for the completion of the High School Project, with a view to handing it over to the Ministry of Education. The project's main components are ICT materials for teachers and students, as well as technology infrastructure for storage/ dissemination. This requires ICT equipment; software and a central repository for the educational materials to store reproduce and continuously update and distribute material, teacher training, remedial support and continuous assessment through standard examinations across all grades at high schools.

Monitoring of Internet and Wi-Fi Infrastructure provided by the USF

Objective: To ensure provision of adequate connectivity and/or supplementary content storage facility

• Regular meetings with the USF team

- Schools listing provided
- Deployment strategy and Procurement being monitored

Variance: Delays in the procurement of the Broadband and Wi-Fi infrastructure partners

Objective: Content on Central Repository for Educational Materials (CREM) and social media sites available at all times to education system and updated with new content related to e-Learning projects implemented Diagnostic Tests Administered

• Contract for Supporting On-line Content repository and the procurement and delivery of supplementary equipment being reviewed by Lawyers for early signing.

Variance: Funding significantly limited

Client Relationship and Teacher Training

- One hundred and twenty-one (121) Master Trainers trained, 960 teachers trained in Microsoft Technology Integration, 258 assessed (50%)
- As planned

Public Education

Objective: All publics aware of content project interventions and how they can impact the education system positively

- PR plan revised with a ramping up approached towards Launching when the Tablets are being delivered.
- Photo-ops captured for activities today. Social media campaign started and ongoing.
- New Website designed and ready to be launched.

Variance: Delays in Procurement process

Client Support and Teacher Training of Phase 1& 2 institutions

Objective: Teachers and lecturers in the project institutions trained and certified in the skills, methodologies and techniques required in integrating the tablets and other technologies in instructional delivery

- Basic ICT training of 171 institutions 99% completed.
- Regular Stakeholder meetings being held.
- ****Variance**:** Time to Revise Basic ICT training and get approval.
 - Minor Procurement challenges in selecting training and certification partner.
 - Integration Training to be started early August 2018.
 - On-Site coaching to start in October 2018.
 - Awaiting decision from MOEYI/ Pilot Schools on additional schools for redistribution

Provision of Supporting Technology to Phase 1 Institutions

Target: Facilitate customs clearance of equipment

- Tender Cancelled due to poor bids.
- Bidders' feedback sought
- Technology and RFP revised
- New bids received and being evaluated

Variance: Procurement process: Project approved by Cabinet July 2017. Tender had to be cancelled and republished

Pilot Project using 1:1 Tablet Strategy

Target: Facilitate clearance of tablets and charging carts through customs/Train Technology Management teams

• NCC partial endorsement on contract recommendations given in June 2018. Clarification being sought. Draft Cabinet Submission prepared ****Variance**:** Procurement process: Project approved by Cabinet July 2017. Bid extended by 1 month. 4 months delay at Sector and NCC

3.6 UNIVERSAL SERVICE FUND (USF)

The USF is a statutory entity geared at facilitating the provision of universal access to the information superhighway by accelerating the deployment of broadband services island-wide. The USF also covers the collection of universal service obligation (USO) levy and funding for e-Learning Projects. The Mission of the USF is to facilitate the provision of universal access to Internet services by stimulating and accelerating the deployment of broadband and related services island-wide. This will be achieved through the effective collection and astute management of the universal service levy and disbursing such funds in a transparent and non-discriminatory manner to finance appropriate projects.

Technology Advancement Programme (TAP)

Target: Train 1000 participants in Information Technology Communication (ICT) and data collection

• Nine hundred (900) participants trained in Information Technology Communication (ICT) and data collection practices.

Target: Plan and secure placement for 800 participants

- Fortnightly payment of stipend to participants
- Target: Commence training for 200 participants in records digitization
 - Demo time attendance management System

Variance: While the programme was oversubscribed, several participants exited the program via natural attrition processes

Community Access Point

Target: Complete installation of 10 Community Access Points approved in the previous financial year 2017/2018
- Four (4) Community Access Points completed which were approved in previous financial year 2017/2018
- Target: Conduct quarterly site reviews of existing CAPs
 - Fifteen (15) new site visits competed

Target: Evaluate and submit 5 new CAP applications to the Projects Committee for approval consideration

• Eight (8) Community Access Points approved for installation of computer equipment, furniture and related accessories

Alternate Energy System (Solar)

Target: Complete installation of 10 previously approved solar system from financial year 2017/2018

• Eleven (11) solar systems deployed that were approved in previous financial year 2017/2018

Target: Complete 15 site visits for new proposed

- Fifteen (15) new site visits competed
- Eight (8) new solar systems approved for installation

Variance: Delays in installations due to supplier's inability to source inverters for systems

Island wide Broadband Network

Target: Draft contract and send to stakeholders for review

- Collection of Technical requirements for new
- Target: New design of WAN and Deployment Strategy
 - Draft contract completed

Tablets in Schools Programme (TIS)

Target: Complete design of wireless and security solution

- Requirements gathering completed
- Target: Submission of RFP Technical specification to Procurement department
 - Project plan completed

Target: Creation of vendor schedule

- Site assessments for 170 school
- Completion of Terms of Reference (TOR)

Variance: Delays in the requirements gathering for the implementation and design of a centrally managed WIFI network.

WIFI Hotspot

Target: To deploy 1st Site - Emancipation Park slated for August 31, 2018

• Tender process completed.

• Evaluation Committee currently reviewing/ submitted bids

3.7 SPECTRUM MANAGEMENT AUTHORITY (SMA)

The SMA in its 2017 – 2021 Corporate Strategic Plan document indicated that its ultimate goal is to manage the spectrum effectively; through the use of modern technology, and employing international best practice to regulate efficiently. In light of this, and in keeping with the mandate and the stated objectives of the SMA, principal performance targets (Appendix 1) were established, to guide our efforts, in support of the Government of Jamaica's Information and Communications Technology (ICT) objectives. In addition to the principal performance targets, the SMA as is customary has in place quality performance standards, which compares with or are better than our counterparts globally.

HIGHLIGHTS OF PERFORMANCE/ACHIEVEMENTS AGAINST TARGETS

For the 3 months ending 2018 June 30, the SMA performed well with regards to its core operational activities (Licensing - new and renewal- Interference Management, and Financial Management), with the exception of number of licences renewed. All other core operational activities have exceeded their established KPI. Seventy-eight per cent (78%) of the renewal target was licensed versus the KPI of 85%. The SMA however remains confident of exceeding the KPI as the year progresses. For new licence applications, 100% have been processed within the established processing times versus the KPI of 80%. It was noted as well that the 54 new applications the SMA received since the start of the fiscal year, was 30 less than the 84 received for the same period last year, a 36% reduction in the level of requests for licences. The SMA will monitor the level of request during the fiscal year.

The SMA's performance, in relation to the resolution of interference cases within the established resolution time, was above the KPI for the period under review. The SMA's Income performance for the period was also above the target and KPI of 90%.

- Licensing
- Processing time for new Applications

Summary of Performance

	QUARTER			YEAR - TO - DATE		
Particulars	Actual Apr – Jun	KPI Apr – Jun Variance		Actual Apr – Jun	KPI Apr – Jun	Variance
% of new applications processed within	400%	000/	200/	400%	000/	201/
service standards	100%	80%	20%	100%	80%	20%

Quarter: For the 1st quarter in the FY, the SMA having brought forward 31 applications, received an additional 58 applications, of which 54 have been granted and 7 cancelled. All 58 or 100% of the licences granted, were processed within their respective standard processing time.

Renewal Licences Summary of Performance

	QUARTER			YEAR - TO - DATE		
Particulars	Actual Apr – Jun	KPI Apr – Jun	Variance	Actual Apr – Jun	KPI Apr – Jun	Variance
Number of Licences						
Renewed	166	181	-15	166	181	-15
No. of licences						
renewed within the						
service standards.	176	158	18	176	158	18

Quarter: The renewal of 166 licences represents a performance rate of 78%. The target was 208 existing licences, of which there were 2 cancellations, and 7 additions; which resulted in a plus 5 net effect on the target of 208 bringing it to 213. This performance rate was below the SMA's **KPI of 85% or 181 (85% of 213)** licences for renewals. Note that licences are only renewed after receipt of payment. Of the 166 licences renewed, all or 100% was processed within the established processing standard. The KPI for this activity is 90% or 149 (90% of 166).

Summary of Renewal Licensing Activities as at 2018 June 30

Particulars	April – Jun 2018	July – Sept. 2018	Oct – Dec 2018	Jan – Mar 2019	April – Jun 2018 (YTD)
Renewal Target	208				208
Additions	7				7
Cancelled*	2				2
Renewable Amount	213				213
Granted/Approved	166				166

*Licences are normally cancelled based on non-payment of fees or upon the request of the licensee.

Summary of Performance

	QUARTER			YEAR - TO - DATE		
Particulars	Actual Apr – Jun	KPI Apr – Jun	Variance	Actual Apr – Jun	KPI Apr – Jun	Variance
Number of Licences	166			166		

Renewed		181	-15		181	-15
No. of licences renewed within the service standards.	176	158	18	176	158	18

Quarter: The renewal of 166 licences represents a performance rate of 78%. The target was 208 existing licences, of which there were 2 cancellations, and 7 additions; which resulted in a plus 5 net effect on the target of 208 bringing it to 213. This performance rate was below the SMA's **KPI of 85% or 181 (85% of 213)** licences for renewals. Note that licences are only renewed after receipt of payment. Of the 166 licences renewed, all or 100% was processed within the established processing standard. The KPI for this activity is 90% or 149 (90% of 166).

Particulars	April – Jun 2018	July – Sept. 2018	Oct – Dec 2018	Jan – Mar 2019	April – Jun 2018 (YTD)
Renewal Target	208				208
Additions	7				7
Cancelled*	2				2
Renewable Amount	213				213
Granted/Approved	166				166

Summary of Renewal Licensing Activities as at 2018 June 30

*Licences are normally cancelled based on non-payment of fees or upon the request of the licensee.

Interference Management

Quarter: <u>No. of Interference Cases:</u> During the 1st Quarter of the 2018/2019 FY, the SMA investigated 5 cases of interference reports. All 5 cases were received during the FY and were resolved as at 2018 June 30. All cases resolved were completed within the slated resolution time. The **KPI for resolution within slated time is 90%.**

Financial

Income and Collections

The KPI for actual income booked is 90% of the targeted/budgeted income. For the 3 months ending 2018 June 30, the Authority targeted total income of approximately \$92.87M to be booked, which translates into a KPI of \$83.58M. For that period, \$100.34M, or approximately 108 percent of the targeted amount

was booked, which was \$16.75M above the KPI. See details of income categories below. The table below represents a comparative distribution of income for the period under review.

Revenue	Amount Booked April - Jun	Amount Budgeted April - Jun	KPI (90% of Target) April-Jun	KPI Variance	Amount Collected YTD
	\$'M	\$'M	\$'M	\$'M	\$'M
Processing Fees	2.24	2.53	2.28	- 0.03	2.24
Regulatory Fees	95.74	87.48	78.73	17.01	253.58
Interest Income	2.33	2.86	2.57	- 0.24	2.33
Other Income	0.02	0.01	0.01	0.01	0.02
	100.34	92.87	83.58	16.75	258.17

YTD regulatory fees collected totaled \$258.17M. These amounts usually include amounts collected relating to the previous year, the current year, as well as prepayments.

Regulatory Fees – Actual regulatory fees totaling approx. \$95.74M is well above the budgeted and KPI amounts of \$92.87M and \$83.58M respectively. This positive variance is due to applications received during the period, which was above that which was anticipated. This was particularly so for microwave and marine licence applications.

Processing Fees - Processing fees are primarily charged for new applications and so an estimate is made each year of the possible revenue to be earned from this line item. For the 3 months in the FY, the SMA targeted \$2.53M. The actual amount of \$2.24M that materialized was marginally below the KPI of \$2.28M.

Interest Income – Interest income realized for the quarter amounted to approximately \$2.33M; while the budgeted amount for the same period was \$2.86M. The variance may be attributed to the lower than expected bank balance and hence levels of investments, early in the fiscal year.

Other Income - A total of \$20,841 was reported for the quarter.

Spectrum Licence Fees

Spectrum Licence Fees are collected on behalf of the GoJ and paid over to the Tax Administration of Jamaica instead of to the Accountant General's Department in the Consolidated Fund. For the quarter, the SMA collected \$25.47M in spectrum licence fees, and remitted \$89.06M, including amount brought forward from the previous FY.

Please note that spectrum licence fees are remitted in the month after they are collected, with the exception of fees collected on mobile access spectrum that under normal circumstances, are remitted in the month collected.

Expenditure

Recurrent Expenses – For the quarter, the SMA reported total expenditure (including depreciation) of \$75.37M, in comparison to budget target of \$100.73M. This variance is due primarily to Salary & Related Costs and for Meetings & Seminars.

Capital Expenditure - YTD the Authority added to fixed assets a total of \$7.15M compared with budgeted amount of approx. \$55.30M. There was a delay in the approval of the SMA's budget which saw a reduction of \$150.0M. A rationalization of the SMA's capital expenditure in discussions with the Ministry of Finance and Public Service is to be conducted.

Period	Actual Expenditure (Recurrent & Cap.) \$'M	Budgeted Expenditure (Recurrent & Cap.) \$'M	Variance \$'M
April – June (Q1)	82.52	156.03	73.51
Jul – Sept (Q2)			
Oct – Dec (Q3)			
Jan – Mar (Q4)			
Total (YTD)	82.52	156.03	73.51

Summary of Total Expenditure – April to June 2018

Legal, Policy and Regulatory

Spectrum Management Framework (the Framework)

Upon the invitation of the Managing Director, on 2018 April 12, Mr. Cecil McCain, Director, Post & Telecommunications, met with members of the SMA's senior management team, to discuss the draft Spectrum Management Framework and to determine the way forward. Mr. McCain indicated that the intention was to finalize the Framework for acceptance by the 3rd quarter of the FY, in order to submit same to Cabinet for approval. He sought the SMA's input on the type of

consultation process which should be undertaken e.g. cluster versus general public. At the end of the meeting, it was agreed that Mr. McCain would revert to the SMA with a schedule outlining the milestones to be accomplished

Quarterly Report

The SMA submitted its fourth (4th) quarter performance report ending 2017 March 31, as requested by the MSET and in accordance with the Public Bodies Management and Accountability Act (PBMA), on 2018 April 9.

Type Approval

During the quarter, a request for exemption from paying the processing fee for a Type Approval application was received from the Japan International Cooperation Agency (JICA). The request was communicated to the Chief Technical Director, MSET on 2018 May 4. A response was received on the same day advising that the request falls within Article X (2) (2) (a) of the Agreement on Technical Cooperation, between the Government of Jamaica and Japan, and should therefore be exempt.

International Telecommunications Union (ITU)

Correspondence was received from the ITU on 2018 May 18, outlining the position of ITU debtor's accounts as at 31 March 2018. The Statement indicated that Jamaica and Digicel owe the sums of 79,500 and 35,775 Swiss Francs respectively. The information on the amount owing by Jamaica was forwarded to Ms. Wahkeen Murray, Chief Technical Director, MSET, and the amount owing by Digicel was forwarded to Ms. Tobi-Ann Chang, Legal & Regulatory Director, Digicel, on the same day for their attention.

3rd ITU Regional Frequency Coordination Meeting

The 3rd ITU Regional Frequency Coordination Meeting for Central America and the Caribbean Region on the use of the VHF (174-216 MHz) and the UHF (470-806 MHz) bands was held in Panama City, Panama from 2018 May 7 to 11. The Director Policy & Strategic Planning and a Telecommunications Engineer, Band Planning from the SMA was in attendance at the meeting. The International Telecommunication Union (ITU), in collaboration with the Comisión Técnica Regional de Telecomunicaciones (COMTELCA), the Caribbean Telecommunications Union (CTU) and the Inter-American Telecommunication Commission (CITEL), at the kind invitation of the Autoridad Nacional de los Servicios Publicos of Panama (ASEP), organized the meeting.

The 3rd meeting, was a follow-up and continuation of the 1st and 2nd meetings, and was a very important milestone for the process of regional frequency coordination, intended to facilitate the transition from Analog to Digital Terrestrial Television (DTT) and the allocation of the Digital spectrum, by ensuring compatible operation for all involved services and administrations.

Upon the request of CITEL, in May 2018 the SMA completed and submitted a questionnaire for the Development of an Informational Report on the Satellite Broadband Systems in the Americas, according to CITEL's Decision PCC.II/DEC. 198 (XXX-17).

Utility Regulation and Competition Office (OfReg) In the Cayman Islands

A team from the Utility Regulation and Competition Office in the Cayman Islands, led by JP Morgan, Chief Executive Officer, (formerly of the OUR), met with a team of SMA's senior managers, led by the Managing Director, on 2018 May 04. The OfReg team sought to gain insights on the SMA's experience in dealing with certain issues in spectrum management, in addition to SMA's plans in relation to 5G.

International Telecommunications Satellite Organization (ITSO)

The Managing Director and Director Legal Affairs, attended the 38th Meeting of the Assembly of Parties Meeting, in Washington D.C. during 2018 June 13-15, as part of Jamaica's delegation with Ms. Wahkeen Murray, Chief Technical Director, MSET. The Director Legal Affairs also served as Vice Chairman for Region A. – The Americas - during the meeting. The Meeting Report was submitted to the Permanent Secretary, MSET, and the Ministry of Foreign Affairs and Foreign Trade on 2018 June 28.

Capital Development Projects

Monitoring Capacity Project

During the 2017/18 FY, the SMA embarked on a project to enhance its monitoring capacity. The project comprised 2 phases: phase 1 related to the upgrade of both the St. Ann and St. James's Radio Monitoring and Direction Finding System (RMDFS) with additional features; phase 2 of the project featured the installation of new sites in Portland and Manchester. Phase 1 was completed during 2017/18 FY, and phase 2 is being implemented in this 2018/19 FY. The status/achievements of the RMDFS sites as at the end of the first quarter are as follows:

- The contract for the Manchester site development was awarded to C & D Construction, and the work has commenced;
- Discussions are ongoing with the North East Regional Health Authority's (NERHA's) Regional Director and the Region's legal team to execute the Lease for the Port Antonio Hospital.

Regulatory Compliance

During the quarter, the SMA maintained regulatory compliance, by performing, *inter alia*, the following:

- Making Pension payments as required;
- Submitting Payroll statutory deductions in full as required;

- The SMA has started the process to have its 2016/17 financial, performance and procurement audit completed, which will facilitate the completion of the 2017/18 annual report, both of which are due by 2018 July 31;
- Submitting Net Credit Report and Financial Statements to the Ministry of Finance.

APPENDIX 1 CORE OPERATIONAL TARGETS

The following represents corporate core operational and quality of service targets established for the 18/19 FY

No.	Particulars		Targets	Key Performance Indicator (KPI)
1.0	Regulatory Fees	350.70M		
	Interest Income		10.66M	
	Processing Fees		10.16M	
	Other Income		<u>39.44M</u>	
	TOTAL INCOME		<u>\$410.96M</u>	90% of Target
2.0	Expenditure		\$410.73M	Within Target
3.0	SPECTRUM LICENCE FEES COLLECTED		\$1,267.58M	80% of target
	SPECTRUM LICENCE FEES REMITTED	\$1,267.58M	Remit fees collected up to Feb. 2019 and mobile fees collected in Mar. 2019	
4.0	RENEWAL LICENCES		442 Licences	85% of target
5.0	INTERFERENCE MANAGEMENT			
5.1	All interference resolved as per, performan	nce standards set o	ut below:	
	External influence, readily identifiable	15 business		
	External influences, not readily identifiable	days		
		60 business		
		days	Resolve all	90% of target
5.2	To respond to major cases requiring substant networks & systems - as per agreed scheo involved	reported cases		

5.3	Interference report acknowledged within 24 hours and resolution		
	framework established with client.	100% of cases	100% of cases

QUALITY OF SERVICE TARGETS

No.	Particulars	Standard Per Business Days	Key Performance Indicator (KPI)
1.0	LICENSING		
	New - % of applications processed within service standards.		
	Aeronautical	15	
	Amateur and Alien Amateur	8	
	Citizens Band	8	
	Type Approval (Regular and Amended)	10	
	Other Non-spectrum certification	8	
	Private Radio – Major Network	25	80%
	Private Radio – Other Network	16	
	Temporary Licence for Maritime	1	
	Permanent Licence for Maritime	3	
	Maritime (None MAJ)	12	
	Custom Detention Notices	1	
	VSAT	15	
	Renewal		
	Regular and Amended licences	5	90%
2.0	INTERFERENCE		
	% of interference cases resolve as per standard above.	100%	90%

3.8 POST AND TELECOMS & POSTAL CORPORATION OF JAMAICA

The Post and Telecoms Department (PTD) constitutes a network of post offices and postal agencies across the country and is responsible for all mails in Jamaica and has been mandated to ensure access for all Jamaicans to affordable postal services. The Postal Corporation of Jamaica (Post Corp) is a limited liability company operating parallel to Post and Telecom, whose priorities include the enactment of the Postal Service Bill. This is to fully commercialize and modernize

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the PTD, adding value to the products and services being offered, identifying and introducing new revenue streams, increased application of ICT across all functional areas and increased competitiveness.

International Postal System (IPS) Upgrade (UPU Quality of Service Fund)

- UPU conducted site survey
- Project Plan obtained

Strategy: Implement of Counter Automation

- Presentation made to Public Investment Management Secretariat (PIMSEC) Technical Review Committee.
- (Another presentation to be made on July 2, with additional information requested)

Strategy: Remittance

- 10 Post Office locations approved by the Bank of Jamaica
- PINS issued by Money Gram International

Objective: Miami Mailbox Service Operational requirements completed:

- Miami Freight Forwarder identified
- Approval received from Jamaica Customs Agency
- Standard Operating Procedures developed
- Data requirements completed
- Electronic platform developed
- Delivery truck procured

Objective: Renovation of Ocho Rios Post Office (TEF Funded Project)

- Demolition completed
- Roof and floor erected

Repeal of the Postal Act

• Draft Submission completed

Initiative: Support for the implementation of the National Identification System (NIDS)

- Signed MoU between OPM and PTD
- Collaboration with OPM for developing Project Charter

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- PTD, OPM, eGOV finalizing design Drawings and Bills of Quantity being developed •

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