GOVERNMENT OF JAMAICA

MINISTRY OF SCIENCE, ENERGY AND TECHNOLOGY

STRATEGIC BUSINESS PLAN 2017 - 2020

January 2017

TABLE OF CONTENTS

MESSAGES

HONOURABLE MINISTER'S MESSAGE 1

PERMANENT SECRETARY'S MESSAGE 2

ACCOUNTABILITY STATEMENT 3

1.0 EXECUTIVE SUMMARY 4

1.1 OVERVIEW 4

1.2 MINISTRY'S PRIORITY POLICIES/PROGRAMMES/PROJECTS 4

1.3 POLICY, PROGRAMME AND PROJECTS THAT SUPPORT GOVERNMENT STRATEGIC PRIORITIES 8

1.4 STRATEGIES 13

1.5 MINISTRY'S PERFORMANCE MANAGEMENT FRAMEWORK 19

1.6 MINISTRY'S ALIGNMENT OF PRIORITY POLICIES/PROGRAMMES/PROJECTS 24

1.7 TARGETS 26

1.8 MEDIUM TERM EXPENDITURE SUMMARY 29

2.0 PLANS AND PRIORITIES 29

2.1 PORTFOLIO AREAS 29

2.2 VISION, MISSION AND MANDATE 30

2.3 STRATEGIC OUTCOMES 31

2.4 PROGRAMME ACTIVITY ARCHITECTURE - MSET 32

2.5 SITUATIONAL ANALYSIS OF THE MINISTRY 33

2.6 MINISTRY'S CURRENT PERFORMANCE (2016-2017) 38

2.7 PRIORITY POLICIES, PROGRAMMES AND PROJECTS (2017 – 2020) 44

3.0 MEDIUM TERM FINANCIAL IMPLICATION 72

4.0 HUMAN RESOURCES CAPACITY PLAN 73

5.0 DEPARTMENTS AND AGENCIES BUSINESS PLAN SUMMARIES 74

5.1 GOVERNMENT ELECTRICAL INSPECTORATE (GEI) / GOVERNMENT ELECTRICAL REGULATOR (GER) 74

5.2 INTERNATIONAL CENTRE FOR ENVIRONMENT AND NUCLEAR SCIENCES (ICENS) 75

5.3 eGOV JAMAICA LIMITED (eGovJa) 77

5.4 SCIENTIFIC RESEARCH COUNCIL (SRC) 78

5.5 NATIONAL COMMISSION ON SCIENCE AND TECHNOLOGY (NCST) 79

5.6 E-LEARNING JAMAICA COMPANY LIMITED (E-LJAM) 79

5.7 POST AND TELECOMMUNICATIONS DEPARTMENT (PTD) 80

5.8 NATIONAL ENERGY SOLUTIONS LIMITED (NESOL) 81

5.9 BOARD OF EXAMINERS 82

6.0 LIST OF PUBLIC SECTOR ENTERPRISES (SELF-FINANCED PUBLIC BODIES) 83

APPENDICES....86
APPENDIX A: RISK MANAGEMENT MATRIX....86
APPENDIX B: LEGISLATIVE PROGRAMME 2017 – 2020....89
APPENDIX C: PROCUREMENT PLAN FOR FINANCIAL YEARS 2017 – 2020....90
APPENDIX D: MONITORING AND EVALUATION PLANS....91
APPENDIX E: INTERNAL AUDIT STRATEGIC PLAN 2017-2020....95
APPENDIX F: STAKEHOLDER ANALYSIS 2017/16....97
APPENDIX G: GLOSSARY FOR PERFORMANCE MONITORING AND EVALUATION SYSTEM....100

HONOURABLE MINISTER'S MESSAGE

Science, Energy and Technology (SET) are key elements of Jamaica's growth and development strategy over the short, medium and long term. Consistent with its subject areas, the Ministry of Science, Energy and Technology (MSET) plays a pivotal role in contributing to the economic transformation and sustainable development of the economy, and the well-being of our citizens.

Our Ministry is poised to be a major change agent, and to this end has created the 2017-2020 Strategic Business Plan as the key guide that outlines the fundamental policy direction of the core portfolio areas over the next three (3) years. MSET's medium term framework is anchored in its mandate to:-

- Encourage private sector innovation in the science, energy and technology sectors.
- Lead legal and regulatory reform of the Information and Communications Technology (ICT), Electricity and Gas sectors.
- Improve national energy efficiency and conservation.
- Diversify primary energy sources, particularly to increase the share of renewable energy and reduce dependence on imported fuels.
- Promote and enable the exploitation of S&T for innovation and economic development.
- Create a single ICT regulator.
- Streamline government's ICT operations (GovNet).
- Make access to government services more convenient and efficient using ICTs (e-Government).
- Promote the use of free and open source software by government entities.
- Increase access to and usage of ICT within the education sector and all segments of the economy.

Legislation and regulations designed to create a modernised, transparent, efficient and effective ICT, Electricity and Gas sectors are among the major initiatives, which will drive change and create the enabling framework to encourage investments and balanced growth. The continued implementation and completion of our energy projects will result in the restructuring of the energy sector. This will allow for increased efficiencies and greater competitiveness, the increased use of renewables and fuel diversification; resulting in an expanded, more efficient and productive refinery, a more efficient electricity generation and transmission system, and lower electricity cost.

The continued development and increased application of science and technology (S&T) are central to Jamaica's economic transformation. Projects that have been implemented during 2016-2017 and which showed promise will be continued during 2017-2018, and through to 2020, if warranted. The revitalized National Commission on Science and Technology has been mandated to promote and facilitate the contribution of S&T to national development, with a particular focus on the nutraceutical and other new and possibly high earning sectors.

The vibrant ICT sector is poised for more significant growth. It offers various opportunities for increased investments and employment of Jamaicans in the Business Processing Outsourcing Sector. Animation is a major initiative that will build on Jamaica's competitive advantage and creativity.

These opportunities may further be exploited through the development of a modern and robust infrastructure, with a well trained workforce, and clear consistent regulation to encourage investment. The priority programmes of the MSET are therefore geared to take advantage of opportunities in all the portfolio sectors and to drive the prosperity programme of the Government.

Andrew Wheatley, Ph.D., MP
Minister of Science, Energy and Technology

PERMANENT SECRETARY'S MESSAGE

The Ministry of Science, Energy and Technology's (MSET's) Strategic Plan 2017-2020 highlights our three (3) year programme to continue improving efficiencies within our core portfolios by articulating and implementing appropriate policies, reducing costs and rationalizing several multi-agency functions, while elevating service standards.

The period 2017-2020 will see the commencement of the transformation of the Government Electrical Inspectorate into the Government Electrical Regulator and the Post and Telecommunications Department to improve service delivery. Similarly, the work to create a single Information and Communications Technology (ICT) regulator will continue as a priority, given its importance to the development of the industry and to keep pace with its dynamics, which are driven by convergence.

In the area of energy, the Energy Security Efficiency and Enhancement Project and the Energy Efficiency and Conservation Programme will remain as two (2) major components in the implementation of the National Energy Policy. Outputs of each project will contribute to the realisation of the primary objectives of conservation, diversification of energy sources, greater efficiency and cost effectiveness of the sector and the promotion of investment and development. The public education and communication initiatives are expected to contribute to the fostering of a culture of efficiency and conservation. The promulgation of the new Electricity Act 2015 will involve the development and implementation of an Integrated Resource Plan (IRP) that will create the framework for the modernization of the electricity sector. This will also promote energy efficiency and the use of renewable energy sources for electricity generation. This IRP along with a strong policy and regulatory framework will facilitate an environment that will promote investment towards the development of the country's energy infrastructure.

Legislation relating to the creation of a Single Regulator for the ICT sector, Cyber security and the promotion of innovation and entrepreneurship will be the primary areas of emphasis for the ICT sector. The Science agenda will place emphasis on the popularization of science and technology, and optimising the potential for value creation, particularly within the framework of a nutraceutical industry. In the 2017/18 financial year the Ministry will be implementing the new Science Technology and Innovation Policy that will promote integration and the strengthening of the legal and regulatory framework in the science sector towards national development

I am confident that the MSET's Strategic Plan is aligned to and supports the goals being pursued in Jamaica's 2030 Vision – for Jamaica to be the "…***place of choice to live, work, raise families and do business."***

Hillary Alexander, JP
Permanent Secretary

ACCOUNTABILITY STATEMENT

This Strategic Business Plan for the three (3) year period April 1, 2017 – March 31, 2020, was prepared under my direction in accordance with the policy directives outlined by the Government of Jamaica (GOJ), and the authority delegated to me under Section 16 of the Financial Administration and Audit (FAA) Act. The Plan outlines the Ministry's strategies and desired outcomes that contribute to the achievement of the Government's growth agenda, and specifically, the planned policies, programmes and projects for which appropriate monitoring and evaluation mechanisms are being deployed to ensure their timely and cost-effective implementation.

The Ministry's priorities outlined in this Business Plan were identified in context of the Government's medium-term priorities and fiscal targets. I am therefore, committed to achieving the planned results laid out in this Business Plan.

Hillary Alexander, JP
Permanent Secretary

1.0 EXECUTIVE SUMMARY

1.1 OVERVIEW

The Ministry of Science, Energy and Technology (MSET) has portfolio responsibility for sixteen (16) agencies and departments spanning the country's energy, science and Information and Communications Technology (ICT) sectors.

The Ministry's Strategic Business Plan is aimed at the alignment of policies, programmes and projects to be results-based towards achieving its mandate, which is to facilitate the development of the science, energy and technology sectors in keeping with the National Development Plan Vision 2030.

Through consultation with key stakeholders, MSET provides policy direction for the sectors to assure alignment of programmes to overarching government policy directions. It also provides oversight of implementation through its agencies and through some of its entities, regulates and monitors the sectors' performance. The Ministry's programmes and activities are supportive of the achievement of the goals of Vision 2030: National Development Plan by contributing to the creation of a prosperous economy, promoting energy security, a technology enabled society and an internationally competitive industry.

This Strategic Business Plan 2017-2020 focuses attention on priority policies, legislations, programmes and projects, the strategies to be employed in achieving them, plus the expected outcomes and impacts that will address existing and emerging challenges facing the science, energy and technology sectors. It also outlines initiatives that seek to facilitate more efficient and effective use of resources and synergy among Ministries, Departments and Agencies (MDAs). Consequently, these various policies, programmes and projects being developed and implemented are being executed in collaboration and consultation with key stakeholders towards the achievement of the Ministry's mandate. The planning process focuses on the alignment of its major priorities to the Government of Jamaica (GOJ) strategic priorities and the National Goals. Within this context, short, medium and long-term targets developed are geared towards achievement of the Ministry's strategic objectives.

In keeping with the theme of result-based planning, a Monitoring and Evaluation (M&E) Framework has been developed to track the progress of Policies, Programmes and Projects that are implemented towards achieving the desired strategic outcomes. The Monitoring and Evaluation Plan is designed to assess the success and/or failure of the key policy initiatives, programmes and projects by measuring the degree to which targets are being achieved against predetermined Key Performance Indicators (KPI). The Ministry in an effort to maintain effective M&E will seek to address deviations from targets and issues contributing to under-achievements in a timely and effective manner.

1.2 MINISTRY'S PRIORITY POLICIES/PROGRAMMES/PROJECTS

The Government of Jamaica (GOJ) through the National Development Plan sets out the long-term goals for the country and in support of these goals, there are the Medium Term Socio-Economic Policy Framework (MTF), Medium Term Economic Programme (MTEP) and the Medium Term Strategic Priorities of the Government for 2017-2018. The MSET areas of focus in science, energy and technology feed directly into one of the GOJ medium term strategic priorities, which is '*Inclusive Sustainable Economic Growth and Job Creation*'. Therefore, our policy priorities have been planned with keen focus on facilitating improved service delivery, energy security, increased wealth creation, increased employment and an overall better standard of life for all Jamaicans. Our proposed policies have been heavily influenced by the need to also demonstrate harmony with other policies in other spheres of government, where necessary and in the country's best interest. Our policy priorities are therefore as follows:

i. Spectrum Management Policy
ii. Postal Service Policy
iii. Free and Open Source Software (FOSS) Policy
iv. e-Government Policies standards and Guidelines
v. Broadband Policy
vi. Addenda policies to the National Energy Policy, namely:
    a. Renewable and Alternative Energy Policy

b. Biofuels Policy
c. Energy from Waste Policy
d. Carbon Credit Policy
e. Energy Efficiency and Conservation Policy

vii. Electric Power Sector Policy.

viii. Science, Technology and Innovation (ST&I) Policy (This policy which will be spearheaded by the National Commission on Science and Technology (NCST), is of significant importance to development of the Science Sector.

Table 1 provides an outline of the intent and expected benefits of each policy.

TABLE 1: PRIORITY POLICIES, THEIR INTENT AND PROJECTED BENEFITS

NO	NAME OF POLICY / PORTFOLIO	INTENT AND PROJECTED BENEFITS
	SCIENCE	
1.	Science, Technology and Innovation Policy	To promote and facilitate the development of S&T as major aspects of our culture and our economy. Increased production of value-added products, increased number of local patents being registered, and the development of a local innovation and science-driven sector that employs significant number of persons, creates wealth and earns the country increasing quantities of foreign exchange while making us less dependent on foreign technologies.
	INFORMATION AND COMMUNICATIONS TECHNOLOGY	
2.	Spectrum Management Policy	To ensure efficient spectrum planning, allocation and assignment in accordance with international best practices, protocols and standards; increased government revenues from licence fees; and increased traffic in various areas of the spectrum.
3.	Postal Services Policy	To provide for a modern and robust postal services sector that promote competition, meets universal service obligations, and sets out the licensing and regulatory framework for the sector.
4.	FOSS Policy	To promote innovation and cost rationalization in the use of open source software and open standards for the execution of business processes in the public and private sectors; and to develop Centres of Excellence to provide support for the deployment and use of FOSS solutions.
5.	Open Data Policy	To govern the access, use, reuse, adaptation and distribution of government data in machine readable and processable form to the public.
6.	Broadband Policy	A policy that promotes the island wide deployment and uptake of high speed Internet.
7.	A framework on Internet Governance	A framework which outlines the norms and principles necessary to shape the evolution and use of the Internet.
8.	Policies and procedures for the administration and technical management, registration and promotion of Jamaica's Country Top Level Domain (.jm ccTLD)	A policy that provides for the administration and technical management, registration and promotion of .jm ccTLD.
	ENERGY	
9.	Renewable and Alternative Energy Policy	A well-developed, vibrant and diversified renewable energy sector that contributes to Jamaica's energy security and sustainable future. Increased investment in renewables, decreased reliance on imported fuels to drive various branches of economy and aspects of society. Job creation, especially in installation, servicing, sales and operations. The emergence of an ESCO Sector, which should create jobs.
10.	Energy Efficiency and Conservation Policy	The policy is intended to create the enabling environment whereby "In Jamaica, energy is generated, transmitted and utilized exercising best practices in energy conservation and efficiency". It sets out the necessary strategies to guide conservation and efficiency, and

NO	NAME OF POLICY / PORTFOLIO	INTENT AND PROJECTED BENEFITS
		present targets and ways to monitor performance. The emergence of an ESCO Sector, which should create jobs and create savings
11.	Electric Power Sector Policy	The policy is intended to provide the strategic framework that will guide the orderly development of the electricity sector; define key roles of main actors; and outline the general approach to achieving reduction in electricity prices. It will support the energy policy's thrust for energy security through fuel source diversification.
12.	Biofuels Policy	This policy is intended to define the framework for the exploration, development and expansion of biofuels options. The policy will guide the operations and processes associated with the development of the biofuels sector with specific focus on bioethanol and biodiesel and will require partnerships among the agricultural, energy, transportations and financial sectors. The outcome desired is modern sector that contributes to energy security and positively to the environment
13.	Energy from Waste Policy	The policy will seek to ensure that Jamaica is among the world leaders in providing accessible, affordable and clean energy from waste contributing to sustainable energy security. The intention is to use waste, including municipal solid waste, to generate electricity.
14.	Carbon Credit Policy	Jamaica is a signatory to the United Nations Framework Convention on Climate change and its Kyoto Protocol which mandates the reductions in greenhouse gas emission for certain countries. This policy is designed to achieve a competitive, diversified, efficient and investment-conducive carbon credits trading sector that fosters socio-economic development and induces a less carbon-intensive economy.

1.2.1 PRIORITY PROGRAMME AND PROJECTS

In addition to the policies outlined in Table 1 above, the Ministry through its Departments, Agencies, Public and Private Stakeholders will be pursuing key programmes and projects, outlined in Table 2 below, primarily in support of sustainable economic growth and job creation;

TABLE 2: KEY PROGRAMMES AND POJECTS

PROGRAMMES	PROJECTS
ENERGY	
Diversification of fuel sources	• The use of Liquefied Natural Gas (LNG) as fuel for the generation of electricity at the Old Harbour Power Plant (190MW). • Implementation of Energy from Waste projects for an additional 50 MW of electricity • Expansion of the Oil and Gas Exploration
Renewable Energy in the Energy mix	• Wigton Phase 4 to be pursued by the Wigton Wind farm for the generation of electricity from wind as a portion of the 150 MW to be procured. • Development of investment packages for energy projects including hydro. • OUR/GPE to issue Request for Proposal (RFP) for another 150 MW of renewables
Energy Efficiency and Conservation	• The retrofitting of Public Sector Buildings (energy intensive users: hospitals, schools and other government facilities) with energy efficient technology. • Implementation of an Urban Traffic Management System (UTMS) to be implemented by Petroleum Corporation of Jamaica (PCJ), i.e. a central control Intelligent Traffic System (ITS) integration platform for traffic monitoring, operation, planning and modelling. • Expanding of the Testing Chambers at the Bureau of Standards to enhance the capacity for testing of appliances

Modernizing of the Energy Infrastructure and Electricity Planning	• Promotion of Smart Grid Technologies in collaboration with the JPS and other stakeholders • Upgrading of the Country's Oil Refinery • The development of the country's first Integrated Resource Plan that will be used to plan for the addition of new generating capacity for the grid and also contemplate the optimal mix of sources of generation for the future
Improving the regulatory framework for the petroleum sector	• Consolidation of the petroleum legislation treating with upstream and downstream activities
TECHNOLOGY	
Improvement to the legal and regulatory framework for the Information and Communications Technology sector	• Establishment of a single ICT Regulator • Establish Office of the Information/Data Commissioner by the end of FY 2018/2019 • Development of a Spectrum Management Policy • Development of a Postal Services Policy • Development of an Open Data Policy
Modernization of the Government of Jamaica ICT Infrastructure	• Implementation of the GovNet project to support the integration of the GOJ ICT infrastructure • Execution of the recommendations of the Blue Print Report (Road map and action plan) for ICT transformation.
Improve security of the GOJ ICT systems and electronic communication	• Implementation of the Cyber Security Strategy
SCIENCE	
Development of a new Science Technology and Innovation (ST&I) policy to support national development	• Implementation of a sustainable Research and Development (R&D) agenda aimed at driving growth through ST&I • Development of the ST&I Road Map
Strengthening of the national capacity to collect and analyse ST&I/R&D data	• Development and execution of projects to measure R&D supportive of GOJ's efforts to incorporate R&D in national development
Integration of Science and Technology in all areas of national development	• Implementation of pilot project Improving Innovation Capacities in the Caribbean (INVOCAB) in the education system • Expansion of the National Innovation System by creating a sustainable funding mechanism for R&D. • Continuation and expansion of the Youth Employment in Digital Animations Industries

1.2.2 STRATEGIC OBJECTIVES

To effectively pursue these major policies, programmes and projects as outlined above, the Ministry's primary Strategic Objectives are:

i. To create and facilitate the policy, legal and regulatory framework that will promote the modernization of the energy sector, and the diversification of energy sources by 2020.
ii. To promote a strong and effective nation-wide culture of energy efficiency and conservation within the next three (3) years.
iii. To Modernize the GOJ ICT governance framework; and ICT infrastructure to allow for high speed, high quality and low cost communication, with widespread use across all MDA,s over the next three(3) years.
iv. To increase access to and use of ICT in all sectors of the economy by 2020.
v. To have an improved regulatory framework that incorporate best practices across the science, energy and technology portfolios.
vi. To create a culture that embraces and facilitates the application of ST&I, in all areas of the economy to support national development by 2020.
vii. To create of an environment that facilitates increased investment in Research and Development (R&D) in science technology to support national development by March 2019

1.3 POLICY, PROGRAMME AND PROJECTS THAT SUPPORT GOVERNMENT STRATEGIC PRIORITIES

In keeping with the GOJ Strategic Priorities, the MSET will be focusing on key policies, programmes and projects to support the medium term strategic agenda towards achieving both the sectorial and national outcomes. The 2017/18 Medium Term Strategic Priorities as stipulated by the Government are:

I. Inclusive Sustainable Economic Growth and Job Creation;
II. Rule of Law and Timely Justice Outcomes;
III. Debt Reduction, Macro-Economic Stability and Fiscal Prudence;
IV. Human Capital development; and
V. Social Protection

The major **priority programmes** that the MSET will pursue in support of the GOJ Strategic Priorities are outlined below:

GOJ STRATEGIC PRIORITY: INCLUSIVE SUSTAINABLE ECONOMIC GROWTH AND JOB CREATION

MSET SUPPORTING PRIORITY #1: **Diversification of Fuel Sources**

- DESCRIPTION**:** The diversification of fuel Source (DFS) programme is aimed at the exploring and developing of alternative sources of fuel for generation of energy**.** The main objectives of this programme are: **1**. to reduce the dependency on fossil fuel as the only source of fuel for energy production; **2**. To strengthen the energy security of the country and; **3**. To reduce the overall cost of energy for consumption and economic development.

- CONTEXT: For decades Jamaica has been relying on fossil fuel as the only major source of fuel for energy generation. In 2009 when the Energy Policy was implemented Jamaica was over 90% dependent on imported oil and therefore exposed to the aggressive fluctuations in the price of oil. The dependency on oil as the sole major source of fuel posed a real threat to the energy security of the country, which can negatively affects the country's growth and development. The business owners and manufacturers over the years have been affected by the high cost of energy in maintaining the sustainability of their operations, hence, this programme is also geared towards a more affordable cost of electricity for consumers**.**

- GOAL(S): The DSF is aimed at facilitating the establishment of other sustainable energy sources such as LNG, Petcoke and Renewables by 2020.

- PLANNED BUDGET: Private Investments

- END OF YEAR TARGET**:**
  - Commence the process of upgrading of Petrojam Oil Refinery to produce Petcoke and cleaner fuel such as Ultra Low Sulphur Diesel
  - Jamaica Public Service (JPS) 190 MW Old harbour LNG Power Plant commence construction
  - Energy from Waste Policy promulgated
  - Completion of the Integrated Resource Plan

- ACHIEVEMENTS TO DATE:
  - JPS Montego Bay Bouge Power Plant now transformed to utilizing LNG as their fuel source for generating electricity

GOJ STRATEGIC PRIORITY: INCLUSIVE SUSTAINABLE ECONOMIC GROWTH AND JOB CREATION

MSET SUPPORTING PRIORITY #2: **Renewable Energy (RE) in the Energy Mix**

- DESCRIPTION: In keeping with the thrust to diversify the energy sources there is the need to introduce renewable energy in the overall energy mix by the development of indigenous energy sources such as solar, wind, hydro and biomass for the generation of electricity (overall target is 30% by 2030). The main objectives of the RE Programme is to: 1. complement the traditional energy sources with renewables in an effort to reduce the importation and use of oil and to lower the cost of energy; and 2. To mitigate against climate change through reduction of the emission of Carbon dioxide (Co2) in the atmosphere.

- CONTEXT**:** Renewable energy sources when developed, which are indigenous to Jamaica, have been proven to be more cost effective and a cleaner source of energy, which is more environmentally friendly. Currently energy from renewable sources (hydro, wind, solar, biomass) account for only 10.5% of the Jamaica's total energy production. The introduction of more renewables in the energy mix will enhance the country's growth, competitiveness and energy security while decreasing the carbon footprint.

- GOAL(S): The RE Programme will seek to increase the use of renewable energy sources in the energy generation mix to 15% of the country's total energy production by the year 2020.

- PLANNED BUDGET: Private Investments

- END OF YEAR TARGET:
  - Commence procurement for an additional 150 MW of renewable energy power generation.
  - Reduction of oil consumption by approximately 200,000 barrels for the year
  - Investment packages developed for hydro power
  - Finalization of the Renewable Energy and Waste-to-Energy Policies

- ACHIEVEMENTS TO DATE
  - Wigton Wind Farm now has Three (3) Wind Farm facilities fully functional with a generating capacity of 62.50 MW, which equates to a reduction in oil consumption by approximately 96,000 barrels per annum.
  - The Blue Mountain Renewables (BMR) Wind Farm was commissioned in August 2016 with a generating capacity of over 36 MW of electricity to the National Grid, potentially displacing approximately 55,000 barrels of oil (BOE).
  - Content Solar established a photovoltaic generating facility with a capacity of 20MW, which will reduce BOE by approximately 23,000[1] barrels.

GOJ STRATEGIC PRIORITY: INCLUSIVE SUSTAINABLE ECONOMIC GROWTH AND JOB CREATION

MSET SUPPORTING PRIORITY #3: **Energy Efficiency and Conservation**

- DESCRIPTION: Energy efficiency (EE) and energy conservation (EC) are integral elements of the country's efforts towards the reduction of the national energy cost. This programme seeks to enhance Jamaica's energy efficiency and conservation potential through the implementation EE and EC in the public sector. The major objectives is to provide public awareness on EE and EC measures among the private and public sectors and to implement EE retrofits within public sector building envelops.

[1] The assumption is that the Solar Plant is generating electricity for at least 5.5 hours per day

- CONTEXT: The Government of Jamaica public facilities are known to be inefficient as it relates to energy consumption, which is mainly due to obsolete equipment, poor building infrastructure and outdated energy technology. The implementation of EE and EC measures (e.g. energy efficient air condition units, lighting and cool roof technology) in Government buildings will seek to reduce electricity cost in the public sector.

- GOAL(S): This programme aims to provide energy efficiency and conservation opportunities with an estimated potential savings of approximately $2.6 billion annually and over 20% reduction in public sector electrical energy consumption while increasing awareness in EC and EE.

- PLANNED BUDGET:J$251.8M

- END OF YEAR TARGET:
  - From existing retrofits carried out in Public Sector Buildings a target of 1,910,207 KWh reduction in energy consumption is projected
  - From existing retrofits oil barrels reduction is projected at 1,220 barrels which will reduce CO_2 by 1,569 tonnes.
  - To implement energy efficiency retrofits in at least 12 public sector facilities.

- ACHIEVEMENTS TO DATE
  - 43 government facilities have benefited from energy efficiency retrofits to date
  - From the 23 facilities being monitored for savings; reduction in KWh consumption resulted in a combined, savings of 3,625,509 KWh to date which translates to approx. $131,544,491.52 in cumulative monetary savings to December 2016
  - Total investment in the energy efficiency interventions to December 2016 amounts to approximately $973. 4 million.

GOJ STRATEGIC PRIORITY: INCLUSIVE SUSTAINABLE ECONOMIC GROWTH AND JOB CREATION

MSET SUPPORTING PRIORITY #4: **Improvement to the Legal and Regulatory Framework for the Information and Communications Technology Sector**

- DESCRIPTION: This priority seeks to promulgate modern legislation to repeal, replace and update existing laws and to introduce new laws to govern the Information and Communications Technology (ICT) sector. The new framework will, among other things, addresses the current variegated approach to regulation, which sees the sector being regulated by three (3) separate and distinct Regulators. These entities are the Office of Utilities Regulation, the Spectrum Management Authority and the Broadcasting Commission of Jamaica. The establishment of a single point of entry into the sector in the form of a single ICT Regulator that will deal with all ICT regulations. It will also seek to improve the collection, storage, processing and confidentiality of personal data.

- CONTEXT: At present, the ICT sector is governed by legislation which dates as far back as the 1970's. As such, the legal framework, though updated from time to time since that date, does not address the modern realities of the sector, such as the prevalence of convergence. As a result, entry into the sector by new entrants can be lengthy, requiring interface with up to three regulators and adequate measures are not in place to ensure the protection of consumers and robust competition between and among service providers. Coupled with this is the advancement of technology and the government's policy to create a knowledge based society there is increase need to ensure that citizens personal data is protected.

- GOAL(S): To institute a modern legal and regulatory framework which employs a modern approach to regulation (including the establishment of a single regulatory body); ensures improved quality of service for consumers; encourages investment and competition in the sector; and facilitates the provision and uptake of ICT services by Jamaicans.

  To provide for the protection of personal data and regulate the collection, processing, storage and disclosure of same.

- PLANNED BUDGET**:**

- END OF YEAR TARGET:
    - Tabling of a new ICT Act (to repeal and replace the Telecommunications Act; Radio and Telegraph Control Act and sections of the Broadcast and Radio Re-diffusion Act)
    - Tabling of the Data Protection Act
    - New Spectrum Management Policy
    - Establishment of Single ICT Regulator at least 25% complete

- ACHIEVEMENTS TO DATE:
    - Draft Data Protection Bill
    - Telecommunications (Spectrum Regulatory Fees) (Amendment) Regulations
    - Radio and Telegraph Control (Radio Operators and Technicians) (Amendment) Regulations
    - Radio and Telegraph Control (Amateur Radio Service) (Amendment) Regulations

GOJ STRATEGIC PRIORITY: INCLUSIVE SUSTAINABLE ECONOMIC GROWTH AND JOB CREATION

MSET SUPPORTING PRIORITY #5: **Modernization of the Government of Jamaica ICT Infrastructure**

- DESCRIPTION: A modern ICT infrastructure for the GOJ is one that will integrate the different functions through a central communication network. The **GovNet,** which is considered as the backbone for a modern ICT system, will be a GoJ Wide Area Network (WAN) to be established, which will connect Government entities to facilitate shared services including data centre, consolidated voice communication system, consolidated email system and Gov-Internet. It will provide an essential enabler for the implementation of joined-up government up and one and one stop, non-stop e-government services, and national portal.

- CONTEXT: In August 2011, under the Public Sector Transformation Project a consultancy team was contracted to (a) prepare an economic rationale for GovNet, and propose a suitable business model for its implementation; and (b) conduct a Technical Review to determine the most appropriate and cost effective network configuration to be used for creating the physical infrastructure for GovNet. The information is now been used to support the implementation of GovNet.

- GOAL(S): GovNet will provide a secure wide area network 'backbone' communication infrastructure, which will connect Government Ministries Agencies, and Departments, to facilitate shared services, including data centre computing services (Gov-Cloud), consolidated voice communication system (Gov-Talk), consolidated email system (Gov-Email), and Gov-Internet. This investment will reduce the government's annual ICT expenses by up to 30% when fully implemented.

- PLANNED BUDGET: US 2M (Phase 1)

- END OF YEAR TARGET**:**
- The first phase (Phase 1) which will include the completion of the design of the network to leverage existing ICT infrastructure will be completed by the end of the FY 2017/18.

- ACHIEVEMENTS TO DATE:
    - A vendor has been selected, and contract negotiations will commence with the vendor.

GOJ STRATEGIC PRIORITY: INCLUSIVE SUSTAINABLE ECONOMIC GROWTH AND JOB CREATION

MSET SUPPORTING PRIORITY #6: **The Integration of Science and Technology in the Sustainable Development Agenda**

- DESCRIPTION**:** Foster the creation and implementation of the National ST&I policy to nurture the integration of science and technology in Jamaica's national vision 2030 development agenda.

- CONTEXT: Science and Technology are pivotal elements to national development. With the integration of S&T there is need to position our scientific and research capacities to meet local needs and enable Jamaica to tackle new and existing challenges in catalysing sustainable development. A major case in point is the development of the national nutraceutical industry, which is facilitating the development of ginger and marijuana nutraceuticals.

- GOAL(S): Improve the coordination and resourcing of ST& I sector, including the promotion of a possible development of a science technology and research park which will enhance research and attract foreign direct investments.

- PLANNED BUDGET:

- END OF YEAR TARGET:
  - Promulgation/implementation of national STI Policy: embracing building a culture of ST&I and their integration in to national development agenda
  - Formalization of an approved framework for the coordination of the national nutraceutical industry
  - Support the modernization and development of infrastructure that strengthens scientific and research institutions thereby improving capacity to contribute to development goals
  - Development of national research fund to support strategic scientific research priorities and deepening of International Cooperation such as the Jamaica-South Africa Bilateral Cooperation
  - Promotion of public awareness of the relevance of ST&I and its impact on national development and well-being of society

- ACHIEVEMENTS TO DATE:
  - Drafting and consultation of the National ST&I Policy underway
  - National Nutraceutical Industry Framework:
    - Development: Drafting of Amendments to Food and Drug Act, MOH 1975 underway;
    - Training of 54 Youth in the Young Nutraceutical Farmers Training Programme
    - 2 Business Opportunity Workshops with the objective of enhancing awareness of the impending regulatory implications and exposure to the relevant public entities that will support their fledgling industry
    - Supported the acquisition of USA and EU patents of the recently discovered McGhie JCG Ginger and guide the development of key research investigation for the potential value added industries
  - Hosted the 2016 National Medal in Science and Technology and National Innovation Awards; bringing national recognition to the Individuals whose work has contributed significantly to social and economic development
  - Implemented bilateral cooperation in S&T between Jamaica and South Africa

1.4 STRATEGIES

In order to transform the Ministry's priorities and desired outcomes into reality, the following strategies will be pursued:

1.4.1 SUSTAINABLE PARTNERSHIPS

The Ministry will seek to create sustainable partnerships with key stakeholders both locally and internationally in an effort to strengthen strategic alliances towards building the science, energy and technology sectors. It is expected that these partnerships will promote greater opportunities for increased investments, financial support, capacity building and technical support. The MSET will capitalize on these relationships, which will include Multinational Financial Agencies, Development Banks, Private Sector, other Public Sector Entities and Academia, to drive its programmes and policies towards the achievement of desired outcomes.

1.4.2 CITIZEN-FOCUSED SERVICE

The Ministry has to address the needs and expectations of the citizenry. Consequently, much time and effort have been spent on engaging with the citizenry through public consultations and cultivating partnerships. Importantly, there is on-going explanation of policies and programmes to the media, and monitoring expectations through feedback mechanisms. MSET is committed to providing its clients with the highest level of service possible. We commit to developing a 'Customer Charter', and require that our departments and agencies do the same and will ensure that all business being conducted with the Ministry is completed within an agreed period of time.

The Ministry is also guided by the various national policies and the policy agenda contained in the government's manifesto. The intention is to mirror the respective agendas and priorities that when pursued will transform the landscape and simultaneously meet citizens' expectations. In keeping with this, the following strategies will be emphasized:

i. Assess outcomes of priority programmes against expectations of the public to measure customer satisfaction.
ii. Establish a benchmark for service levels and ensure that it is met.
iii. Continue to engage with stakeholders through various media.
iv. Adopting a multi-level, multi-faceted communication program to more effectively engage the public on the Ministry's strategies and programs and performance
v. Initiate contact with key stakeholder groups and participate in public fora, etc.

1.4.3 STEWARDSHIP

The Ministry is aware of its responsibilities under the Financial Administration and Audit Act (FAA Act), Contractor General's Act and the Public Bodies Act and will continue to adhere to the requirements of these Acts. It is MSET's intention to remain compliant and keep audit queries or breaches at zero.

The added constraint of resources means that the Ministry has to manage financial resources and business processes, particularly procurement, in a timely and efficient manner. The focus of our strategy is to:

i. Strengthen measures to increase internal controls through an effective audit program and monitoring and evaluation system
ii. Ensure that the Ministry and its agencies comply with the financial regulations.
iii. Strengthen and monitor the procurement process.
iv. Strengthen the management of cash flow allocations and the use of assets, including motor vehicles.
v. Strengthen the Project Management capacity within the Ministry

1.4.4 HUMAN RESOURCES

The Human Resources (HR) strategy is geared to addressing the expectations of the various stakeholders and must contribute to the benefit of the wider public. The strategic focus is to provide a customer-oriented service, which rests on adopting and orienting sound organizational core values, recruitment planning and training. The strategies include:

i. Creating a more customer-oriented staff.
ii. Developing and implementing a Manpower Plan.
iii. Ensuring the HR staff are well trained and fully apprised of their functions.
iv. Strengthening the Ministry's accountability through regular performance appraisals.
v. Transform HR through the requisite exposure to best practices in human resources management and culture.
vi. Organizational design and development

1.4.5 INFORMATION SYSTEMS AND TECHNOLOGIES

Information systems and technology have a role to play in increasing the levels of efficiency and improvements in service delivery. The Information Technology strategy is designed to address internal processes within the organization and also focus on processes that impact externally by providing requisite services that are technology driven and congruent with stakeholders' expectations. The main strategies include:

i. Providing funding for acquisition of key ICT software and infrastructure along with training.
ii. Developing and disseminating government's ICT policies to key stakeholders.
iii. Implement structured maintenance system to support hardware and software

A comprehensive 'Corporate Communications and Public Education programme' will also be pursued. This is required to promote the many and varied initiatives being undertaken by MSET.

1.4.6 RISK MANAGEMENT

A Risk Management Framework is an important tool in the planning and management process. A risk assessment exercise was done internally and across the respective agencies, with a view to identifying the major areas of operation that are particularly vulnerable to risk. Further assessment of these risks is outlined in the risk matrix attached as Appendix A. The major risks identified include funding shortfall, procurement delays, and policy and personnel changes.

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The risk management strategies include:

i. Identifying and ranking the risks.
ii. Identification of appropriate risk-mitigation strategies for identified high-impact risks.
iii. Risk reduction through establishing a system of internal controls that minimises the extent of occurrence and allows for detection of the risk.
iv. Detailed monitoring and evaluation of all policies, programmes, projects and systems.
v. Policy, programme, project and system review, where necessary, to ensure continuing relevance.
vi. An effective internal audit programme.

1.4.7 MONITORING AND EVALUATION

The successful implementation of policies, programmes and projects is critical to meeting long term goals and objectives. Consequently, each stage of the process has to be monitored and evaluated. This process is outlined in the Monitoring and Evaluation Plans attached at Appendix D. The Ministry has in place a reporting framework, which identifies various reports, in all the functional areas, including Finance, Internal Audit, Human Resources, Science, Energy and Technology, among others.

The ministry intends to increase the rigour of its monitoring and evaluation programme to track and grade its performance, including that of its portfolio agencies. This will be accomplished through established mechanisms of reporting and performance reviews to ensure an audit and reconciliation of the entities' work plans against their achievements[2].

The mechanisms which will be employed to ensure an efficient monitoring and evaluation programme are:

- Monitoring and Evaluation Plans,
- Quarterly performance reviews of the Ministry's divisions and agencies. Heads of Divisions and Chief Executive Officers will be required to report on actual achievements against plans and to also provide explanations for deviations and revise plans to meet targets.
- Assignment of agencies to Desk Officers in the Division,
- Tabling of annual reports to Parliament and submission of periodic reports to Cabinet,
- Representation of the ministry on the agencies' Boards of Directors,
- Reports from project managers, divisional and agency heads ,
- Analysis of work programme against achievements and periodic audits.

The use of the Performance Monitoring and Evaluation System (PMES) and Performance Management and Appraisal System (PMAS) will further enhance the performance monitoring and evaluation process at the level of the individual and at the level of the units, divisions and agencies.

The main strategies are therefore to:

i. Promote the implementation of the Performance Management and Appraisal System (PMAS) to improve productivity and engagement of staff.
ii. Adhere to the PMES standards and requirements as administered by the Cabinet Office.
iii. Monitor Quarterly all agencies, divisions and units.
iv. Strengthen the Ministry's evaluation capabilities in the areas of policy and projects.

1.4.8 PROCUREMENT

An effective procurement system rests on proper planning, commitment and execution of the government's procurement policies and procedures, as well as identifying various scenarios that affect best practices. As a result, the focus will be on:

i. Ensuring careful attention to terms of reference and product or service specifications.
ii. Ensuring value for money (including assessment of life-cycle costs).
iii. Monitoring the procurement process closely to avoid delays, as well as identify and mitigate risk.
iv. Applying best practices such as considerations for sustainability and the preservation of the environment.
v. Identifying contingencies and their cost.
vi. Ensuring that the required staff members are trained in the government's procurement management system.
vii. Keeping abreast and compliant with the government's procurement guidelines.

[2] The absence of the required staff presents a threat to achieving this objective.

MSET will observe the requirements of the GOJ's public procurement framework and will assist its agencies to do the same. The Procurement Committee established in the Ministry and in each agency will be responsible for procuring the works, goods and services required. The Procurement Plan attached at Appendix C gives further information.

1.4.9 ACCOUNTABILITY

The Minister and the Permanent Secretary (PS) are responsible for the Ministry's direction, level of success and performance. The PS is governed by the established accountability framework, which outline in detail, the responsibilities that fall under the purview of that office, and is ultimately accountable to the Minister and Cabinet Office. The PS is responsible for the day to day operations of the ministry and leads a team of senior officers who have responsibility for specific divisions and agencies.

A combination of strategies will be employed to promote accountability within the Ministry and its agencies. These will include the following:

i. Build individual ownership for projects, programmes and key tasks.
ii. Create effective partnerships with international development partners as well as other MDAs in policy development and project implementation.
iii. Promote excellent corporate governance by ensuring that agencies and departments are sensitised to the developments and requirement of the GOJ.
iv. Promote the implementation of PMAS and PMES for the evaluation of staff; and assessment of performance of entities.
v. Enhance communication and continued engagement with stakeholders,
vi. Public reporting of performance on key programmes and projects.
vii. Capacity building in critical areas, including project management, procurement and planning, policy development, monitoring and evaluation.

1.4.10 POLICIES AND PROGRAMMES FORMULATION AND IMPLEMENTATION STRATEGIES

At the heart of a properly functioning ministry are the correct policies and programmes and their effective implementation. Careful thought has been given to policy formulation and implementation. It is recognized that a key area of attaining stakeholders' consensus is in prior action. Consultation is a key strategy employed. The Ministry has a cadre of human resources invested with an in-depth knowledge of the subject areas of the various portfolios and the requisite skills to successfully engage stakeholders in the consultation processes. Consequently, policies and programmes will be developed based on broad-based and intensive consultations with stakeholders, especially key stakeholders. However, it must be clearly appreciated that the Ministry needs to be strengthened with the required range of skills required to develop robust policies.

Conventional and appropriate consultation methodologies and media will be employed, including real and virtual meetings, electronic and social media. Appropriate time will be given for stakeholders to respond to and provide comments on documents sent for consideration.

1.4.11 STAKEHOLDER MANAGEMENT

The Ministry finds merit in incorporating stakeholders' needs and expectations at all levels of the policy development process as it facilitates a greater level of service delivery and benefit to society. Consequently, accessibility and openness are emphasized. Stakeholders should be in a position to communicate with the Ministry at any time and have their concerns acknowledged. The Ministry has a Communications Unit, staffed with professionals in this area, which is geared to handle structured communication as well as queries and/or responses from stakeholders. Additionally, the various segments of the Ministry with policy development functions will also be equally involved in interfacing with stakeholders.

The following strategies will be employed to facilitate effective stakeholder management:

i. A stakeholder mapping and analysis will be completed to ascertain the Ministry's full list of stakeholders and to determine the methodologies to best deploy to allow for maximum and consistent support and engagement.
ii. Stakeholder engagement to assist in policy development, advise on programmes and project deployment and to fully articulate the needs and expectations for both the stakeholders and the Ministry to ensure greater synergy and buy-in in pursuit of the Ministry's strategic objectives.
iii. Stakeholder agreements to ensure role identification and participation in implementation and responsibilities, example via Memoranda of Understating (MOU) to ensure full partnerships, understanding of roles and responsibilities and buy-in to programmes.

1.4.12 ENVIRONMENTAL PROTECTION

The promotion of sound environmental practices is an important element in policy development in MSET. To minimize and mitigate any negative environmental impacts that may arise from the policies, programmes and projects pursued by the Ministry and its agencies, the following measures will be employed:

i. Strengthen and implement legislation and regulations aimed at facilitating environmental protection as it relates to science, energy and technology.
ii. Work closely with environmental agencies and ensure that the Ministry, its entities, partners and investors satisfy requirements to obtain required permits and licences from the various authorities.
iii. Support the environmental monitoring of all entities associated with the Ministry.
iv. Build sustainable development practices into procurement and development activities, including promotion of energy efficiency and conservation; renewable energy development and in mitigation activities
v. Develop and implement environmental stewardship plans as an integral element of programme design and encourage/require entities to take similar actions.

1.4.13 MANAGEMENT RESPONSE TO EVALUATION FINDINGS

The Ministry intends to re-inforce its monitoring and evaluation of programmes, policies and projects to take appropriate action as necessary in response to any findings which will affect the success of project implementation. Some measures will be:

i. Ensure greater level of collaboration with Project Managers and Heads of Departments and Agencies.
ii. Take decisive actions to address any deviations from targets.

1.4.14 The strategies outlined above are implemented through the Ministry and its various Departments/Agencies/Divisions. The agencies that are integral in the execution of these strategies are:

SCIENCE PORTFOLIO

i. International Centre for Environmental and Nuclear Sciences (ICENS)
ii. Scientific Research Council (SRC)
iii. National Commission on Science and Technology (NCST)

INFORMATION AND COMMUNICATIONS TECHNOLOGY PORTFOLIO

iv. eGov Jamaica Limited (eGovJa)
v. e-Learning Jamaica Company Limited (e-Ljam)
vi. Post and Telecommunications Department (PTD)
vii. Postal Corporation of Jamaica (PostCorp)
viii. Spectrum Management Authority Limited (SMA)
ix. Universal Service Fund (USF)

ENERGY PORTFOLIO

x. Petroleum Corporation of Jamaica (PCJ)
xi. PETROJAM Limited (PETROJAM)
xii. National Energy Solutions Limited (NESOL)
xiii. Board of Examiner (BOE)
xiv. PETROJAM Ethanol Limited (PEL)

xv. Wigton Windfarm Limited (WWF)
xvi. Jamaica Aircraft Refuelling Services (JARS)

The internal and external divisions are also critical to the process; they are:

1.4.15 INTERNAL DIVISIONS AND UNITS

i. **The Political Directorate comprising the Office of the Minister:** This Office sets government policy for the portfolio subjects as transmitted through the office of the Permanent Secretary.

ii. **The Permanent Secretary's Office (PSO):** The function of this office is to implement GOJ policies transmitted through the Minister, Cabinet, Parliament and other responsible organs of the state.

iii. **Policy, Planning, Development and Evaluation Division (PPDED):** The PPDED provides policy, planning, development and evaluation direction, oversight and support for the Ministry's three (3) major portfolios. It is responsible for the preparation of the Ministry's Strategic and Operational Plans, coordinating the preparation of the Ministry's annual sectoral presentations, procurement management, and monitoring and evaluating the performance of the Ministry and its agencies.

iv. **Energy Division (ED):** The division has an overall mandate to pursue the roll out of the National Energy Policy 2009-2030, including the transformation of the energy sector.

v. **Legal Unit (LU):** This unit prepares and monitors legislation to give effect to the policies of the ministry and its agencies, and provide legal advice on all relevant matters.

vi. **Finance and Accounts:** The division directs the Ministry's budgetary process, manages its budgetary allocation, and ensures that the Ministry conforms to the requirements of the FAA Act.

vii. **Internal Audit (IA):** The division is responsible for ensuring efficiency and accountability of the Ministry's resources through conducting various types and levels of audits in the ministry and its agencies. to ensure compliance with the FAA Act.

viii. **Corporate Services Division:** This division is responsible for the management and development of the Ministry's human resources as well as the administration of the Ministry. The areas of responsibility include Human Resource Management and Development, Procurement, Office Administration, Information Technology, Documentation, Information Access Services.

ix. **Communications and Public Relations Unit (CPRU):** This unit develops, coordinates and manages the Ministry's Communication Programme and is responsible for disseminating information to the various publics that interface with the ministry. The unit is also tasked with coordinating information requirements and outputs of the Ministry.

x. **Information and Communications Technology Division (ICTD):** This division exercises immediate responsibility for the policy direction of the ICT sector.

xi. **Cyber Incident Response Team (CIRT)** This unit is responsible for providing incident management and coordination and ensuring effective implementation related to delivery of the services of the CIRT.

1.4.16 EXTERNAL DEPARTMENTS

i. **Government Electrical Inspectorate (GEI) / Government Electrical Regulator (GER**): This entity's current mandate is to ensure that electrical installations in the country are safe.

1.5 MINISTRY'S PERFORMANCE MANAGEMENT FRAMEWORK

STRATEGIC OUTCOMES

STRATEGY MAP

FIGURE 1: Strategy Map

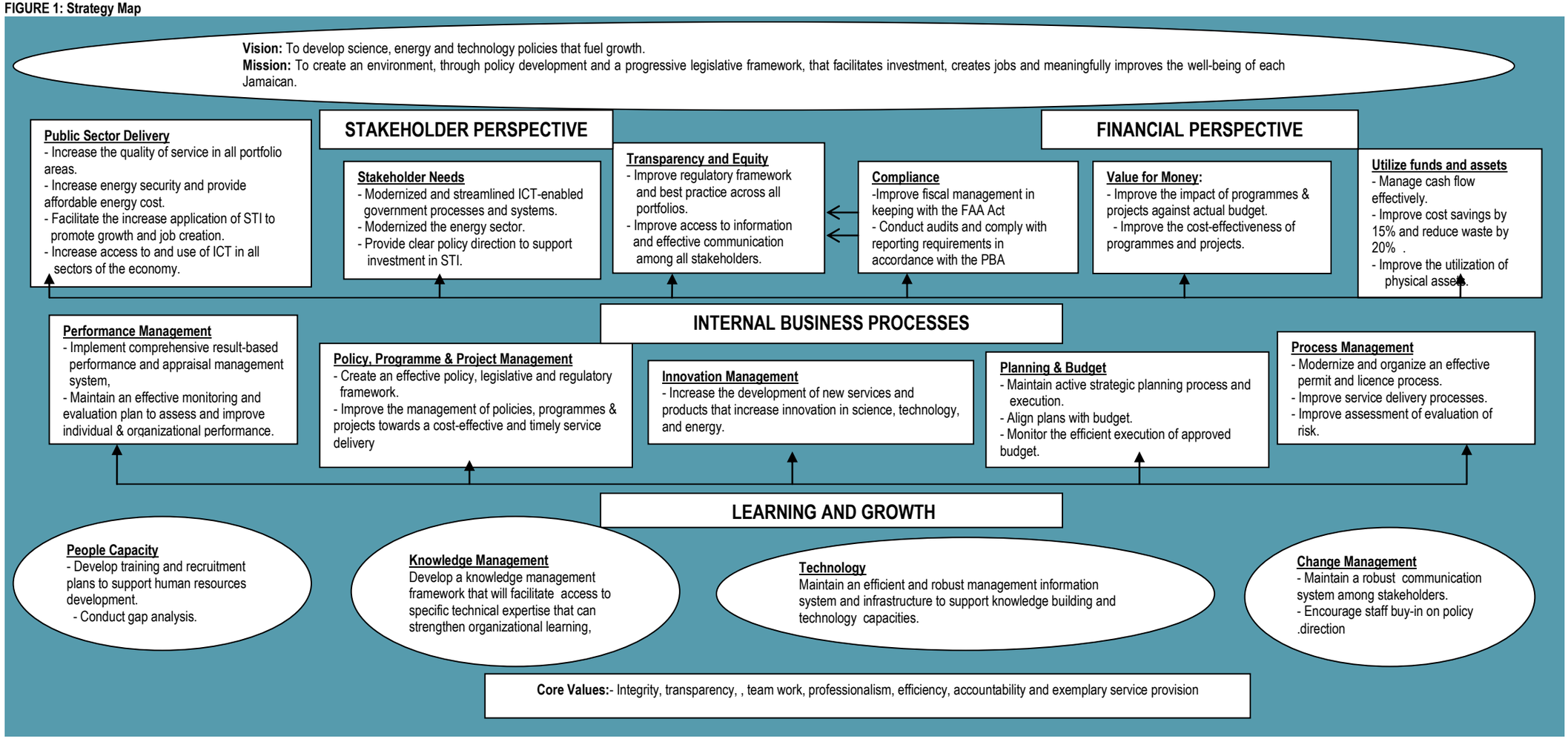


Table 3 outlines the Ministry's 'Balanced Scorecard'.

TABLE 3: MSTEM'S BALANCED SCORECARD

STRATEGIC OBJECTIVES	MEASURES (PERFORMANCE INDICATORS)	TARGETS	INITIATIVES	MEDIUM-TERM BUDGET ($)
STAKEHOLDER PERSPECTIVE				
To create and facilitate the policy, legal and regulatory framework that will promote the modernization of the energy sector, and the diversification of energy sources by 2020.	▪ # of alternative sustainable fuel sources available by 2020 • % of Renewable energy as part of the total energy mix	Two (2) by June 2018 15% by 2020 150 MW in 2017/18	• Monitor the implementation of Liquefied Natural Gas (LNG) for power generation at the Old Harbour Power Plant for 190MW • Conduct review of the National Energy Policy and addenda policies • Investment packages develop for hydro-electricity project. • Monitor the implementation of a 33.1 MW Solar generating facility to be developed by Eight Rivers Energy Company • OUR/GPE to issue Request for Proposal (RFP) for another 150 MW of renewables • Development and implementation of Integrated Resource Plan (IRP) for the Electricity Sector	$4 Million $15 Million $88 Million US$48.7 Million
To promote a strong and effective nationwide culture of energy efficiency and conservation within the next three (3) years.	▪ Cumulative savings of KWh in the public sector ▪ # of retrofits installed in Public sector building envelops	6,000,000 KWh by March 2020 73 buildings by 2020	• The PCJ will be pursuing investments in RE and EE interventions in hospitals and health facilities which will result in over 300KW solar PV installed • EE and conservation measures will be implemented with retrofitting done in over 73 government facilities Implementation of an Urban Traffic Management System (UTMS) to save travel time and fuel consumption	$345 Million $3.9 Billion
Modern policy, legislative and regulatory framework in the energy sector.	• # breaches in the Petroleum and Electricity sector	Zero adverse breach 2017 2016-2017	• Petroleum and Oil Fuel (Landing and Storage) Act • Petroleum Quality Control Act • Electricity Policy	
To Increase access to and use of ICT in all sectors of the economy.	• # of CAP to be established over the next 3 years • No. of public institutions connected on Broad Band Network. • No. of schools in which the project is implemented	120 by 2020 280 Ports - 2020 300 by 2020	• USF to establishment Community Access Points (CAP) at strategic locations island-wide • Continued island-wide roll-out of Broadband Network and WiFi access by the USF • Tablets in School Project	$435 Million $1.2 Billion

STRATEGIC OBJECTIVES	MEASURES (PERFORMANCE INDICATORS)	TARGETS	INITIATIVES	MEDIUM-TERM BUDGET ($)
			• Technology Innovation Fund (TIF)	
To Modernize the GOJ ICT governance framework; and ICT infrastructure to allow for high speed, high quality and low cost communication, with widespread use across all MDA,s over the next three(3) years.	• GovNet Design developed • E-Gov Policy guidelines and standards developed.	2017 2017-2018	• Prepare GovNet design • FOSS Policy • Open Data Policy	$.7 Million $21 Million[3] $.7 Million
To have an improved regulatory framework and best practice across all portfolios.	• Percentage reduction of approval time for certification of installations for connection to the grid. • Single ICT Regulator created • Spectrum Management Policy developed • Postal Services Policy developed • Cyber Security Strategy implemented • Data Protection legislation tabled	2018 2018 2018 2020 2017-2020 2018	• GEI Transformation • Single ICT Regulator • Spectrum Management Policy • Postal Services Policy • Cyber Security Strategy • Data Protection Act	$20 Million[4] $6 Million $.7 Million $2.1 Million
To create a culture that embraces and facilitates the application of science technology and innovation (ST&I), in all areas of the economy towards national development by 2020.	• Number of publications and public engagement activities • STI Policy promulgated and implemented • Number of science interventions in schools	6 per year 2017 3	• Public engagement initiatives e.g. medal awards, science exhibitions, seminars etc. • Execute implementation plan and M&E • Science in Schools project. • Strengthen Science Clubs in schools	
To create of an environment that facilitates increased investments in Research and Development (R&D) in science technology towards national development by March 2019	• R&D indicators identified • Number of GOJ supported R&D programmes • Technology Innovation fund re-activated • Audit recommendations implemented •	2017 3 2018 2020	• Execute pilot R&D survey for public and private sector entities and Identification and development of a mechanism to collect, record, store, analyse and report collected data • Re-activation of the Technology Innovation Fund to support priority research programme • Completion of Science Labs in Schools Project • Rationalization of GOJ's science labs • Constitute oversight committee to govern the implementation of key audit recommendations	

[3] This includes the sum of JA $20 Million Dollars budgeted for the salary of the Chief Information Officer.
[4] This sum represents the sum for the Transition Manager only and does not include the costs associated with the creation of the Single Regulator.

STRATEGIC OBJECTIVES	MEASURES (PERFORMANCE INDICATORS)	TARGETS	INITIATIVES	MEDIUM-TERM BUDGET ($)
FINANCIAL PERSPECTIVE				
To achieve prudent fiscal management.	▪ Above 95% compliance with procurement requirements. ▪ Contractor General's compliance rating of above 95%. ▪ Budgets used for intended purposes.	≥ 95%	• Knowledge transfer/training/ retraining in government procurement standards. • Effective budget management training and audits.	
	▪ Budget submitted by November 30 annually. ▪ Number Audit queries	Ministry-wide strategic budgeting process. Zero adverse audit queries	• Budget and planning process begins in August each year. • Budget and strategic plans submitted simultaneously. • Ongoing Monitoring and review of internal controls	
Conduct audits and process reviews.	12 internal audits in 2017/18 14 internal audits in 2018/19 and 16 in 2019/20	Average of 1 audit monthly	• Conduct Audits • Audit Plan	
INTERNAL PROCESS PERSPECTIVE				
Performance Management. Strategic planning execution and Performance Management	• Implementation of PMAS by 2017. • Performance reports quarterly. • Output focused Job Descriptions. • Training in PMAS. • Strategic Corporate Plan and Operational Plans developed in agreed timeframe	100% 2017 – 2020 2017 November 2017	• Implement the PMAS. • Ongoing performance reporting to Cabinet under PMES. • Develop the Strategic Business and Operational plans aligned with GOJ Priorities and budget. • Develop and implement Monitoring and Evaluation framework	
Policy, Programme and Project Management. Creation of a modern legislative framework.	• Number of key legislations drafted. • Number of policies developed/amended and submitted to Parliament.	7 5	• Postal Services Act. • Data Protection Act • Petroleum (Landing and Storage) Act • ICT Act • Repeal and replacement of the Telecommunications Act • Open Data Policy • Free and Open Source Policy • Postal Services Policy • The Electricity (Electric Power Wheeling) Regulations • The Petroleum (Quality Control) Act • Energy from Waste Policy • ST&I Policy	

STRATEGIC OBJECTIVES	MEASURES (PERFORMANCE INDICATORS)	TARGETS	INITIATIVES	MEDIUM-TERM BUDGET ($)
Improved policies, programmes and projects.	• Clear policy objectives and statements. • Information flow, data collection and interpretation. • Cost-benefit analyses completed. • Evaluation studies completed. • Consultations held. • Active stakeholder participation in policy, programme and project development.	80%	• Various fora to develop, explain and clarify policy issues across sectors. • Inter-ministry committees. • Joint public-private sector committees. • Memoranda of Understanding (MOUs) to foster greater ownership and to improve program execution. • Data collection, consultancies, reports, business process reviews.	
Improving the internal management, security, and competences in the use of appropriate technologies	• Internal IT systems functional and secure	2017	• Implementation of IT Security Policy and Appropriate/Social Media Use Policy.	
LEARNING AND GROWTH PERSPECTIVE (Organizational Effectiveness and Capabilities)				
Improved human resource capacity. Integrate plans with human resources. Competent staff.	• Organization structure and work groups reflect task assigned in work plan. • Staff delivers output at assigned timelines. • Level of re-work minimized.	80%	• Organizational chart developed and publicized. • Organizational review. • Manpower Planning. • Performance reports generated and evaluated. • Continued training.	
Training and recruitment plans supporting human resources development	• Organizational structure revised • Output-focused job descriptions completed • Training opportunities identified, employees trained	2017 – 2020 2017 2017	• Continued development of human resources and technical capacities through training in management, project management, monitoring and evaluation and energy planning.	

1.6 MINISTRY'S ALIGNMENT OF PRIORITY POLICIES/PROGRAMMES/PROJECTS

TABLE 4: Alignment of Priority Policies, Programmes and Projects with Vision 2030's Goals

VISION 2030 NATIONAL GOALS	VISION 2030 NATIONAL OUTCOMES	NATIONAL STRATEGIES (SECTORAL PAPER, MODERNISATION DOCUMENT, MANIFESTO)	MINISTRY'S PRIORITY POLICIES/PROGRAMMES/ PROJECTS	KEY ACTIONS
# 3 Jamaica's economy is prosperous	**#10 Energy security and efficiency**	#10-1: Diversify the energy supply	1. Develop the Policy and Legislative framework that will facilitate further development of the manufacturing and productive sectors, and other areas of the economy through affordable and sustainable energy supply. 2. Promote fuel diversification and the security of the public electricity supply. 3. Facilitate the development of new renewable energy projects with a total of 150MW in capacity.	1. Strengthen and develop an integrated policy legislative and regulatory framework. 2. Promote and track the implementation of projects supporting energy diversification priorities that are timely, cost competitive, efficient and environmentally friendly. 3. Implement and facilitate programmes that will achieve the targets for percentage renewables and monitor Key Performance Indicators 4. Implement/recommend suitable fiscal framework to facilitate the development and use of alternative energy and promote energy efficiency.
		#10-2: Promote energy efficiency and conservation.	4. Enhance the efficiency of the energy sector in the: a) generation, transmission and distribution of electricity; b) use of energy in the transport sector; c) Electricity consumption across all sectors of the economy. 5. Development of the Country's Energy Efficiency (EE) Potential. 6. Expansion of Appliances Labelling and Testing Programme. 7. Contribute to the introduction of an updated Jamaica Building Code.	5. Create a dynamic energy industry and markets to increase competition. 6. Seek the requisite budget, including grant funding, to popularize energy efficiency and renewable energy development. 7. Establish framework for the use of the least economic cost expansion plan (LCEP) for electricity generation, transmission and distribution. 8. Develop institutional capacity to implement demand side energy management programmes. 9. Develop, promote and implement programmes to influence market behaviour favouring energy efficiency. 10. Update and promulgate new energy efficient Building Code. 11. Promote the reduction emissions through energy interventions. 12. Develop and implement environmental stewardship.
		#10-3: Develop necessary regulatory framework for the introduction of alternative fuels. Develop the institutional framework to coordinate policy with energy initiatives and provide integrated monitoring and enforcement of regulations. Review and modify existing institutional framework and drive the ICT sector towards achievement of policy objectives.	8. Promulgate Energy Sector sub-policies and legislations. 9. Promote Net Metering and Power Wheeling. 10. Expansion of the OUR's regulatory mandate.	13. Submit for approval and promulgate sub- policies. 14. Reinstate and operationalize net metering and wheeling framework.

VISION 2030 NATIONAL GOALS	VISION 2030 NATIONAL OUTCOMES	NATIONAL STRATEGIES (SECTORAL PAPER, MODERNISATION DOCUMENT, MANIFESTO)	MINISTRY'S PRIORITY POLICIES/PROGRAMMES/ PROJECTS	KEY ACTIONS
	#11 A Technology Enabled Society.	#11-1 Integrate S&T into all areas of development.	11. Build capacity and promote effective S&T education in primary and secondary schools. 12. Use ICT to enhance learning in the formal education system. 13. Create and improve strategic public private sector partnerships in building S&T skills. 14. Review and define roles of R&D institutions. 15. Strengthen intellectual property rights system. 16. Create funding mechanisms for R&D. 17. Create an effective policy and legislative framework to support and advance Science, Technology and Innovation (STI). 18. Develop a viable and robust STI policy. 19. Promote lifelong learning in ICTs. 20. Strengthen and modify the policy, legislative and regulatory framework governing the ICT sector. 21. Promote greater use of Free and Open Source Software.	15. Develop the National ST&I Policy. 16. Implement a framework to promote scientific innovation. 17. Strengthen the educational and skills levels in S&T throughout the education system. 18. Increase and strengthen data collection on the ICT sector. 19. Implement funding mechanisms. 20. Repeal the Telecommunications Act and replace with an ICT Act. 21. Strengthen the Cyber Incident Response Team. 22. Implement the Cyber Security Strategy. 23. Data Protection Act. 24. Postal Services Act. 25. Establish a Single Regulator for ICT and other elements to deepen competition and compliance. 26. Develop Free and Open Source Policy
		# 11-2 Establish a dynamic and responsive National Innovation System (NIS).	22. Align investments in STI infrastructure with national development goals. 23. Create financing and incentive mechanisms aimed at attracting research intensive activities in Jamaica.	27. Develop the necessary linkages among the NIS stakeholders to diffuse STI in the economy. 28. Build STI capacity through rationalization/optimization of laboratories and processes.

VISION 2030 NATIONAL GOALS	VISION 2030 NATIONAL OUTCOMES	NATIONAL STRATEGIES (SECTORAL PAPER, MODERNISATION DOCUMENT, MANIFESTO)	MINISTRY'S PRIORITY POLICIES/PROGRAMMES/ PROJECTS	KEY ACTIONS
# 3 Jamaica's economy is prosperous.	**#12 Internationally competitive industry structures.**	**Build competitive value-added production.**	24. Encourage government to become an exemplar user of ICT applications. 25. Establish mechanism for funding ICT ventures. 26. Compliance with environmental standards and legislation. 27. STI Infrastructure development. 28. Incentive systems for investment in value-added and priority areas. 29. Expansion of the National Science and Innovation Awards. 30. Re-align and strengthen the functions of the National Commission on Science and Technology (NCST).	29. Development of the Government Network (GovNet) for integration of Government ICT systems. 30. Establishment of a Technology Innovation Fund (TIF) 31. Develop institutional framework for R&D. 32. Strengthen research institutions. 33. Design and develop innovative structures and financing mechanism. 34. Examine STI and ICT infrastructure findings. 35. Initiate engagement with stakeholders. 36. Initiate focus in new areas of the economy in the application of science by the Scientific Research Council, including new products and processes. 37. Sensitize Jamaicans to the importance of science, technology, engineering, mathematics and innovation (STEMI) through the engagement of educational institutions and civic groups.

1.7 TARGETS

During the 2017-2020 planning period, the Ministry will continue to implement existing policies, including the National Energy Policy 2009-2030 (NEP), the S&T Roadmap, and the ICT Policy. It will also conclude and implement others, including the five (5) addenda energy policies, and an Electricity (Power Sector) Policy.

The Energy Efficiency Conservation Project will be continued with the aim of uncovering further energy efficiency opportunities within the public sector.

The implementation of ministry and departmental strategies will lead to the delivery of the sectoral outcomes against the sectoral performance indicators and high-level targets that have been set. These are set out in Table 3 and show the progress that the Ministry plans to make towards its overall goal during the four (4) year planning cycle.

TABLE 5: MEDIUM TERM TARGETS

SECTOR OUTCOMES	OUTCOME INDICATORS	CURRENT PERFORMANCE (2016 - 2017)	THREE YEAR SECTORAL TARGETS (2017 – 2020)
Energy efficiency.	Number of electrical appliances tested and labelled to indicate their annual energy consumption. Number of public awareness campaigns launched. Number of buildings benefitting from 'efficiency interventions'. KWh savings achieved in the Public Sector	55% of appliances entering the market labelled. A total of 41 Public sector buildings benefitting from energy efficiency retrofits 3,625,509 KWh	80% of all appliances entering the market are labelled. National Information Awareness Campaign: 20 information awareness bulletins published. 5% reduction in energy consumption throughout the Public Sector per annum. 6,000,000 KWh savings in public sector energy consumption
Modernized Energy Infrastructure	New investments in electricity generation capacity Petrojam Oil Refinery upgraded	2 Unsolicited proposals were received in relation to the upgrade project and the Venezuelan and Jamaican Stakeholders to decide on the way forward	The country's Oil Refinery able to expand the refinery crude capacity and produce more finished products, as well as diversification of its products to produce alternative fuel such as Petcoke.
Increased use of renewable energy in the national energy mix.	Increased Investments, pre-feasibility and feasibility studies for the development of renewables, example hydro, solar and wind power. Low carbon road map developed and promoted. Percentage of renewables in the total energy mix	Over 80MW of electricity now being generated from renewables from different investments in RE Studies continued. 10.5%	Additional 150 MW of electricity being generated from Renewables 15% of renewables in energy mix at end of 2020. 5,074 barrels per 1000 population.
Improved governance. **A strengthened regulatory and institutional framework.** **Improvement in sector performance and monitoring of energy policy.**	New and amended acts and regulations. Compliance with petroleum regulations. Reduction in disruptions. Modern data base/improved turnaround time for dealing with queries. Review of data capturing systems. National Energy Policy reviewed every 3 years	Petroleum Quality Control Act and Regulations Petroleum (Landing and Storage) Act Natural Gas Act National Energy Sector Policy Review Committee established and reporting.	Petroleum & Gas Acts and regulations developed and promulgated by end of 2020. 10 meetings per year (30 cumulatively) with members of the Petroleum Sub-sector. 21 reports completed over the period. 100% 4 assessments.
Energy conservation in the Public Sector - government to become a leader in energy efficiency and conservation.	Reduction in energy costs. Reduction in CO_2 and other emissions. Reduction in barrels of oil consumed.	Approximately J$131,544,491.52 in monetary savings to date 2,133 barrels of oil	Savings increase by 70% CO_2 emissions of 19,150 tonnes/year by 2018[5]. A reduction of 13,886 barrels of oil per annum by 2018.

[5] Each barrel of oil saved prevents the release of 0.43 metric tons of CO_2.

SECTOR OUTCOMES	OUTCOME INDICATORS	CURRENT PERFORMANCE (2016 - 2017)	THREE YEAR SECTORAL TARGETS (2017 – 2020)
	Energy Conservation Awareness Programme conducted. Energy retrofitting and installations are carried out. Train public sector staff in energy conservation and efficiency.	Energy Conservation Awareness Programme launched. Energy retrofit contracts awarded, retrofits being conducted. Approximately 50 public sector employees trained. Mandate clarified and funding provided.	Complete 3 draft manuals on energy efficiency standard monitoring and verification. Complete 2 draft manuals on energy efficiency, maintenance and environmental disposal. Retrofit lighting units, air-conditioning units and install building envelopes in identified buildings. 12 public sector energy management-training programmes completed. NESol established as a keen player in building out renewables.
Eco-efficiency in industry.	Technical support given to the private sector to transition to greater eco-efficiencies.	Energy audits conducted. Projects identified Technical and financial support (line of credit) provided to the private sector.	Minimum of 40 energy audits completed by 2020.
	Approval and implementation of energy sub-policies.	Sub-policies being updated.	Energy sub-policies implemented.
Promotion and application of S&T in all spheres of the economy.	Increased application of S&T in all spheres of the economy. Guidelines/framework for nutraceuticals. Streamlining of GOJ laboratory facilities in the Hope Gardens Complex.	Fora promoting the application of S&T throughout the economy. Auditing plans being reviewed. Commence drafting of an S&T Policy. Implement recommendations of the Hope Gardens Complex Laboratory report.	Build out of the S&T Road Map. Increased focus on the application of S&T in agriculture, waste management, value-added agriculture and other segments of the economy. S&T Park in the Hope Gardens Complex established. S&T Policy implemented.

1.8 MEDIUM TERM EXPENDITURE SUMMARY

The medium term summary of expenditure for the ministry and its agencies that are funded through it is outlined in Table 4.

TABLE 6: MSET'S MEDIUM TERM EXPENDITURE SUMMARY

ITEM	YEAR 1 ESTIMATE OF EXPENDITURE (2016-2017), J$	YEAR 2 ESTIMATE OF EXPENDITURE (2017-2018), J$	YEAR 3 ESTIMATE OF EXPENDITURE (2018-2019), J$
RECURRENT	3,583,160,000	4,410,501,429	4,637,258,653
LESS APPROPRIATIONS-IN-AID			
i. OLADE	6,450,000		
ii. SRC	64,980,560	71,480,870	78,628,270
iii. NESOL	135,400,000		
TOTAL RECURRENT	**3,,376329,440**	**4,339,020,559**	**4,558,630,383**
CAPITAL A	951,881,000		
LESS APPROPRIATIONS-IN-AID			
i. E-LEARNING	700,000,000		
TOTAL CAPITAL A	**251,881,000**	0.00	0.00
TOTAL CAPITAL B	**585,873,000**		
TOTAL FUNDING APPROVED	**4,214,083,440**	**4,339,020,559**	**4,558,630,383**

2.0 PLANS AND PRIORITIES

2.1 PORTFOLIO AREAS

The MSET has portfolio responsibility for the country's energy, science, and ICT sectors.

SCIENCE

Significantly greater application of STI will be pivotal to the country's quest for economic and technological transformation and development. The creation and use of cleaner technologies, the continued promotion of eco-efficiency and the development of a green economy, are central features of this plan.

During the 2016-2020 planning cycle, attempts will be made to apply practical and cutting edge science to resolve various problems and expend resources to integrate S&T into the economy and wider society through mechanisms, including the annual Science and Innovation Awards and by strengthening the teaching of science and Science Clubs in our schools. The continued revitalization of the NCST, planned increase in its staff complement, continued strengthening of the SRC and build-out of its Science Road Map will be major priorities during the life of this three (3) year plan.

ENERGY

The Ministry's energy-focused priority policies, programmes and projects are directly geared to addressing the challenges that are facing the country. Many of these are partly occasioned by the liberalization of our economy, its vulnerability to internal and external shocks, high debt to Gross Domestic Product (GDP) ratio, large external trade imbalance contributed largely by the high cost of energy and low value of exports. The country's dependence on imported oil and the economy's high energy intensity, particularly in the Bauxite and Alumina Sector are compounded by inefficient energy use, several obsolete and inefficient electricity generation plants, the absence of competition in key areas of the electricity sector and limited development of renewables.

Reducing dependence on expensive fossil fuel and improving country-wide energy efficiency levels are critical issues that will be pursued during the 2017-2020 planning period. Sourcing cheaper fuels, continued development and expansion of the role played by local renewable energy sources in electricity generation and wider energy supply, promoting the construction of modern and efficient combined cycle electricity generating plants are other strategies to assist in ensuring that energy costs are reduced to consumers and businesses.

The continued implementation of the National Energy Policy, completion and introduction of the addenda energy policies and the repositioning of the agencies within the energy portfolio, are very important in pursuit of energy security in the country. The modernisation and expansion of the country's electricity generation infrastructure, including the installation of new generating capacity, the promotion of synergies in electricity generation between the alumina sector and the national grid are also critical initiatives going into the next fiscal year.

TECHNOLOGY

Devising policies and programmes that will encourage greater levels of innovation, increased entrepreneurship in the ICT sector, use of ICT to improve efficiency in service delivery, operating and production costs, diversifying spheres of economic involvement and opportunities, increasing local output, facilitating inward investment and creating new employment opportunities will be central objectives over the three (3) year planning cycle. Practical and cutting edge ICT and an improved and expanded ICT infrastructure will be leveraged to resolve problems, including the absence of streamlined and current regulations to realize greater efficiency and encourage investments in the ICT sector.

ICT has been positioned and is recognized as a major driver of national development. During the 2017-2020 planning cycle, ICT will be further integrated into our schools, businesses and the wider economy through a multiplicity of mechanisms. This will include implementation of the ConnectJa Project which will seek to provide Wi-Fi access in public spaces, increased use of ICT in the education system as envisioned by the 'Tablets in School' project, the general promotion of ICT and partnerships with academia and the private sector. Continued reshaping of the legislative and policy frameworks underpinning the country's ICT infrastructure, improving access to and lowering the cost of ICT services, improving the quality of the ICT infrastructure and deriving increased value from its application, while ensuring that Jamaica is acknowledged as one of the main ICT hubs within the Americas, are other major objectives to be pursued. The successful execution of the mandates of the ministry's ICT agencies, namely e-Ljam, USF, eGovJa and SMA will be critical to the Ministry's success.

The security of the National Cyber Space is also very important as the Ministry seeks to implement the Cyber Security Strategy in an effort to strengthen the country's ICT network against cyber attacks

The continued development of the spectrum, creation of additional radio monitoring and direction finding sites, removal of illegal users of the spectrum, promotion of increased competition within the telecommunications sector and increased use of ICT by the GOJ, plus the wider application of ICT throughout the economy are other strategic projects to be pursued.

2.2 VISION, MISSION AND MANDATE

2.2.1 VISION

To create an environment, through policy development and a progressive legislative framework, that facilitates investment, creates jobs and meaningfully improves the well-being of each Jamaican.

2.2.2 MISSION

To develop science, energy and technology policies that *Fuel Growth*.

2.2.3 MANDATE

Based on the subject areas assigned, the ministry's mandate is to:

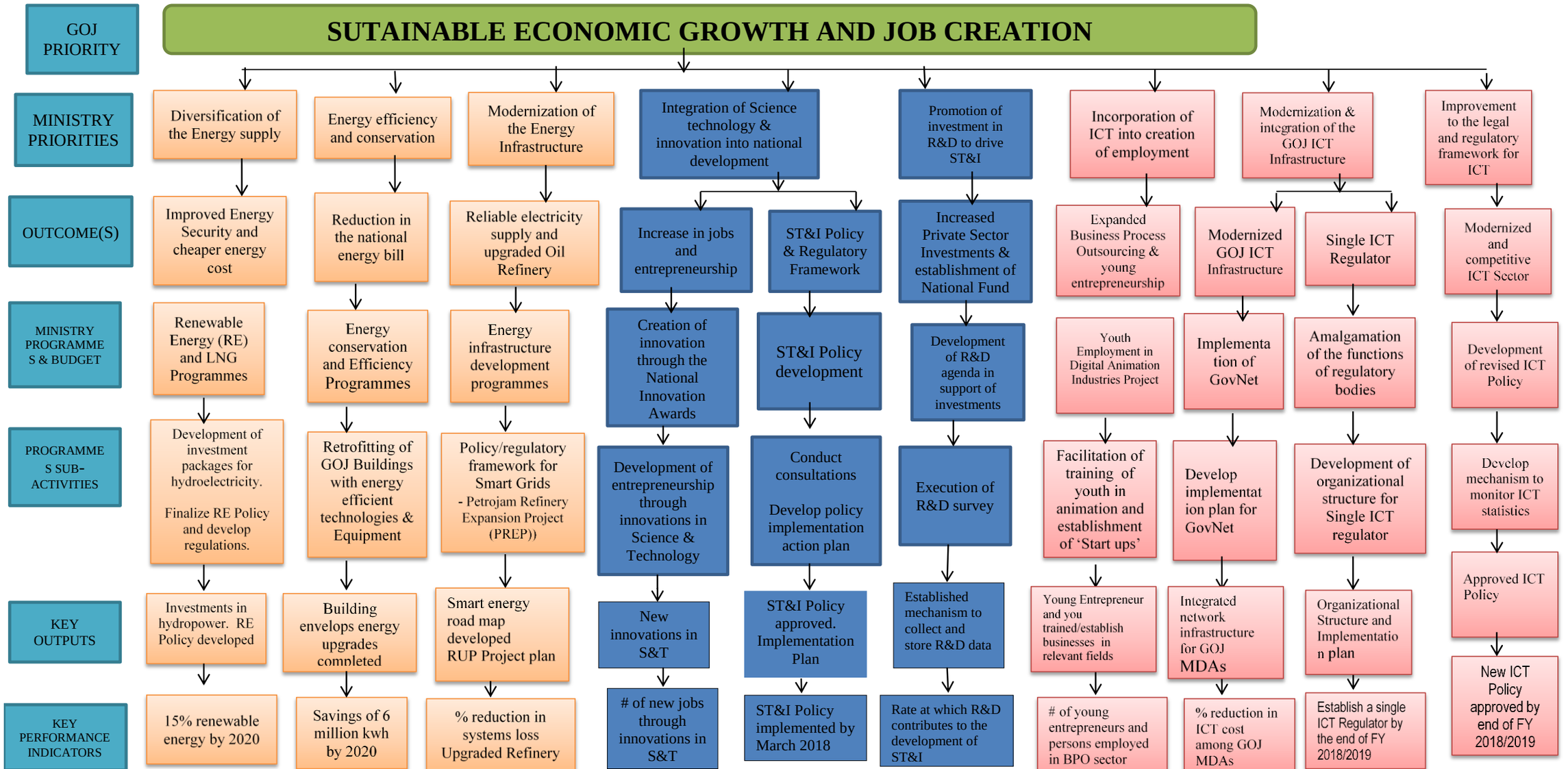
i. Encourage private sector innovation in the science, energy and ICT sectors.
ii. Lead legal and regulatory reform of the ICT, electricity and gas sectors.
iii. Improve national energy efficiency and conservation.
iv. Diversify primary energy sources, energy sources, particularly to increase the share of renewable energy and to reduce dependence on imported fuels.
v. Promote and enable the exploitation of S&T for innovation and economic development.
vi. Create a single ICT regulator.
vii. Streamline government's ICT operations (GovNet).
viii. Make access to Government services, more convenient and efficient using ICTs (e-Government).
ix. Promote the use of free and open source software by government entities.
x. Increase access to and usage of ICT within the education sector and all segments of the economy.

2.3 STRATEGIC OUTCOMES

The strategic outcomes that the Ministry expects to result from its policy and legislative priorities, programmes and projects are as follows:

i. The country's energy security is significantly improved.by the number of sustainable alternative energy sources developed
ii. Improved access to and affordability of energy services and supplies.
iii. Modernized and developed infrastructure in the science, energy and ICT sectors.
iv. Increased development and usage of alternative and renewable energy resources in the energy mix throughout all spheres of the country's economy.
v. An upgraded petroleum refinery providing a least cost option for petroleum supplies, satisfying demand and producing higher value added products for the local and export markets.
vi. Marked increase in the application of energy conservation and energy efficiency throughout the economy, especially within the public sector.
vii. Increased access to and usage of ICT throughout the economy.
viii. The generation of new businesses, employment and wealth-creation in the portfolio sectors, with the increased application of Science and Technology.
ix. Sustainable practices are widely employed in the energy, ICT and science sectors, towards the development of a green economy.
x. Jamaica is a knowledge-based and educated society that is globally competitive and productive.
xi. High quality and high value of service that exceeds stakeholders' expectations and results in improved stakeholder satisfaction.
xii. An appropriately staffed and expertly directed Ministry that efficiently executes its mandates and consistently adds significant value to the economy in compliance with Government of Jamaica (GOJ) policies.
xiii. Greater policy alignment and integration across portfolio and other key sectors, example Transport, Mining, Housing and Industry, to improve planning and resource management.
xiv. An active, appropriately resourced, competent Cyber Incident Response Team (CIRT), which successfully protects the country's ICT systems.
xv. A properly managed, fairly allocated and appropriately valued spectrum.
xvi. World-class, affordable and accessible high capacity ICT infrastructure.
xvii. Increased contribution of research and development (R&D) to national development through rationalisation of the S&T functions across government, the promotion of the sector through the NCST and other organs, and increased allocation of resources to S&T.
xviii. High quality e-enabled services provided by all agencies within the MSET to all stakeholders

2.4 PROGRAMME ACTIVITY ARCHITECTURE – MSET



2.5 SITUATIONAL ANALYSIS OF THE MINISTRY

A clear understanding of the Ministry's strengths and weaknesses, the threats to its mandate and the opportunities that present themselves is of import to creating a logical and appropriate Strategic Plan, which has a high possibility of being successful.

A SWOT Analysis and a Situational Analysis provide a clear overview and analysis of the Ministry's strengths, weaknesses, opportunities and threats. The information garnered forms the basis for identifying objectives, targets and strategies that may be employed to apply the strengths, address the weaknesses, realize the opportunities and mitigate the threats to us achieving our mandate as expressed through our policies, programmes and projects. Simultaneously, they indicate the broader environment in which we must operate, but over which we have limited or no control and the variables that can impact the outcomes that we expect to achieve.

The Ministry's strengths and weaknesses, the opportunities that it may seek to realize and the threats to it successfully executing its mandate are outlined in Table 6.

TABLE 7: SWOT ANALYSIS OF THE MINISTRY OF SCIENCE, ENERGY AND TECHNOLOGY (MSET)

STRENGTHS *(Internal)*	DESCRIPTION	OPTIONS FOR PRESERVING OR ENHANCING EACH STRENGTH
➢ **Strong ministerial and administrative leadership committed to the Ministry's mission and vision.**	Over the last 5 years under the leadership of the Permanent Secretary and the Political Representatives, the ministry has made a positive impact through successful execution of critical energy and ICT programmes.	Periodic reinforcement of mission/vision and effective policy direction
➢ **Experienced, well-trained and competent staff working towards achieving the Ministry's goals.**	Staff members that head critical portfolio areas are experienced, trained and qualified in their respective area. Competences in specialist areas such as energy, legal, science & technology are adequate.	Continuous implementation of structured training and mentorship programs
➢ **Organizational structure is aligned to facilitate adequate human resources in critical areas towards achieving the ministry's mandate.**	Over the last 2 years the Organizational structure has been reviewed and the ministry received approval for a more comprehensive structure in critical areas such as Policy Planning, HR, Audit and Energy Divisions.	Periodical review of organizational structure and proper manpower planning.

➢ **Sufficient physical resources enabling staff to execute their function efficiently.** ➢ **High levels of compliance and adherence to government procedures and guidelines.** ➢ **Ability to interact and communicate effectively with stakeholders.** ➢ **Quickly emerging team culture and more integrated management team** ➢	The ministry has been periodically upgrading ICT hardware and software and replacing old and obsolete furniture and equipment. Over the past 3 years the ministry has not received any adverse audit report from the Auditor General. The ministry is also fully compliant with the reporting requirements of the Contractor General's Office The ministry has periodic stakeholder meeting with key stakeholders in science, energy and technology areas. With the improved organizational structure for the Corporate Services division the ministry was able to employ a Director, Employee Relations who will seek to strengthen the synergies among all levels of staff	Continuous review and strengthening of asset maintenance system. Continuous sensitization, monitoring and effective internal audit program Effective communication plan and periodic stakeholder analysis Implement staff welfare program to maintain good moral and promote active communication among all levels of staff
WEAKNESSES *(Internal)*	**DESCRIPTION**	**OPTIONS FOR MINIMISING OR OVERCOMING EACH WEAKNESS**
➢ **Policies, projects and programmes not being implemented in a timely manner.** ➢ **Absence of the use of GOJ Performance Management Appraisal System (PMAS) for the evaluation of staff performance.**	Critical projects such as the Energy Security Efficiency Enhancement and the Energy Efficiency and Conservation Projects are lagging in terms of the deliverables and these projects duration have been extended. The absence of the GOJ PMAS in the ministry to evaluate results based performance would make it difficult to	Improvement in project management capacity and tighter monitoring and evaluation PMAS to be implemented in 2017/18

	assess the achievement of individual key work targets and to properly reward staff	
➢ **Unprofessionalism and need for improved work ethic among some staff.**	Unprofessionalism and, for example, unpunctuality or lack of commitment among some staff result in reduced productivity and under achievement of the ministry's targets.	Effective enforcement of staff orders with more coaching and mentoring
➢ **Instances of inadequate synergies between divisions and agencies.**	There is a need for closer collaboration among portfolio agencies in pursuing some programmes and to facilitate clarity in roles and responsibilities and policy direction in support of the mission and vision.	Implement a more integrated communication system and convene more performance review meetings that will facilitate better collaborations among departments, division and agencies.
➢ **Out-dated and inadequate legislation in some portfolios.**	Legislations such as the Postal Services Act, Petroleum Quality Control Act and the Telecommunications Act among others need to be updated so as to be aligned with policy initiatives.	Timely review and assessment of key legislation.

OPPORTUNITY *(External)*	**DESCRIPTION**	**OPTIONS FOR TAKING ADVANTAGE OF EACH OPPORTUNITY**
➢ **Ministry's priority programmes will receive technical and financial support as these progeammes attract the interest of Multi-lateral Financial Institutions (MFIs).**	Programmes such as energy security, energy conservation, ICT infrastructure development and STI development are all initiatives that falls within the mandate of most MFIs for assisting developing countries. The ESEEP and the EECP are currently supported by the World Bank and	Development of effective project proposals and proper alignment of policies, programmes and projects to attract support from MFIs.

	IDB respectively.	
➢ **The Ministry will receive specific assistance (technical, training and advisory) through its association and membership with international development partners.**	The Ministry's membership in international agencies such as IAEA, OLADE, International Postal Union and others have provided technical and professional support that assisted the Ministry in achieving its mandate.	Continue to develop sustainable membership in relevant international development organizations that supports the achievement of the ministry's mandate.
➢ **Greater level of success to achieve with private sector buy-in in support of the ministry's policies, programmes and projects through the development of sustainable initiatives and partnerships.**	The Ministry develops sustainable business relationship with external stakeholders such as JPS, FLOW, Digicel in pursuit of the ministry's initiatives and policies; for example, Zero-rated Access to Government Websites Project, LNG use in generating electricity and net billing.	The Ministry will continue to develop and maintain strategic alliances with key external stakeholders through continuous consultations, collaborations and communication towards achieving the ministry's mandate.
➢ **The emerging interest of the private sector to invest in renewable energy technologies.**	Over the past year there has been significant investment by private sector entities such as WRB Limited and BMR Wind Farm who have implemented 20MW Photovoltaic Plant and a 36MW Wind farm respectively at a total cost of over US$140M.	The regulatory and legislative framework will be strengthened to encourage more investments and to develop the policy to have attractive pricing for supplying electricity to the grid that will yield greater returns for investors.
➢ **The emerging development of nutraceuticals globally towards healthier lifestyles and as alternative therapies.**	The National Commission on Science & Technology (NCST) Launched the Nutraceuticals Industry in Jamaica in March 2015 in an effort to capitalize on the emerging and expanding market locally and globally.	The Ministry through the NCST and SRC will continue the strengthening of the legislative and regulatory framework, educate the relevant stakeholders and lay the scientific/medical groundwork to facilitate the expanding market.

➢ **The existing opportunity for the use of ICT for creating employment and contributing to economic development**	Over the last 5 years there has been an emerging development of Business Processing Outsourcing (BPO) that provided employment opportunities and has contributed to economic growth.	The Ministry will form more sustainable partnerships with secondary and tertiary institutions and expand the BPO/ICT services beyond just call centres and customer service.
THREATS/CHALLENGES *(External)*	**DESCRIPTION**	**OPTIONS FOR OVERCOMING EACH THREAT/CHALLENGE**
➢ **Volatile oil prices globally which can negatively affect the cost of energy.**	The country still relies on crude oil in the production of finished petroleum products such as diesel oil, gasoline, kerosene, etc. In 2015 Petrojam imported over 8million barrels of crude oil	Encourage additional investment in alternative sources of energy such as solar, wind, hydropower and in LNG.
➢ **Terms of the PetroCaribe Agreement may be compromised due to the unstable economic climate in Venezuela.**	Concessional financing to Jamaica in the form of long-term loans, based on oil purchases from Venezuela under the PetroCaribe Energy Co-operation Agreement can be affected. This could also negatively impact on the Petrojam Refinery Expansion Project.	Seek to strengthen or enter into partnerships with other oil producing countries and organizations.
➢ **Random cyber-attacks on GOJ ICT Infrastructure**	Over the last three (3) years there had been at least four (4) cyber-attacks on key Ministries websites.	Develop capacity in the management of cyber threats and strengthening of the capabilities of the Cyber Incident Response Team (CIRT)
➢ **Inadequate budget ceiling allocated by the Ministry of Finance**	Over the past 3 years the budget ceiling allocated to the MSET was not sufficient to fund all priority programmes/projects.	Prioritize programmes and projects based on availability of funds and pursue external sources of funding where possible.
➢ **Changes in international laws, regulations and**	The country's growth and development can	Develop and strengthen local capacities

treaties. ➢ **Lack of investments in Science Technology and Innovation (ST&I) to drive growth**	be negatively impacted by changes in international rules and agreements, which can affect the ministry's programmes. Current statistic indicates that less than 1% of our Gross Domestic Product (GDP) is being invested in research and development (R&D) and overall investment in ST&I is very low.	in science, energy and technology. Finalisation of the ST&I policy which will seek to address funding for R&D and strengthening of the legal and regulatory framework.

CONCLUSIONS FROM SWOT ANALYSIS

The sectors under MSET are particularly vulnerable to external threats that have had pronounced negative impacts on the science, energy and ICT sectors. The Jamaican economy has limited control over many of these variables. Consequently, contingencies and scenario analyses must be incorporated into the planning process. Experience has shown that even with some of these considerations, negative impacts still occur. The attention to careful design of programmes and timely implementation remains an area that needs to be improved so as to put in place the necessary strategies to soften these external impacts.

The Ministry has embraced public sector reform and accountability. There is an awareness of the significance of the modernization and accountability programmes and their capacity to improve efficiency and service delivery to customers. The lagging of critical policies to drive the growth agenda remains a challenge and with the strengthening of the human resources in the Policy Division, the Ministry will seek to accelerate the development of these policies. A Ministry-wide implementation of PMAS and PMES by the end of 2017 is necessary.

2.6 MINISTRY'S CURRENT PERFORMANCE (2016-2017)

SUMMARY OF PRIORITY POLICY ACHIEVEMENTS

TABLE 8:

Priority Policy	Programme/ Project & Budget No.	Performance Indicators	Target 16/17	Actual Result 16/17	Target 17/18	Expected Result 17/18
Renewable Energy (RE) Policy	New renewable energy projects with a total of 150MW in capacity	% of renewable energy in the total energy mix	Increase renewable energy to 12.5% of the energy mix.	RE currently stands at 10.5% of the Energy mix	Increase renewable energy to 13% of the energy mix.	RE Projected to be 13% of the energy mix
		Reduction in Barrels of oil				
		Reduction in CO2 emission				
Energy Efficiency and Conservation Policy	The retrofitting of Government Buildings with RE, EE, and EC measures to	# of retrofits installed in Government Buildings	6 additional buildings to be provided with retrofits	3 buildings 100 %completed, 2 buildings 90% and the other 85% completed	12 additional buildings to be provided with retrofits	Energy consumption in 12 GOJ Buildings will show mark reduction.

Priority Policy	Programme/ Project & Budget No.	Performance Indicators	Target 16/17	Actual Result 16/17	Target 17/18	Expected Result 17/18
	reduce energy consumption	Cumulative savings in KWh		Cumulative savings of 3,625,509 KWh to date which translates to approx. a 3% reduction and $131,544,491.52 in monetary savings.	A total of 4,000,000 KWh savings in energy consumption	Monetary savings increase by at least 60%
	Facilitate expansion of the Appliances Labelling and Testing Programmes of the BSJ	# of different models of appliances tested	Improved capacity of the BSJ to conduct test on more appliances	New and modified Test Chambers installed at the BSJ	25 different models of appliances to be tested	Increase in the number of manufacturers brands being certified
		% increase in proportion of tested appliances				
Modernization of the Energy Infrastructure	Facilitate the development of the energy systems, with consideration for new generation capacity and the introduction of Smart Grid technologies	number of players investing in the supply and distribution of electricity	85% increase over previous period.			
		Reduced system losses	Technical – 8.2% Non Technical – 13.3%			
	Introduction of cleaner fuels into the petroleum supply chain and improve the operational efficiencies of the Petrojam Refinery	Refinery upgrade approved and funding available	Commence phase 1 of upgrade project			
Open Data Policy	Improved integration and delivery of public services using ICTs	Open Data Policy approved by end of FY 2016/2017	Open Data Policy developed.	- Consultations done - Cabinet's approval Received - Open data portal launched	Open Data Policy developed and implemented	Open Data Policy in effect
Cyber Security Strategy	Increase the security of electronic communication	Cyber Security Strategy implemented by the end of FY 2019/2020	Implementation of Cyber Security Strategy		Promulgation of Cyber Security Strategy	Improved Safety of Public Sector cyber space

Priority Policy	Programme/ Project & Budget No.	Performance Indicators	Target 16/17	Actual Result 16/17	Target 17/18	Expected Result 17/18
Single ICT Regulator	Improve legal and regulatory framework for the ICT sector	Establish a single ICT Regulator by the end of FY 2018/2019			Commence amalgamation of the functions of the Spectrum Management Authority (SMA); telecommunications functions of the Office of Utilities Regulation (OUR) and the non-content related functions of the Broadcasting Commission of Jamaica (BCJ)	Specific functions of the existing Regulators are amalgamated towards establishing a Single Regulator
Improve delivery of services using ICTs	Encouraging the use of alternative work arrangements, supported by ICT, in the public and private sectors	e-home pilot in the private sector completed and assessed by the end of FY 2018/2019			e-home pilot conducted and assessed in at least one (1) private sector entities Consultant engaged and draft policy paper on e-home as an alternative work arrangement for the public service prepared	Pilot Project on e-home completed and feasibility assessment done Draft Policy document on e-home developed
Postal Services Policy	Development of a modern postal services sector	Postal Sector Market Study conducted by the end of FY 2017/2018 to inform the development of Postal Services Policy Postal Services Policy approved by the end of FY 2018/2019			Postal Sector Market Study completed	Improved understanding and knowledge of the Postal Sector
Supporting framework for the integration of science and technology in national development	Development and implementation of the new science and technology and innovation policy as a tool for sustainable national development	Science Technology and Innovation Policy developed and approved by end of 2017/18	Development of and implementation of Science Technology and Innovation (ST&I) policy	First draft of the STI Policy was circulated among the STI Thematic Working Group for review.	▪ Consultative development of and implementation of Science Technology and Innovation (ST&I) policy ▪ Preparation and implementation of action/implementation plan	ST&I Policy Implemented ST&I Implementation action plan in effect

Priority Policy	Programme/ Project & Budget No.	Performance Indicators	Target 16/17	Actual Result 16/17	Target 17/18	Expected Result 17/18
Science Research and Development (R&D) supporting national development	Strengthening of national capacity to collect and analyse ST&I/R&D data	Increase activities in R&D from the Science and technology community			▪ Execute pilot R&D survey ▪ Identification and development of a mechanism to collect, record, store, analyse and report collected data ▪ Explore MOU agreement with relevant MDAs	R&D Pilot survey conducted Mechanism in place to collect, record, store, analyse and report collected data MOU in effect

TABLE 9: PRIORITY POLICIES, THEIR INTENT AND PROJECTED BENEFITS

NO	NAME OF POLICY / PORTFOLIO	INTENT AND PROJECTED BENEFITS	STATUS AND COMMENTS
		SCIENCE	
1.	Science, Technology and Innovation Policy	To promote and facilitate the development of science and technology as major aspects of our culture and our economy. Increased production of value-added products, increased number of local patents being registered, and the development of a local innovation and science-driven sector that employs significant number of persons, creates wealth and earns the country increasing quantities of foreign exchange while making us less dependent on foreign technologies.	Draft ST&I Policy developed and circulated to thematic working groups for review. Implementation is projected to be by end of 2017/18 FY
		TECHNOLOGY	
2.	Spectrum Management Policy	To ensure efficient spectrum planning, allocation and assignment in accordance with international best practices, protocols and standards. Job creation, increased government revenues from licence fees and increased traffic in various areas of the spectrum.	To be completed by the end of FY 2017/2018
3.	Postal Services Policy	To provide for a modern and robust postal services sector, which safeguards fair compensation for stakeholders, meets universal service obligations, and sets out the licensing and regulatory framework for the sector. Increased number of private sector jobs is projected.	To be completed by the end of FY 2018/2019
4.	FOSS Policy	To promote innovation and cost rationalization in the use of software for the execution of business processes in the public and private sectors; and to develop Centres of Excellence to provide support for the deployment and use of FOSS solutions.	In progress
5.	Information and Communications Technology (ICT) Policy	To provide for the development of a modern and robust ICT sector that enhance productivity and competitiveness; drives private sector investment; makes ICT readily accessible by all citizens; supports improved governance at all levels; and contributes to science, research and innovation.	To be completed by the end of FY 2018/2019
6.	Cyber Security Strategy	To provide for a National Cyber Security Strategy which encourages consumer confidence in the security of ICTs and	Developed

NO	NAME OF POLICY / PORTFOLIO	INTENT AND PROJECTED BENEFITS	STATUS AND COMMENTS
		the protection of critical ICT infrastructure; to establish a Computer Incident Response Team (CIRT) to monitor and respond to potential threats to ICT infrastructure; and to provide the framework for public education and capacity building.	
		ENERGY	
7.	Renewable Energy Policy	A well-developed, vibrant and diversified renewable energy sector that contributes to Jamaica's energy security and sustainable future. Increased investment in renewables, decreased reliance on imported fuels to drive various branches of economy and aspects of society. Job creation, especially in installation, servicing, sales and operations. The emergence of an ESCO Sector, which should create jobs and save consumers money.	Plans are being made to conduct review of the National Energy Policy and the draft RE Policy is to be updated
8.	Energy Efficiency and Conservation Policy	The policy is intended to create the enabling environment whereby "In Jamaica, energy is generated, transmitted and utilized exercising best practices in energy conservation and efficiency". It sets out the necessary strategies to guide conservation and efficiency, and present targets and ways to monitor performance. The emergence of an ESCO Sector, which should create jobs and save consumers money.	Completed draft is to be updated to allow for synchronization with the National Energy Policy.
9.	Electric Power Sector Policy	The policy is intended to provide the strategic framework that will guide the orderly development of the electricity sector; define key roles of main actors; and outline the general approach to achieving reduction in electricity prices. It will support the energy policy's thrust for energy security through fuel source diversification.	
10.	National Energy Policy	The policy will provide the enabling environment, including legislative support for the achievement of this national outcome of a secure and sustainable energy supply and the implementation of the two national energy strategies.	Being implemented.
11.	Biofuels Policy	The policy provides the framework for the development of ethanol from sugar cane and further use of bagasse for cogeneration and is also a part of the country's Strategy for the adaption of the Sugar Industry 2006-2020, which addresses the re-development of the sugar industry and its attendant reforms to facilitate access to ethanol and power generation. The main benefits include generation of clean electric power sustainable growth and development ,increased supply of biodiesel	Draft policy to be reviewed with the intention of possibly having a more comprehensive policy for Bio-energy.
12.	Waste to Energy Policy	Implementation of this policy will guide the operations and processes associated with generating energy from waste in Jamaica and have the potential to be a contributor in meeting the target set for renewable energy for Jamaica. The main benefits includes reduction in the overall waste quantities requiring final disposal, reduction in greenhouse gas emissions, environmentally safe solid waste management and disposal, as well as the potential for cleaner and cheaper electric power supply	Draft to be finalized
13.	Carbon Credit Policy	Implementation of this policy will result in a reduction in Jamaica's carbon footprint or activities that induce global warming through release of greenhouse gases into the environment and adverse consequences. The policy will also provide an incentive to for certain afforestation and reforestation activities and enhance energy security through displacing traditional energy sources and earning rom carbon credits in a developing energy sector	Draft to be finalized

SUMMARY OF PRIORITY LEGISLATIVE ACHIEVEMENTS

TABLE 10: LEGISLATIVE PROGRAMME ACHIEVEMENTS

KEY:

1	2	3	4	5	6	7
Passed	Tabled	Approved by Cabinet	Being considered/approved by Legislative Committee	Being drafted	Drafting Instructions issued	Cabinet approval of Drafting Instructions

NO	NAME OF LEGISLATION	PURPOSE OF LEGISLATION	CATEGORY	PROGRESS	PRIORITY
	ICT				
1.	The Data Protection Act	The Act will provide for the protection of privacy of individuals in relation to personal data and to regulate the collection, processing, storing, use and disclosure of personal data.	7	A Draft Bill was prepared by the CPC and circulated to various stakeholders for review. Upon receiving the comments of the stakeholders, further drafting instructions have been prepared for the CPC to enable the preparation of a revised Draft Bill.	High
2.	The Information and Communications Technology Act (Telecommunications Act Repeal)	To provide the ICT sector with an adequate legislative and regulatory framework which addresses: • the establishment of a converged stand-alone ICT Regulator • current trends and emerging technologies • competitiveness • consumer protection.	7	Cabinet Submission to be prepared seeking approval for drafting instructions to be issued.	High
3.	Cybercrimes (Amendment) Act	To strengthen the sanctions under the Act and to bring same into alignment with international best practices.	1	The Act was passed in Parliament and received the Governor General's assent in December 2015.	
4.	Postal Services Act [Post Office Act (Repeal)]	Review of the Post Office Act and other legislation with a view to aligning same with policy initiatives to: • Licence and regulate all operators providing postal services outside of a policy and legislative framework by inter alia; • Repealing the Post Office Act; and creating a statutory body.	5	The draft Bill is to be reviewed to ensure its currency and alignment with new policy thrust.	Medium
5.	Telecommunications (Amendment) Act	To amend the Act to establish the basic requirements and conditions for the implementation and operation of number portability in Jamaica.	1	Rules were passed and implemented in June 2015	High
6.	Regulations to the Telecommunications Act	To outline the fixed penalties applicable in respect of offences promulgated under the Act as amended in May 2012.	7	To be addressed in the review of the Telecommunications Act and the consideration of the ICT Act mentioned at 2 above.	High
	ENERGY				
7.	The Electricity (Electric Power Wheeling) Regulations The Electricity (Net Billing) Regulations	These Regulations are being done pursuant to the powers conferred on the Minister with responsibility for energy under the Electricity Act 2015. The aim is to promulgate Regulations which treat with net billing, wheeling and auxiliary connections with the Jamaica Public Service Company Limited.	1	Separate Draft Bills have been prepared by the CPC which were reviewed by the Ministry and further drafting instructions sent to the CPC for incorporation into the Bills.	

8.	The Electricity (Electrical Work, Registration and Licensing) Regulations Resolution	These Regulations aim to establish the office of the Government Electrical Regulator and to address matters dealing with inspection of premises including but not limited to: 1. Appointment of inspectors 2. Registration of electricians 3. Conduct of inspections and certifications 4. Electrical installations	7	Draft Regulations have been developed by the CPC which was reviewed by the Ministry and the GEI. Further Drafting instructions have been given to the CPC.	
9.	The Petroleum (Quality Control) Act	• To review and amend the current licensing mechanisms and penalties associated with the Act, to ensure appropriate enforcement of safety standards for the petroleum sector; • To provide for appropriate charges for the inspection of petroleum facilities; • To establish standards and regulations for ultra-low sulphur diesel; and • To establish standards and regulations for biodiesel.		Further to the review conducted by the Commonwealth Secretariat on the petroleum regime, it was recommended that our petroleum laws treating with quality and safety regulations be consolidated into one piece of legislation. The Draft Bill of the Petroleum (Quality Control) Act previously prepared by the CPC has been reviewed and further amendments are being proposed in keeping with the recommendations of the Petroleum Trade Reform Committee and the Commonwealth Secretariat.	High

2.7 PRIORITY POLICIES, PROGRAMMES AND PROJECTS (2017 – 2020)

The Ministry's policy priorities are planned and developed with focus on the National Development Plan Vision 2030 Jamaica, Public Sector Master Rationalisation Plan, Ministry Paper No. 56 - Government at Your Service, Public Sector Modernisation Vision and Strategy 2015 – 2018, Medium Term Socio-Economic Policy Framework: 2015 - 2018 (MTF), The Medium Term Economic Programme (MTEP), along with the Medium-term Strategic Priorities of the Government 2017/18 and the policy positions taken by the political directorate. Of great importance are the government's policy priorities and proposed major projects.

SCIENCE AND TECHNOLOGY PORTFOLIO

The priority plans and programmes for the S&T portfolio, namely the NCST, are outlined in Table 9.

TABLE 11: PRIORITY PLANS AND PROGRAMMES FOR THE SCIENCE PORTFOLIO 2016 - 2020

Priority Policy Issue	Strategy	Output	Performance Measure/ Outcome indicator	Target & Cost '000 2017/18	Target & Cost '000 2018/19	Target & Cost '000 2019/2020
MAJOR PROGRAMMES						
Strategic Business Plan						
Enabling a supporting environment for the integration of science and technology in national development	Prepare new science and technology and innovation policy as an enabler of sustainable national development • Determine research agenda aligned to national development priorities with appropriate funding model	▪ Prepared and approved Science, Technology and Innovation Policy 2017-2030 • Implementation plan with key activities to be undertaken • Defined national medium term research priorities	▪ Increase collaboration among and between S&T entities, socio-economic sectors locally and abroad ▪ Improvement in the scientific literacy ▪ Enhance support for science and technology infrastructure ▪ Sectorial embrace of science and technology as enabling forces of sustainable development ▪ Identify priorities for R&D	▪ Consultative development of and implementation of Science Technology and Innovation (ST&I) policy ▪ Preparation and implementation of action/implementation plan		
Strengthen national capacity to collect and analyse ST&I/R&D data	▪ Design and execute a pilot project for the measurement of R&D in support of GoJ effort to incorporate R&D in the national accounting ▪ Constitute oversight committee to govern the systematized collection of ST&I data	▪ National R&D survey executed for public and private sector entities ▪ Signed MOU agreement between relevant agencies responsible for collection and reporting of ST&I data – standardized data	▪ Increase involvement and input from the S&T community in the development and updating of indicators for ST&I activities ▪ Evidence based decision making through the systematic collection of ST&I data ▪ Stakeholders trained in the collection and reporting of ST&I data in keeping with	▪ Execute pilot R&D survey ▪ Identification and development of a mechanism to collect, record, store, analyse and report collected data ▪ Explore MOU	▪ Stakeholder consultations to gain buy-in – public and private entities for continuous collection and reporting of National ST&I indicators ▪ Capacity building activities among stakeholders	▪ Execute national survey on STI indicators

Priority Policy Issue	Strategy	Output	Performance Measure/ Outcome indicator	Target & Cost '000 2017/18	Target & Cost '000 2018/19	Target & Cost '000 2019/2020
	▪ Strengthening the capacity for S&T institutions to adopt appropriate metrics for the collection, reporting and analysis of science and technology indicators	collection and reduction in duplicity ▪ Capacity building workshops for stakeholders and data collectors on ST&I and R&D indicators, with technical assistance from UNESCO/RICYT	international standards and practices ▪ Capacity for systematic reporting and measurement of ST&I and R&D inputs in the public and private sectors	agreement with relevant MDAs ▪ Stakeholder engagements ▪ Capacity assessment Report on institutional gaps as it relates to human resources, and hard/soft wares etc.		
Formalize the establishment of the National Nutraceutical Industry (NNI) in keeping with international developments	▪ Review and amend proposed changes to the National Food and Drug Act (FDA) for the inclusion of nutraceuticals as a special class of products requiring appropriate regulatory considerations for public health and safety ▪ Develop the National Nutraceutical Industry framework to guide the coordination of the industry and the promotion of the formalization of informal sector activities	▪ Proposed amendment to MOH submitted regarding the regulation of products, people and facilities ▪ Approved framework for the coordination of the industry	▪ Promulgation of new National FDA with appropriate regulatory guidelines ▪ Prepared and approved guiding framework	▪ Implementation and monitoring of Amendment to the FDA through proposed structures ▪ Initiate study – support from MICAF, PIOJ and or consultancy	▪ Publish and launch report ▪ Implement recommendations ▪ Framework developed with responsibilities of functional and governing agencies ▪ Implementation of guidelines of Chief Parliamentary Counsel for development of NNI	

Priority Policy Issue	Strategy	Output	Performance Measure/ Outcome indicator	Target & Cost '000 2017/18	Target & Cost '000 2018/19	Target & Cost '000 2019/2020
	▪ Baseline survey of the performance of the NNI (imports/exports, production volumes, major distributors, growers/producers etc.)in Jamaica and identify potential areas for expansion and support ▪ Value chain analysis of 5 nutraceutical inputs, ▪ Establish database of persons in the industry ▪ Strong Public Education Campaign focused at building awareness on legislative changes and policy implications ▪ Enhance youth involvement in the NNI by building capacity for engagement in various aspect of the industry	▪ Published reports on the state of the NNI in Jamaica with recommendations ▪ Establish database of practitioners currently involved in the industry ▪ Sensitization through various forms of print and electronic media and public engagement initiatives ▪ Train 1000 4-H Clubbites in Nutraceutical farming across the island o New entrepreneurial activities among youth in nutraceutical farming and product development ▪ New entrepreneurial activities among youth in nutraceutical farming and product development	▪ Results/reports of the study (s) ▪ Repository of relevant information for the NNI for persons in the industry ▪ Increased # of Publications and informational material in public domain ▪ Increased public engagement thru workshops /consultations/ seminars/lectures etc. ▪ 4-H clubbites trained in the business and cultivation of nutraceutical crops o Increased establishment of new and stable nutraceutical business and entrepreneurial initiatives among participants ▪ Increased establishment of new and stable nutraceutical business and entrepreneurial initiatives	▪ Execution of study (s) ▪ Develop a database of persons involved in various aspects of the industry ▪ Stakeholder and public engagements ▪ Review and expand nutraceutical farming training programme ▪ Train 100 4-H clubbites exposing them to various aspects of the value chain • Develop & explore partnerships for advancing this initiative		

Priority Policy Issue	Strategy	Output	Performance Measure/ Outcome indicator	Target & Cost '000 2017/18	Target & Cost '000 2018/19	Target & Cost '000 2019/2020
Facilitate the creation of the framework for the modernization of infrastructure and strengthening of Scientific institutions	▪ Revise and Coordinate the execution of key recommendations of the Hope Gardens Lab Audit ▪ Prepare a framework for the modernization of scientific entities for greater relevance and efficiency	▪ Progress on Implementation - quarterly Status report ▪ Institute appropriate committee bodies to facilitate recommendations ▪ Identified resources to support execution of recommendations ▪ Cabinet engagements on recommended models for infrastructure improvements, improved coordination and efficiency among entities	▪ Improve operational and services deliverables and overall organizational development ▪ High level support for execution of the recommendations with relevant financial support	▪ Formation of relevant committee to execute key recommendations ▪ Development of corresponding implementation plan ▪ Engage key stakeholders in assisting with execution of recommendation and identification of appropriate resources needed		
Popularization of Science, Technology and Innovation (ST&I)	▪ Facilitate the wide dissemination of scientific knowledge through media and public relations activities on matters of public importance and national development through increased coordination ▪ Publicly recognize the efforts of scientist, and innovators ▪ Facilitate capacity building support for innovators and promotion of access to funds and resources towards in the	▪ Publications of articles and media engagement ▪ Public engagements (seminars, webinars, symposia, news supplements, social media etc.) promoting S&T ▪ Coordinated support from relevant agencies for the 2016 Innovation Competition winners ▪ Features and follow-up	▪ Implemented Public Education initiatives and engagements through the institution of appropriate mechanism (s) ▪ Identified resources to support execution of programmes ▪ Increase engagement of the scientific community in publishing scientific information ▪ Increase public engagement and involvement in science and technology applications	▪ Plan and execute programme ▪ Collaborate with stakeholders in producing information for print and electronic media ▪ Engage mass and social media in the promotions of programme/initiatives ▪ Solicit funding support		

Priority Policy Issue	Strategy	Output	Performance Measure/ Outcome indicator	Target & Cost '000 2017/18	Target & Cost '000 2018/19	Target & Cost '000 2019/2020
	development of innovation towards commercialization	activities promoting work and accomplishments of Jamaican scientists and innovators ▪ Engage relevant MDAs in support of capacity development initiatives and venture capital support facilities	▪ Increase support for the Biennial Awards ceremony ▪ Increase stakeholder participation and involvement ▪ 20% of Winners of National Innovation Awards progress with their innovations	for awards presentations (2018) ▪ Increase capacity building training and support for innovators to further their access to available resources with support from relevant public and private entities ▪ Coordinate venture support meetup to build exposure for 2016 cohort		

ENERGY PORTFOLIO

The priority plans and programmes for the Energy Portfolio are outlined in Table 11

TABLE 12: PRIORITY PLANS AND PROGRAMMES FOR THE ENERGY PORTFOLIO 2017 – 2020

PRIORITY POLICY ISSUES	STRATEGY	OUTPUT	PERFORMANCE MEASURES/ OUTCOME INDICATORS	TARGET & COST 2017/18	TARGET & COST 2018/19	TARGET & COST 2019/20
MAJOR PROGRAMMES						
Strategic Business Plan						
Goal 1 – Energy Efficiency	Facilitate the introduction of energy saving devices e.g. LED, solar panels, energy efficient appliances	Electrical appliances tested	Testing facilities sufficient to test appliances Increased sales and imports of energy efficient appliances	Testing Facilities installed at the BSJ	Energy Efficient appliances/devices tested and labelled	Energy Efficient appliances/devices tested and labelled
	Develop and implement programmes to influence market behaviour toward and promote efficient use of energy	Established framework for Energy Services Company (ESCO) development	Framework developed Training intervention achieved At least three operating ESCOs	Framework for energy performance contracting Training and capacity building workshops At least three operating ESCOs J$5MIllion	Enabling environment for local and foreign financing of energy projects	
	Design and facilitate a systematic series of dialogue sessions to build awareness on energy Robust media campaign to increase public awareness and support for private sector and public sector issues	Information/Communication Plan (Project and National Energy Programme)	Number of Workshops held, Number of advertisements sponsored, Number of publications distributed	At least 5 targeted delivery programmes J$10 Million	A minimum of 5 targeted delivery programmes J$10 Million	A minimum of 5 targeted delivery programmes J$12 Million

PRIORITY POLICY ISSUES	STRATEGY	OUTPUT	PERFORMANCE MEASURES/ OUTCOME INDICATORS	TARGET & COST 2017/18	TARGET & COST 2018/19	TARGET & COST 2019/20
Goal 2 - Modernized Energy Infrastructure	Advise on the general development of the electricity system, with consideration for new generation capacity and the introduction of Smart Grid technologies	New investment commitments to Electricity Sector (US$ Millions)	New commitments by type of investment (generation, gas, energy efficiency, etc.) Complete Investor's Guide for the Energy Sector *($20M)*	25% increase over previous period to US$300 Million	100% increase over previous period to US$600 Million	
	Increase use of technologies in the electricity sector to drive competition, improve system stability and electricity price reduction.	Smart Energy Road Map, including Smart Grid technologies developed	Smart Energy Road Map Implementation Plan Developed and Recommendations for Implementation defined	Smart Group Working Group Established and phased implementation of Smart Energy programmes commenced	Continue Phased Implementation of Smart Energy Programmes	
Goal 3 Renewable Energy Programme	Prioritize renewable energy sources by economic feasibility criteria	Prefeasibility, Feasibility and Other investment studies underway or completed on Renewable Energy (Hydro and Wind)	Number and status of investments studies (prefeasibility, feasibility, other investments preparation) carried out for development of Renewable Energy	5 feasibility studies Increased hydroelectricity capacity 3 Investment packages for hydro development - J$88 million	Increased hydroelectricity capacity 3 Investment packages for hydro development J$88 million	Commitment for new Hydro Plant
	Develop a National Renewable Energy Policy that will provide a framework for stakeholders in the renewable energy sector	De-risking the renewable energy sector and diversifying the country's energy mix	Draft Renewable Energy Policy reviewed by Ministry and stakeholders Draft RE Policy approved by Cabinet	Review and finalize Renewable Energy Policy – stakeholder consultations ($7M) Develop regulations for the RE sector ($2M)	Finalize regulations for the RE sector	

PRIORITY POLICY ISSUES	STRATEGY	OUTPUT	PERFORMANCE MEASURES/ OUTCOME INDICATORS	TARGET & COST 2017/18	TARGET & COST 2018/19	TARGET & COST 2019/20
	Developing an environment that will facilitate the development and connection of renewable energy systems to the electricity grid.	An increasing number of persons/entities accessing a License to Net Bill, Auxiliary Connect or Power Wheel An increasing number of persons/entities accessing Standard Offer Contracts (SOCs) An increasing number of persons/entities connecting to the electricity grid for the purposes of Net Billing, Auxiliary Connections or Power Wheeling	Provide a regulatory framework for Net Billing, Auxiliary Connections and Power Wheeling Programmes Establish a Unit within the Ministry with responsibility to administer the issuing of Net Billing, Auxiliary and Power Wheeling Licenses Number of Licenses Issued Number of SOCs Signed Number of Connections	Net Billing, Auxiliary Connections and Power Wheeling Regulations approved by Cabinet	Increase number of licenses issued, SOCs signed and connections to the electricity grid by 5% per annum	Increase number of licenses issued, SOCs signed and connections to the electricity grid by 5% per annum
	Expand the local capacity of RE penetration in Jamaica through the provision of line of credits and incentives	Achieving the 15% renewable energy in national energy mix by 2020	Number of renewable energy systems installed (Solar, Wind, Hydro, Biomass, etc.) Number and value of loans disbursed	Conduct survey of renewable energy penetration *($20M shared, supported via the World Bank ESEEP Programme)* (12.5% renewables)	Increase number of renewable energy systems installed and loans disbursed by 5% per annum (13% renewables)	Increase number of renewable energy systems installed and loans disbursed by 5% per annum (15% renewables)
	Build the capacity of local human resources to develop, design, install, maintain and operate renewable energy plants/systems	An increasing number of skilled human resources with the ability to develop, design, install, maintain and operate renewable energy plants/systems	Number of renewable energy conferences, training programmes, workshops and seminars Number of public and private technical/vocational educational programmes	Capacity Building workshops for RE development ($7M)	Increase in number of renewable energy conferences, training programmes, workshops, seminars hosted and educational programmes by 5%	Increase in number of renewable energy conferences, training programmes, workshops, seminars hosted and educational programmes by 5%

PRIORITY POLICY ISSUES	STRATEGY	OUTPUT	PERFORMANCE MEASURES/ OUTCOME INDICATORS	TARGET & COST 2017/18	TARGET & COST 2018/19	TARGET & COST 2019/20
	Conduct and make available feasibility studies and assessment of the country's renewable energy resources and potentials and make investment ready	Developed renewable energy resource maps and feasibility studies and an increased investment in large-scale renewable energy projects	Number of feasibility studies and assessments completed Number of large-scale renewable energy projects completed	Complete hydro feasibility studies *(US$937,590)* Procurement of new RE generation capacity – 150MW	Increase the number of large-scale renewable energy projects by 5%	Increase the number of large-scale renewable energy projects by 5%
Goal 4 Energy Security	Expand renewable energy and indigenous sources in the energy supply mix	Reduction in the share of Petroleum in the Energy Mix from 91%	Increase in Energy Security	Reduction in contribution of petroleum to 89% Increased hydroelectricity capacity GPE to publish RFP for at least one waste to energy plant Pursue production of electricity from bagasse to grid J$300million	Reduction in contribution of petroleum to 73%	Reduction in contribution of petroleum to 67%

PRIORITY POLICY ISSUES	STRATEGY	OUTPUT	PERFORMANCE MEASURES/ OUTCOME INDICATORS	TARGET & COST 2017/18	TARGET & COST 2018/19	TARGET & COST 2019/20
Goal 5 Governance and Regulatory Framework	Strengthen the Regulatory and Institutional Framework to Improve Sector Performance, Increase Private Investment and Transition to Cleaner Fuel	Coherence in the policy, legislative and regulatory framework for the Energy Sector Status and number of regulations	Approved Legislative Agenda Successfully Completed Number of new regulations under preparation or approved	Approval of Legislative Agenda Commence development of National Petroleum Standards Capacity Built to monitor and enforce the Policy, legislative and Regulatory Requirements Develop internal capacity to support the Electricity and Petroleum Licences and Administration Processing of Electricity and Petroleum Licences 5 regulations developed J$19 million	Review of Policy, Legislative and Regulatory Framework and develop plan for amendments as necessary 3 regulations developed J$8 million	5 regulations developed
	Encourage and facilitate Improved compliance of petroleum operators through liaison with stakeholders and Petroleum Safety Inspectorate and maintain industrial harmony.	Increased registration and regularization of petroleum marketers, distributors, retailers and contractors,	Registration targets achieved Number of public education programme conducted Number of disruptions averted.	6 meetings at a minimum	6 meetings at a minimum	6 meetings at a minimum
	Establish a web based Petroleum application and database system. on petroleum licensees	Monthly Reports on the number of Licenses issued, suspended, etc.	Web base system developed, installed and generating monthly reports	Facilitate the development and implementation of a web based application system.	Prepare Monthly Reports on the number of Licenses issued, suspended, etc.	Prepare Monthly Reports on the number of Licenses issued, suspended, etc.

PRIORITY POLICY ISSUES	STRATEGY	OUTPUT	PERFORMANCE MEASURES/ OUTCOME INDICATORS	TARGET & COST 2017/18	TARGET & COST 2018/19	TARGET & COST 2019/20
	Assist MICAF with the establishment of a Petroleum Inspectorate (PI) at the NCRA to regulate and monitor the Petroleum Sector	Monthly Reports on stakeholder compliancy with regards regulations	Fully established Petroleum Inspectorate by the end of the 2017/2018	Facilitate the implementation of PI and training of inspectors	Monitor and oversee the operations of PI to ensure policy objectives are achieved Review and analyse monthly Reports	Monitor and oversee the operations of PI to ensure policy objectives are achieved Review and analyse monthly Reports
	Re-establish the Petroleum Advisory Council (PAC)	Quarterly PAC meetings and reports Annual Petroleum (Industry) Safety Awards Ceremony	Fully established PAC by the end of the 1st quarter. Safety Inspections and Awards Recognition, including the annual Petroleum (Industry) Safety Awards Ceremony by the end of the 2017/2018	Facilitate quarterly (PAC) meeting and review J$100,000 Coordinate Safety award ceremony	Facilitate quarterly (PAC) meeting and review J$110,000 Coordinate Safety award ceremony	Facilitate quarterly (PAC) meeting and review J$120,000 Coordinate Safety award ceremony
	Develop Legislation for the Gas Sector	Draft Legislation completed	Draft Gas Legislation to be completed by 2018/2019	Facilitate the preparation of the Gas Legislation and stakeholder consultations J$100,000	Facilitate the review of Gas Sector Policy	Facilitate the review of Gas Sector Policy
	Facilitate the development petroleum codes that encompasses health, safety and the environment	Draft Petroleum Codes completed	First Draft of Petroleum codes to be completed by the end of 2017/2018	Facilitate the Procurement of a Consultant to prepare draft codes J$5Million	Facilitate the preparation and implementation of Petroleum Codes J$1Million	Facilitate the further implementation of Petroleum Codes

PRIORITY POLICY ISSUES	STRATEGY	OUTPUT	PERFORMANCE MEASURES/ OUTCOME INDICATORS	TARGET & COST 2017/18	TARGET & COST 2018/19	TARGET & COST 2019/20
	Facilitate broad–based consultation and national consensus in decision making for the development of the energy sector.	Increased Stakeholders' Participation in and acceptance of decision made and the decision making process Minimize controversy concerning decisions on broad energy issues	Meetings Held and Decisions made	4 Stakeholders/Advisory meetings held J$80,000	4 Stakeholders/Advisory Meetings held J$80,000	4 Stakeholders/Advisory Meetings held J$100,000
	Establish Mechanisms for determining the effectiveness of the implementation of the Ministry's energy programmes, projects and initiatives.	Up to date reports on the implementation of the Ministry's Energy Programmes, Projects and Initiatives	Meetings held and Number and quality of Quarterly Reports submitted and recommendations implemented	Established monitoring framework to track energy targets and indicators M&E reports produced quarterly J$2million	M&E reports produced quarterly	M&E reports produced quarterly
	Improve long-term planning and forecasting for the energy sector	Integrated Resource Plan (IRP)	Simulations Model results Reports and analyses	Complete Integrated Resource Plan for the Electricity Sector - US$452,000	Finalize Integrated Energy Plan	Update Integrated Resource Plan Establish working group to review IRP results J$8Million

PRIORITY POLICY ISSUES	STRATEGY	OUTPUT	PERFORMANCE MEASURES/ OUTCOME INDICATORS	TARGET & COST 2017/18	TARGET & COST 2018/19	TARGET & COST 2019/20
	Develop/update regulatory frameworks, tariff and operational methodologies for the energy sector; and perform capacity building for the MSET.	Governance and Regulatory documents developed/ updated; capacity building performed.	Up-to-date Regulatory framework exists; capacity of MSET to monitor Energy Sector strengthened.	Finalize Gas Sector Regulatory Framework – US$155,000 Develop Monitoring & Evaluation Framework of the Refinery and Downstream Petroleum Sector – US$105,000 Develop New Regulations and Tariff Methodologies for Renewable Energies – US$105,000	Develop and implement Optimal LNG Industry Structure Define Actions Required to Maximize the Consumption of Gas and Optimize the use of Gas Infrastructure US$185,000	
	Ensure the adoption of Project Management Best Practices for the energy sector projects. Ensure the organization is equipped with standard project management tools.	Energy Projects delivered successfully. Improved Project Management outcomes. Acquisition of project management tools	Energy Project delivered on-time, within scope and budget. Training courses completed	Delivery of all scheduled reports Quarterly review of projects deliverables against targets Conduct Risk Analyses	Delivery of all scheduled reports Quarterly review of projects deliverables against targets Conduct Risk Analyses on	Delivery of all scheduled reports Quarterly review of projects deliverables against targets Conduct Risk Analyses on major projects IDP funded
	Ensure capacity building and training for project staff	Improved Specifications for the acquisitions of goods, services, equipment and works. Increase in the number of staff trained		on major projects IDP funded Capacity Building – Minimum of one training per person J$1.4Million	major projects IDP funded Capacity Building – Minimum of one training per person J$1Million	Capacity Building – Minimum of one training per person J$1Million

PRIORITY POLICY ISSUES	STRATEGY	OUTPUT	PERFORMANCE MEASURES/ OUTCOME INDICATORS	TARGET & COST 2017/18	TARGET & COST 2018/19	TARGET & COST 2019/20
Goal 6 - Government is a Leader in Energy Conservation	To Facilitate the enhancement of Jamaica's Energy Efficiency (EE) and Energy Conservation (EC) potential through the design and implementation of cost savings EE and EC measures in the public sector. Develop the Energy Efficiency Institutional Framework. Compile Training Manuals to support EE/EC Initiatives	Institutional Strengthening in place. Investments in Energy Efficiency EE and Energy Conservation (EC). Energy Efficiency and Conservation (EEC) Education Awareness Programme in place. Building envelope measures implemented by the PCJ Draft Standards & Norms for EE Technologies.	Cumulated Energy Savings of 6,000,000 kWh in the public sector by 2018 is realized. Cumulated Energy expenses reduction of J$200M by 2018 is realized. Reductions in CO2 emissions of 3500 tones/year in the public sector by 2018. A reduction of 3000 bbls/year barrels of oils is reduced by 2018. Number of Installation and retrofits carried out in keeping with established targets	Energy Savings Monitoring and Verification at 5 additional facilities Recommendations re building envelopes improvements ECE Education Awareness Programmes implemented in 10 additional facilities J$359 Million Monitor and facilitate the implementation of the Energy Management & Efficiency project to be executed by the PCJ	Analyses of the impact of EE & EC intervention in the public sector Survey of the Effect of Energy Efficiency and Conservation (EEC) Education Awareness Programme in the targeted facilities. Conduct Monitoring and evaluation of Energy Management & efficiency Project	Implementation of new Energy Efficiency and Conservation (EEC) projects in the public sector. Conduct Monitoring and evaluation of Energy Management & efficiency Project
	Development of National Guidelines for the Management of Hazardous Waste arising from EE/EC Interventions in the Public Sector. Develop Energy Savings Monitoring & Verifications Activities	Fifteen EE Monitoring & Verification Audits completed. Four (4) Workshops and seminars on EE procurement and management conducted	Proposal for EE & EC incentives mechanisms developed.			

PRIORITY POLICY ISSUES	STRATEGY	OUTPUT	PERFORMANCE MEASURES/ OUTCOME INDICATORS	TARGET & COST 2017/18	TARGET & COST 2018/19	TARGET & COST 2019/20
Goal 7 – Eco-efficiency in Industry	Expand Concessionary Line of Credit Financing to support Private Sector Retrofits for EEC Conduct detailed energy audits and analysis of energy consumption patterns for Jamaica.	Improved Energy efficiency in the Private Sector Energy audits conducted Retrofits for Energy Conservation and Efficiency completed	Increase uptake of funds available through Energy Funds for EEC Retrofits Technical support given to the private sector to facilitate their transition to eco-efficiencies	At least 6 EEC Retrofit energy projects completed J$45million Coordinated activities through the OLADE Sub Regional Office in the areas of: Capacity Building & Training: US$25,000 Meetings with Vulnerable Groups for Social Inclusion (increased access to energy): US$120,000 for Jamaica and 4 other OLADE Member Countries Promotion for Energy Efficiency and Renewable Energy initiatives: US$35,000		

INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) PORTFOLIO

The priority plans and programmes for the ICT portfolio are outlined in Table 10.

TABLE 13: PRIORITY PLANS AND PROGRAMMES FOR THE ICT PORTFOLIO 2016 - 2020

PROGRAMME/ PROJECT & BUDGET NO. AND POLICY INITIATIVES	STRATEGIES	OUTPUT	PERFORMANCE INDICATORS	TARGET & COST 17/18	TARGET & COST 18/19	TARGET & COST 19/20
MAJOR INITIATIVES (LEGISLATIVE & POLICY)						
Improve legal and regulatory framework for the Information and Communications Technology sector	Revise Information and Communications Technology (ICT) Policy	A Policy that promotes modernization and competition within the ICT Sector	New ICT Policy approved by end of FY 2018/2019	Revised ICT Policy tabled in Parliament	ICT Policy approved Monitor implementation of ICT Policy	Monitor implementation of ICT Policy
		Development of a mechanism to monitor ICT statistics and indicators as a reference for policy development and international ranking	Database of ICT statistics and indicators created by end of FY 2017/2018	Schematic for the database for ICT statistics and modalities for collection of data	Database of ICT statistics and indicators created	ICT statistics and indicators monitored; database updated
	Develop a Spectrum Management Policy	A Policy that provides for efficient spectrum planning, allocation and assignment in accordance with international best practices, protocols and standards	Spectrum Management Policy approved by the end of FY 2017/2018	Spectrum Management Policy developed and approved	Monitor Implementation of Policy	Monitor Implementation of Policy
	Develop a Postal Services Policy	A Policy that provides for the development of a modern postal services sector	Postal Sector Market Study conducted by the end of FY 2017/2018 to inform the development of Postal Services Policy Postal Services Policy approved by the end of FY 2018/2019	Postal Sector Market Study completed	Postal Services Policy developed and approved	Monitor Implementation of Policy
	Develop a Broadband Policy	A policy that promotes the island wide deployment and uptake of high speed Internet	Broadband Policy by the end of FY 2018/2019	N/A	Broadband Policy developed and approved.	Monitor Implementation of Policy
Improve legal and regulatory framework for the Information and Communications Technology sector	Promulgate ICT Act	An ICT Act that provides for a modern framework for licensing, regulation and the establishment of a single ICT Regulator	ICT Act promulgated by the end of FY 2018/2019	Table ICT Act in Parliament	Promulgation of ICT Act	Monitor the implementation of ICT Act

PROGRAMME/ PROJECT & BUDGET NO. AND POLICY INITIATIVES	STRATEGIES	OUTPUT	PERFORMANCE INDICATORS	TARGET & COST 17/18	TARGET & COST 18/19	TARGET & COST 19/20
	Promulgate Data Protection Act	A Data Protection Act that provides for the protection and privacy of personal data and prescribes how this data is to be handled	Data Protection Act promulgated by the end of FY 2018/2019	Table Data Protection Act in Parliament Establish Office of the Data Commissioner	Promulgate Data Protection Act Implement public education campaign Complete establishment of Office of the Data Commissioner	Monitor the implementation of Data Protection Act Continue public education on legislation
	Repeal Post Office Act and promulgate Postal Services Act	A new Postal Services Act that provides for a modern and robust postal services sector which safeguards fair compensation for stakeholders; meets universal service obligations and sets out the licensing and regulatory framework for the sector	New Postal Services Act promulgated by the end of FY 2018/2019	N/A	Promulgate new Postal Services Act	Monitor the implementation of Postal Services Act
	Provide inputs to support the promulgation of Regulations for the management, reuse and disposal of electronic waste (e-Waste)	Draft Regulations for the management, reuse and disposal of e-Waste provided as inputs to guide the Ministry with responsibility for solid waste in its development of Regulations	Draft e-Waste Regulations developed as inputs to be provided to the Ministry with responsibility for solid waste by the end of FY 2018-2019	Draft e-Waste Regulations developed by ITU Consultant for stakeholder review.	Draft e-Waste Regulations developed and forwarded to the Ministry with responsibility for solid waste as inputs to guide promulgation of Regulations	N/A
Improve integration and delivery of public services using ICTs	Develop an Open Data Policy	A policy to govern the access, use, reuse, adaptation and distribution of government data in machine readable and processable form to the public	Open Data Policy approved by end of FY 2017/2018	Open Data Policy developed and approved	Monitor implementation of the Open Data Policy	Monitor implementation of the Open Data Policy

PROGRAMME/ PROJECT & BUDGET NO. AND POLICY INITIATIVES	STRATEGIES	OUTPUT	PERFORMANCE INDICATORS	TARGET & COST 17/18	TARGET & COST 18/19	TARGET & COST 19/20
Reduce reliance on proprietary software and foster software innovation	Develop an Open Software and Open Standards Policy	A policy that promotes the use of open source software and open standards within government and the private sector	Open Source Software and Open Standards Policy approved by the end of FY 2018/2019	Open Source Software and Open Standards Framework completed	Open Source Software and Open Standards policy developed and approved	Monitor implementation of Policy on Open Source Software and Open Standards within MDAs
Increase the security of electronic communication	Implement Cyber Security Strategy	A framework that promotes *inter alia* cyber incident response, technical cyber security improvement; and public education and capacity building	Cyber Security Strategy implemented by the end of FY 2019/2020	Implementation of Cyber Security Strategy Monitor elements previously implemented	Implementation of cyber security strategy; Monitor elements previously implemented	Implementation of cyber security strategy Monitor elements previously implemented
Improving the regulatory framework governing the use of the Internet	Develop a framework on Internet Governance (IG)	A framework which outlines the norms and principles necessary to shape the evolution and use of the Internet	IG Taskforce launched and IG Forum and consultations held by the end of FY 2017/2018 A framework for IG developed by the end of FY 2018/2019	IG Taskforce launched; IG forum and consultations held	A framework for IG developed	Implementation of the Framework
	Develop policies and procedures for the administration and technical management, registration and promotion of Jamaica's Country Top Level Domain (.jm ccTLD)	A policy that provides for the administration and technical management, registration and promotion of .jm ccTLD)	A policy that provides for the administration and technical management, registration and promotion of .jm ccTLD) developed by the end of FY 2017/2018	Policy for the administration and technical management; registration and promotion of .jm ccTLD developed	Implementation of the policy	Monitor implementation of the policy
Improve legal and regulatory framework for the ICT sector	Establish a single ICT Regulator	A single ICT Regulator	Establish a single ICT Regulator by the end of FY 2018/2019	Commence amalgamation of the functions of the Spectrum Management Authority (SMA); telecommunications functions of the Office of Utilities Regulation (OUR) and the non-content related functions of the Broadcasting Commission of Jamaica (BCJ)	Complete amalgamation of the functions of the SMA; OUR; and the BCJ and establish single ICT Regulator.	N/A
Improve legal and regulatory framework for the ICT sector	Establish Office of the Information/Data Commissioner	Office of the Information/Data Commissioner	Establish Office of the Information/Data Commissioner by the end of FY 2018/2019	Commence preparatory work for the establishment of the Office of the Information/Data Commissioner	Complete establishment of Office of the Information/Data Commissioner	N/A

PROGRAMME/ PROJECT & BUDGET NO. AND POLICY INITIATIVES	STRATEGIES	OUTPUT	PERFORMANCE INDICATORS	TARGET & COST 17/18	TARGET & COST 18/19	TARGET & COST 19/20
Improve delivery of services using ICTs	Encourage the use of alternative work arrangements, supported by ICT, in the public and private sectors	At least two (2) new private sector entities piloting e-home as an alternative work initiative	e-home pilot in the private sector completed and assessed by the end of FY 2018/2019	e-home pilot conducted and assessed in at least one (1) private sector entities	e-home pilot conducted in at least one (1) private sector entities	N/A
		Recommendations to support e-home as an alternative work arrangement for the public service provided to the Ministry of Finance and the Public Service for consideration	Consultant report on e-home as an alternative work arrangement for the public service provided to the Ministry of Finance and the Public Service by the end of FY 2018/2019	Consultant engaged and draft policy paper on e-home as an alternative work arrangement for the public service prepared	Recommendations on e-home as an alternative work arrangement for the public service, provided to the Ministry of Finance and the Public Service for consideration for policy development.	
OTHER INITIATIVES and ACTIVITIES						
Ensure proper administration of the telecommunications sector.	Prepare and issue all licences for which recommendations have been received from the Regulators	Licences prepared and issued	Licences prepared and issued within one (1) month of receipt of recommendations	Licences prepared and issued	Licences prepared and issued	Licences prepared and issued
	Prepare requisitions for members of the Telecommunications Tribunal and ICT Advisory Council and submit same to the Accounts Department for payment	Requisitions for members of the Telecommunications Tribunal and the ICT Advisory Council prepared	Requisitions prepared for the Accounts Department to make payment to members of the Tribunal thirty days prior to due date and to the ICT Advisory Council fifteen days after the end of each quarter	Requisitions prepared and submitted for payment Telecommunications Tribunal - **$1,200,000 + $84,000 for admin support** ICT Advisory Council – **$1,500,000**	Requisitions prepared and submitted for payment Telecommunications Tribunal - **$1,200,000 + $84,000 for admin support** ICT Advisory Council – **$1,500,000**	Requisitions prepared and submitted for payment ICT Advisory Council – **$1,500,000**
	Monitor compliance by Regulators and Agencies with the Public Bodies Management and Accountability Act and other relevant legislation	Plans/Reports from Portfolio Agencies forwarded to the Policy Division reviewed	Plans/Reports from Portfolio Agencies reviewed and forwarded to Policy Division within two weeks of receipt	Comments submitted to Policy Division	Comments submitted to Policy Division	Comments submitted to Policy Division

PROGRAMME/ PROJECT & BUDGET NO. AND POLICY INITIATIVES	STRATEGIES	OUTPUT	PERFORMANCE INDICATORS	TARGET & COST 17/18	TARGET & COST 18/19	TARGET & COST 19/20
Ensure technical and policy input provided to internal stakeholders and MDAs regarding government ICT initiatives; and the interest of Jamaica as appropriate advanced in ICT related regional and international fora.	Review and prepare technical submissions, reports and briefs in support of the Office of Chief Information Officer and the Jamaica Cyber Incident Response Team	Technical submissions, reports and briefs, reviewed and/or prepared	Technical submissions, reports and briefs reviewed and/or prepared within the agreed timeframe	Technical submissions, reports and briefs reviewed and/or prepared	Technical submissions, reports and briefs reviewed and/or prepared	Technical submissions, reports and briefs reviewed and/or prepared
	Review submissions, reports and briefs prepared by internal divisions and provide technical support and advice as required	Submissions, reports and briefs reviewed and technical support and advice provided	Submissions, reports and briefs reviewed and technical support and advice provided within the agreed timeframe	Submissions, reports and briefs reviewed and technical support and advice provided	Submissions, reports and briefs reviewed and technical support and advice provided	Submissions, reports and briefs reviewed and technical support and advice provided
	Participate in consultation; provide comments on legislative, policy and other government initiatives	Consultation documents	Consultation objectives are addressed in document Consultations are timely representative and comprehensive	Participate in consultation. Comments provided on legislative, policy and other government initiatives	Participate in consultation. Comments provided on legislative, policy and other government initiatives	Participate in consultation. Comments on legislative, policy and other government initiatives
	Review and prepare technical submissions, reports and briefs for participation in ICT regional and international fora	Reports/briefs reviewed and technical submissions/contributions prepared Reports on decisions taken and/or approved	Reports/briefs reviewed and technical submissions/contributions prepared within the agreed timeframe Reports from meetings/conferences submitted within one (1) month of return from meetings/conferences	Reports/briefs reviewed and technical submissions/contributions prepared Reports from meetings/conferences submitted	Reports/briefs reviewed and technical submissions/contributions prepared Reports from meetings/conferences submitted	Reports/briefs reviewed and technical submissions/contributions prepared Reports from meetings/conferences submitted
	Ensure Jamaica's full compliance with its financial obligations under agreements and treaties	Prepared invoices	Invoices submitted to Accounts Department within two (2) days of receipt	Prepare invoices for submission to Accounts Department **Microsoft Agreement - $151,250,000** **Universal Postal Union - $1,000,000**	Prepare invoices for submission to Accounts Department **Microsoft Agreement - $159,568,750** **Universal Postal Union - $1,055,000**	Prepare invoices for submission to Accounts Department **Microsoft Agreement - $168,345,031** **Universal Postal Union - $1,113,025**

POLICY, PLANNING, DEVELOPMENT AND EVALUATION PORTFOLIO

General policy development, strategic planning, monitoring and evaluation matters for all portfolios, several plans, projects and programmes are outlined in Table 12.

TABLE 14: POLICY, PLANNING, DEVELOPMENT AND EVALUATION 2017-2020

PRIORITY POLICY/PROGRAMME ISSUES	OBJECTIVES	STRATEGIES	PERFORMANCE MEASURES / OUTPUT INDICATORS	MAJOR TASKS, TARGETS, RESOURCES AND COST		
				YEAR 1 (2017-2018) *Budgeted cost 33,748,,866*	YEAR 2 (2018-2019) *Projected Cost 52,857,259*	YEAR 3 (2019-2020) *Projected cost 55,742,494*
Effective policy development, Strategic planning, and monitoring and evaluation of the ministry's activities.	To enable the ministry to optimize its ability to develop and analyse policies, towards pursuing the Ministry's programmes and projects.	Broad-based consultations with all stakeholders to identify issues that affect policy effectiveness. Implementation and constant improvement of a focused monitoring and evaluation programme of policies to allow for the gathering of necessary information and the provision of feedback to stakeholders. Develop concept papers and draft policy documents for sign-off by cabinet Office. Continued training and improvement in the capacity of staff members as a key component to facilitate an effective Policy, Planning, Development and Evaluation Division.	The number of stakeholder consultation meetings held. Policy Analysis reports prepared and presented in agreed timeframe. Concept papers submit to Cabinet in agreed timeframe Evidence-based concept and position papers prepared. Draft Policy documents completed and approved in agreed timeframe Ministry Papers are completed and laid in Parliament in time for the Budget Debate each fiscal year. Documents, including Cabinet Submissions, Cabinet Notes, briefs, reports and memoranda are prepared accurately and on time.	Meetings to represent the Ministry's interest are attended and the Minister, PS, CTD briefed on the proceedings. Track and evaluate new policies implementation and report on progress. Prepare concept papers to highlight areas/issues to inform policy revision and development Develop draft policy documents and position papers and pursue relevant consultations Prepare Ministry Papers for presentation to Parliament in time for the Budget Debate	Meetings to represent the Ministry's interest are attended and the Minister, PS, CTD briefed on the proceedings. Continued Monitoring and evaluation of major policy programmes. Prepare concept papers to highlight areas/issues to inform policy revision and development Develop draft policy documents and position papers and pursue relevant consultations Prepare Ministry Papers for presentation to Parliament in time for the Budget Debate	Meetings to represent the Ministry's interest are attended and the Minister, PS, CTD briefed on the proceedings. Continued Monitoring and evaluation of major policy programmes. Prepare concept papers to highlight areas/issues to inform policy revision and development Develop draft policy documents and position papers and pursue relevant consultations Prepare Ministry Papers for presentation to Parliament in time for the Budget Debate

PRIORITY POLICY/PROGRAMME ISSUES	OBJECTIVES	STRATEGIES	PERFORMANCE MEASURES / OUTPUT INDICATORS	MAJOR TASKS, TARGETS, RESOURCES AND COST		
				YEAR 1 (2017-2018) *Budgeted cost 33,748,,866*	YEAR 2 (2018-2019) *Projected Cost 52,857,259*	YEAR 3 (2019-2020) *Projected cost 55,742,494*
	To lead the strategic planning processes of the Ministry through the alignment of policies and programmes and effective monitoring and evaluation towards achieving desired outcomes.	Conduct environmental scanning and stakeholder analysis. Determine the ministry's priority policies and programmes and ensure alignment with the National Development Plan and Medium Term Strategic Priorities of the GOJ. Identify the cross-cutting initiatives across the public sector and define the ministry's role towards achieving the desired outcome Develop monitoring & evaluation plan to track performance of policy, programmes and projects	The Ministry's Operational and Strategic Business plans are completed and submitted to Cabinet and the Ministry of Finance in the stipulated time. Operational and Strategic Business plans for the Ministry's agencies are received in agreed time. The annual reports of the Ministry's agencies are received, the required Cabinet Notes prepared and submitted to Cabinet and the reports submitted to Parliament. Ministry-wide biannual strategic and operational planning sessions held. Research aimed at facilitating evidence-based policy and policy revision. Annual divisional budgets, Strategic 3-Year Plans, Corporate Plans and individual work plans are completed. Quarterly Operational Plan Review Meetings convened with each agency and division within the Ministry.	Ministry's Operational and Strategic Business plans are completed and submitted to Cabinet and the Ministry of Finance. Quarterly Operational Plan Review Meetings convened with each agency and division within the Ministry. The agencies' annual reports are reviewed, and the required Cabinet Notes prepared and dispatched. Annual divisional budgets, Strategic 3-Year Plans, Corporate Plans and individual work plans are completed. Ministry-wide biannual strategic and operational planning sessions held. Individual work plans are monitored and revised to achieve at least an 85% completion rate. Annual performance evaluations for staff members completed.	Ministry's Operational and Strategic Business plans are completed and submitted to Cabinet and the Ministry of Finance. Quarterly Operational Plan Review Meetings convened with each agency and division within the Ministry. The agencies' annual reports are reviewed, and the required Cabinet Notes prepared and dispatched. Evidence-based policy and policy revision driven by research prepared. Annual divisional budgets, Strategic 4-Year Plans, Corporate Plans and individual work plans are completed. Ministry-wide biannual strategic and operational planning sessions held. Individual work plans monitored and revised to achieve at least an 85% completion rate. Individual work plans monitored and revised to achieve at least an 85% completion rate.	Ministry's Operational and Strategic Business plans are completed and submitted to Cabinet and the Ministry of Finance. Quarterly Operational Plan Review Meetings convened with each agency and division within the Ministry. The agencies' annual reports are reviewed, and the required Cabinet Notes prepared and dispatched. Evidence-based policy and policy revision driven by research prepared. Annual divisional budgets, Strategic 4-Year Plans, Corporate Plans and individual work plans are completed. Ministry-wide biannual strategic and operational planning sessions held. Individual work plans monitored and revised to achieve at least an 85% completion rate. Liaise with Divisions, Departments & Agencies (DDAs) to submit quarterly performance reports to the Ministry.

PRIORITY POLICY/PROGRAMME ISSUES	OBJECTIVES	STRATEGIES	PERFORMANCE MEASURES / OUTPUT INDICATORS	MAJOR TASKS, TARGETS, RESOURCES AND COST		
				YEAR 1 (2017-2018) *Budgeted cost 33,748,,866*	YEAR 2 (2018-2019) *Projected Cost 52,857,259*	YEAR 3 (2019-2020) *Projected cost 55,742,494*
			Quarterly Performance reports compiled and submitted to the relevant authourities in agreed time Individual work plans are monitored and revised to achieve at least an 85% completion rate. Annual performance evaluations for staff members completed as per the HRMA Division's dictates	Liaise with Divisions, Departments & Agencies (DDAs) to submit quarterly performance reports to the Ministry. Conduct analysis of quarterly reports from DDAs and prepare the Ministry's quarterly performance report. Contribute to the compilation of Minister's Budget Debate speech.	Liaise with Divisions, Departments & Agencies (DDAs) to submit quarterly performance reports to the Ministry. Conduct analysis of quarterly reports from DDAs and prepare the Ministry's quarterly performance report Division's staff annual performance evaluation completed. Contribute to the compilation of Minister's Budget Debate speech.	Conduct analysis of quarterly reports from DDAs and prepare the Ministry's quarterly performance report. Division's staff annual performance evaluation completed. Contribute to the compilation of Minister's Budget Debate speech.

PRIORITY POLICY/PROGRAMME ISSUES	OBJECTIVES	STRATEGIES	PERFORMANCE MEASURES / OUTPUT INDICATORS	MAJOR TASKS, TARGETS, RESOURCES AND COST		
				YEAR 1 (2017-2018) *Budgeted cost 33,748,,866*	YEAR 2 (2018-2019) *Projected Cost 52,857,259*	YEAR 3 (2019-2020) *Projected cost 55,742,494*
	To develop research programmes and proposal that will inform effective policy development and strategic planning towards achieving desired outcomes.	Conduct stakeholder analysis to determine research needs. Increase the use of research in fulfilling the objectives of operational / strategic planning and Policy development Conduct necessary statistical analysis to provide empirical data to strengthen research program Encourage sensitization and capacity development towards improving the environment for research Keep the research team abreast of the status, plans and issues faced by each division, department & agency in MSET Review draft policy papers and conduct contextual research, including obstacles and opportunities to implementation.	Improved quality assurance testing and surveys, with appropriate reporting Strengthened research agenda for the MSET Research Proposals that is geared towards better policy development and strategic planning completed in agreed time Survey reports, statistical analysis and research findings that are accurate and beneficial Improvement in the technical capability of the research team in data analysis Reports on research findings complied and presented in agreed timeframe	Send official communication to Ministry departments and agencies for research availability and requirements Conduct short presentations / communications to relevant stakeholders with practical examples of how research can improve input and output Assess the best statistical packages and other research instruments applicable to research projects for MSET Review annual reports for Ministry's Departments and Agencies Provide technical support in research as needed. Assist with the development of the National Science Research Agenda Conduct research as requested to facilitate management decision making	Provide supporting research and data for policy and regulatory framework strengthening Provide technical assistance to Ministry departments and agencies as needed to support the development of funding, policy and project proposals Assist the Post and Telecommunication Department (PTD), in conducting their quality assurance tests and surveys Conduct a comprehensive survey on the usage, deterrents, and most desired improvements of the Jamaica Post Develop research proposal towards conducting a national science survey	Conduct National Science survey Develop research proposal towards conducting a national energy survey (Impact of renewable energy interventions on national development) Develop research proposal towards conducting a national technology survey Provide supporting research and data for policy and regulatory framework strengthening Provide technical assistance to Ministry departments and agencies as needed to support the development of funding, policy and project proposals
Implementation of the National Energy Policy	Facilitate the development of a modern, efficient, diversified and environmentally sustainable energy sector providing affordable and accessible energy supplies with long term energy security.	Develop sub policies and perform monitoring & evaluation through close alliance with the Petroleum Corporation of Jamaica (PCJ) Group of Companies, the National Energy Solutions Company (NESol), other public sector bodies, academia donors, professional bodies.	Proposed incentives to promote energy efficiency and energy conservation and the development of renewable energy are implemented by the Ministry of Finance and Planning (MOFP).	At least 4 stakeholder meetings held Consultation sessions held island wide	At least 4 stakeholder meetings held Coordinate the implementation of Energy from waste policy Draft Policy for Bio-fuels developed	Support the promulgation of the Energy from Waste Policy

PRIORITY POLICY/PROGRAMME ISSUES	OBJECTIVES	STRATEGIES	PERFORMANCE MEASURES / OUTPUT INDICATORS	MAJOR TASKS, TARGETS, RESOURCES AND COST		
				YEAR 1 (2017-2018) ***Budgeted cost 33,748,,866***	**YEAR 2 (2018-2019)** ***Projected Cost 52,857,259***	**YEAR 3 (2019-2020)** ***Projected cost 55,742,494***
		In partnership with stakeholders, complete studies and pilot projects on various issues necessary to facilitate the development of a biofuels industry in Jamaica.	Building-out of renewable energy technologies. Climate proofing of operations within the science and energy sectors. Local companies sign MOUs and commit resources to develop biofuels and increase their capacity to develop the biofuels sector.	Prepare Draft policy to support Energy from Waste Perform Policy analysis and assess the effectiveness of National Energy Policy Perform monitoring and evaluation to track performance of National Energy Policy	Perform Policy analysis and assess the effectiveness of National Energy Policy Perform monitoring and evaluation to track performance of National Energy Policy	Perform Policy analysis and assess the effectiveness of National Energy Policy Perform monitoring and evaluation to track performance of National Energy Policy
Active performance of focal point roles: Sustainable Development, Climate Change, Biodiversity, Environment Policy, Minamata Convention, World Heritage Site declaration, etc.	To develop and manage the sectorial strategies and actions, along with monitoring, evaluating and reporting on these strategies and actions.	Participation in meetings. Inter-ministry coordination of various treaty issues	Participation in various fora. Development of Ministry positions and intra-ministry facilitation documents specific to the various treaty and other issues. Collaboration with donor entities to obtain technical and financial support to effect the implementation of agreed treaty and other matters. Review of sustainable development policy and mechanisms, environmental policy, climate change mechanisms, etc.	Represent the Ministry at various fora to facilitate the incorporation of climate change adaptation, sustainable development, environmental management, world heritage site declaration, biodiversity, etc. into the strategic planning processes and execution of the Ministry's mandates. Work with donors to access climate funds to support implementation of programmes and projects crosscutting Science, Technology and energy sectors. Collaborate with other ministries and agencies on the implementation of treaty requirements within the	Represent the Ministry at various fora to facilitate the incorporation of climate change adaptation, sustainable development, environmental management, world heritage site declaration, biodiversity, etc. into the strategic planning processes and execution of the Ministry's mandates. Work with donors to access climate funds to support implementation of programmes and projects crosscutting Science, Technology and energy sectors. Collaborate with other ministries and agencies on the implementation of treaty requirements within the science and energy sectors.	Represent the Ministry at various fora to facilitate the incorporation of climate change adaptation, sustainable development, environmental management, world heritage site declaration, biodiversity, etc. into the strategic planning processes and execution of the Ministry's mandates. Work with donors to access climate funds to support implementation of programmes and projects crosscutting Science, Technology and energy sectors. Collaborate with other ministries and agencies on the implementation of treaty requirements within the science and energy sectors.

PRIORITY POLICY/PROGRAMME ISSUES	OBJECTIVES	STRATEGIES	PERFORMANCE MEASURES / OUTPUT INDICATORS	MAJOR TASKS, TARGETS, RESOURCES AND COST		
				YEAR 1 (2017-2018) ***Budgeted cost 33,748,,866***	**YEAR 2 (2018-2019)** ***Projected Cost 52,857,259***	**YEAR 3 (2019-2020)** ***Projected cost 55,742,494***
				science and energy sectors. Review of NEPA's Biogas, Coal-fired Plant, and other guidelines and documents.		
Implementation of the Information & Communication Technology Policy	To revise and promulgate an ICT policy that facilitates the modernization and Integration of the GOJ ICT systems and infrastructure.	Development of a mechanism to monitor ICT statistics and indicators as a reference for policy development and international ranking Alignment of the Ministry's strategic plan to support the implementation of the ICT Policy Conduct relevant research that guides the development, monitoring and evaluation of the ICT Policy	A Policy that provides for efficient spectrum planning, allocation and assignment in accordance with international best practices, protocols and standards A Policy that provides for the development of a modern postal services sector A policy that promotes the island wide deployment and uptake of high speed Internet An ICT Act that provides for a modern framework for licensing, regulation and the establishment of a single ICT Regulator Single ICT Regulator established	Conduct analysis of the existing ICT policy and support revision of the Policy Conduct targeted research to inform the progress of policy implementation Perform monitoring and evaluation to track performance of policy Liaise with the ICT Division to support the promulgation of the ICT Policy and sub-policies	Conduct analysis of the existing ICT policy and make recommendations Conduct targeted research to inform the progress of policy implementation Perform monitoring and evaluation to track performance of policy Liaise with the ICT Division to support the promulgation of the ICT Policy and sub-policies	Conduct analysis of the existing ICT policy and make recommendations Conduct targeted research to inform the progress of policy implementation Perform monitoring and evaluation to track performance of policy Liaise with the ICT Division to support the promulgation of the ICT Policy and sub-policies
Development and implementation of the Science Technology and Innovation (ST&I) Policy	To develop and implement a new ST&I Policy towards enabling a supporting environment for the integration of ST&I into	Liaise with the National Commission on Science and Technology (NCST) to support consultations with stakeholders in developing policy documents	Increased collaboration among and between S&T entities, socio-economic sectors locally and abroad	Execute targeted research and draft policy document in consultation with the NCST Coordinate and support the	Support the promulgation of the ST&I Policy. Perform Policy analysis and	Support the promulgation of the ST&I Policy. Perform Policy analysis and

PRIORITY POLICY/PROGRAMME ISSUES	OBJECTIVES	STRATEGIES	PERFORMANCE MEASURES / OUTPUT INDICATORS	MAJOR TASKS, TARGETS, RESOURCES AND COST		
				YEAR 1 (2017-2018) *Budgeted cost 33,748,,866*	YEAR 2 (2018-2019) *Projected Cost 52,857,259*	YEAR 3 (2019-2020) *Projected cost 55,742,494*
	national development	Coordinate the policy development processes and facilitate a collaborative approach in developing ST&I Policy. Conduct relevant research that guides the development, monitoring and evaluation of the ICT Policy	Concept Paper and position Paper developed Cabinet Submissions completed and submitted to Cabinet in agreed time frame Consultations held and relevant research completed ST&I Policy approved and implemented	preparation of cabinet submission and follow-up through to policy approval Coordinate public sensitization and communication of ST&I Policy	assess the effectiveness of new ST&I Policy Conduct monitoring and evaluation to track policy performance in relation to policy objectives	assess the effectiveness of new ST&I Policy Conduct monitoring and evaluation to track policy performance in relation to policy objectives

3.0 MEDIUM TERM FINANCIAL IMPLICATION

SUMMARY OF PROJECTED ANNUAL EXPENDITURE WITH PROJECTED ANNUAL INCREASE

TABLE 15: 2017-2020 BUDGET AND FORWARD ESTIMATES: MINISTRY AND AGENCIES

ITEM AND PROGRAMME	EXPENDITURE APRIL TO DECEMBER 2016	BUDGET APPROVED 2017/2018	FORWARD ESTIMATES 2018/2019	FORWARD ESTIMATES 2019/2020
MINISTRY				
Direction and Management	70,220,111.00	120,599,000.00	126,949,988.00	132,856,424.00
Financial Management and Accounting Services	30,337,356.00	44,813,000.00	41,865,984.00	42,224,886.00
Human Resource Management and Other Support Services	128,635,225.00	168,412,000.00	197,063,224.00	200,382,778.00
Administration of Internal Audit	10,501,699.00	19,669,000.00	26,940,772.00	27,200,955.00
Legal Services	6,918,575.00	14,285,088.00	12,375,085.00	12,894,909.00
Communication and Public Relations	3,828,992.00	9,911,027.00	10,537,376.00	9,589,517.00
Technology Administration	108,432,015.00	157,241,000.00	160,936,018.00	160,944,832.00
Policy Formulation, Monitoring and Evaluation	14,959,458.00	32,338,000.00	47,375,201.00	47,629,055.00
Technical and Economic Department: Energy Division	26,818,700.00	47,033,000.00	44,767,177.00	44,986,911.00
Government Energy Inspectorate (GEI)	92,440,271.00	130,969,000.00	154,091,996.00	158,655,004.00
Directorate of Communications	21,516,553.00	38,666,000.00	37,524,790.00	36,557,320.00
Membership Fees, Grants and Contributions	6,160,879.00	7,218,000.00	7,554,000.00	7,914,000.00
Cyber Incident Response Team (CIRT)	-	16,562,542.00	15,985,203.00	16,526,928.00
SUB-TOTAL RECURRENT (MINISTRY)	**520,769,834.00**	**807,716,655.00**	**883,966,814.00**	**898,363,519.00**
DEPARTMENTS AGENCIES/ PUBLIC BODIES				
E-Gov Jamaica Limited (e-GOV)	**1,196,304,423.00**	1,580,035,000.00	1,923,562,750.00	2,019,744,060.00
Board of Examiners (BOE)	**8,097,063.00**	11,742,000.00	12,016,858.00	12,276,567.00
National Energy Solutions Limited (NESOL)	**343,551,412.00**	486,920,000.00	877,860,000.00	938,708,000.00
E-Learning Jamaica Company Limited (E-LEARNING)	**86,461,645.00**	106,277,000.00	129,388,000.00	129,449,000.00
National Commission on Science and Technology (NCST)	**15,620,638.00**	20,045,887.00	20,045,887.00	20,045,887.00
Scientific Research Council (SRC)	**326,386,700.00**	482,893,000.00	481,038,510.00	529,141,990.00
International Centre for Environmental and Nuclear Sciences (**ICENS**)	58,760,535.00	80,441,000.00	82,622,610.00	89,529,630.00
Establishment of OLADE		7,089,000.00		
SUB-TOTAL DEPARTMENTS, AGENCIES, RECURRENT	**2,555,952,250.00**	**3,583,159,544.00**	**4,410,501,429.00**	**4,637,258,653.00**
LESS APPROPRIATIONS-IN-AID:				
i. OLADE		**6,450,000.00**		
ii. SRC		64,980,560.00	71,480,870.00	78,628,270.00
iii. NESOL		135,400,000.00	0.00	0.00
TOTAL RECURRENT	**2,555,952,250.00**	**3,376,328,984.00**	**4,339,020,559.00**	**4,558,630,383.00**
CAPITAL A				
E-LEARNING JAMAICA COMPANY LIMITED	-	700,000,000.00		
ENERGY EFFICIENCY & CONSERVATION PROJECT	182,336,405.00	251,881,000.00		
LESS APPROPRIATIONS-IN-AID		(700,000,000.00)		
TOTAL CAPITAL A	**182,336,405.00**	**251,881,000.00**	**0**	**0**
TOTAL CAPITAL B	**231,616,555.00**	**585,573,000.00**	**0.00**	**0**
TOTAL BUDGET	**2,969,905,210.00**	**4,213,782,984.00**	**4,339,020,559.00**	**4,558,630,383.00**

TABLE 16: LIST OF CAPITAL B PROJECTS AND BUDGET

NO.	NAME OF PROJECT	SOURCE OF FUNDING		TOTAL FUNDING (J$)	REMARKS
		CONSOLIDATED FUND (J$)	EXTERNAL FUND (J$)		
9353	Energy Security and Efficiency Enhancement Project	4,970,000.00	210,258,000.00	215,228,000.00	Supported by World Bank
9489	Upgrade to International Postal System	0.00	46.676,000.00	46,676,000.00	Funding support assumed by the GOJ
9400	OLADE Caribbean Sub-Regional Office	0.00	0.00	0.00	Supported by OLADE
9469	Youth Employment in Digital and Animation Industries	4,400,000.00	300,000,000.00	304,400,000.00	Supported by World Bank
9450	SRC - INVOCAB	1,950,000.00	17,319,000.00	19,269,000.00	Supported by the ACP
	TOTAL, $	**11,320,000.00**	**574,253,000.00**	**585,573,000.00**	

4.0 HUMAN RESOURCES CAPACITY PLAN

While cognizant of the country's current financial constraints, it is necessary that the Ministry obtains its required cadre of staff and continuously train and improve the capacity of its human resources so as to successfully address its mandate.

The Ministry's Human Resources Capacity Plan, which outlines its current and proposed staff complement, is outlined in Table 16. Compared with the current persons employed within the Ministry, the numbers are projected to increase to 249 persons at the end of the planning cycle in FY 2019/2020. This reflects an increase of 25% and is comprised of the existing 30 vacancies and forward projections up to 249 by 2019/2020. The projected increase is necessary to facilitate the effective implementation of our growing mandates.

It is very likely that the number of employees will decline by approximately 34% when the planned transformation and privatization of the GEI takes effect and the establishment of the Corporate Services Department in GoJ.

TABLE 16: HUMAN RESOURCES CAPACITY PLAN

UNITS, DIVISIONS OR PROJECTS	CURRENT STAFF COMPLEMENT 2016/2017	VACANCIES	PLANNED STAFF COMPLEMENT			
			2017/2018	2018/2019	2019/2020	COMMENTS
Corporate Services Division	52	5	57	57	57	
Finance and Accounts Division	20	1	21	21	21	
Internal Audit Unit	9	3	12	12	12	
Policy, Planning, Development and Evaluation Division	13	2	15	15	15	
Energy Division	14	3	17	**20**	**23**	**Due to ongoing restructuring in this Division, staff compliment may increase by 60%**
Communication & Public Relations Unit	3	0	7	7	7	
Information, Communication and Technology Division	5	3	8	**9**	**10**	**Due to ongoing restructuring in this Division, staff compliment may increase by 50%**
Legal Unit	2	0	2	2	2	
Executive Office	8	0	8	8	8	
Cyber Incidents Response Team (CIRT) Office	1	0	5	5	5	
Government Electrical Inspectorate (GEI) / Regulator (GER)	52	6	58	**58**	**58**	**GEI to be transition to GER resulting in significant reduction in staff**

UNITS, DIVISIONS OR PROJECTS	CURRENT STAFF COMPLEMENT 2016/2017	VACANCIES	PLANNED STAFF COMPLEMENT			
			2017/2018	2018/2019	2019/2020	COMMENTS
Chief Information Office	2	1	4	4	4	
Science Division	0	0	3	**3**	**3**	**Establishment of Science Division in progress**
National Commission on Science and Technology (NCST)	4	0	4	4	4	
Energy Security and Efficiency Enhancement Project	5	1	6	6	6	
Youth Employment in Digital Animation Industries Project	5	1	6	6	6	
Energy Efficiency and Conservation Project	5	3	8	**8**	**8**	**Project to be transferred to the PCJ effective April 1. 2017**
TOTAL	**199**	**30**	**241**	**245**	**249**	

5.0 DEPARTMENTS AND AGENCIES BUSINESS PLAN SUMMARIES

Summaries of the business plans for the Ministry's external departments and agencies whose budgets are funded through it are outlined below.

EXTERNAL DIVISIONS

5.1 GOVERNMENT ELECTRICAL INSPECTORATE (GEI) / GOVERNMENT ELECTRICAL REGULATOR (GER)

MISSION

i. To ensure that electrical installations island-wide are carried out in a manner consistent with the Jamaica Standards Regulations.
ii. To educate the society on the importance of having electrical installations inspected and certified.
iii. To monitor electrical installation practices with the aim of preventing loss of life and property as a result of electrical accidents.

MANDATE

i. Ensure that all electrical installations constructed in Jamaica comply with the Electric Lighting Law and the related regulations so that electrical systems can provide light and power without hazard to life and property.
ii. Physically inspect all new installations (industrial, commercial, and domestic) and certify them before they are connected to the power grid of the Jamaica Public Service Company Limited (JPSCo).
iii. Carry out periodic checks of old installations, including transmission and distribution lines and substations, and recommend modifications and improvements as necessary.
iv. Inspect and certify new installations by the JPSCo, electrical systems (transmission and distribution) and the National Energy Services Company Limited (NESOL).
v. Process, comment on, and approve all electrical designs submitted by consultants, contractors, developers and consumers.
vi. Investigate accidents relating to electricity and prepare reports to improve the safety of installations involved.
vii. Provide technical information to consultants, architects, electrical engineers, contractors, the police, fire officials and the general public.
viii. Monitor the performance of all licensed electricians and advise the Board of Examiners accordingly.
ix. Meet with technical committees of the Board of Examiners and the Bureau of Standards to deliberate on technical standards, materials, equipment and the preparation of new specifications.

STRATEGIC OUTCOMES

i. A current and competitive fee structure for electrical inspections results in an improved cash flow for the GEI and possibly providing it with the funding necessary to effect its modernization, transform it into a self-financing entity and removing it from the list of entities requiring financial support from the government.
ii. The implementation of a fee structure for petroleum inspections.
iii. Transformation of the GEI into a primarily regulatory entity and privatization of its inspectorate functions. This is intended to create an extremely efficient entity, reduce its call on the GOJ's budget, and make the electrical inspection task less onerous, less time consuming and more easily available.

STRATEGIC PRIORITIES

i. Conduct or facilitate 105,000 electrical inspections over the three-year planning cycle and aligned to transformation plan.
ii. Re-inspect 450 petroleum stations over the three year planning cycle.
iii. Reduce the backlog of electrical inspections by 85% by 2017.

MEDIUM TERM EXPENDITURE SUMMARY

TABLE 18: GOVERNMENT ELECTRICAL INSPECTORATE'S (GEI) MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTIONS

APPROVED BUDGET 2017/2018, J$	PROJECTIONS, J$		
	2018/2019	2019/2020	
130,969,000	154,091,996	158,655,004	

5.2 INTERNATIONAL CENTRE FOR ENVIRONMENT AND NUCLEAR SCIENCES (ICENS)

VISION

To be a centre of excellent and forward looking scientific research providing the data, information, expertise and methods needed to resolve present and future challenges to the environment, natural resource base and international competitiveness of Jamaica.

MISSION

To maintain a scientific information baseline and capabilities in interdisciplinary STI capabilities for enhancing the quality of life in Jamaica by guiding sustainable development of natural resources, remediation of the environment and the life systems and industries that it supports.

STRATEGIC DIRECTIONS

ICENS' strategic plans and priority programmes are set in a framework that mirrors international standards and bears relevance in their applicability to the Jamaican society. Also, the strategic research programmes and activities seek to target the most critical areas of the Jamaican economy.

Specific strategic directions are as follows:

i. ICENS integrates its diverse programmes within available budget to provide a central research, information and knowledge facility to better the lives of Jamaican people.

ii. Scientific data are made available and disseminated within Jamaica to demonstrate to all levels of society their use in resolving challenges related to environmental and natural resources.
iii. Continued collaborations and partnerships with various entities in the areas of R&D projects.
iv. Build national capacity to apply environmental research to everyday problem solving.
v. Continued development and upgrading of ICENS' physical and human capital, particularly in the areas of management and training.

STRATEGIC OUTCOMES

i. Research data help to resolve Jamaica's developmental challenges.
ii. New technologies developed and deployed quickly and effectively throughout the economy resulting in improved commercial activities, increased competitiveness of local businesses, increased wealth generation and employment opportunities.
iii. Improved understanding of the effects of selected trace metals on humans, plants and animals as a means to improve the health, nutrition and wellbeing of Jamaicans through better prevention and early detection of related diseases.
iv. Jamaican foods, in increasing quantities, meet health and export safety requirements.
v. Discovery of new natural resources, including water, minerals, biological resources and improved efficiency in their use.
vi. Jamaica's science infrastructure becomes more integrated and responsive and research programmes have a wider impact in terms of scale, quality, efficiency, effectiveness and time-frame.
vii. ICENS and Jamaica's R&D community achieve greater value at lower cost through sharing of research, support resources and infrastructure, including people, skills and equipment.
viii. Jamaica has an increased appreciation of the value of science and science-based solutions, which are widely employed throughout the economy.
ix. ICENS' work contributes to improved socio-economic development in Jamaica.

PLANTS AND FOOD COMPOSITION

i. Research priorities for the next four (4) years will be the determination of the heavy metal contents of Jamaican grown foods, their relationship with soil profiles and the possible health effects on the Jamaican population.
ii. Elements for priority attention will include arsenic, cadmium, lead and mercury and assessment of level of toxicity.

IMPORT SUBSTITUTION BY NEW MATERIALS

ICENS will carry out research with international partners to develop new materials from Jamaican industrial, agricultural and end of life electronic wastes as a means of substituting expensive imports and creating new SMEs and community-based job opportunities in the country. Specific research projects to be pursued include the following:

i. Formulate low-cost road repair and construction materials.
ii. Recycle banana plant fibres into low-cost eco-friendly packaging that can replace environmentally harmful polystyrene.
iii. Recover rare earth elements from discarded electronic equipment and devise new uses for bauxite red mud waste.

MEDIUM TERM EXPENDITURE SUMMARY

TABLE 19: ICENS' MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTIONS

APPROVED BUDGET 2017/2018, J$	PROJECTIONS, J$		
	2018/2019	2019/2020	
80,441,000.00	82,622,610.00	89,529,630.00	

5.3 EGOV JAMAICA LIMITED (EGOVJA)

eGov Jamaica Limited (eGovJa) is charged with the responsibility of implementing ICT solutions in Government MDAs to facilitate the achievement of business objectives and greater efficiency.

VISION
To be the reliable ICT solutions and services company dedicated to achieving excellence and transformational value to the GOJ.

MISSION
We exist to revolutionize the Government of Jamaica's interactions with its entities, citizenry and businesses through harnessing the power of ICT.

MANDATE AND VALUE STATEMENT
To lead the development and implementation of ICT strategies, frameworks and solutions for the Government of Jamaica to facilitate the achievement of business objectives and greater efficiency.

We are a visionary, customer-centric company that values integrity, accountability, effective communication, innovation, knowledge and respect.

STRATEGIC OUTCOMES
i. Creation of a common government-wide area network (GovNet) and communication and data backbone.
ii. National Portal.
iii. Benefits from software agreements.

THE STRATEGIC PLANS AND PRIORITY PROGRAMMES
i. Continuation of the GovNet Project.
ii. The launch of the National Portal *Jamaica.gov.jm* for the provision of information to access government services and to facilitate persons doing business in Jamaica.
iii. Pursue the introduction of FOSS.
iv. Review ICT procurement and projects to ensure that ICT projects are in line with GOJ priorities.

TABLE 20: eGOVJA'S MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTIONS

APPROVED BUDGET 2017/2018, J$	PROJECTIONS, J$		
	2018/2019	2019/2020	
1,580,035,000.00	1,923,562,750.00	2,019,744,060.00	

TABLE 21: HUMAN RESOURCE CAPACITY PLAN

CURRENT STAFF COMPLEMENT	PLANNED 2016/2017	PLANNED 2017/2018	PLANNED 2018/2019	PLANNED 2019-2020
226	276	301	326	326

5.4 SCIENTIFIC RESEARCH COUNCIL (SRC)

VISION

The Scientific Research Council, guided by quality management principles, is a centre of excellence that utilizes innovation, scientific and technical information and knowledge for transformation and sustainable development, positively impacting the quality of life of all Jamaicans.

MISSION

The Scientific Research Council (SRC) serves the productive sector, policy makers and the general public in order to enable sustainable growth and development in Jamaica by:

i. Providing quality scientific and technological solutions (product/process R&D, policy advice, technology transfer).
ii. Popularizing S&T through strategic alliances.
iii. Being Customer-focused, with innovative, competent and responsive teams.

STRATEGIC OUTCOMES

i. Established and maintained scientific information centre, which contributes to the propagation of scientific knowledge.
ii. The SRC's preparations and interventions contribute to improved competitiveness of individual businesses, increased value of exports, wealth and employment creation, and economic development.

STRATEGIC DIRECTION

i. Movement to value added interventions in S&T
ii. Focus on indigenous resources.
iii. Pursue economic linkages.
iv. Prioritize areas of energy, agro-processing, agri-business, innovation and ICT.

STRATEGIC PLANS AND PRIORITIES

i. Implementation of priority actions under the STI Roadmap.
ii. Maintain the Caribbean Climate Innovation Centre.
iii. Improve the Microbiology Laboratory
iv. Develop and implement "Waste Management Systems Business Plan"
v. Increase the use of the "Food Pilot Plant".

MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTIONS

TABLE 22: SRC MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTIONS

APPROVED BUDGET 2017/2018, J$	PROJECTIONS J$		
	2018/2019	2019/2020	
482,893,000.00	481,038,510.00	529,141,990.00	

5.5 NATIONAL COMMISSION ON SCIENCE AND TECHNOLOGY (NCST)

VISION

The Commission envision that Science, Technology and Innovation will be integral to Jamaica's social, environmental and economic welfare through well-established cross-sectoral linkages working within and organized, dynamic and responsive ST&I system

MISSION

To facilitate the formation of strategic partnerships towards advancing the implementation of the national science, technology and innovation (ST &I) policy and playing a fundamental role in the creation of wealth and improving the quality of life for Jamaicans.

STRATEGIC OUTCOMES

I. Build awareness of the relevance and importance of scientific and technological innovation in Jamaica's growth and development
II. Nurture Jamaica's sustainable development by creating an enabling environment which facilitates the building of its ST&I capacity

STRATEGIC PLANS AND PRIORITIES

i. Finalization of the new ST&I policy
ii. Pilot survey of Research and Development Indicators for Public and Private Sector
iii. Finalization of the proposed amendments to the Food and Drug Act, MoH for the regulation of nutraceutical products
iv. Facilitate the creation of a framework for modernizing the infrastructure and strengthening of scientific institutions
v. Public engagement on the role of ST&I and building awareness their relevance

MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTIONS

TABLE 23: NCST MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTIONS

APPROVED BUDGET 2017/2018, J$	PROJECTIONS J$		
	2018/2019	2019/2020	
20,046,000	29,225,341	29,276,141	

5.6 E-LEARNING JAMAICA COMPANY LIMITED (E-LJAM)

VISION

To transform national learning outcomes using ICTs

MISSION

i. To facilitate the development of a knowledge-based society by using ICT methodologies.
ii. e-LJam is committed to using indigenous Jamaican ICT solutions of world class standards.

STRATEGIC OUTCOMES

i. Development of a comprehensive set of standard ICT-based instructional materials for teachers and students in eleven (11) subject areas.
ii. Widespread availability of the technology and infrastructure for data storage, dissemination and access through the provision of ICT equipment and software to schools along with the establishment of a central repository for educational materials to store and reproduce, update and distribute material.
iii. The training of teachers in ICT across the educational system results in significantly improved instructional capacity and improved student performance across the education system.
iv. Standard examination assessment across grades 7-9.
v. The provision of remedial support to students results in marked improvements in student performance in all areas of the education system.

STRATEGIC PRIORITIES

i. promotion and the integration of technology in the education system
ii. Continued building out of CAPs.
iii. Island-wide implementation of the Tablets in School project, post evaluation of the pilot project.

MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTIONS

TABLE 23: E-LJAM'S MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTIONS

APPROVED BUDGET 2017/2018, J$	PROJECTIONS, J$		
	2018/2019	2019/2020	
106,277,000.00	129,388,000.00	129,449,000.00	

5.7 POST AND TELECOMMUNICATIONS DEPARTMENT (PTD)

MANDATE

The Post and Telecommunications Department (PTD) is responsible for Jamaica's postal service and is comprised of a network of post offices and postal agencies across the country. The Postal Corporation of Jamaica was established in 2000 to commercialize and modernize the PTD.

STRATEGIC OUTCOMES

i. The modernisation of the postal services.
ii. Introduction of new market driven products and services.
iii. Increased competitiveness of the PTD.

STRATEGIC PRIORITIES

i. Repeal and replace Post Office Act with a Postal Services Act.
ii. Transition from a Central Government Department to a fully corporatized entity.
iii. Increased application of ICT, including automated postal counters and CAPs.
v. Establish a local area network.
vi. Establish a full track and trace system.

MEDIUM TERM EXPENDITURE SUMMARY

TABLE 24: PTD'S MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTIONS

APPROVED BUDGET 2017/2018 (J$)	PROJECTIONS (J$)		
	2018/2019	2019/2020	
1,560,151,000.00	1,710,699,410.00	1,864,662,357.00	

The PTD's current and projected staff complement is outlined in Table 18.

TABLE 25: PTD'S CURRENT AND PLANNED STAFF COMPLEMENT

CURRENT STAFF COMPLEMENT	PLANNED			
	2017– 2018	2018 – 2019	2019 -2020	
1916	1887	1887	1887	

5.8 NATIONAL ENERGY SOLUTIONS LIMITED (NESOL)

MISSION

To contribute to the economic growth and development of the country by providing affordable access to electricity island-wide and regularizing urban electrification.

MANDATE

The construction of electrical distribution pole lines in non-electrified areas and the provision of house wiring assistance through affordable loan programmes to householders who would be given access to electricity service from the newly erected electricity lines. Additionally, REP offers house-wiring assistance to needy householders in already electrified areas through a revolving fund programme.

STRATEGIC OUTCOMES

i. Transform REP into a major renewable energy solutions provider.
ii. House wiring to be provided to over 2,050 houses in 2016-2017, and over 8,000 houses wired during the 2016-2020 period.
iii. Pole Line Extensions expanded in more rural communities

STRATEGIC PRIORITIES

i. Public positioning of NESOL through aggressive search for business opportunities and public awareness.
ii. Diversification of services into renewables.
iii. Expansion of electrification services in rural communities and poor urban communities.
iv. Complete 15 km of pole line extensions in 2017-2018.

MEDIUM TERM EXPENDITURE SUMMARY

Owing to the proposed rebranding of this entity, the annual growth in its medium term expenditure is likely to be slightly higher than that of other entities within the ministry. I

TABLE 26: NATIONAL ENERGY SOLUTIONS LIMITED'S (NESOL) MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTED INCREASE

APPROVED BUDGET 2017/2018, J$	PROJECTIONS, J$		
	2018/2019	2019/2020	
486,920,000.00	877,860,000.00	938,708,000.00	

5.9 BOARD OF EXAMINERS

VISION STATEMENT
To modernize, regulate the electrical installation industry of Jamaica through the granting and renewing of electrical licence.

MISSION STATEMENT
To establish a licensing authority, that will prepare a cadre of professional licensing electricians who are capable of been certified to national, regional and international standards."

BOARD OF EXAMINERS

TABLE 27: BOARD OF EXAMINERS' (BOE) MEDIUM TERM EXPENDITURE SUMMARY WITH 3 YEAR PROJECTED INCREASE

APPROVED BUDGET 2017/2018, J$	PROJECTIONS, J$		
	2018/2019	2019/2020	
11,742,000.00	12,016,858.00	12,276,567.00	

6.0 LIST OF PUBLIC SECTOR ENTERPRISES (SELF-FINANCED PUBLIC BODIES)

There are ten (10) self-financing public bodies within the Ministry. Basic information on each entity is outlined in Table 28.

TABLE 28: LIST OF PUBLIC SECTOR ENTERPRISES (SELF-FINANCED PUBLIC BODIES)

NAME OF ENTITY	PURPOSE	CEO	CONTACT	INCOME ($'000)			EXPENDITURE ($'000)			FUNDING ($'000)		
				YR1	YR2	YR3	YR1	YR2	YR3	YR1	YR2	YR3
TECHNOLOGY												
Spectrum Management Authority Limited (SMA)	To ensure the efficient management of Jamaica's radio frequency spectrum in keeping with international best practices.	Dr. David McBean	13-19 Harbour Street Kgn. Tel: 92-28884 dmcbean@sma.gov.jm	353,726,178 (Interest income, regulatory and processing fees)	359,933,802 (Interest income, regulatory and processing fees)	363,831,062 (Interest income, regulatory and processing fees)	Recurrent 302,940,000 Non-operating ExP.: 50,400.000	Recurrent 308,120,000 Non-operating ExP.: 50,400.000	Recurrent: 312,800,000 Non-operating ExP.: 50,400.000	Interest income, regulatory and processing fees Remit to Consolidated Fund: 1,160,490	Interest income, regulatory and processing fees Remit to Consolidated Fund: 1,160,490	Interest income, regulatory and processing fees Remit to Consolidated Fund: 1,160,490
Universal Service Fund Limited (USF)	To facilitate the provision of universal access by the deployment of high capacity networks.	Ms. Suzette Buchanan (Acting)	36 Trafalgar Road Kgn. 10 Tel: 926-1727 esimms@usf.gov.jm							Consolidated Fund: 1,700,000	Consolidated Fund: 2,200,000	Consolidated Fund: 2,180,000
Postal Corporation of Jamaica (PostalCorp)	To commercialize and modernize the postal service.	Mr. Michael Gentles	Central Sorting Office South Camp Road Kingston 4 pmgoffice@jamaicapost.gov.jm mgentles_jmpost@hotmail.com									
ENERGY												
Petroleum Corporation of Jamaica (PCJ)	To undertake the development and promotion of Jamaica's energy resources.	Mr. Winston Watson	36 Trafalgar Road, Kgn. 10 Tel: 929-5380 winston.watson@pcj.com	$2.23 billion	$2.55 billion	$2.77 billion	$1.68 billion	&1.92 billion	$2.10 billion	Commissions, rent and interest income	Commissions, rent and interest income	Commissions, rent and interest income

NAME OF ENTITY	PURPOSE	CEO	CONTACT	INCOME ($'000)			EXPENDITURE ($'000)			FUNDING ($'000)		
				YR1	YR2	YR3	YR1	YR2	YR3	YR1	YR2	YR3
Petrojam Limited	To refine and supply petroleum products at internationally competitive prices and quality, acting in the best interest of Jamaica.	Mr. Winston Watson	96 Marcus Garvey Drive, Kgn. Tel: 923-8611 wlw@petrojam.com	Refinery Gross Margin US$80.96 million	Refinery Gross Margin US$90.25million	US$101.56 million	US$65.14 million	US$67.7million	US$69.26 million	Profits Management fees Rental revenues Commissions	Profits Management fees Rental revenues Commissions	Profits Management fees Rental revenues Commissions
Petrojam Ethanol Limited (PEL)	To produce, export and sell ethanol.	Dr. Audley Darmond	96 Marcus Garvey Drive Tel: 934-6682 ron@petrojam.com				138,153			Profits and inventories	Profits and inventories	Profits and inventories
Wigton Windfarm Limited (WWL)	To provide and or facilitate increased wind power and other renewable technologies to generate electricity, thereby diversifying Jamaica's energy mix.	Mr. Earl Barrett	36 Trafalgar Road Kgn. 10 Tel: 960-3994 Earl.barrett@wwfja.com							Profits	Profits	Profits

TABLE 29: LIST OF PUBLIC SECTOR ENTERPRISES FINANCED THROUGH THE CENTRAL GOVERNMENT'S BUDGET

NAME OF ENTITY	PURPOSE	CEO	CONTACT	INCOME ($000)			EXPENDITURE ($000)			FUNDING ($000)		
				YR1	YR2	YR3	YR1	YR2	YR3	YR1	YR2	YR3
National Commission on Science and Technology (NCST)			Prof. Errol Morrison 36 Trafalgar Road Kingston 10				60,113	60,113	60,113			
eGov Jamaica Limited	To revolutionize the Government of Jamaica's interactions with its entities, citizenry and businesses through harnessing the power of ICT.	Mr Morris Barnes (Acting)	235B Old Hope Road Kingston 6 Jamaica, W.I. hathias@egovja.com				1.89 B	2.082 B	2.291 B			
E-Learning Jamaica Company Limited	To facilitate web-based learning, computer-based learning and virtual classrooms utilizing information and communications technology.	Ms. Avril Crawford	36 Trafalgar Road Kingston 10 Tel: 929-4044 Avril.crawford@e-ljam.net				1.4 billion Recurrent 107,083	Recurrent 114,961	Recurrent 123,362	Universal Service Fund	Universal Service Fund	Universal Service Fund

NAME OF ENTITY	PURPOSE	CEO	CONTACT	INCOME ($000)			EXPENDITURE ($000)			FUNDING ($000)		
				YR1	YR2	YR3	YR1	YR2	YR3	YR1	YR2	YR3
Post and Telecommunications Department (PTD)	To provide efficient and cost effective postal and related services to its customers.	Mr. Michael Gentles	Central Sorting Office South Camp Road Kingston 4 mgentles_jmpost@hotmail.com pmgoffice@jamaicapost.gov.jm				116,992	126,535	135,024			
Government Electrical Regulator (GER)	To ensure that electrical installations in the country are safe and effected consistent with the Jamaica Standards Regulations.	Mr. Solomon Burchell	18 Parkington Plaza Kgn. 10 Tel:929-4070-3 gei@cwjamaica.com				152,424	143,040	145,257			
Scientific Research Council (SRC)	To foster the development of scientific research for the benefit of all of Jamaica.	Dr. Cliff Riley	Old Hope Road Hope Gardens Kgn. 6 Tel : 702-4025 hawthornew@src-jamaica.org	69,855	69,855	69,855	376,711	397,235	426,116			
International Centre for Environmental and Nuclear Sciences (ICENS)	To enhance the quality of life in Jamaica by maintaining: an accessible scientific information baseline for the environment; interdisciplinary STI capabilities; chemical analysis of environmental media and foodstuff using nuclear and atomic spectroscopy.	Mr. Charles Grant	University of the West Indies Tel:927-1777 charles.grant@uwimona.edu.jm				75,492	75,937	81,937	Subvention / grant funding		
National Energy Solutions Limited (NESOL)	To expand electricity supply to rural communities to assist in regularizing urban supplies and to facilitate the increased use of renewable source of energy.	Ms. Carolyn Warren (Acting)	113 Washington Boulevard Kingston. 20 Tel: 933-0631 gdaley@rep.gov.jm	29,700	29,700	29,700	500,548	477,261	490,791	GOJ: 470,848 AIA: 29,700	GOJ-440,250 AIA 70,350	GOJ: 420,100 AIA: 120,700
Board of Examiners (BoE)	To licence electricians, renew licence and revoke licences where electricians operate contrary to the laws.	Mr. Oswall Williams-Chairman	113 Washington Boulevard Kingston 20 Tel: 934-6496 boelicence@cwjamaica.com	450,000	1,120,000	1,510,000	11,580	11,832	12,056	Subvention from the MOF through the MSTEM.		

APPENDICES

APPENDIX A: RISK MANAGEMENT MATRIX

PROGRAMME/PROJECT/ POLICY INITIATIVE	RISKS	IMPACT	PROBA-BILITY	MITIGATING MEASURE/RESPONSE	2017/2018	2018/2019	2019/2020
Refinery Upgrade Project.	Financing Divestment	Negative: This has resulted in delays in implementation and increases in project cost. Positive: if the new owners provide the resources to effect the upgrade. Negative implications for the PetroCaribe Agreement with further negative implications for balance of trade and other macro-economic issues, especially if the new owners are not the Venezuelans: Alternative fuel supplier Loss of market share and reduction sales and profitability	100%	**Avoidance** -			
				Reduction – Discussions with Venezuela on alternative financing options	Secured Financing and expedited phase implementation		
				Sharing -	Cost of the upgrade to be shared among equity partners		
				Acceptance -			
				Reduction -			
				Sharing -			
				Acceptance - No action is taken			
Oil and Gas Exploration	Legal Financial	Lack of clarity on legal requirements and tariff structures for exploration and development of oil and gas sector. Unavailability of financing has delayed the development of the sector.	Medium	**Avoidance** -			
				Reduction – Development of Regulations is necessary to attract investment and for procedures.			
				Sharing -			
				Acceptance -			
				Reduction – Address concerns of stakeholders and their expectations			
				Sharing -			
				Acceptance -			
Tablets in Schools Project.	Stakeholders Suppliers Financial Procurement	Procurement mechanisms may delay the project's implementation	High	**Avoidance** – Update implementation plan and collaborate with the MOFP and USF on developing the procurement plan to mitigate risks.			
				Reduction - Address concerns of			

PROGRAMME/PROJECT/ POLICY INITIATIVE	RISKS	IMPACT	PROBA-BILITY	MITIGATING MEASURE/RESPONSE	2017/2018	2018/2019	2019/2020
				stakeholders and manage expectations through training and sensitization.			
				Sharing -			
				Acceptance -			
FOSS Policy.	Stakeholder buy-in Funding Implementation & project management deficit	Continued unnecessary expenditure on some licensed software. Lack of innovation in software use and development. Delays in implementation	High High medium	**Reduction** – Promote awareness and benefits of FOSS. **Reduction** – Strengthen monitoring and evaluation			
Rural Electrification Programme.	Funding Project Management	Limited availability of electricity to rural communities. Limited socio-economic activities in said communities.	High	**Reduction:** Secure funding to accelerate projects. Project Management and RE Systems training.			
150 MW Renewable Energy Project	Low participation in Office of Utilities Regulation (OUR) tender process. Evaluation delays by the OUR.	Low participation for firm capacity. Delay in announcing the award of generation licences by MSTEM. Delay in building-out RE capacity.	High	**Reduction:** Provide greater clarity in the RFP on the framework (including tariffs and incentives particularly for firm capacity RE).			
Energy Security and Efficiency Enhancement Programme.	Foreign Exchange Insufficient fiscal space. Inability to	Currency depreciation will increase the DBJ's financial exposure. Very high demand may oversubscribe the pool of loan funds.	High	**Transfer:** Clarify the operational framework for the disbursement of funds between the MOFP and DBJ. **Reduction:** Recruit required staff and technical assistance to accelerate			

PROGRAMME/PROJECT/ POLICY INITIATIVE	RISKS	IMPACT	PROBA-BILITY	MITIGATING MEASURE/RESPONSE	2017/2018	2018/2019	2019/2020
	attract or retain qualified staff Delay of project deliverables	Variation on project expenditure/increase cost	high	project deployment and improve programme planning and management. Employ better project monitoring and control			
Energy Efficiency and Conservation Programme.	Delay in project deliverables. Insufficient fiscal space. Inability to attract or retain qualified staff	Delay in programme deployment and completion. Increased cost of project administration. Inability to meet targets and realize full cost benefit of the programme.	High	**Reduction:** Recruit required staff and technical assistance to accelerate project deployment and improve programme planning and management.			
Establishment of Government Network Infrastructure (GovNet).	Funding	Delay to the pending improvement in the GOJ ICT Infrastructure	high	Seek donor funding where necessary and liaise closely with MOFP			
Low-Carbon Energy Road Maps for Small Island States in the Caribbean.	Funding	Slow development of low carbon development strategies. Vulnerability.	High				
Enhancing the ICT Regulatory Environment.	Funding Speed of delivery (consultant)	Reduced investment in the ICT and related sectors of the economy.	High	Early and constant consultations with stakeholders, including the CPC. Ensure consultants deliver agreed assignment on time and within budget.			
Transformation and privatization of the GEI.	Funding Speed of completion	Unavailability of funds delays the transformation and proposed privatization.	High	Scheduled discussions with the Ministry of Finance regarding the need to fund this project as planned.			
Energy Sector –Sub Policies	Information may become dated	Delay in policy implementation and investments through uncertainty	Medium	Schedule meetings with stakeholders to finalise and submit policies			

APPENDIX B: LEGISLATIVE PROGRAMME 2017 – 2020

NO	NAME OF LEGISLATION	PURPOSE OF LEGISLATION	PRIORITY
1.	The Data Protection Act	The Act will provide for the protection of privacy of individuals in relation to personal data and regulate the collection, processing, storage, use and disclosure of personal data.	High
2.	Information and Communications Technology Act (Telecommunications Act Repeal)	To provide the ICT sector with an adequate legislative and regulatory framework which addresses: • the establishment of a single stand-alone ICT Regulator • current trends and emerging technologies • competitiveness • consumer protection	High
3.	Postal Services Act [Post Office Act (Repeal)]	Review of the Post Office Act and other legislation with a view to aligning same with policy initiatives to licence and regulate all operators providing postal services.	Medium
4.	The Electricity (Electric Power Wheeling) Regulations The Electricity (Net Billing) Regulations	These Regulations are being done pursuant to the powers conferred on the Minister with responsibility for energy under the Electricity Act 2015. The aim is to promulgate Regulations which treat with net billing, wheeling and auxiliary connections with the Jamaica Public Service Company Limited.	High
5.	The Electricity (Electrical Work, Registration and Licensing) Regulations Resolution.	These Regulations aim to establish the office of the Government Electrical Regulator and to address matters dealing with inspection of premises including but not limited to: 1. Appointment of inspectors 2. Registration of electricians 3. Conduct of inspections and certifications 4. Electrical installations	
1.			
2.	The Petroleum (Quality Control) Act	• To review and amend the current licensing mechanisms and penalties associated with the Act, to ensure appropriate enforcement of safety standards for the petroleum sector; • To provide for appropriate charges for the inspection of petroleum facilities; • To establish standards and regulations for the introduction of low sulphur and ultra-low sulphur diesel; and • To establish standards and regulations for biodiesel.	High

APPENDIX C: PROCUREMENT PLAN FOR FINANCIAL YEARS 2017 – 2020

REF. NO.	DESCRIPTION	UNIT OF MEASURE	QUANTITY	ESTIMATED BUDGET & FUNDING SOURCE					PRE-QUALIFICATION	PROCUREMENT METHOD	ESTIMATED DATES			STATUS & COMMENTS
				GOJ	EXTERNAL FUNDING		SELF-FINANCED	TOTAL	YES / NO		PUBLICATION	AWARD	START	
					LOANS	GRANTS								
	1. GOODS													
	Stationery Supplies			Yes				3,438,539.00	No	LT	n/a	n/a	Qtrs. 1- 4	
	First Aid/ Pharmaceutical Items			Yes				40,667.00	No	LT	n/a	n/a	Qtrs. 1- 4	
	Cutleries			Yes				345,290.00	No	LT	n/a	n/a	Qtrs. 1- 4	
	Food and Drinks			Yes				1,608,162.00	No	LT	n/a	n/a	Qtrs. 1- 4	
	Office Furniture			Yes				746,000.00	No	LT	n/a	n/a	Qtrs. 1- 4	
	Cleaning Products			Yes				637,455.00	No	LT	n/a	n/a	Qtrs. 1- 4	
	Security Surveillance Systems		1	Yes				1,540,000.00	No	LT	Jun-16	Jul-16	Qtrs. 1-2	
	Computers: Laptops		3	Yes				385,000.00	No	LT	May-16	May-16	Qtr. 1	
	Computers: Desktops		12	Yes				1,584,000.00	No	LT	Oct-16	Nov-16	Qtr. 3	
	Motor Vehicle Purchases		3	Yes				6,000,000.00	No	LCB	Jul-16	Aug. 2016	Qtr. 2	
	2. WORKS								No					
	Office Renovations/Painting			Yes				7,000,000.00	No	LCB	Apr-16	May-16	Qtr. 1	

APPENDIX D: MONITORING AND EVALUATION PLANS

MSET – MONITORING PLAN 2017/20

Priority Policies, Programmes and Projects	Output Performance Indicator(s)	Baseline Data (2014/2015)	Departmental- level major tasks to realise the objective of the priority policy, programme or project	Monitoring Frequency (Toward the realisation of the objective of the priority policy, programme or project)						Monitoring Method(s)
				Year (2017/2018)		Year (2018/2019)		Year (2019/2020)		
				Target	Monitoring Timeline	Target	Monitoring Timeline	Target	Monitoring Timeline	
Diversification of Fuel Sources	# of alternative sustainable fuel sources available by 2020	0 infrastructure projects	Monitor the implementation of Liquefied Natural Gas (LNG) for power generation at the Old Harbour Power Plant for 190MW Development and implementation of Energy from Waste policy	Two (2) infrastructure projects by March 2018	Quarterly	Two (2) infrastructure projects by March 2019	Quarterly	one (1) infrastructure projects by March 2019	Quarterly	- Site visits (observation) - Project Manager's progress reports
	% of Renewable energy as part of the total energy mix	Renewable Energy (RE) constitutes 8% of the country's total energy mix at end of 2014/15	Monitor the implementation of a 33.1 MW Solar generating facility to be developed by Eight Rivers Energy Company	Eight Rivers Solar project projected to be 70% completed by March 2018	Quarterly	Eight Rivers Solar project projected to be 100% completed by October 2018	Quarterly	Eight Rivers Solar project projected to be commissioned by January 2019	Quarterly	- Site visits (observation) - Project Manager's progress reports
			Facilitate the OUR's issuance of Request for Proposal (RFP) for another 150 MW of renewables	OUR Placement of RFP by October 2017	Quarterly	One (1) new approval for RE Development project by March 2018	Quarterly	One (1) new RE Development project completed by December 2019	Quarterly	- Site visits (observation) - Project Manager's progress reports -
Energy Efficiency and Conservation	Cumulative savings of KWh in the public sector	Cumulative energy savings of 841,725KWh as at March 2016	Monitor savings from existing energy efficiency retrofits to verify KWh savings and reduction in energy cost	Cumulative savings of approximately 6,000,000KWh by March 2018	Quarterly	Cumulative savings of approximately 7,500,000KWh by March 2019	Quarterly	Cumulative savings of approximately 9,000,000KWh by March 2020	Quarterly	- Conduct research to verify energy data - Project Manager's progress reports - statistical analysis

Priority Policies, Programmes and Projects	Output Performance Indicator(s)	Baseline Data (2014/2015)	Departmental- level major tasks to realise the objective of the priority policy, programme or project	Monitoring Frequency (Toward the realisation of the objective of the priority policy, programme or project)						Monitoring Method(s)
				Year (2017/2018)		Year (2018/2019)		Year (2019/2020)		
				Target	Monitoring Timeline	Target	Monitoring Timeline	Target	Monitoring Timeline	
	# of retrofits installed in Public sector building envelops	As at March 2016 a total of Forty (40) facilities retrofitted.	EE and conservation measures will be implemented with retrofitting done in government facilities	Energy efficiency retrofits completed in 12 Public Sector facilities at the end of March 2018	Quarterly	Energy efficiency retrofits completed in 30 Public Sector facilities at the end of March 2019	Quarterly	Energy efficiency retrofits completed in 73 Public Sector facilities at the end of March 2020	Quarterly	- Conduct research to verify energy data - Project Manager's progress reports - Site visits (observation
Improvement to the Legal and Regulatory Framework for the Information and Communications Technology Sector	# of ICT Legislations, policies and regulations developed and implemented		Development of : Spectrum Management Policy, Postal Services Policy, Cyber Security Strategy and Data Protection Act Establishment of Single ICT Regulator	Spectrum Policy and Data Protection developed by March 2018	Quarterly	Single ICT Regulator established by March 2019	Quarterly	Postal Services Policy developed and Cyber Security Strategy implemented by March 2020	Quarterly	- quarterly reports - Performance review meetings
Modernization of the Government of Jamaica ICT Infrastructure	# of ICT systems, policies, designs and standards developed and implemented		Development and implementation of GovNet Design	GovNet Design developed by March 2018	Quarterly					- Quarterly reports - Performance review meetings
			Development of e-Gov Policy guidelines and standards.			e-Gov Policy guidelines and standards developed by March 2019.	Quarterly			- Quarterly reports - Performance review meetings
			Open Data Policy implementation Development of FOSS Policy	Open Data Policy implemented by March 2018 FOSS Policy developed by March 2018	Quarterly Quarterly	Implementation of FOSS Policy by December 2018				- Quarterly reports - Performance review meetings - Quarterly reports - Performance review meetings
The Integration of Science and Technology in	STI Policy implemented and		Public engagement initiatives e.g. medal awards, science	Three Public engagement initiatives done	Quarterly	Six (6) Public engagement initiatives done	Quarterly	Six (6) Public engagement initiatives done	Quarterly	- Site visits (observation) - Project Manager's progress reports

Priority Policies, Programmes and Projects	Output Performance Indicator(s)	Baseline Data (2014/2015)	Departmental- level major tasks to realise the objective of the priority policy, programme or project	Monitoring Frequency (Toward the realisation of the objective of the priority policy, programme or project)						Monitoring Method(s)
				Year (2017/2018)		Year (2018/2019)		Year (2019/2020)		
				Target	Monitoring Timeline	Target	Monitoring Timeline	Target	Monitoring Timeline	
the Sustainable Development Agenda	promulgated Number of science interventions in schools		exhibitions, seminars etc. Execute implementation plan and M&E Science in Schools project and Strengthening of Science Clubs in schools	by December 2017 Three (3) Science interventions in schools by March 2018	Quarterly	by March 2019		by March 2020		

MSET – EVALUATION PLAN 2017/20

Priority Policies, Programmes and Projects	Goal(s)	Expected Outcome(s)	Evaluation Type (Frequency)	Planned Evaluation Completion Date (mm/yy)	Evaluation Method(s)	Entity Responsible for Evaluation
Diversification of Fuel Sources	▪ The DSF is aimed at facilitating the establishment of other sustainable energy sources such as LNG, Petcoke and Renewables by 2020. ▪ To increase the use of renewable energy sources in the energy generation mix to 15% of the country's total energy production by the year 2020	▪ Affordable and reliable energy supply to the Jamaican Citizens ▪ Reduction in BOE consumption and the National energy bill	*Mid-Term*	*December 2017*	*Survey* *Document review* *Focus groups* Statistical analysis Document review	*MSET*
Energy Efficiency and Conservation	▪ To provide energy efficiency and conservation opportunities with an estimated potential savings of approximately J$2.6 billion by 2020.	▪ Reduction in energy consumption in Public Sector entities and decrease in the national energy bill	*Mid-Term*	*March 2018*	Statistical analysis Document review Survey	*MSET*

Priority Policies, Programmes and Projects	Goal(s)	Expected Outcome(s)	Evaluation Type (Frequency)	Planned Evaluation Completion Date (mm/yy)	Evaluation Method(s)	Entity Responsible for Evaluation
	▪ To achieve 20% reduction in public sector electrical energy consumption by 2020					
Improvement to the Legal and Regulatory Framework for the Information and Communications Technology Sector	▪ To institute a modern legal and regulatory framework which employs a modern approach to regulation (including the establishment of a single regulatory body) by 2019 ▪ To provide for the protection of personal data and regulate the collection, processing, storage and disclosure of same by 2018	▪ Improved quality of services for consumers, increased investments and competition in the sector; *and increased* uptake of ICT services by Jamaicans. ▪ An enhanced legislative and regulatory framework the provides for the protection of citizens personal data	*Initial* *Mid-Term*	*October 2017* *March 2018*	Performance Reports Document review Survey	*MSET*
Modernization of the Government of Jamaica ICT Infrastructure	▪ To provide a secure wide area network 'backbone' communication infrastructure, which will connect Government Ministries Agencies, and Departments, to facilitate shared services and will reduce the government's annual ICT expenses by up to 30% when fully implemented	▪ This programme will provide an essential enabler for the implementation of joined-up government up and one and one stop, non-stop e-government services, and national portal.	*Mid-Term*	*February 2018*	Performance Reports Document review Survey	*MSET*
The Integration of Science and Technology in the Sustainable Development Agenda	▪ To improve the coordination and resourcing of ST& I sector, including the promotion of a possible development of a science technology and research park which will enhance research and attract foreign direct investments by 2020	▪ An improved Science Technology and Innovation policy framework that will promote investments and support the national development agenda.	*Initial* *Mid-Term*	*December 2017* *March 2018*	Performance Reports Document review Survey	*MSET*

APPENDIX E: INTERNAL AUDIT STRATEGIC PLAN 2017-2020

Dept. Division	Internal Audit
Vision	*To be recognized for excellence and professionalism in internal audit services and be seen as leaders in the implementation of continuous improvement in government stewardship and performance*
Mission	*The mission of the internal Audit Unit is to add value to the operations of the Ministry, its external divisions and portfolio agencies by promoting a controlled environment through open communication, professionalism, expertise and trust, while performing audit services of the highest standards.*
Ministry's Outcome Indicators	*Improved governance, overall efficiency and accountability in the Ministry of Science, Technology & Mining and its portfolio agencies* *Reduction in the level of Auditor General's queries and appearances before the Public Accounts Committee of Parliament*

Priority Policy	**Strategic Objectives**	**Strategies**	**Key Output**	**Performance Indicator/Targets**				**Cost ($M)**		
				Yr 1	**Yr 2**	**Yr 3**	**Yr 4**	**Yr 1**	**Yr 2**	**Yr 3**
	iii. Other statutory regulations	Reviewing and assessing the effectiveness of risk management, control and governance processes.	Risk assessment conducted for all audit reviews	Improved governance and efficiency 95% reduction in the level of Auditor General's queries and appearances before the PAC within the Ministry and external divisions and 85% within portfolio agencies Reports issued for at least 90% of audits conducted	Improved governance and efficiency 96% reduction in the level of Auditor General's queries and appearances before the PAC within the Ministry and external divisions and 90% within portfolio agencies Reports finalized/issued for at least 93% of audits conducted	Improved Governance and Efficiency. 98% reduction in the level of Auditor General's queries and appearances before the PAC Within the Ministry and external divisions and 95% within portfolio agencies Reports finalized/issued for at least 95% of audits conducted	Improved Governance and Efficiency. 99% reduction in the level of Auditor General's queries and appearances before the PAC Within the Ministry and external divisions and 97% within portfolio agencies Reports finalized/issued for at least 95% of audits conducted			
		Communicate findings and observations to relevant stakeholders in a timely manner.	Timely and accurate audit reports on all audited activities.	Increased level and quality of output.	Increased level and quality of output.	Increased level and quality of output.	Increased level and quality of output.			
	Strengthening the capacity of the Internal Audit Unit	Recruitment of qualified and competent personnel to fill vacant position	Increase staff compliment by at least one (1) vacant position							
Dept.	Internal Audit									

Division										
Vision	*To be recognized for excellence and professionalism in internal audit services and be seen as leaders in the implementation of continuous improvement in government stewardship and performance*									
Mission	*The mission of the internal Audit Unit is to add value to the operations of the Ministry, its external divisions and portfolio agencies by promoting a controlled environment through open communication, professionalism, expertise and trust, while performing audit services of the highest standards.*									
Ministry's Outcome Indicators	*Improved governance, overall efficiency and accountability in the Ministry of Science, Technology & Mining and its portfolio agencies* *Reduction in the level of Auditor General's queries and appearances before the Public Accounts Committee of Parliament*									
Priority Policy	**Strategic Objectives**	**Strategies**	**Key Output**	**Performance Indicator/Targets**				**Cost ($M)**		
				Yr 1	**Yr 2**	**Yr 3**	**Yr 4**	**Yr 1**	**Yr 2**	**Yr 3**
	Creating a cadre of highly skilled and competent staff	Identifying and exploring relevant training options and ensure training of all staff members. Continued Education through personal initiatives. Assess performance of unit through quality assurance and ongoing reviews.	All members of staff exposed to external and in house training. Certification in relevant qualification and training. Completion of quality assurance reviews. Performance appraisals conducted	100% staff participation in at least 2 external and/or in-house training courses. Periodic reviews in Conformance with IA Standards Performance appraisals done in a timely manner	100% staff participation in at least 2 external and/or in-house training courses Periodic reviews in Conformance with IA Standards. Performance appraisals done in a timely manner	80% participation in external training. 100% participation in-house training Periodic reviews in Conformance with IA Standards. Performance appraisals done in a timely manner	80% participation in external training. 100% participation in-house training At least one staff member qualified with relevant professional designation Periodic reviews in Conformance with IA Standards. Performance appraisals done in a timely manner			

APPENDIX F: STAKEHOLDER ANALYSIS 2017/16

Stakeholder's Perspective (What the stakeholder needs, wants and expects from the Ministry in undertaking its mission/mandate)						Organization's Perspective (What the Ministry needs, wants and expects from the Stakeholder to effectively undertake its mission/mandate)		
Stakeholder (Person, Group, Organization)	**Interests** (High or Low)	**Influence** (High or Low)	**Needs**	**Wants**	**Expectations**	**Needs**	**Wants**	**Expectations**
Jamaica Public Service Company Limited	high	High	The Electricity Act Electricity Power Sector Policy	More market share as a result of affordable electricity cost	A policy framework that creates an environment in which they can operate in a sustainable manner to maximize return on their investment	Energy Security and affordable energy	Greater buy-in on the electricity policy and Electricity Act.	JPS to continue operating in a sustainable manner providing reliable and affordable electricity to the country
Office of the Utilities Regulations (OUR)	high	high	Legislative and regulatory framework in which to operate	To have greater input in policy development and legislative process	Structured consultation and communication on legislative and policy matters	A regulatory environment for the efficient delivery of affordable utility services to all its customers	Buy-in on all legislative and policy requirements	To have a regulatory environment where all stakeholders are the beneficiaries of satisfactory and affordable utility services.
Multi-lateral development and financial organizations	high	high	Appropriate programmes and projects that meet the requirement for financial and technical support.	Greater recognition for their interventions	Successful execution and completion of projects that contribute to the country's development	Sustainable financial and technical support for specific programmes and projects that will assist in the achievement of the Ministry's mandate	Greater input in developing the terms and requirements for funding support	The Ministry's Priority Progammes and projects are adequately funded and supported towards achieving the desired outcomes.
Telecommunication/Internet Providers	low	high	Policy direction and an efficient process for granting of	Polices that allow for greater market share	A policy framework that creates an environment in which they can	Sustainable, efficient and affordable services that will contribute	Better communication as it relates to their operational	Improvement in service delivery and greater competition

			relevant licences		operate in a sustainable manner to maximize return on their investment	to growth and development	challenges and risk	
Jamaican Public	high	low	Improved service delivery in science, energy and technology that will contribute to self-empowerment.	Greater input in policy development	Science, Energy and Technology sectors that will provide quality service and provide opportunities for investment, growth and development.	To take advantage of the opportunities available in the science, energy and technology sectors	Greater buy-in on policies and programmes.	Sustainable development of businesses and improved standard of living as a result of capitalizing on the opportunities in the science, energy and technology sectors
Ministry of Finance	high	high	Fiscal prudence in budget execution and adherence to GOJ procedures and guidelines	More consultation in policy development	Timely financial reporting, full compliance and accountability	Adequate budgetary support for policies, programmes and projects	More timely sensitization on changed in policy, procedures and guidelines	Improved budgetary support and clarity in fiscal policy direction
Ministry of National Security	high	high	Cyber security policy and strategy to mitigate against cyber attacks	Policy responsibility equally shared	Comprehensive legislative and policy framework for enhancing cyber security.	Manpower and specific security expertise	Specific training in cyber security.	Effective partnership collaborating towards having a safer cyber space
Ministry of Justice	low	high	Timely submission of draft legislations	Quality draft legislations	Effective collaboration and follow-up to full legislation	Timely and effective review of draft legislations	Legal opinions	Efficient law revision process
Portfolio Agencies in the Ministry	high	high	Strategic policy direction and clear articulation of the major priorities for the science, energy and technology sector.	Greater degree of autonomy	Well defined policy and legislative framework for the science, energy and technology sector to facilitate achievement of their mandate	Implement programmes and projects towards achieving Energy source diversification, energy efficiency and energy	Greater buy-in on policy direction. Better communication and collaboration	Greater level of success towards achieving the goals of the National Energy Policy. More investment in ST&I and creation of jobs

						conservation. Programmes and projects to promote investments in ST&I. Programmes to improve the GOJ ICT infrastructure. Timely Reporting		A more integrated GOJ ICT infrastructure.
Staff of the Ministry	high	high	Employment and reasonable compensation. Required resources to perform job	Recognition and rewards	Sustainable job security and job satisfaction.	Result oriented performance.	Loyalty and commitment. Motivated work force	Achievement of work targets and adherence to policy and directives.

APPENDIX G: GLOSSARY FOR PERFORMANCE MONITORING AND EVALUATION SYSTEM

Accountability: The obligation to demonstrate and take responsibility both for the means used and the results achieved in light of agreed expectations.

Baseline: A clearly defined commencement point from which implementation begins and comparisons of improvement or decline with subsequently accumulated data can be made.

Benchmark: Reference point or standard against which performance or achievements can be assessed. A benchmark refers to the performance that has been achieved in the recent past by other comparable organisations, or what can be reasonably inferred to have been achieved in the circumstances.

Cost Effectiveness: The extent to which an organization, programme, policy or initiative is using the most appropriate and efficient means in achieving its expected results relative to alternative design and delivery approaches.

Effectiveness: The extent to which an organisation, policy, programmes or initiative is meeting its expected results.

Efficiency: The extent to which an organisation, policy, programmes or initiative produces outputs in relation to the resources used.

Evaluation: The systematic collection and analysis of evidence on the outcomes of programmes to make judgments about their relevance, performance and alternative ways to deliver them or to achieve the same results.

Expected Result: An outcome that a programme, policy or initiative is designed to produce.

External Evaluation: The evaluation of a development intervention conducted by entities and/or individuals outside the donor and implementing organizations.

Feedback: The transmission of findings generated through the evaluation process to parties for whom it is relevant and useful so as to facilitate learning. This may involve the collection and dissemination of findings, conclusions, recommendations and lessons from experience.

Goal: The higher-order objective or results to which a development intervention is intended to contribute.

GoJ's Performance Report: A government-wide performance report tabled annually in Parliament. This report provides parliamentarians and Jamaicans with a whole-of-government perspective from which to assess the performance of MDAs in the delivery of agreed plans, programmes and resource allocation and the achievement of results.

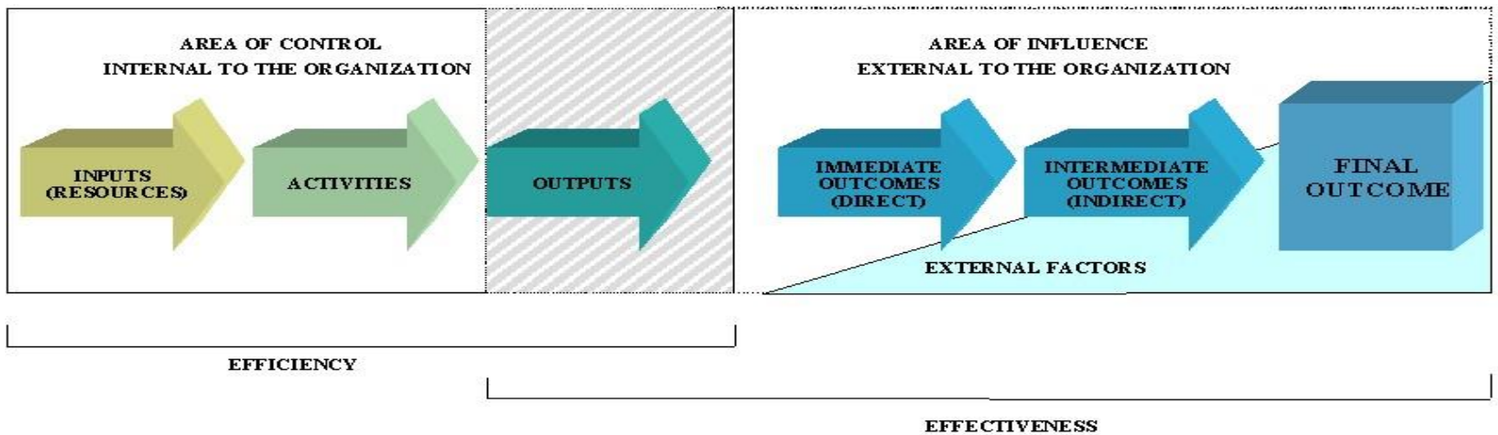
Governance: The processes and structures through which decision-making authority is exercised. Example, an effective governance structure ensures individuals or groups of individuals are responsible for setting policy directions, priorities, taking investment decisions, re-allocating resources and designing programmes.

Government Initiative: A priority outcome and the means to achieve it articulated by the Government. It may involve one or more Ministries, and one or more programmes.

Impacts: Positive and negative, primary and secondary long-term effects or changes produced by a development intervention, directly or indirectly, intended or unintended.

Indicators: Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a programme.

Lessons Learned: Generalizations based on evaluation experiences with projects, programmes, or policies that abstract from the specific circumstances to broader situations. Frequently, lessons highlight strengths or weaknesses in the preparation, design, and implementation that affect performance, outcome and impact.



Medium Term Expenditure Framework (MTEF): A tool which links plans and budgets over the medium term and help managers make decisions on how best to strategically allocate financial resources in line with government policy.

Mid-term Evaluation: Evaluation performed towards the middle of the period of implementation of the intervention.

Ministry Business Plans (MBP): The MBPs provide information on plans and expected performance over a three-year period. These reports are tabled in Parliament annually, after resource allocation deliberations. They include information on the department or agency's mission or mandate, strategic outcomes, strategies, plans and performance targets.

Ministry Performance Reports (MPR): The MPRs are tabled in Parliament four months after the end of the financial year. Their fundamental purpose is to present a report on results and accomplishments as established in the corresponding Ministry Business Plans (MBPs) in order to provide Parliamentarians with knowledge and understanding of the government's stewardship of public resources.

Mission: The fundamental purpose for the existence of an organisation which forms the baseline for effective business planning.

Monitoring or Performance Monitoring: An on-going activity that uses the systematic collection of data on specified indicators; to provide management with an indication of the extent to which physical and financial progress has been made on a planned programme, project or policy initiative.

National Outcome: The long-term and enduring benefits to citizens that more than one Ministry, Department or Agency are working to achieve.

Operational Planning: Operational planning is a subset of strategic work planning. It describes short-term ways of achieving milestones and explains how, or what portion of, a strategic plan will be put into operation during a given operational period.

Outcome: The likely or achieved medium-term effects of an intervention's outputs. (Related terms: result, outputs, impacts).

Output: The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.
Performance: The degree to which a development intervention or a development partner operates according to specific criteria/ guidelines or achieves results in accordance with stated goals or plans.

Performance Evaluation: An independent analysis undertaken at a fixed point in time to determine the degree to which stated objectives or results have been reached. This is generally used as a basis for decision making, including updating plans.

Performance Indicator: A variable that allows the verification of changes in the development intervention or shows results relative to what was planned. See p**erformance measure.**

Performance Measure: A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organisation, program, policy or initiative. Quantitative performance measures are composed of a number and a unit of measure. The number provides the magnitude (how much) and the unit gives the number its meaning (what). E.g. number of written complaints received.

Performance Monitoring: The on-going, systematic process of collecting, analysing and using performance information to assess and report on an organization's progress in meeting expected results and, if necessary, make adjustments to ensure these results are achieved.

Performance Monitoring and Evaluation System (PMES): A comprehensive framework that includes an inventory of activities, resources, results, performance measurement and governance information. PMES will provide a formal process through which the Government of Jamaica will be able to monitor and report on results; support the setting of broad strategic priorities and the reflection of these priorities in the plans of MDAs through the development of performance indicators and targets.

Performance Reporting: The process of communicating evidence-based performance information. Performance reporting supports decision-making, accountability and transparency.

Plans: The articulation of strategic choices, which provide information on how an organisation intends to achieve its priorities and associated results. Generally a plan will explain the logic behind the strategies chosen and should focus on actions that lead to the expected result.

Policy: A course of action taken by Government to address a given problem or related set of problems. A statement of principles by Government that informs legislation, regulation, official guidelines and operating practices intended to influence behaviour towards a stated outcome.

Programme: A group of related activities that are designed and managed to meet a specific public need and often treated as a budgetary unit.

Project: A task or planned programme of work that has a start and end date and requires significant time and effort in initiating, planning, executing and monitoring to complete.

Programme Evaluation: Evaluation of a set of interventions, marshalled to attain specific global, regional, country, or sector development objectives. (A development programme is a time bound intervention involving multiple activities that may cut across sectors, themes and/or geographic areas).

Priorities: Specific areas that an organisation has chosen to focus and report on during the planning period. They represent the things that are most important or what must be done first to support the achievement of the desired Strategic Outcome(s).

Relevance: The extent to which the objectives of a government intervention are consistent with beneficiaries' requirements, country needs global priorities and partners' and donors' policies. (Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances).

Reliability: Consistency or dependability of data and evaluation judgements, with reference to the quality of the instruments, procedures and analyses used to collect and interpret evaluation data. Evaluation information is reliable when repeated observations using similar instruments under similar conditions produce similar results.

Result: The output, outcome, or impact (intended or unintended, positive and/ or negative) of a development intervention.

Results-based Management: A comprehensive, lifecycle, approach to management that integrates strategy, people, resources, processes and measurements to improve decision-making and drive change. The approach focuses on getting the right design early in a process, focusing on outcomes, implementing performance measurement, learning and changing, and reporting performance.

Results-based Model: A depiction of the causal or logical relationships between inputs, activities, outputs and the outcomes of a given policy, programme or initiative.

Strategic Outcome: A long-term and enduring benefit to Jamaicans that stems from a ministry, department or agency's mandate, vision and efforts. It represents the difference a ministry, department or agency wants to make for Jamaicans.

Strategic Planning: Determines the general direction and goals of the organization in both the short and long term; the process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy.

Strategic Priorities: A ranking of an organization's strategic objectives by importance; a description of what an organization's decision-makers believe is more important or less important.
Strategies: Strategy refers to a plan of action designed to achieve a particular goal.

Sustainability: The continuation of benefits from a government intervention after major developmental programme has been completed. It may also be defined as the probability of continued long-term benefits.

Target: A measurable performance or success level that an organization, programme or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative and are appropriate for both outputs and outcomes.

Transparency: Transparency is a general quality. It is implemented by a set of policies, practices and procedures that allow citizens to have accessibility, usability, informativeness, understandability and auditability of information and process held by centres of authority.

Validity: The extent to which the data collection strategies and instruments measure what they purport to measure.

Vision: The category of intentions and desires for the organisation that are broad, all-intrusive and forward-thinking.

Whole-of-government: All ministries, agencies and departments, including statutory bodies (public sector enterprises/public bodies).

Whole-of-Government Business Plan: This plan sets out the broad functional and fiscal goals of Government over a 3-year horizon. The plan will also outline how GoJ's strategic priorities will be pursued and the specific performance indicators and targets that will be used to monitor and report on results.