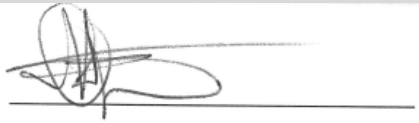
GOVERNMENT OF JAMAICA

MINISTRY OF SCIENCE, ENERGY & TECHNOLOGY

STRATEGIC BUSINESS PLAN
2021/2022 – 2024/2025

DOCUMENT APPROVAL AND SIGN OFF

This document has been approved as the official Strategic Business Plan and Budget of the Ministry of Science, Energy and Technology for the four-year period 2021/2022 – 2024/2025**.** The Strategic Business Plan and Budget of the Ministry has been prepared in consideration of the various relevant policies, legislation and other mandates for which the Ministry is responsible.

Prepared by	Signature	Date
Zahra H. Oliphant, PhD Director, Corporate Planning and Performance Management (Acting) Policy, Planning, Development and Evaluation Division		4-Feb-2021

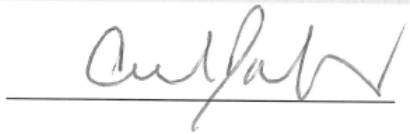
Approved by	Signature	Date
Carol Palmer, CD, JP, (Mrs) Permanent Secretary		2021/02/15

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HONOURABLE MINISTER'S MESSAGE

The Ministry of Science, Energy and Technology (MSET) has played a leading role in the significant strides and achievements made in the Science, Energy and Technology sectors over the last few years. The Ministry's programmes, policies and projects are important elements in the execution of the Science and Technology (S&T) strategies required to create a Technology-Enabled Society, as outlined in the National Development Plan: Vision 2030. As the Government of Jamaica (GOJ) continues on the path of achieving economic growth and prosperity for our citizens, the Ministry remains a major catalyst in driving this agenda.

This 2021 – 2025 Strategic Business Plan will continue to focus on the Ministry's contribution towards achieving the GOJ's 2021/22 Medium Term Strategic Priority, namely, Inclusive Sustainable Economic Growth and Job Creation. In pursuit of the Growth Agenda, The Medium Term Socio-Economic Policy Framework (MTF) and the GOJ Medium Term Priorities, the MSET over the next four (4) years will pursue its key priority programmes to:

- Continue the implementation of the National Energy Policy (NEP);
- streamline the government's Information and Communications Technology (ICT) operations towards transforming Jamaica into a Digital Society;
- improve the legal and regulatory framework for the Science, Energy and ICT sectors;
- improve security of the GOJ ICT systems and electronic communication;
- promulgate a new Science Technology and Innovation (ST&I) Policy to support national development; and
- support the integration of Science and Technology in all areas of national development.

Our development and success, as a nation, are hinged on the promotion and integration of ST&I in all aspects of our society and the diversification of energy sources to enhance the country's energy security. With our existence being increasingly impacted by current and emerging technologies, it is imperative that the Jamaican public has a basic knowledge of science and technology. In order for ST&I to drive national development, it is important that our strategies in the Ministry's portfolio areas are aligned and the work being carried out across all sectors is coordinated. MSET will continue to support the programmes and projects of its agencies, other MDAs, and the private sector that contribute to the enhancement of our capacity in science, energy and technology, towards improving our economic prospects and raising the quality of life for the Jamaican public.

The Ministry, guided by the Integrated Resource Plan (IRP), will continue the implementation of initiatives that will empower the energy sector to provide affordable energy and to be more efficient in the supply and distribution of electricity to its citizens. The country has made great strides with a number of investments in Renewable Energy (RE) and Liquefied Natural Gas (LNG).

1. Over 117 MW of new generation of electricity from renewables was commissioned during the period 2015 – 2019. This includes the 37 MW just added with the completion of the Eight Rivers Solar Farm Project in November, 2019.
2. LNG is now being used as the source of energy to generate electricity at the Jamaica Public Service (JPS) Bogue Power Plant. It is also the fuel of choice for electricity generation for the Old Harbour Power Plant that is currently being commissioned into operation.
3. This year, MSET will lead the process for the implementation of electric mobility in Jamaica through the recently produced Strategic Framework.

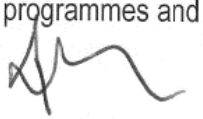
In keeping with the GOJ's thrust to rationalise public bodies and increase oversight and accountability, Cabinet in 2019/2020, approved the following rationalisations:

1. The integration of the functions of the Petroleum Corporation of Jamaica into a newly created division of the Ministry of Science, Energy & Technology;
2. The reintegration of the functions of Petrojam Ethanol Limited (PEL) into Petrojam Limited as a division of Petrojam and the winding up of PEL; and
3. The reintegration of the functions of Jamaica Aircraft Refuelling Service (JARS) as a division of Petrojam and the winding up of JARS.

The above rationalisations are already underway or have been completed and the Ministry will seek to ensure that these transitions are as seamless as possible and the mandates of these entities are achieved, ultimately benefitting the people of Jamaica.

In the ICT Sector, much emphasis will be placed on transforming Jamaica into a Digital Society that will facilitate greater ease of doing business and promote national development. This will be done in collaboration with other government entities through the acceleration of eight (8) key pillars which include; the establishment of the ICT Authority that will provide an integrated approach in digitising government services, the full roll-out of broadband technology in support of the GOJ wide area network, implementation of the public key infrastructure to support digital signature, the introduction of a National Identification System (NIDS) and the digitisation of GOJ records. Additionally, there are policy and legislative pillars namely; the promulgation of the Data Protection Act through this Ministry, as well as, the Data Sharing Policy and the Electronic Transaction Act which although not operationalised through this Ministry, are still related to our mandate. The ICT Sector will continue to expand and is poised to attract greater levels of investment and create more opportunities for employment. There has been significant progress towards modernization of the ICT infrastructure with the implementation of the Blue Print Report, which provides a comprehensive road map for transformation of the GOJ ICT platform into a more advanced and integrated system. The Ministry, through the Universal Service Fund, has implemented ICT projects to assist the disabled community and this initiative will continue to expand going into 2021/22 in an effort to empower members of this group.

As the MSET rolls out the 2021-2025 Strategic Business Plan, there is great optimism that this Ministry will play a vital role, through the execution of its policies, programmes and projects, in moving the country forward in the creation of jobs and economic development.



Honourable Daryl Vaz, MP
Minister of Science, Energy and Technology

PERMANENT SECRETARY'S MESSAGE

The Ministry's Strategic Business Plan for the period 2021 to 2025 was developed to outline the strategic direction for the Ministry in keeping with the sectoral and national strategies towards the achievement of the goals and national outcomes of Vision 2030 National Development Plan and the Sustainable Development Goals (SDGs), over the medium term. The MSET areas of focus in science, energy and technology feed directly into the GOJ medium term strategic priority, 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 and increased employment; and this serves as our commitment to the citizens for the next 5 years.

The MSET will continue to implement strategies to enhance service delivery and standards that will contribute to the ease and security of doing business in the country. In this regard, the Ministry will oversee the upgrading of the Post and Telecommunications Department in an effort to improve service delivery from this entity and will also continue to give oversight to the newly established Government Electrical Regulator (GER), which is expected to guarantee greater efficiency in the provision of electricity services. Additionally, the Ministry's efforts to safeguard the country's cyber borders will continue through further strengthening of the Cyber Incident Response Team's capacity. In an effort to align with the MTF and the GOJ strategic priorities, a major priority for the Ministry going into the 2021/22 financial year is to review and update the National Energy Policy and to finalise the development of the energy sub-Policies. The Ministry will also continue to strengthen the legal and regulatory framework and begin the implementation of the Integrated Resource Plan (IRP) that will guide electricity planning for the electricity sector going forward.

The integration and modernization of the GOJ ICT infrastructure along with the establishment of the ICT Authority, will continue to be the primary areas of emphasis for the ICT sector towards the transformation of Jamaica into a digital society. MSET will aggressively pursue a new policy and legislative agenda that will promulgate an Open Data Policy and revise the current ICT Policy. The Broadband legislative agenda for the Ministry will also be prioritised for the next financial year as we seek to expand broadband coverage for the entire nation. The promulgation of the National Science and Technology and Innovation Policy is expected to be finalised in short order. This will promote the integration and strengthening of the legal and regulatory framework that will position science and technology as a cross-cutting enabler of national development. Research and Development (R&D) will also continue to be an area of major focus as we seek to promote increased investment in this area, as well as infrastructural improvement of the country's scientific and research institutions.

Pursuant to the Cabinet's Decisions, the Ministry will continue with the rationalisation of some Public Bodies under its Portfolio in an effort to create greater efficiency and effectiveness in keeping with the GOJ public sector transformation agenda. Consequently, the Ministry will be conducting a strategic review of its organisational structure with the aim of building capacity to be able to execute new functions to drive the Science, Energy and Technology sectors. I am confident that the MSET's Strategic Business 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."***



Carol Palmer, CD, JP (Mrs)
Permanent Secretary

ACCOUNTABILITY STATEMENT

This Strategic Business Plan for the next four years, commencing April 1, 2021 was prepared under my direction in accordance with the policy directives outlined by the Government of Jamaica, and the authority delegated to me under Section 16 of the Financial Administration and Audit (FAA) Act. The Plan outlines the Ministry's strategies that will contribute to the achievement of the Government's agenda, and specifically, the programmes for which appropriate monitoring and evaluation mechanisms are being deployed to ensure their timely and cost-efficient 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.



Carol Palmer, CD, JP (Mrs)
Permanent Secretary

1.0 EXECUTIVE SUMMARY

1.1 OVERVIEW

The Ministry of Science, Energy and Technology (MSET) has portfolio responsibility for twelve (12) agencies and departments spanning the country's Science, Energy and Information and Communications Technology (ICT) sectors. The Ministry's Strategic Business Plan aligns its policies, programmes and projects to be results-based in order to achieve its mandate, which is to facilitate the development of the Science, Energy and Technology sectors in keeping with the National Development Plan Vision 2030.

The Ministry's policies and programmes are developed in support of the achievement of the goals of Vision 2030: National Development Plan, the Medium Term Socio-Economic Policy Framework (MTF) 2018-2021, the Medium Term Economic Programme (MTEP), as well as the Medium-term Strategic Priorities of Government for 2020/2021. The MSET areas of focus in Science, Energy and Technology feed directly into the GOJ's medium term strategic priority, which is 'Inclusive Sustainable Economic Growth and Job Creation'. Therefore, our policy priorities have been planned with keen focus on facilitating improved energy security, ease of doing business through digital technology, increased wealth creation through advancements in Information and Communications Technology (ICT), and Science Technology and Innovation.

Through consultation with key stakeholders, MSET provides policy direction for the Science, Energy and Technology sectors to assure alignment of programmes with overarching government policy directives. It also provides oversight of implementation, through its agencies and through some of its entities, as well as, regulates and monitors the sectors' performance.

This Strategic Business Plan 2021-2025 focuses attention on priority policies, legislation, programmes and projects. The plan also addresses the strategies to be employed in achieving the aforementioned, as well as, the expected outcomes and impacts that will address existing and emerging challenges facing the Science, Energy and Technology sectors. The Plan has been restructured to be more strategic in keeping with the GOJ Medium Term Results-Based Budgeting (MTRBB) Framework. It also outlines initiatives that seek to facilitate more efficient and effective use of resources and increase synergy among Ministries, Departments and Agencies (MDAs). Consequently, these various policies, programmes and projects are 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, the National Goals and the SDGs. Within this context, short, medium and long-term targets developed are geared towards achieving the Ministry's strategic objectives.

In keeping with the need for strategic management, a Monitoring and Evaluation (M&E) Framework has been developed to track the progress of policies, programmes and projects that are implemented to achieve 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, as part of its effective M&E strategy, will address deviations from targets and issues contributing to under-achievements in a timely and effective manner.







Science (SRC), Technology (SMA), Energy (Petrojam)

1.2 VISION, MISSION, VALUES & MANDATE

VISION

The leading public sector organisation to provide the legislative, regulatory and policy framework that will ensure energy security and promote innovation, investments and development in the science and technology sectors.

MISSION STATEMENT

Provide the legal and policy framework that guide innovation and development in the science, energy and technology sectors to fuel growth.

CORE VALUES

Professionalism	**S**ervice **to C**ountry	**A**ccountability	
Mutual **R**espect	**S**ense **of H**umour	**T**eam **W**ork	**I**ntegrity

MANDATE

The mandate of MSET is to:

- Encourage private sector innovation in the science, energy and ICT sectors.
- Lead legal and regulatory reform of the ICT, electricity and gas sectors.
- Improve national energy efficiency and conservation.
- Diversify primary energy sources, particularly to increase the share of renewable energy and to reduce dependence on imported fuels.
- Promote and enable the exploitation of S&T for innovation and economic development.
- Streamline government's ICT operations in an effort to create a digital society.
- 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.

SUPPORTING GOJ MEDIUM-TERM STRATEGIC PRIORITIES

- Inclusive Sustainable Economic Growth and Job Creation

STRATEGIC OBJECTIVES

i. Modernize the GOJ ICT governance framework over the next three (3) years in support of a digital society.
ii. Modernize ICT infrastructure in Ministries' headquarters within the Kingston Metropolitan Area (KMA) over the next three (3) years to enhance digital services across government.
iii. Increase access to and use of ICT to approximately 400 educational entities in the country over the next four (4) years.
iv. Increase access to and use of ICT by 50% in Public Institutions, schools and key public areas in the country over the next four (4) years.
v. Modernize the policy, legislative and regulatory framework across the ICT, Energy and Science sectors by 2024.
vi. Increase awareness of cyber security amongst MDAs, Micro-Small and Medium Sized Enterprises (MSME) and vulnerable groups over the next three (3) years.
vii. Improve the application of ST&I, in educational institutions and private sector to support national development over the next four (4) years.
viii. Facilitate an increase in investments in Research and Development (R&D), through ST&I, to 0.1% of GDP by March 2024.
ix. Reduce energy consumption in specific Public Sector Entities by over 5,000,000KWh by 2024.
x. Increase the use of renewable energy to be 27% of the country's electricity generation by 2024.
xi. Modernize the Energy Infrastructure, to meet international standards, over the next four (4) years.

SECTOR OUTCOMES

i. Use of ST&I to drive national development.
ii. Increased scientific literacy and awareness across society.
iii. Increased investments in scientific R&D.
iv. Modern and integrated policy, legislative, regulatory and institutional framework for the energy sector.
v. Increased use of alternative energy in the national energy mix.
vi. Comprehensive Oil and Gas Exploration.
vii. Lower consumption of energy in the Public Sector.
viii. All Jamaicans have access to electricity.
ix. Modern policy and regulatory environment conducive to investments in ICT and network development in support of a digital culture.
x. Increased access and use of ICT in educational institutions and strategic public facilities.
xi. Increased Cyber intelligence and security to reduce cybercrimes.

1.3 SITUATIONAL ANALYSIS

Science, energy and technology are integral factors driving sustainable development and job creation. Globally, the role of science, technology and innovation has been explicitly recognised as a vital driver of sustainability; however, that depends on the capacity of states to integrate science into the heart of national strategies for development. The field of Information and Communications Technology (ICT) encompasses the technologies and services involved in computing, data management, telecommunications and internet; thus enabling ICT to be an integral stimulus of economic development and an enabler of innovation. Across the world, growth in communications infrastructure deployment was on the decline for 2019 and in light of the current COVID-19 pandemic which has called for stronger ICT systems, data are emerging that rural areas particularly in developing economies, face greater challenges staying connected. The energy landscape is also changing across the world as economies recognise that the world is on an unsustainable path and its carbon budget is depleting. There is a global shift in priorities as energy markets move towards renewable and other forms of zero or low-carbon energy sources, while the demand for oil and gas becomes increasingly challenged. In light of the aforementioned, the Ministry recognises that Jamaica's strategic direction in the areas of science, energy and ICT plays a critical role in national development and as such, the plans, programmes and initiatives need to reflect what is required to fulfil this mandate.

As one of the earliest developing countries to legislate the use of Science and Technology (S&T) in exploiting natural resources, Jamaica has made strides in developing and implementing S&T related activities over the years. However, there are deficiencies in the S&T landscape due to an outdated policy of 1990, low investment in Research and Development (R&D) and lack of baseline data on knowledge, attitudes and perception of S&T by the public, as well as, data on R&D and Innovation activities. The National Science, Technology and Innovation (ST&I) Policy which currently has Green Paper status, has set the goals and objectives required to address the existing deficiencies in Jamaica's S&T landscape in order to drive sustainable growth and development.

For the energy sector, Jamaica continues to be economically vulnerable to external factors such as fluctuations in oil prices, a consequence of an over dependence on imported fossil fuel. Preliminary figures for 2019 show that the country imported approximately 21.5 million barrels of oil which was an increase over approx. 20.7 million barrels imported in 2018; road and rail continue to account for the majority of petroleum consumption at 34%, while electricity generation accounts for 21%. The total energy consumption of Jamaica declined by 0.2% to 20.8 million thousand Barrels of Oil Equivalent (BOE) in 2019; there was a decrease of 0.5% in petroleum based sources and a 3.2% increase in consumption from Alternative Energy sources (natural gas, hydropower, wind, solar, coal and bagasse). As regional and international communities move toward the use of cleaner fuel sources for energy, the role of natural gas as a transition fuel from oil to Renewable Energy Sources (RES) has been underscored by many and acknowledged by Jamaica. As such, Jamaica continues to strive towards the goal of 42% of natural gas as part of the energy supply matrix by 2030, based on targets set by the National

Energy Policy. This target for natural gas is also considered in the Integrated Resource Plan (IRP) which is the first long term electricity road map for Jamaica. The IRP also highlights what is required to achieve a target of 50% electricity generation from renewable energy sources by 2037 and this will equate to approximately US $7.3B in investments in the energy sector. The development of a strategic framework for electric mobility through funding from the Inter-American Development Bank (IDB), sets the foundation for the development of an Electric Vehicle/Mobility policy which will address sustainable transport and ultimately lead to reducing Jamaica's carbon footprint.

The push for energy efficiency and conservation (EEC) continues to be a priority for most developing countries and Jamaica is no exception, as we continue the drive to reduce electricity consumption in the public sector. Although Jamaica has achieved significant savings from energy efficiency and conservation projects implemented to date, there is still greater need to execute energy efficiency and conservation measures in additional public bodies. With energy intensity likely increasing due to 'stay at home' and 'work from home' as part of the Disaster Risk Management Order for the COVID-19 pandemic, there is greater need to increase awareness in energy efficiency among government employees and the wider public.

As articulated in the MTF 2018-2021, ICT is critical to Jamaica's transition to developed country status, as a result of its role in the productive sector and as an enabler of other sectors. In order to realise this goal, the Ministry through its agencies continue to work towards creating the appropriate policy and regulatory environment to facilitate investment in ICT and network development; as well as, expanding broadband coverage through deployment of Community Access Points (CAP) and establishing public Wi-Fi hotspots. The latter is particularly important due to the deficiencies in accessing technology that have been brought to fore with the global pandemic. At the end of 2019, there were 317,907 subscribers of fixed broadband, while mobile broadband had 1,630,742 subscribers; this shows the extent to which Jamaicans rely on accessing internet from mobile devices associated with a SIM card. The pandemic has highlighted that this is insufficient to meet the needs of the populace, particularly students who require a stable broadband connection to facilitate online learning. The insufficient number of devices available to students is also an issue that the Ministry through its Tablets in School Programme and in conjunction with the Ministry of Education, has been working to address.

With the passing of the ICT Authority Act, the functions of eGov Jamaica Ltd and the Office of the Chief Information Officer (CIO) will be transferred to the new ICT Authority with the aim being to improve ICT services management in all public bodies. Through streamlining and consolidating ICT services in the public sector, the Government's sustainable digital agenda will be realised and this will increase the ease of doing business in Jamaica. The country is also on the cusp of a new regime with the passing of the Data Protection Act (2020) which will ensure that the personal data of all individuals in Jamaica are protected. The threat of cyber-attacks still remains a clear and present danger to the ICT industry and as such, the Ministry will be reviewing the Cybercrimes Act to ensure that the provisions are up to date with what is required to ensure cyber security in an era where the amount of personal and sensitive data in cyberspace has increased.

Based on the findings highlighted above and the environmental scan conducted (see SWOT analysis in Appendices), some key areas to be prioritised in the science, energy and technology sectors are highlighted below:

- Integration of ST&I into all areas of national development through policy promulgation; this includes collecting baseline data and strengthening science, technology, engineering and mathematics (STEM) education;
- Greater investment in Research, Development and Innovation;
- Facilitate increased access and use of ICT across public and private sectors;
- Modernisation of the ICT infrastructure to facilitate more efficient internet communication and achieve broadband network islandwide;
- Implementation of the twenty (20) year Integrated Resource Plan to facilitate increased investment in renewable and alternative sources of energy; and
- Increase the drive to reduce energy consumption in the public sector and to create the awareness nationally to support efficient energy consumption, which ultimately reduces carbon footprint.



Bottling Lab (SRC)

1.4 PROGRAMMES AND SUB-PROGRAMMES

The Ministry's programmes are being planned and developed with great consideration of the National Development Plan Vision 2030, Medium Term Economic Programme (MTEP), Medium Term Socio-Economic Policy Framework 2018 - 2021 (MTF) and Medium-Term Results Based Budgeting (MTRBB) for Jamaica. With these in mind, and in keeping with the GOJ Strategic Priorities, the Ministry's programmes are also strategically aligned towards the achievement of the Sustainable Development Goals (SDGs). These programmes and sub-programmes for the medium term are as indicated to the right.

PRIORITY POLICIES

The MSET areas of focus in science, energy and technology feed directly into GOJ medium term strategic priority, 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 and increased employment. The 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 county's best interest. Our policy priorities are as follows:

- Spectrum Management Policy
- Postal Service Policy
- Open Data Policy
- Broadband Policy
- Information and Communications Technology Policy (revised)
- National Energy Policy (revised)
- Addenda policies to the National Energy Policy, namely:
    a. Renewable and Alternative Energy Policy
    b. Electric Vehicle Policy
    c. Biofuels Policy
    d. Energy from Waste Policy
    e. Carbon Credit Policy
    f. Energy Efficiency and Conservation Policy
- Electric Power Sector Policy
- Science, Technology and Innovation (ST&I) Policy

PROGRAMMES & SUB-PROGRAMMES

PROGRAMME #1: 001 - EXECUTIVE DIRECTION AND ADMINISTRATION

Sub-programme:

- 01 - Central Administration
- 02 - Policy Planning & Development

PROGRAMME #2: 003 – RESEARCH AND DEVELOPMENT

Sub-programme:

- 04 - Product Research and Development

PROGRAMME #3: 129 - SCIENCE, TECHNOLOGY AND INNOVATION DEVELOPMENT

Sub-programme:

- 20 - Science Policy and Regulatory Frameworks
- 21 - Planning, Innovation and Popularisation

PROGRAMME #4: 701 - ENERGY MANAGEMENT AND IMPLEMENTATION

Sub-programme:

- 20 – Electrification Services
- 21 - Energy Management
- 22 - Energy Policy Administration

PROGRAMME #5: 128 - ICT DEVELOPMENT, ACCESS AND USE

Sub-programme:

- 20 - ICT Policy and Regulation
- 21 - ICT Infrastructure Development
- 22 - ICT Propagation
- 23 - Security of ICT System

1.5 PROGRAMME OBJECTIVES

PROGRAMME 001: EXECUTIVE DIRECTION AND ADMINISTRATION

Programme Objective(s):	To improve the effectiveness of the implementation of key policies, policies, projects and administrative services that support organisational strategies to advance the achievement of the organisation's goals and objectives.
Programme Description & Context	The Executive Direction and Administration Programme aims to strengthen strategic management across the Ministry in order to enhance governance, management, coordination, integrity and allocation of public resources. The Programme, which reinforces the principles of continuous performance improvement and the enhancement of organisational productivity, commands effective strategic management by the executive in directing effective policy implementation and adoption; planning; operations management and linking operational and tactical decisions. Through this programme, the executive controls and directs people and resources to deliver organisational objectives and results in a cost-efficient way with due regard to risks and opportunities, as well as the creation of public value. The programme is therefore driven by effectiveness in the implementation of key policies, plans and projects, supported by robust systems, processes and procedures that ensure that the organisation is satisfactorily progressing towards the achievement of its mission, goals and strategic objectives. A key tenet of the programme is also the evaluation of outcomes to assess the relevance, feasibility, effectiveness and consistency of the organisational strategy that informs how effectively resources are being utilised to produce desired results.
Sub-programme 01:	**Central Administration**
Objective(s)	To improve the operational efficiency, and human, organisational and institutional capabilities of the organisation to support the delivery of results.

Description & Context	The administration of public services encompasses an amalgamation of activities that provide enterprise-wide support services to enhance service delivery and the welfare of employees. This function ensures that the organisation is operated efficiently, and policy, planning and legislative requirements are met. The programme includes ensuring that assets and facilities are utilised and managed efficiently; human resources are adequate and at a satisfactory competent level to perform organisational tasks and realise the objectives of the organisation; robust financial management and procurement systems are in place; the provision of high-quality information and services to customers, employees and stakeholders; and the provision of adequate information technology support to business operations, and the effective management of administrative systems and processes. The functional areas under this programme include financial management, human resource management, administration, information technology and communication, and documentation and records management.
Sub-programme 02:	**Policy, Planning and Development**
Objective(s)	To improve the efficiency and effectiveness of initiatives in achieving organisational targets, goals and objectives.
Description & Context	The programme seeks to provide strategic direction, executive oversight and support for the organisation through the formulation, implementation and administration of policies, plans, projects and initiatives that enable the effective and efficient delivery of services. The programme encompasses the provision of strategic guidance and direction through short, medium and long-term plans; the monitoring and evaluation of policies, plans and projects and programmes against action plans; the formulation and execution of capital investment projects; and the undertaking of studies, research and analyses. The programme also comprises key functions such as governance and audit, which are critical to ensuring that the organisation functions effectively and achieves its objectives, drives organisational improvement, ensures value for money in the use of public funds, as well as maintain legal and ethical standing in the eyes of the public, stakeholders, investors, shareholders, regulators and the wider community. A critical component of the programme is the

	engagement of stakeholders and the forging of partnerships on matters impacting a wide range of organisational and sector issues.

PROGRAMME 003: RESEARCH AND DEVELOPMENT

Programme Objective(s):	To increase awareness and investments in Research and Development that drive processes and product development and reduce socio-economic challenges.
Programme Description & Context	This programme supports the administration of scientific research and development to help resolve Jamaica's critical socio-economic challenges through integrated multidisciplinary research and development programmes. Major goals can be summarized as: contributing to the nation's socio-economic advancement, assisting in the creation and support of a national pool of excellent scientists and technologists, developing, strengthening and supporting national, regional and international collaboration and partnerships in science and technology and being a "best practice" institution in support of national science and technology initiatives. Organizations represented under this programme are the Scientific Research Council (SRC), the International Centre for Environment and Nuclear Sciences (ICENS) and the National Commission on Science and Technology (NCST).
Sub-programme 04:	**Product Research and Development**
Objective(s)	To apply best practices in scientific research that will enhance innovations and result in improved environment, health, products and services and promotion of private sector investments.
Description & Context	This programme supports the functions and operations of the International Centre for Environment and Nuclear Sciences (ICENS) and the Scientific Research Council (SRC) to fulfil their mandates.

	The programme supports the SRC in the execution of research and development activities. Major goals in keeping with the Council's priorities include a focus on: supporting Micro, Small and Medium Enterprises through product development, product manufacturing and trade facilitation.

PROGRAMME 129: SCIENCE, TECHNOLOGY AND INNOVATION DEVELOPMENT

Programme Objective(s):	To increase the use of science, technology and innovative solutions for economic growth.
Programme Description & Context	The integration of Science, Technology and Innovation in national development is a pivotal element that will foster the application of scientific knowledge and technological innovation across key national sectors, as well as increased investment in Research and Development. The main aim of this programme is to create an effective policy and legislative framework to support and advance ST&I. A key element of this programme is the promulgation of the ST&I Policy, which will facilitate the development of Science and Technology (S&T) as major aspects of our culture and our economy. The repositioning of the ST&I Sector to advance our steps towards developed country status by 2030 is contingent on a number of factors, including a knowledge-based economy, which will drive economic growth, wealth creation and the overall well being of the society. The capacity of our scientific and technological endeavours has to be accounted for to ensure consensus on where we are as it relates to the medium to long-term priorities in achieving the goals of the Vision 2030 National Development Plan.

Sub-programme 20:	**Science Policy and Regulatory Framework**
Objective(s)	Modern legislation and effective policies to support ST&I development
Description & Context	This programme supports policy creation and legal and regulatory framework to promote the modernization of the science and technology sector. The activities under this programme will be managed by the Science Division within the Ministry in an effort to promulgate the ST&I Policy.

Sub-programme 21:	**Planning, Innovation and Popularisation**
Objective(s)	Increase innovations and greater use of science and technology.
Description & Context	This programme supports the operations and activities being undertaken by the National Commission on Science and Technology (NCST) and the SRC, which is responsible for fostering and advancing the National Policy and Strategy for science and technology in Jamaica.

PROGRAMME 701: ENERGY MANAGEMENT AND IMPLEMENTATION

Programme Objective(s):	A modern, efficient, diversified and environmentally sustainable energy sector providing affordable and accessible energy supplies supported by an appropriate policy, regulatory and institutional framework.
Programme Description & Context	This programme will support Vision 2030 Jamaica – National Development Plan, provide the enabling environment for the achievement of National Outcome #10 - "energy security and efficiency" and the implementation of the two national energy strategies: to diversify the energy supply and to promote energy efficiency and conservation. The MSET through its agencies is responsible for the implementation of the strategies as articulated in the National Energy Policy. Some of these strategies include facilitating investments in renewable energy, modernizing of the energy infrastructure, implementation of the Integrated Resource Plan, Integrated Energy Plan and a National Energy Action plan. The dependence on imported petroleum makes the island highly vulnerable to disruptions in the supply chain for oil and changes in oil prices which can potentially reduce the island's energy security. Dependence on petroleum also limits the country's ability to improve energy efficiency and reduce energy costs.

Sub-Programme 20:	**Electrification Services**
Objective(s)	To ensure that electrical installations in the country are safe by regulating electrical inspectors and electricians licensed in accordance with the Electricity Act (2015).
Description & Context	This activity supports the Government Electrical Regulator (formerly the Government Electrical Inspectorate and the Board of Examiners) which is established pursuant to Section 48 of the Electricity Act 2015. This activity is mandated to review and audit the inspection work carried out by licensed private inspectors, as well as, test and examine persons who are to act as electricians and inspectors and recommend such persons to the Minister for approval.

Sub-Programme 21:	**Energy Management**
Objective(s)	To provide energy efficiency and conservation opportunities that will result in cost savings and reduction in public sector electrical energy consumption while increasing awareness in energy conservation (EC) and energy efficiency (EE)**.**
Description & Context	This programme supports the implementation of energy conservation and management initiatives. The programme is designed to facilitate EE and EC in the public sector, transport sector as well as, in residential communities. Projects are executed under this programme to implement energy efficient retrofits to government buildings in an effort to reduce energy consumption in the public sector.

Sub-Programme 22:	**Energy Policy Administration**
Objective(s)	To support the activities relating to the development and implementation of the National Energy Policy and the energy sub-policies.

Description & Context	The National Energy Policy is being updated to reflect the emerging trends in the energy landscape. This programme supports the implementation of the different energy strategies towards achieving the objectives of the National Energy Policy and the sub-policies

PROGRAMME 128: ICT DEVELOPMENT, ACCESS AND USE

Programme Objective(s):	To increase access to and use of ICT in all sectors of the economy and to modernise the government of Jamaica's ICT governance framework towards the country being a digital society.
Programme Description & Context	This programme seeks to promulgate relevant policies and modern legislation to repeal, replace and update existing laws and to introduce new laws to govern the ICT sector and to support the development of a digital society. The digitisation of GOJ business processes is a critical element being supported by this programme and this new framework will, among other things, address the collection, storage, processing and confidentiality of personal data and new forms of cybercrimes. The programme is designed to support the eight (8) key pillars[1] that will enable the transformation of the country into a digital society. At present, the ICT sector is governed by legislation which dates as far back as the 1970's. As such, the legal framework, although 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 and digital society; there is also increased need to ensure that citizens' personal data are protected.

Sub-programme 20:	**ICT Policy and Regulation**

[1] Eight key pillars towards a digital society: 1) ICT Authority, 2) GOJ Broadband Network, 3) Public key infrastructure, 4) Data Protection Act, 5) NIDS, 6) Data Sharing Policy, 7) Electronic Transaction Act, 8) Digitisation of GOJ Records

Objective(s)	All residents of Jamaica adapt to a digital culture and have access to quality ICT to enhance living standards and business endeavours.
Description & Context	This programme supports the policy direction of the Ministry's ICT portfolio and the facilitation of ICT development and a regulatory framework that supports ICT investments and the country being a digital society. The programme supports the promulgation of the Data Protection Act, which is one of the key pillars in the transition to a digital culture.
Sub-programme 21:	**ICT Infrastructure Development**
Objective(s)	To support the implementation of a modern ICT system and an integrated GOJ Wide Area Network for the country that will facilitate a digital culture in doing business across government.
Description & Context	This programme supports the modernisation of ICT systems and infrastructure to enhance service delivery; this is primarily driven by eGov Jamaica (eGov). The programme will also support the establishment of the ICT Authority, which is one of the major pillars that will facilitate the integration and digitisation of GOJ business processes and delivery of services, in pursuit of Jamaica becoming a digital society. The ICT Authority will provide support to the revenue departments, namely, Tax Administration of Jamaica (TAJ) and the Jamaica Customs Agency and will be the major link in the information flow among these departments throughout the country. At the macro level, this entity will place particular focus on the following priority policy areas: reducing GOJ's Information and Communications Technology (ICT) cost, implementing the GovNet Project, promoting efficiency and effectiveness in government through technology and promoting national growth and development.
Sub-programme 22:	**ICT Propagation**
Objective(s)	All citizens of Jamaica have access to quality ICT.
Description & Context	This programme supports the propagation of information and communications technology throughout the society, particularly within educational institutions. The programme incorporates

	the Tablets in Schools activity which is responsible for increasing learning opportunities to students by providing access to computers and other ICT equipment, supported by teachers trained in the effective use of such technology into the teaching/learning process. The programme also supports the expansion of broadband and internet access being executed by the Universal Service Fund (USF).
Sub-programme 23:	**Security of ICT Systems**
Objective(s)	To execute activities that will create awareness among all stakeholders about cyberattacks and how to mitigate and protect ICT systems against such attacks.
Description & Context	This programme supports the Jamaica Cyber Incident Response Team (JaCIRT) Division. The JaCIRT is responsible for providing incident management and coordination, and ensuring effective implementation of cyber security strategies in an effort to have a secure cyber space for the country.

2.0 SECTOR HIGHLIGHTS

Sector Outcomes	Sustainable Development Goals (SDG)	Supporting Programmes/ Sub-programme	Performance Indicators	Base Year (2018/2019)	Current Performance (2020/2021)	Sectoral Targets (2021 – 2025)
SCIENCE PORTFOLIO						
Use of ST&I to drive national development	**SDG #9**: Industry, Innovation and Infrastructure	**Programme:** Science, Technology and Innovation Development	**1. Outcome**: Resident Patent filing	27	14	TBD

Sector Outcomes	Sustainable Development Goals (SDG)	Supporting Programmes/ Sub-programme	Performance Indicators	Base Year (2018/2019)	Current Performance (2020/2021)	Sectoral Targets (2021 – 2025)
		Sub-programme: Science Policy and Regulatory Framework	2. **Outcome**: Global Innovation Rank	81	72	TBD
Increased scientific literacy and awareness across society	**SDG #9:** Industry, Innovation and Infrastructure	**Programme:** Science, Technology and Innovation Development **Sub-programme:** Planning, Innovation and Popularisation	**Outcome**: # of scientific publications/ million population	85.1	53.3	TBD
Increased investments in scientific R&D	**SDG #9:** Industry, Innovation and Infrastructure	**Programme:** Research and Development **Sub-programme:** Product Research and Development	**Outcome**: % of GDP expended on R&D	0.001	TBD	0.1
ENERGY PORTFOLIO						
Modern and integrated policy, legislative, regulatory and institutional framework for the energy sector	**SDG #7**: Ensure Access to Affordable, Reliable, Sustainable and Modern Energy for All	**Programme:** Energy Management and Implementation **Sub-programme:** Energy Policy Administration	**Outcome**: # of new investments in the energy sector	0	0	3
Increased use of alternative energy in the national energy mix	**SDG #7:** Ensure Access to Affordable, Reliable, Sustainable and	**Programme:** Energy Management and Implementation	**Outcome:** Percentage of renewables in energy mix	7.8	8	TBD

Sector Outcomes	Sustainable Development Goals (SDG)	Supporting Programmes/ Sub-programme	Performance Indicators	Base Year (2018/2019)	Current Performance (2020/2021)	Sectoral Targets (2021 – 2025)
	Modern Energy for All	**Sub-programme:** Energy Policy Administration	**Outcome:** Percentage of renewables in electricity generation	12.1	11	27
			Outcome: Percentage of LNG in electricity generation	21	21	61
Comprehensive Oil and Gas Exploration	**SDG #7:** Ensure Access to Affordable, Reliable, Sustainable and Modern Energy for all	**Programme:** Energy Management and Implementation **Sub-programme:** Energy Policy Administration	**Outcome:** # of blocks explored	35	0	8
Lower consumption of energy in the Public sector	**SDG #7:** Ensure Access to Affordable, Reliable, Sustainable and Modern Energy for all	**Programme:** Energy Management and Implementation **Sub-programme:** Energy Management	**Outcome:** Energy Intensity index (EII)BTU/US$1 Unit of output	9403	10,650	6000
			Outcome: KWh savings in electricity consumption annually	1.6m(KWh)	0m(KWh)	TBD
TECHNOLOGY PORTFOLIO						
Modern policy and regulatory environment conducive to investments in ICT and network development in support of a digital society	**SDG #9:** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	**Programme:** ICT Development, Access and Use **Sub-programme:** ICT Policy and Regulation	**Outcome:** ICT Development Index	60	TBD[2]	56

[2] The International Telecommunications Union has not yet released ICT Development Index 2020

Sector Outcomes	Sustainable Development Goals (SDG)	Supporting Programmes/ Sub-programme	Performance Indicators	Base Year (2018/2019)	Current Performance (2020/2021)	Sectoral Targets (2021 – 2025)
Increased access and use of ICT in educational institutions and strategic public facilities	**SDG #9:** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	**Sub-programme:** ICT Infrastructure Development **Sub-programme:** ICT Propagation	**Outcome:** Network Readiness Index	83	70	46
Increased Cyber intelligence and security to reduce cyber crimes	**SDG #9:** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	***Sub-programme:*** *ICT Infrastructure Development* ***Sub-programme:*** *Security of ICT Systems*	**Outcome:** % of stakeholder group targeted that are more aware	100%	0%[3]	100%

3.0 MINISTRY'S CURRENT PERFORMANCE

PROGRAMME							
Name of Programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr 2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation/ Comments**
Executive Direction and Administration	% alignment of portfolio performance with Ministry's plans and priorities	Not determined	90	83.4			
SUB-PROGRAMMES							
Name of Sub-programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr 2020– Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**

[3] Cyber-Security awareness sessions were impacted by restrictions due to the pandemic

Central Administration	% change in customer satisfaction	N/A	80	N/A			Survey to gauge satisfaction not yet carried out
Policy Planning & Development	% of performance targets from priority projects, activities and initiatives achieved within time and budget	Not determined	≥70%	43.4%			Some targets were impacted by the pandemic. 34.4% of targets were in progress.
	% compliance with GOJ PMES Comprehensive and effective planning framework	100% All corporate plans, half-yearly reports and quarterly reports submitted	100%	100%			
MAJOR ACTIVITIES/INITIATIVES							
Name of Major Activity/ Initiative	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
PROGRAMME							
Name of Programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr 2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation/ Comments**
Research and Development	% of GDP expended on R&D	Not Determined	TBD	N/A			Survey on R&D has not yet been carried out
SUB-PROGRAMMES							
Name of Sub-programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Product Research and Development	# of scientific publications /million population	72	TBD	N/A			Targets are determined on an annual basis in line with PIOJ's reporting for Vision 2030
MAJOR ACTIVITIES/INITIATIVES							

Name of Major Activity/ Initiative	Performance Indicators	Major Achievements 2019/2020	End-of-year Target 2020/21	Major Achievements (Apr 2020– Sept 2020)	2020/2021 Budget (J$'000	YTD Expenditure (J$'000)	Explanation / Comments
Support the growth and development of MSMEs through R&D to develop products that meet international standards	# of products developed through R&D that meet international standards # of production cycles used by clients for food products	10 projects on hold; Technical assistance provided to fourteen (14) clients regarding product development Production activities were done for 45 clients (e.g. (juices, water, sauce, seasoning, liqueurs, jams, jellies, syrup, Solomon Grundy, patties, plantain tarts, sorrel drinks, rum punch, chutney, fruit mix) • 6351.42kg of raw materials milled and dried for clients • Packaging done for 31 clients		47 production cycles completed. Clients utilized the facility monthly for production of products (e.g. juices, water, sauce, seasoning, liqueurs, jams, jellies, syrup, Solomon Grundy, patties, plantain tarts, sorrel drinks, rum punch, chutney, fruit mix, wheat nut and purees, assorted herbal products etc.) • 1437.2 kg of raw materials dried and grilled for fourteen (14) clients • Retorting activities completed for two (2) clients • Slicing of products for three (3) clients - 509kg • 119.2 kg grounded- 1 client; 54.4 kg for pulping – 1 client • Scale up of 216 – 5 oz. bottles and one gallon of pepper sauce • 35kg of jerk chicken sausage produced for sale			

Name of Major Activity/ Initiative	Performance Indicators	Major Achievements 2019/2020	End-of-year Target 2020/21	Major Achievements *(Apr 2020 – Sept 2020)*	2020/21 Budget (J$'000	YTD Expenditure (J$'000)	Explanation / Comments
Promote the use of scientific research to enhance the protection of the environment	# and type of scientific programmes used to promote the protection of the environment	Protocols researched and determined for tests of lead (Pb) and other heavy metals in dutch pots. Project 100% completed. 90% of caesium (Cs) analysis completed for 25 soil samples from Rio Grande valley IAEA/ARCAL Project RLA7023 at 20% - sampling to assess atmospheric aerosol components in urban areas to improve air pollution and climate change management.	Sustained joint research projects and partnerships with local and international institutions	IAEA/ ARCAL Project RLA7023 - Assessing Atmospheric Aerosol Components in Urban Areas to Improve Air Pollution and Climate Change Management (ARCAL CLIV): Sampling of twenty-six (26) filters from the high-volume air sampler housed at the National Environment and Planning Agency (NEPA) premises.			
Support the increase in production and quality of agricultural produce	% change in production and quality of agricultural produce	Three (3) endemic varieties of Orchids and Cacti fertilized and maintained in shade house for generation of explants (to service two clients contract) Over 16,000 clean irradiated ginger plantlets produced 3,408 jars of sweet yam obtained after	Identification and conservation of two (2) endemic plants with medicinal benefits via tissue culture Multiplication of irradiated yams and ginger	Three (3) varieties of orchids and three (3) varieties of Cacti fertilized and maintained in shade house for the generation of explants At least 5000 disease-free plantlets produced; At least: • 518 jars of ginger plantlets obtained after subculture • 758 jars of sweet			

		subculture		yam obtained after subculture			
Support innovation and economic growth and development through R&D using indigenous materials	Improvement on the Global Innovation Rank	72	TBD	N/A			Global Innovation Index is released annually

PROGRAMME							
Name of Programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr 2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation/ Comments**
Science, Technology and Innovation Development	Resident Patent filing	14	TBD	N/A			Data released annually via PIOJ from JIPO

SUB-PROGRAMMES							
Name of Sub-programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Science Policy and Regulatory Frameworks	% of policy developed % of regulatory framework completed						

MAJOR ACTIVITIES/INITIATIVES							
Name of Major Activity/ Initiative	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020– Sept 2020)**	**2020/21 Budget (J$'000**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Finalise the development of a Science Technology and Innovation Policy.	% of policy completed	The draft ST&I Policy was finalised and approved as a Green Paper by Cabinet and tabled in Parliament.	Completion of Implementation Action Plan and comments from public consultations incorporated into final draft of the policy.	Public consultations completed and matrix of comments and suggestions developed.			

			Execute pilot R & D survey				
Contribute to the development of regulatory framework to govern the National Nutraceutical Industry(NNI)	% of regulatory framework completed # of NNI Subcommittee workshops to prepare drafting instructions to Chief Parliamentary Council (CPC)	Drafting instructions to the CPC 70% completed	Complete drafting instructions to CPC for guidelines and regulations Facilitate stakeholder consultation towards drafting legislation and policy framework	Drafting instructions to the CPC 90% completed Two (2) virtual workshops hosted with the subcommittee of the NNI to prepare drafting instructions and amended regulation guidelines to the CPC in response to their request and queries			
Support the completion of the feasibility study for the development of a science, technology and research park	% completion of feasibility study	Cabinet approval to undertake the feasibility of establishing a science, technology and research park		Feasibility study is 95% completed			
Name of Major Activity/ Initiative	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Popularisation of Science, Technology and Innovation (ST&I)	% increase in public engagement activities (through mass media, seminars, conferences) # of public education initiatives and engagements	Think Tank session with the Jamaica Information Service to discuss the role of Government in supporting early research endeavours of a local group in the National Nutraceutical Industry (NNI)	Coordinate committee to plan activities Plan and execute activities	None			COVID-19 pandemic has reduced public engagement activities
Stimulate and encourage	# of youths participating in	3 events staged targeting winners	Facilitate capacity building support for	None			COVID-19 pandemic has

innovation among Jamaican Youths	innovation competition # of innovators exposed to capacity building activities	and shortlisted participants of the 2018 National Innovation Competition: 1. Translating Innovation workshop 2. Innovators Meet-Up and Sharing Seminar 3. Innovator Business Strategy Workshop Training	innovators Planning of National Innovation Competition and call for nomination for National Medal for S&T				reduced public engagement activities
PROGRAMME							
Name of Programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr 2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation/ Comments**
Energy Management and Implementation	**Outcome**: **#** of new investments in the energy sector	0	1	0			Procurement of new investment based on the approved IRP is pending action from the Generation Procurement Entity (GPE); protocols being developed
MAJOR ACTIVITIES/INITIATIVES							
Name of Major Activity/ Initiative	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Consolidation of the petroleum legislation treating upstream and downstream activities.	% completion of legislation	In drafting stage	Bill drafted	Stakeholders review of regulations 100% completed. Drafting instructions for the Petroleum (Downstream			

				Activities) Bill were prepared as per Cabinet Decisions and sent to the Chief Parliamentary Council (CPC) on August 12, 2020.			
Development and implementation of regulations for Net Billing, Auxiliary Connections and Power Wheeling.	% completion of regulations	In drafting stage	Regulations drafted	95% completion for Net Billing regulations; final documents were received from the CPC in September. 30% completion for Auxiliary Connections and 45% for Power Wheeling regulations			
Operationalization of the Government Electrical Regulators (GER)	% transition	In transition	Increase in staff complement at the GER	GER established effective 1-April-2020			
Finalise regulations for the operation of the GER.	% completion of GER regulations	In drafting stage	Regulations completed and tabled in Parliament	100% Completion of GER Regulations.			Regulations presented to the Lower House of Parliament; however Parliament was dissolved, for the General Elections.
SUB-PROGRAMMES							
Name of Sub-programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Energy Policy Administration	% of policy completed Policy reviewed in agreed timeframe		By March 2021	Consultant engaged to review National Energy Policy and sub-policies			
MAJOR ACTIVITIES/INITIATIVES							

Name of Major Activity/ Initiative	Performance Indicators	Major Achievements 2019/2020	End-of-year Target 2020/21	Major Achievements (Apr2020 – Sept 2020)	2020/21 Budget (J$'000	YTD Expenditure (J$'000)	Explanation / Comments
Reviewing and updating of the National Energy Policy.	% of policy reviewed in agreed timeframe	TOR for consultant drafted.	Consultant engaged and policy revision in progress	Ongoing revision and drafting of TOR for Expression of Interest based on recommendation from final evaluation report.			Unsuccessful response from market
Reviewing and updating of the 6 energy sub-policies.	% completion in reviewing sub-policies	Energy from Waste sub-policy reviewed	1 sub-policy updated	All technical inputs provided to support the finalization of the Energy from Waste (EfW) Policy and Cabinet Submission reviewed			
Name of Major Activity/ Initiative	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Implement strategic framework for electro-mobility (Electric Vehicle).	% of the implementation plan completed	Strategic framework developed	Implementation of framework has commenced	Strategic framework reviewed and input received to inform the final draft			
Development of the National Energy Action Plan.	% of plan completed	No activity	Action Plan drafted	TOR for the consultancy is in drafting stage			
Development of Energy Resources Planning Studies to include an Integrated Energy Plan (IEP).	% completion of development of Energy Resources Planning Studies to include an Integrated Energy Plan	No activity	Consultant procured Working Group established	Procurement of consultancy services 10% completed. Contract and procurement documents reviewed and signed off by MSET legal and the Procurement Committee respectively			
Facilitate the continuation of the exploration for Oil and Gas.	# of Exploration agreements or data collection agreements	3D survey results interpreted	Procure offshore drilling consultant	No blocks explored TORs 95% completed and tender responses received for drilling			Due to the COVID-19 pandemic, there will be no limited new exploration block

	# of areas in Jamaica explored			consultant			uptake for at least 18 months
SUB-PROGRAMMES							
Name of Sub-programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Energy Management	KWh savings in electricity consumption annually	0	Targets to be established. It is anticipated that such targets will be informed by investment grade audits to be conducted under the EMEP project	Communications and Awareness plan is being revised with respect to timelines for executing actions in alignment of re-scoped activities.			Re-scoping of activities for EECP to deep retrofit 19 facilities
MAJOR ACTIVITIES/INITIATIVES							
Name of Major Activity/ Initiative	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Implementation of the Urban Traffic Management System (UTMS).	% completion of implementation of Urban Traffic Management System	Cabinet approval received July 24, 2019 to proceed to contract finalization and signing .	Sign contract and mobilise contractor	Completed technical review of draft contract			
PROGRAMME							
Name of Programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation/ Comments**
ICT Development, Access and Use	Improvement on ICT Development Index	[No ITU publication]					The ICT Development Index was not published for the reference year.
SUB-PROGRAMMES							
Name of Sub-programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr 2020– Sept 2020)**	**2019/20 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**

ICT Policy and Regulation	% of policy development completed	No activity	Commence work on Policies – • Spectrum Management Policy • Review of ICT Policy				
Name of Sub-programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Development of a Spectrum Management Policy	% of policy completed		Spectrum Pricing Policy	Spectrum Pricing Concept Note prepared			
Development of an Open Data Policy	% of policy completed	Comments received from stakeholders	Open Data Policy submitted to Cabinet	Draft Open Data policy updated in keeping with the recommendation of stakeholders			
Promulgation of the ICT Act	ICT Act promulgated in agreed timeframe		Drafting Instructions prepared 20%	Cabinet Submission reviewed			
Open Source Software Policy (formerly FOSS)	% of policy completed	*None*	Concept Paper developed 20%	*None*			
Name of Sub-programme	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
MAJOR ACTIVITIES/INITIATIVES							
Name of Major Activity/ Initiative	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Facilitate the Implementation of the GovNet project	% completion of Implementation of	NOC not implemented • Connection of 50%	Renovations to the space completed	Space identified and design completed for Network Operating			

to support the integration of the GOJ ICT infrastructure.	the GovNet project	of 33 CTMS entities over enterprise fibre network	33.3% of Video Wall Hardware and software installed and implemented	Centre (NOC). Site assessment completed for 50 KMA sites			
Name of Major Activity/ Initiative	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr 2020– Sept 2020)**	**2020/21 Budget (J$'000**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Implementation of an eParticipation platform and mobile application called "MyGov.Jm".	% completion of MyGov.Jm	Draft Business Case developed	Applications available for public use.	Development of Mobile App, Operations Web App, and Public Facing Website functionalities completed pending enhancements arising from demos and focus group sessions			Pilot with JPS (street light reporting) awaiting Cabinet Decision
Establishment of the ICT Authority.	% completion of ICT Authority	Transition Team established and work continued on the Final Transition Plan for the ICT Authority	70% of transitional activities for ICT authority completed	Transition Advisory Group and Transition Team operational			
TIS Roll-Out Project- Tablets for Teachers Programme (TTP)	% Complete – Project Proposals and Plans	100% - Project Proposal submitted to MoEYI, MOFP and JTA which was accepted - Project Management Plan and Milestone Plan accepted by the Steering Committee and updated as needed	N/A	N/A			
	#Teacher tablets imported	N/A	25,000	25,000			
	#Teacher tablets distributed	N/A	12,500	19,500			Covid-19 expedited distribution

TIS Roll-Out Project	% Complete – Technology in Infant and Primary Schools (TIIPS) Programme Proposal and Plan	100% - Revised Proposal and Cabinet Note was submitted to MSET.	N/A	N/A			This proposal was discontinued as new plans were needed to meet the MoEYI's Covid-19 response
TIS Roll-Out Project	# of Schools - 120	0 Tablets in 0 schools:	TBD	0			Delivery was deferred at the request of MoEYI Legal dispute with local vendor for tablets has resulted in delays
	#Tablets - 19305		- Contract 40,000 - Import 40,000 - Distribute 40,000	100% - Contract 40,000 - Import 15000 tablets - Distribute 0 tablets			Delivery was deferred at the request of MoEYI
Name of Major Activity/ Initiative	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Expansion of Community Access Points.	# of CAP to be established		20 new CAPs established	3 sites			
Expansion of Public Wi-Fi.	# of Wi-Fi Hot spots across the Country	1 public Wi-Fi hotspot established in Sam Sharpe Square, St. James	4 new sites established (Annotto Bay, May Pen, Port Antonio, Ocho Rios, 1 existing site restored (Olympic Way) 1 expansion of existing location (Sir William Grant Park) 1 upgraded location (Junction	3 sites established May Pen site completed Annotto Bay (St. Mary) site completed Ocho Rios (St. Ann) site completed			

	# of CAP sites approved for solar		20	8			
Execution of the Technology Advancement Programme (TAP).	# of youths participating in TAP Programme	864 TAP I participants in the programme with 78% of that number successfully completing	80% of TAP II cohort successfully completing 80% of cohort successfully placed in internship opportunities	Have not yet received final grades from Heart and CMU to determine successful completion 93% of cohort placed in internship opportunities			
Name of Major Activity/ Initiative	**Performance Indicators**	**Major Achievements 2019/2020**	**End-of-year Target 2020/21**	**Major Achievements (Apr2020 – Sept 2020)**	**2020/21 Budget (J$'000)**	**YTD Expenditure (J$'000)**	**Explanation / Comments**
Complete the implementation of the Cyber Security Strategy.	% implementation of strategy	No activity	100% completion of the implementation of the following: • NGEM Incident Management System • Qualys Web Analysis Tool • Malware Lab	Completion of the installation of the NGEN incident management system (IMS). Completion of the security baselining of 10 official GoJ websites			
Implement an early warning system which will assist in protecting Jamaica's cyber infrastructure.	% of warning systems implemented	75% complete Ticketing system completed Honeypot Project implemented and being monitored Training and implementation completed for Web Assessment	100% completion of HoneyPot Early Warning Systems	Installation of the HoneyPot(r) Intrusion Detection/Early warning System management node at JaCIRT, partial implementation at eGovJa and the Supreme Court			

4.0 PERFORMANCE IMPROVEMENT PLAN

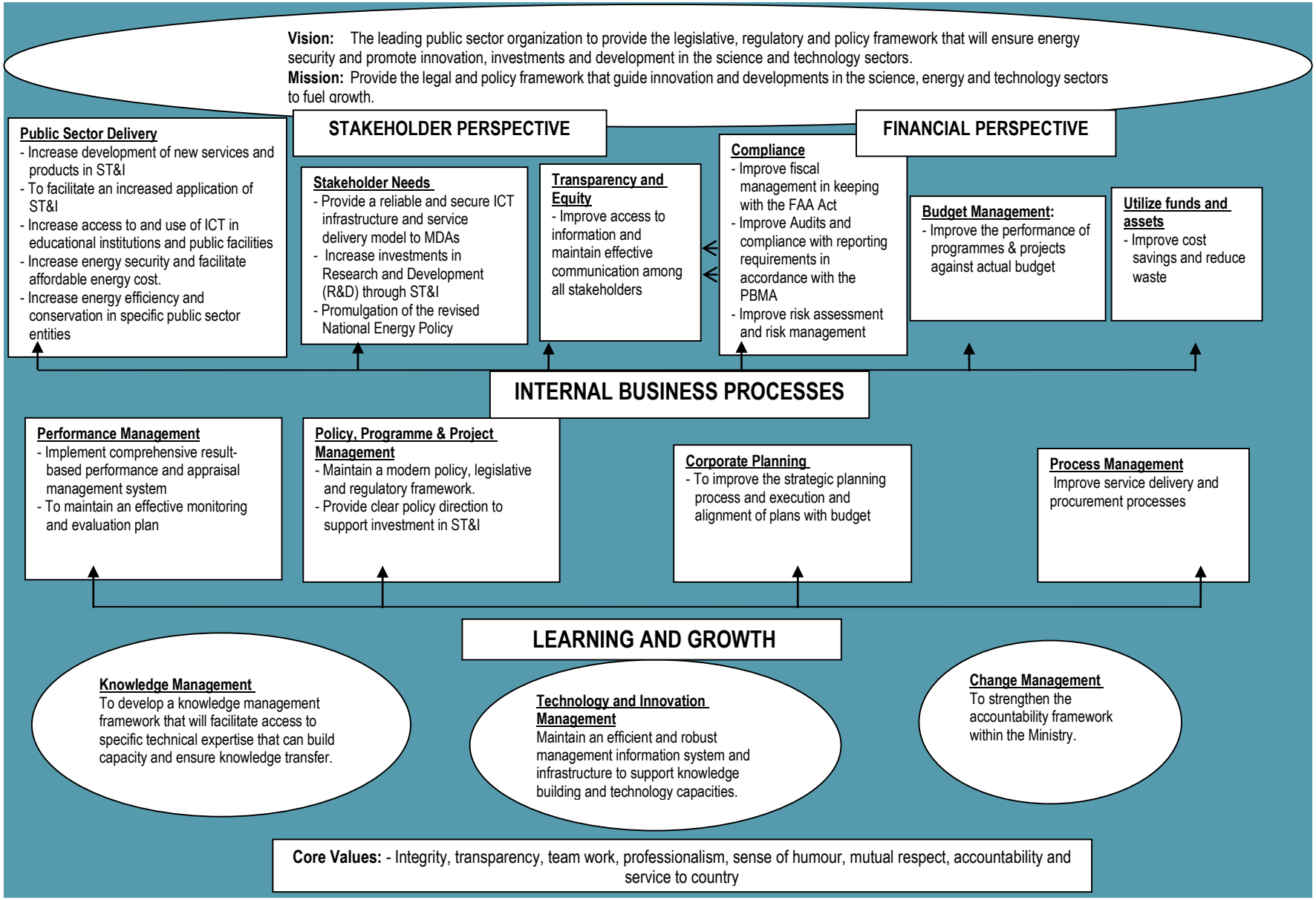
The Ministry has identified key performance issues that need to be addressed in order to bring performance in line with expectations. Outlined in the table below are two (2) major initiatives that are lagging behind in relation to timely implementation. This affects the achievement of specific programme and sub-programme objectives and the overall attainment of the Ministry's and GOJ's Priorities. The Performance Improvement Plan is intended to identify key performance areas and issues and propose strategies on how the Ministry can improve performance in those areas over the medium term.

Programme/ Sub-Programme	Strategic Performance Area	Description of Performance Issue	Required Improvements	Performance Improvement Indicator [Outcome]	Proposed Corrective Measures	Timeline	Budget (J$'000)	Functional Agency/Dept/ Division
ICT Policy Administration	Development of Spectrum Management Policy and Postal Services Policy are behind schedule; as well as, the review of the ICT Policy of 2011 is behind schedule in being updated	Targets set for the development of each Policy were not met. Due to other competing priorities and failed procurement for a consultant, strategic activities were unable to be executed.	Set targets that are attainable and rescheduling of major activities	% of policies reviewed/updated in the agreed timeline	Procurement for Consultant to conduct postal services market study to be retendered. This study is to inform the development of the Postal Services Policy. Revise work plans and assign more human resources to carry out policy development activities. Set work targets to be more achievable over the short and medium terms	March 2023		ICT Division Policy, Planning Development and Evaluation Division (PPDED)

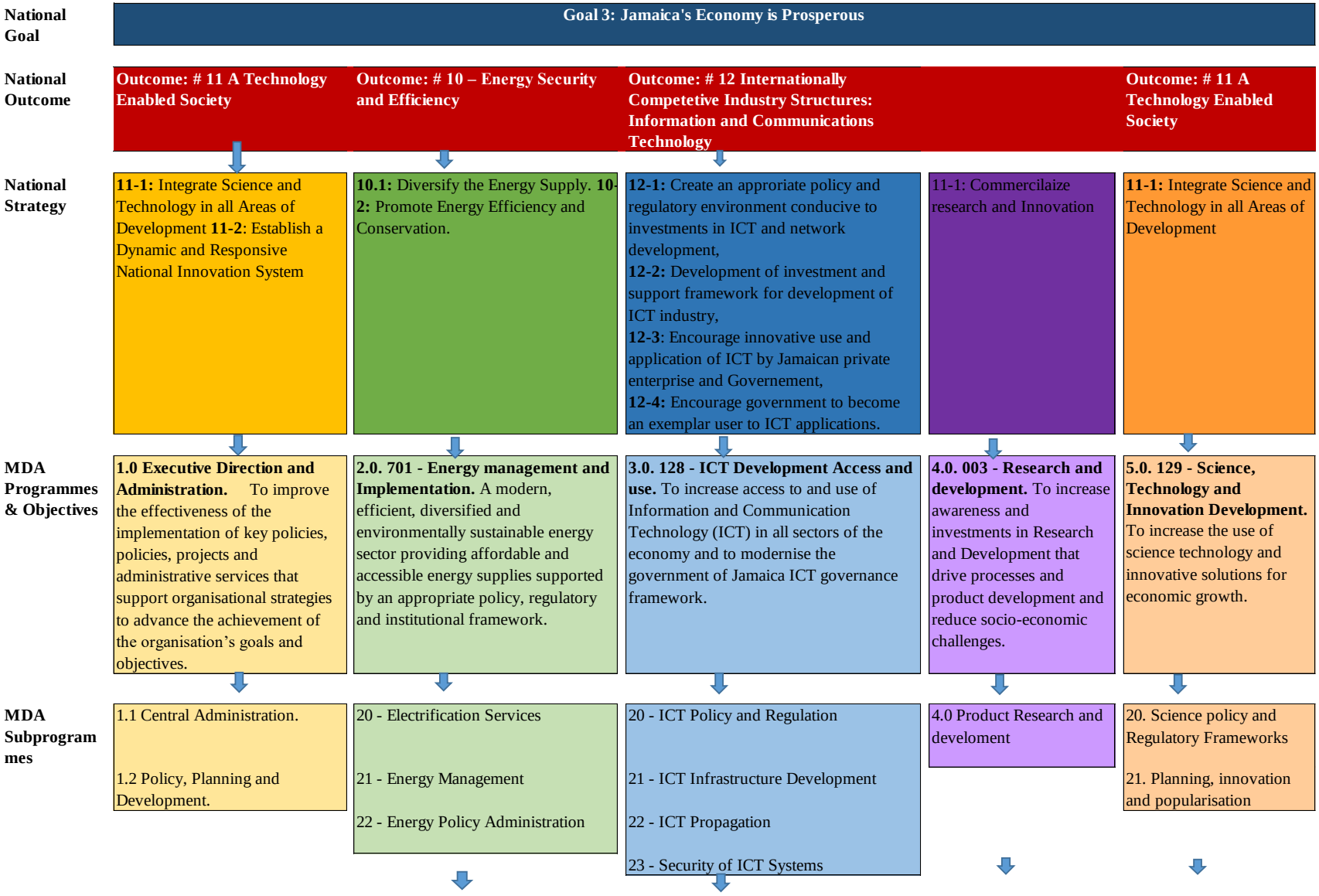
Programme/ Sub-Programme	Strategic Performance Area	Description of Performance Issue	Required Improvements	Performance Improvement Indicator [Outcome]	Proposed Corrective Measures	Timeline	Budget (J$'000)	Functional Agency/Dept/ Division
Energy Policy Administration	The National Energy Policy, which is the overarching Policy to drive developments in the energy sector, was due to be reviewed and updated by the end of March 2015. This has significantly fallen behind schedule and the Policy is not able to adequately address emerging trends in the energy sector. The sub-policies to this policy are still at the draft stage.	Relevant support for the activities relating to the updating and implementation of the National Energy Policy and the development of the sub-policies were not implemented due to staff complement, scheduling, and other competing priorities. There was also the lack of relevant impact studies and absence of data to inform the review of the policy.	Timely review and updating of the National Energy Policy and development of the sub-policies	% of the National Energy Policy reviewed and updated within the set timeline. % of the sub-policies reviewed and developed	Staff complement met, clear, attainable objectives implemented, realistic timeliness set, schedule put in place, appropriate training and the necessary analysis and studies completed. Consultant engaged to update the Policy and complete the development of the sub-policies	March 2022		Energy Division PPDED
Energy Management and Implementation	The Petroleum (Downstream) Activities legislation is intended to modernise the petroleum sector by regulating the quality of fuel supplied for use in	The legislation is intended to repeal and replace the existing Petroleum Act (1979); however, this has been delayed for a few years. Although drafting instructions	Cabinet submission needs to be resubmitted. Additional drafting instruction	% completion of drafting instructions % completion of legislation	Assign additional human resources to carry out review of comments and assist with drafting instructions as top priority. Revision of work	March 2022		Legal Services Unit Energy Division

Programme/ Sub-Programme	Strategic Performance Area	Description of Performance Issue	Required Improvements	Performance Improvement Indicator [Outcome]	Proposed Corrective Measures	Timeline	Budget (J$'000)	Functional Agency/Dept/ Division
	Jamaica. It will also ensure that petroleum products of the highest quality are available to consumers.	have been issued to the Chief Parliamentary Council (CPC), a Cabinet Submission is now required to be presented to Cabinet due to the time that has passed. There are also issues that have arisen which need to be taken into consideration in drafting of the legislation.	s to CPC need to take into account comments from the Attorney General Chambers (AGC).		plans to reflect targets that are specific, measurable, achievable, realistic and time-bound.			

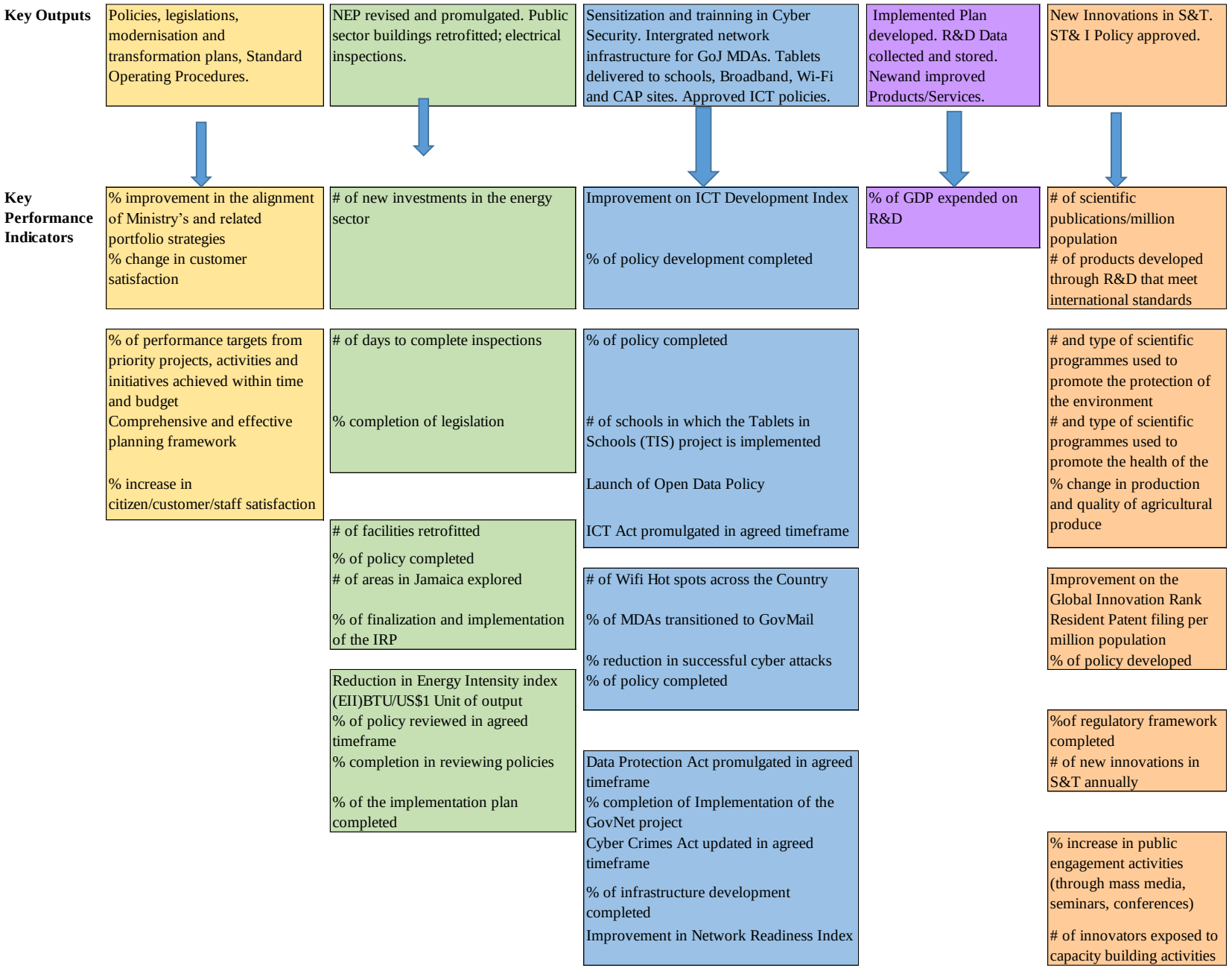
5.0 MSET'S STRATEGY MAP



6.0 PROGRAMME ACTIVITY ARCHITECTURE



Major MDA Acivities/Initiatives					
	Consolidation of the petroleum legislation treating upstream and downstream activities. Development and implementation of regulations for Net Billing, Auxiliary Connections and Power Wheeling. Operationalization of the Government Electrical Regulators (GER) Reviewing and updating of the National Energy Policy. Implement strategic framework for electro-mobility (Electric Vehicle). Development of the National Energy Action Plan. Finalization and implementation of the country's first Integrated Resource Plan (IRP). Development of Energy Resources Planning Studies to include an Integrated Energy Plan (IEP). Facilitate the continuation of the exploration for Oil and Gas.	Facilitate the 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 Implementation of GovMail. Implementation of an eParticipation platform and mobile application called "MyGov.Jm". Establishment of the ICT Authority. Implement an early warning system which will assist in protecting Jamaica's cyber infrastructure. Secondary Schools Technology Integration. Expansion of Community Access Points. Expansion of Public Wifi. Execution of the Technology Advancement Programme (TAP). Complete the implementation of the Cyber Security Strategy. Improve the Overall Security of GOJ ICT Websites	Support the growth and development of MSMEs through R&D to develop products that meet international standards Promote the use of scientific research to enhance the protection of the environment Promote the use of scientific research to protect and enhance the health of the Jamaican population Support the increase in production and quality of agricultural produce Support innovation and economic growth and development through R&D using indigenous materials	Finalise the development of a Science Technology and Innovation Policy. Contribute to the development of regulatory framework to govern the National Nutraceutical Industry(NNI) Support the completion of the feasibility study for the development of a science, technology and research park Popularization of Science, Technology and Innovation (ST&I) Stimulate and encourage innovation among Jamaican Youths


Key Outputs
Policies, legislations, modernisation and transformation plans, Standard Operating Procedures.
NEP revised and promulgated. Public sector buildings retrofitted; electrical inspections.
Sensitization and trainning in Cyber Security. Intergrated network infrastructure for GoJ MDAs. Tablets delivered to schools, Broadband, Wi-Fi and CAP sites. Approved ICT policies.
Implemented Plan developed. R&D Data collected and stored. Newand improved Products/Services.
New Innovations in S&T. ST& I Policy approved.
Key Performance Indicators
% improvement in the alignment of Ministry's and related portfolio strategies
% change in customer satisfaction
# of new investments in the energy sector
Improvement on ICT Development Index
% of policy development completed
% of GDP expended on R&D
# of scientific publications/million population
# of products developed through R&D that meet international standards
% of performance targets from priority projects, activities and initiatives achieved within time and budget
Comprehensive and effective planning framework
% increase in citizen/customer/staff satisfaction
# of days to complete inspections
% completion of legislation
% of policy completed
# of schools in which the Tablets in Schools (TIS) project is implemented
Launch of Open Data Policy
ICT Act promulgated in agreed timeframe
and type of scientific programmes used to promote the protection of the environment
and type of scientific programmes used to promote the health of the
% change in production and quality of agricultural produce
# of facilities retrofitted
% of policy completed
# of areas in Jamaica explored
% of finalization and implementation of the IRP
# of Wifi Hot spots across the Country
% of MDAs transitioned to GovMail
% reduction in successful cyber attacks
% of policy completed
Improvement on the Global Innovation Rank
Resident Patent filing per million population
% of policy developed
Reduction in Energy Intensity index (EII)BTU/US$1 Unit of output
% of policy reviewed in agreed timeframe
% completion in reviewing policies
% of the implementation plan completed
Data Protection Act promulgated in agreed timeframe
% completion of Implementation of the GovNet project
Cyber Crimes Act updated in agreed timeframe
% of infrastructure development completed
Improvement in Network Readiness Index
%of regulatory framework completed
# of new innovations in S&T annually
% increase in public engagement activities (through mass media, seminars, conferences)
# of innovators exposed to capacity building activities

7.0 PROGRAMME IMPLEMENTATION

PROGRAMME NAME: EXECUTIVE DIRECTION AND ADMINISTRATION

PROGRAMME OBJECTIVE: ***To provide institutional governance and operational capacity for the Ministry.*** **SUPPORTING GOJ POLICY PRIORITY:**	**Description & Context:** This programme supports the strategic management of the Ministry's operations and to provide policy direction for the Ministry, Departments and agencies. The programme is mainly concerned with the formulation, initiation, review and evaluation of policies for the effective management of the various programmes and projects comprising its functions. It provides for the centralization of services such as human resource management, financial management and accounting and other administrative services required to support the Ministry's operations. **Programme Coordinator [if available]:**	
Vision 2030 National Goal: Jamaica's Economy is Prosperous	**Sector Outcome:**	**Budget No.: 001**
Vision 2030 National Outcome: # 10, 11 and 12	**Contribution to GOJ Strategic Priority:** ***Inclusive Sustainable Economic Growth & Job Creation*** This Programme provides critical support services to all major policies, programmes and projects that the Ministry pursues towards the achievement of the GOJ Strategic priority.	

RESULTS MATRIX									
Programme/ Sub-programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
Executive Direction and Administration	The Ministry operating efficiently and effectively	**Outcome:** % of performance targets achieved in agreed timeline	**43.4**	**50**	**60**	**≥70**	**≥70**	**≥70**	**All Agencies**

RESULTS MATRIX									
Programme/ Sub-programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
Staff Costs					**$232.04M**	**$221.74M**	**$229.62M**	**$237.34M**	
Cash Grants									
Administrative Costs					**$372.30M**	**$373.84M**	**$387.60M**	**$403.87M**	
Sub-Programme: Central Administration **Objective:** *To provide/support Financial Management and Corporate Services in pursuit of the Ministry's mission, vision and mandate.* **Budget No.: 01**	Effective planning, execution and monitoring of the Ministry's financial resources	**Outcome:** % of Financial resources and services provided	**0**	**80**	**≥90**	**≥90**	**≥90**	**≥90**	**Finance & Accounts (F&A)**
	Efficient Financial reporting to internal and external stakeholders	**Output:** % compliance in submission of reports in stipulated time	**0**	**75**	**100**	**100**	**100**	**100**	**F&A**
	Accurate and timely payments to all stakeholders	**Output:** % of payments process accurately and paid in agreed timeframe	**0**	**80**	**100**	**100**	**100**	**100**	**F&A**
	A modern, robust and integrated Information Technology	**Output:** % of IT systems installed and maintained	**75**	**80**	**100**	**100**	**100**	**100**	**Information Services (IS) Unit**

RESULTS MATRIX									
Programme/ Sub-programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
	(IT) platform to support performance and service delivery								
	Relevant records within MSET are fully digitised	**Output:** % of records digitised	**0**	**0**	**60**	**80**	**100**	**100**	**CSD**
	To strengthen the customer service capacities and framework of the Ministry	**Output:** % customer satisfaction achieved	**TBD**		**20**	**40**	**85**	**85**	**CSD**
	To strengthen the skills and competencies of the workforce to execute the Ministry's mandate.	**Output:** % of staff with the required skills and competencies	**0**	**0**	**50**	**70**	**80**	**80**	**CSD**
	Greater levels of public awareness of MSET services and	**Output:** % increase in Public awareness of MSET services	**TBD**		**10**	**10**	**10**	**10**	**Public Relations**

RESULTS MATRIX									
Programme/ Sub-programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
	to strengthen public trust and confidence in the Ministry.								
Sub-programme: Policy planning and Development **Objective:** *To provide Direction and Management to the policy formulation, strategic planning, monitoring and evaluation in the Ministry.* **Budget No.: 02**	Effective policy development, in support of the execution of the Ministry's programmes	**Outcome:** # of policies drafted and submitted to Cabinet	**0**	**2** • Energy from Waste Policy • Open Data Policy	**4** • EC&E Policy • Renewable Energy Policy • Spectrum Management Policy • Broadband Strategy/ Policy	**3** • National Biofuels Policy • Open Source Software Policy • Electric Vehicle/Mobility Policy	**2** • ICT Policy • Postal Sector Policy		**PPDED**
	Strategic planning and monitoring and evaluation executed	**Output:** % compliance with planning and reporting requirements	**0**	**95**	**100**	**100**	**100**	**100**	**PPDED**
	Strategic research conducted to inform Ministry's policies,	**Output:** % of research requests satisfied in agreed timeframe	**0**	**90**	**≥90**	**≥90**	**≥90**	**≥90**	**PPDED**

RESULTS MATRIX									
Programme/ Sub-programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
	planning, monitoring and evaluation								
Sub-programme: Science Policy and Regulatory Framework **Objective:** **Budget No.: 20**	Improve on STI Roadmap for Jamaica 2012	**Output:** % completion of the analysis	**0**	**50**	**50**	**-**	**-**	**-**	**Science Division**
	Create The Total Roadmap for Government R&D Programs	**Output:** % completion	**0**	**0**	**70**	**100**	**100**	**100**	**Science Division**
	Formulate the National Monitoring and Evaluation System	**Output:** % completion	**0**	**0**	**100**	**100**	**100**	**100**	**Science Division**
	Establish the National S&T Foresight	**Output:** % completion	**0**	**0**	**100**	**-**	**100**	**-**	**Science Division**
Energy Policy Administration	Improved/ strengthened policy, legislative, and energy sector	**Outcome**: # of new investments in the energy sector	**-**	**1**	**0**	**0**	**2**	**1**	**Energy Division**

RESULTS MATRIX									
Programme/ Sub-programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
	regulatory framework								
	Increase in the use of alternative sources of energy	**Outcome:** # of new generating capacity assigned, negotiated or under construction / installed.	**-**	**0**	**4**	**0**	**2**	**1**	**Energy Division**
		Outcome: % renewables in electricity generation	**4.5%**	**11%**	**12.5%**	**12.5%**	**19%**	**27%**	**Energy Division**

SCIENCE PORTFOLIO

PROGRAMME NAME: RESEARCH AND DEVELOPMENT

PROGRAMME OBJECTIVE: To increase awareness and investments in Research and Development that drive processes and product development and reduce socio-economic challenges. **SUPPORTING POLICY PRIORITY:**	Research and Development (R&D) plays a critical role in innovation and economic development. This programme supports the operations of International Centre for Environment and Nuclear Sciences (ICENS) and the Scientific Research Council (SRC) to fulfil their mandates and to help resolve Jamaica's critical socio-economic challenges through integrated multidisciplinary research and development programmes. Major goals can be summarized as: contributing to the nation's socio-economic advancement, assisting in the creation and support of a national pool of excellent scientists and technologists, developing, strengthening and supporting national, regional and international collaboration and partnerships in science and technology.	
National Goal: # 3 Jamaica's Economy is Prosperous	**Sector Outcome**: **Increased investments in scientific R&D**	**Budget. No.: 003**
National Outcome : # 11 A Technology Enabled Society	**Contribution to GOJ Strategic Priority: Inclusive Sustainable Economic Growth & Job Creation**	

RESULTS MATRIX									
Programme/Sub programme	**Intended Results**	**Performance Indicator**	**Baseline (2018/19)**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
Research and Development	Increase investments in R&D and improved	**Outcome:** % of GDP for R&D investments	0.001	TBD	0.02	0.03	0.05	0.1	

RESULTS MATRIX									
Programme/Sub programme	Intended Results	Performance Indicator	Baseline (2018/19)	2020/21 Projected Outturn	Estimates 2021/22	Projection (Forecast) & Costs ($'000) 2022/23	2023/24	2024/25	Functional Agency/ Dept/Div
	processes and products								
Staff Costs					$429.63M	$453.22M	$475.86M	$498.07M	
Cash Grants									
Administrative Costs					$269.64M	$237.30M	$244.06M	$243.95M	
SUB-PROGRAMMES									
Product Research and Development **Objective:** To help the country resolve critical socio-economic challenges through integrated multidisciplinary R&D. **Budget No.:04**	Increase in new and improved products	**Outcome:** # of successful new products developed for market annually	15	1	3	4	6	7	**SRC**
	Increases compliance to MSMSEs to food safety, health and environmental regulatory standards	**Output:** # of MSMEs assisted annually	300	300	350	400	450	500	**SRC**

RESULTS MATRIX									
Programme/Sub programme	Intended Results	Performance Indicator	Baseline (2018/19)	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/Div
					2021/22	2022/23	2023/24	2024/25	
	Reduction in Mosquito population	**Output:** # of mosquitos sterilised	0	0	2.6 million	25 million	50 million	50 million	**ICENS**
	Increase in number of environmentally -friendly wastewater treatment systems (EFWWTS) to decrease pollution load	**Output:** # of EFWWTS constructed for use in Jamaica and the region	2	2	3 local	2 local	3 local	4 local	**SRC**
	Improved quality of agricultural produce	**Output:** # client contracts for disease-free planting material to meet market demand	1	1	at least 2	at least 2	at least 3	at least 3	**SRC**

PROGRAMME NAME: SCIENCE, TECHNOLOGY AND INNOVATION DEVELOPMENT

PROGRAMME OBJECTIVE: Improved Policy Framework that facilitates greater use of science, technology and innovation for economic growth **SUPPORTING GOJ POLICY PRIORITY:**	**Description & Context:** The integration of Science, Technology and Innovation in national development is a pivotal element that will foster the application of scientific knowledge and technological innovation across key national sectors, as well as increased investment in Research and Development. The main aim of this programme is to create an effective policy and legislative framework to support and advance ST&I. A key element of this programme is the promulgation of the ST&I Policy, which will facilitate the development of Science and Technology (S&T) as a cornerstone of our culture and economy. The repositioning of the ST&I Sector to advance our steps towards developed country status by 2030 is contingent on a number of factors, including a knowledge-based economy, which will drive economic growth, wealth creation and overall wellbeing of the society. The capacity of our scientific and technological endeavours has to be accounted for to ensure consensus on where we are, as it relates to the medium to long-term priorities in achieving the goals of the Vision 2030 National Development Plan. **Programme Coordinator [if available]:**	
Vision 2030 National Goal: Jamaica's Economy is Prosperous	**Sector Outcome: Use of ST&I to drive national development**	**Budget No.: 129**
Vision 2030 National Outcome: # 11 A Technology Enabled Society	**Contribution to GOJ Strategic Priority: Inclusive Sustainable Economic Growth & Job Creation** Significantly greater application of ST&I will be pivotal to the country's quest for economic and technological transformation and development. The positioning of science and technology as an enabling force for economic growth, creation of jobs and national development requires a strategic focus that cuts across sectors. The Ministry is putting its support behind activities that will support the development of S&T and how best to leverage our capabilities to advance our national development agenda.	

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
Science, Technology and Innovation Development	Improved policy and legislative framework to	**Outcome** % increase in	**0**		**5**	**10**	**15**	**20**	**Science Division, NCST**

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates 2021/22	Projection (Forecast) & Costs ($'000) 2022/23	2023/24	2024/25	Functional Agency/ Dept/ Div
	support the advance of ST&I	ST&I Investments							
Staff Costs					**$35.54M**	**$36.13M**	**$37.37M**	**$39.02M**	
Cash Grants									
Administrative Costs					**$44.29M**	**$15.637M**	**$16.186M**	**$40.87M**	
Sub-Programme: Science Policy and Regulatory Framework **Objective:** Modern legislations and effective Policies **Budget No.: 20**	ST&I Policy Promulgated	**Outcome:** % completion of Policy development	**0**	**80**	**100**	**-**	**-**	**-**	**Science Division, NCST,**
	Regulations promulgated for the National Nutraceutical Industry	**Output:** % completion of drafting of regulations	**0**	**60**	**90**	**100**	**-**	**-**	**NCST**
Sub-programme: Planning, Innovation and Popularisation **Objective:**	Increased innovations and greater use of S&T	**Outcome:** # of patents registered locally by innovators	**78**	**78**	**81**	**85**	**90**	**95**	**NCST, SRC**

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates 2021/22	Projection (Forecast) & Costs ($'000) 2022/23	2023/24	2024/25	Functional Agency/ Dept/ Div
Increased innovations and greater use of science and technology **Budget No.: 21**	Increased awareness on the use of S&T to drive innovations and development	**Outcome:** % of targeted audiences sensitized	**0**	**60**	**60**	**75**	**75**	**80**	**SRC, NCST**
	Feasibility Study completed for the establishment of an S&T Research Park	**Output:0** % completion	**0**	**90**	**100**	**-**	**-**	**-**	**NCST**
	GOJ Scientific Laboratories rationalized	**Output**: % completion of Strategic review of GOJ Labs	**0**	**0**	**-**	**20**	**30**	**50**	**NCST**
	Improved awareness and capacity in Science, Technology, Engineering and Maths (STEM) in educational institutions	**Output**: # of schools where programmes implemented	**0**	**95**	**124**	**155**	**190**	**250**	**NCST, SRC**
		Efficiency:							

ENERGY PORTFOLIO

PROGRAMME NAME: ENERGY MANAGEMENT AND IMPLEMENTATION

<table>
<tr><td>PROGRAMME OBJECTIVE:
A modern, efficient, diversified and environmentally sustainable energy sector providing affordable and accessible energy supplies supported by an appropriate policy, regulatory and institutional framework

SUPPORTING GOJ POLICY PRIORITY:</td><td colspan="2">Description & Context: Jamaica's National Energy Policy (NEP) will support the National Development Plan – Vision 2030. The NEP provides the enabling environment for the achievement of the national outcome of "a secure and sustainable energy supply for our country" and the implementation of the two national energy strategies: to diversify the energy supply and to promote energy efficiency and conservation. The MSET is responsible for the implementation of the strategies as articulated in the Policy. Some of these strategies include facilitating investments in renewable energy, modernizing energy infrastructure, implementing the Integrated Resource Plan and development of a National Energy Action plan.

The dependence on imported petroleum has resulted in the country being highly vulnerable to disruptions to the supply and to the volatility in oil prices from external sources. Further, it limits the country's ability to improve energy efficiency and reduce energy costs.

Programme Coordinator [if available]:</td></tr>
<tr><td>Vision 2030 National Goal:
Jamaica's Economy is Prosperous</td><td>Sector Outcome: Modern and integrated policy, legislative, regulatory and institutional framework for the energy sector</td><td>Budget No.: 701</td></tr>
<tr><td>Vision 2030 National Outcome: # 10 – Energy Security and Efficiency</td><td colspan="2">Contribution to GOJ Strategic Priority: Inclusive Sustainable Economic Growth & Job Creation
The Energy Policy Programme is aimed at providing affordable and secured energy supply that will support critical industries in the country such as Manufacturing, Mining, Agriculture and Tourism. The programme will also facilitate investments in the energy sector that will create jobs and promote growth.</td></tr>
</table>

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
Energy Management and Implementation	Improved/ strengthened policy, legislative, and regulatory framework to support the energy sector	**Outcome**: **#** of new investments in the energy sector	**-**	**1**	**0**	**0**	**2**	**1**	**Energy Division,** **Policy Division,** **Legal Services** **Generation Procurement Entity**
		# of new licences issued for electricity sector		**30**	**35**	**40**	**50**	**50**	**Energy Division Legal Services Unit**
		# of new licences issued for fuels sector		**20**	**30**	**40**	**45**	**50**	**Energy Division Legal Services Unit**
	Increase in the use of renewable and alternative sources for electricity generation	**Outcome:** % renewables in electricity generation	**4.5**	**11**	**12.5**	**12.5**	**19**	**27**	**Energy Division,**
		Outcome: # of new generating capacity		**1**	**0**	**0**	**2**	**1**	**Energy Division Generation Procurement Entity**

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates 2021/22	Projection (Forecast) & Costs ($'000) 2022/23	2023/24	2024/25	Functional Agency/ Dept/ Div
		assigned, negotiated or under construction / installed.							**Private Sector**
	Reduction in electricity prices	Generation Avoided Cost (USc/kWh)			**10.79**	**10.80**	**11,25**	**10.63**	**MSET JPS OUR**
Staff Costs					$171.10M	$174.24M	$179.18 M	$183.69M	
Cash Grants									
Administrative Costs					$913.17M	$906.12M	$907.21 M	$916.91M	
Sub-Programme: Electrification Services **Objective:** To support the electrification of areas in the country that are without electricity and to uphold electrical safety standards in	Electrical inspections completed and electricity supplied to consumers in timely manner	**Outcome:** # of days to get electricity	145	**45**	**40**	**35**	**30**	**30**	**MSET, JPS, GER**
		# of Licensed Electrical Inspectors		**9**	**20**	**35**	**35**	**35**	**MSET GER**
	Houses are wired in keeping with required standards to be electrified	# of new households electrified		**688**	**500**	**1000**	**1000**	**1000**	**MSET, MLGRD**
		Percentage electrification in the country	92	**94.5**	**94.5**	**95.0**	**95.0**	**96.0**	**MSET MLGRD**

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates 2021/22	Projection (Forecast) & Costs ($'000) 2022/23	2023/24	2024/25	Functional Agency/ Dept/ Div
keeping with the Electricity Lighting Act (2015) **Budget No.: 20**									
Sub-Programme: Energy Management **Objective:** To provide energy efficiency and conservation opportunities that will result in cost savings and reduction in public sector electrical energy consumption while increasing awareness in EC and EE. **Budget No.: 21**	Increase energy efficiency at the level of utilities and end-users.	**Outcome**: Energy Intensity index (EII)BTU/US$1 Unit of output	**14587 (2007)**	**6000**	**6000**	**6000**	**6000**	**6000**	**MSET** **EMEP,**
	Reduction in the electricity consumption in the Public Sector	**Outcome:** KWh savings in electricity consumption	**19,040,804**	**-**	**3,022,427.11**	**7,561,805.74**	**8,456,571.45**	**-**	**MSET, EMEP**
	Reduction in BOE in public sector	**Output:** BOE reduced in electricity generation	**11,786**	**-**	**1,870.88**	**4,680.75**	**5,234.61**	**-**	**MSET, EMEP**
	Avoidance of CO_2 in the Public Sector	**Outcome:** tonnes CO_2 avoid per yr	**31,743**	**-**	**5,038.62**	**12,606.12**	**14,097.77**	**-**	**MSET, EMEP**
	Public sector Buildings are energy efficient	**Output:** # of Government Buildings retrofitted	**80**	**-**	**12.70**	**31.77**	**35.53**	**-**	**MSET, EMEP**

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
	Jamaicans are more aware of energy efficiency and conservation	**Output:** # of Energy Efficiency and Conservation awareness initiatives implemented	71	-	8	30	30	3	**MSET, EMEP**
	Decrease in Motorist travel time and fuel consumption in the Kingston Metropolitan Area (KMA)	**Output:** % completion of the implementation of the Urban Traffic Management System (UTMS)	100	-	79.21	30.92	0	0	**MSET, EMEP, MOTM**
		Annual Fuel consumption in the KMR - Reduction of total fuel consumption	104 million litres OR 1,890,909 BOE	-	82.38	32.15	0	-	**MSET, MOTM, EMEP**
		CO_2 equivalent emissions resulting from transport fuel	203,160	-	160,919.58	62,919.58	-	-	**MSET, MOTM, EMEP**

RESULTS MATRIX									
Programme/ Sub- programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
		consumed in KMR - reduction of total fuel consumption	2.03 tonnes of CO_2 equivalent	**-**	1.61	0.63	-	-	
		Total annual hours of travel time in the KMR - Reduction in total travel time	55 million hours	**-**	43.56	17.00	-	-	**MSET, MOTM, EMEP**
Sub-Programme: Energy Policy Administration **Objective:** To support the activities relating to the development and implementation of the National Energy Policy and the energy sub-policies. **Budget No.: 22**	National Energy Policy (NEP) updated and promulgated	**Outcome:** # of key policy strategies implemented	**0**	**2**	**4**	**4**	**2**	**0**	**Energy Division,** **Policy Division**
	Energy Sub-Policies updated and promulgated	**Output:** # of Sub-policies reviewed and updated	**0**	**1** (Energy from Waste Policy)	**3** (Renewable Energy, Energy Conservation & Efficiency, and revised NEP**)**	**2 (**Electromobility Policy**,** National Biofuels Policy and National Electricity Policy)	**TBD**	**TBD**	**Energy Division** **EMEP** **Policy Division**
	Energy sector Integrated	**Outcome:** % of electricity demand	**100**	**100**	**100**	**100**	**100**	**100**	**MSET** **JPS**

RESULTS MATRIX									
Programme/ Sub- programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
	Resource Plan in effect	satisfied							
	Oil and Gas exploration maximised	**Output:** # of blocks explored	**35**	**10**	**0**	**2**	**2**	**2**	**MSET Oil & Gas Exploration Unit**

TECHNOLOGY PORTFOLIO

PROGRAMME: ICT DEVELOPMENT, ACCESS AND USE

<table>
<tr><td>PROGRAMME OBJECTIVE: To increase access to and use of ICT in all sectors of the economy and to modernise the government of Jamaica ICT governance framework towards the country being a digital society.

SUPPORTING GOJ POLICY PRIORITY:</td><td colspan="2">Description & Context: This programme seeks to promulgate relevant policies and modern legislation to repeal, replace and update existing laws, as well as, introduce new laws to govern the ICT sector and to support the development of a digital society. The digitisation of GOJ business processes is a critical element being supported by this programme and this new framework will, among other things, address the collection, storage, processing and confidentiality of personal data and new forms of cybercrimes. The programme is designed to support the eight (8) key pillars[4] that will enable the transformation of the country into a digital society.

At present, the ICT sector is governed by legislation which dates as far back as the 1970's. As such, the legal framework, although 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 and digital society; there is also increased need to ensure that citizens' personal data are protected.

Programme Coordinator [if available]:</td></tr>
<tr><td>Vision 2030 National Goal: Jamaica's Economy is Prosperous</td><td>Sector Outcome: Modern policy and regulatory environment conducive to investments in ICT and network development</td><td>Budget No.: 128</td></tr>
<tr><td>Vision 2030 National Outcome: # 12 International Competitive Industry Structures: ICT</td><td colspan="2">Contribution to GOJ Strategic Priority: Inclusive Sustainable Economic Growth & Job Creation

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</td></tr>
</table>

[4] Eight key pillars towards a digital society: 1) ICT Authority, 2) GOJ Broadband Network, 3) Public key infrastructure, 4) Data Protection Act, 5) NIDS, 6) Data Sharing Policy, 7) Electronic Transaction Act, 8) Digitisation of GOJ Records

	spheres of economic involvement and opportunities, increasing local output, facilitating inward investment and creating new employment opportunities will be significant driving forces for economic growth.

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
ICT Development, Access and Use	Improved policy, legislative and regulatory framework which supports a modern ICT Sector and the transformation to a digital society	**Outcome:** ICT Development Index	60	60	60	58	56	54	ICT Division, USF, eGOV, eLearning
		Outcome: % increase in investments in the ICT Sector	**0**	TBD	5	8	12	15	ICT Division
Staff Costs									
Cash Grants									
Administrative Costs									
Sub-Programme: ICT Policy and Regulation	Improved ICT Governance Framework	**Outcome:** % implementati	**0**		10	20	30	40	**MSET**

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates 2021/22	Projection (Forecast) & Costs ($'000) 2022/23	2023/24	2024/25	Functional Agency/ Dept/ Div
Objective: All residents of Jamaica adapt to a digital culture and have access to quality ICT to enhance living standards and business endeavours **Budget No.: 20**		on of Policy strategies							
	Completion of the development of relevant legislation and policies	**Output:** # of Policies developed **(6 policies)**	0	0	3 Open Data Policy Spectrum Manage-ment Policy Broadban d Policy/ Strategy	1 Open Source Software Policy	2 ICT Policy Postal Sector Policy	0	**ICT Division** **Policy Division**
		Output: # of legislation tabled **(7) legislation)**	1	1 Data Protectio n Act	3 Infrastruc ture Sharing Rules Quality of Service Rules Resolutio n of Interconn	2 ICT Bill Data Protection Regulation s	1 Cyber-crimes Bill	1 Postal Service s Bill	**ICT Division**

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
					ection Dispute Rules Quality of Service Rules				
		Efficiency:							
		Effectiveness:							
Sub-programme: ICT Infrastructure Development **Objective:** To support the implementation of a modern ICT system and an integrated GOJ Wide Area Network for the country that will facilitate a digital culture in doing business across government	Modern ICT Infrastructure to support s digital culture in Jamaica	**Outcome:** % increase in number of GOJ services provided through ICT	TBD	TBD	**10**	**20**	**40**	**50**	**MSET/eGov**
	GOJ Wide Area Network implemented	**Output:** % completion of GovNet Project	**0**	**10**	**25**	**40**	**60**	**70**	**eGov**
	Improved communication among Government Entities	**Output:** % completion of GovTalk and GovMail projects	**0**	**5**	**20**	**30**	**50**	**70**	**eGov**

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
Budget No.: 21									
	ICT Authority operationalized	**Output:** % of transitional activities completed	**0**	**40**	**70**	**100**	**-**	**-**	**MSET**
Sub-programme: ICT Propagation **Objective:** All residents of Jamaica have access to quality ICT	Improved capacity in ICT among Unattached Youth	**Output:** # of person trained under the Technology Advancement Programme (TAP) annually	**1,000**	**482**	No TAP	**600**		**600**	**USF**
Budget No.: 22		**Output:** % of TAP participants graduating the programme	**78**	**79**	No TAP for this year	**85**	**85**		**USF**
	Improved learning in schools through use of technology	**Output:** # of schools benefiting from ICT Tools	**241**	**0**	**260**	**280**	**300**	**400**	**eLearning**

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
	Increased internet access to Jamaicans	**Output:** # of new communities /public areas with access	**0**	**0**	**154**	**410**	**410**	**-**	**USF**
		Output: # of new Community Access Points (CAP) implemented	**305**	**20**	**10**	**5**	**5**	**-**	**USF**
Sub-programme: Cyber **Objective:** To ensure that the technical measures to secure Jamaicans and Jamaica's interests in cyber space are implemented, complemented by capability based capacity, legal and	Standards Created distributed, implemented and enforced.	# of standards created within CIRT			1	1	2	1	**JaCIRT**
	Drafting, agreement and Signing of MOUs/Information Sharing Agreements with International CIRTs	% increase in # of Signed MOUs/Information Sharing Agreements with International CIRTs, over the previous year			**-**	**25%**	**25%**	**25%**	**JaCIRT**

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
regulatory frameworks that promote public education and awareness. **Budget No.: 23**	A secure searchable database of Cyber Threats	% of database completed			**100%**	**-**	**-**	**-**	**JaCIRT**
	Proactive response to potential cyber events	% improvement in ability to provide early warning to GoJ for adverse cyber incidents and their assessed/potential impact			**25%**	**50%**	**75%**	**100%**	**JaCIRT**
	National Cyber Security Standards	% standardisation of cyber security efforts across government and critical stakeholders based on promulgated national policies.			**25%**	**75%**	**100%**	-	**JaCIRT**
	Enhanced response capability to counter cyber threats and respond to cyber incidents.	% improvement in cybersecurity awareness and			**25%**	**50%**	**75%**	**100%**	**JaCIRT**

RESULTS MATRIX									
Programme/ Sub- programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
		efficiency in incident response and management							
	Response mechanisms specifically tailored to the Jamaican threat landscape	% establishment of Cyber Research facility within CIRT			**100%**	**-**	**-**	**-**	**JaCIRT**
	Sustainable awareness campaigns targeted at specific sectors/industries and general population.	% increase in cybersecurity awareness over previous year			**30%**	**30%**	**30%**	**30%**	**JaCIRT**
	A monitoring and control centre with threat inputs and personnel	% establishment of national Cyber Incident Response Centre			**25%**	**50%**	**75%**	**100%**	**JaCIRT**

8.0 MEDIUM TERM FINANCIAL RESOURCE PLAN

The financial implications of implementing the programmes, sub-programmes and activities and achieving Ministry performance targets over the period of this Business Plan are set out in the following table. It briefly outlines the estimates of expenditure for the current year and budgetary projections for the next three years, thereby facilitating a more detailed forecasting analysis for a three-year period.

Prog. #	Programme	Sub-Prog. #	Sub-Programme	2020/21 Actual Outturn (J$ 000)	2020/21 Approved (J$ 000)	2020/21 Revised (J$ 000)	2021/22 Estimates (J$ 000)	2022/23 Forecast (J$ 000)	2023/24 Forecast (J$ 000)	2024/25 Forecast (J$ 000)
001	Executive Direction & Administration	01	Central Administration		422,693	375,059	738,540	775,266	789,816	806,802
		02	Policy, Planning and Development		190,679	150,539	185,306	107,163	109,781	109,078
			Sub-Total		**613,372**	**525,598**	**923,846**	**882,429**	**899,597**	**915,880**
701	Energy Management and Implementation	20	Electrification Services		112,158	137,081	98,225	100,286	103,320	105,005
		21	Energy Management		479,950	439,148	127,025	132,556	144,235	152,257
		22	Energy Policy Administration		135,219	117,029	139,158	141,527	159,433	144,655
			Sub-Total		**727,327**	**693,258**	**364,408**	**374,369**	**406,988**	**401,917**
128	ICT Development, Access and Use	20	ICT Policy and Regulations		93,155	53,593	182,408	126,115	120,454	119,483
		23	Security of ICT Systems		38,308	21,157	22,946	40,710	43,163	22,825
			Sub-Total		**204,883**	**134,352**	**348,823**	**357,843**	**367,402**	**377,540**
129	Science Technology and Innovation Development	20	Science Policy and Regulatory Frameworks		16,667	22,702	23,297	16,895	16,908	17,572
	Programme Summary		**Total Funding**		**1,488,829**	**1,316,308**	**1,516,905**	**1,440,518**	**1,487,110**	**1,477,677**

9.0 HUMAN RESOURCES CAPACITY PLAN

While cognizant of the 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 in order to successfully address its mandate. The Ministry's Human Resources Capacity Plan, which outlines its current and proposed staff complement, is outlined in the table below. Given the pending organizational review, a projected number was not determined.

UNITS, DIVISIONS OR PROJECTS	CURRENT STAFF COMPLEMENT	PLANNED STAFF COMPLEMENT				FINANACIAL IMPLICATIONS	SOURCE OF FUNDING
		2021/2022	2022/2023	2023/2024	2024/2025		
Ministerial Office	1	1	1	1	1		
Executive Office	5	7	7	7	7		
Information and Communication Technology Division	9	11	11	11	11		
Cyber Incidents Response Team (CIRT) Division	2	5	5	5	5		
Science Division	0	3	3	3	3		
Internal Audit Unit	11	12	12	12	12		
Legal Unit	3	5	5	5	5		
Corporate Services Division	42	50	50	50	50		
Finance and Accounts Division	15	17	17	17	17		
Policy, Planning, Development and Evaluation Division	9	11	11	11	11		
Energy Division	13	17	17	17	17		
Government Electrical Regulator	0	0	0	0	0		
National Commission on Science and Technology (NCST)	4	5	5	5	5		
Energy Solutions Implementation Unit	0	13	13	13	13		
Division – Core Functions PCJ	0	0	0	0	0		
TOTAL	**114**	**157**	**A total projected figure is not given due to the upcoming Strategic Review of the Ministry.**				

10.0 PORTFOLIO ENTITIES MEDIUM TERM IMPLEMENTATION PLAN

10.1 SCIENTIFIC RESEARCH COUNCIL

The Scientific Research Council Act of June 16, 1960 established the Scientific Research Council (SRC). The SRC is mandated to foster the development of scientific research, be a repository of scientific information, and facilitate the development, application and transfer and/or the improvement of technology through research for the benefit of Jamaica. It also plays a role as an enabler in the creation of new industries and the encouragement of technical processes on a cooperative basis with all stakeholders involved. The promotion of scientific and technological endeavours is also critical by facilitating training, the implementation of projects (particularly in the agro-industrial sector) and the conversion of waste to energy.

PROGRAMME: SUPPORTING MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs)

Programme Objective: Customer productivity is increased and the quality of their goods and services is improved through the provision of S&T solutions	This programme in the SRC supports the development of new and improved marketable Jamaican value-added products, as well as facilitates the commercialisation and subsequent sale of products and technologies based on local raw materials, with the objective of reducing risks to MSMEs. The programme also supports the growth and development of MSMEs in meeting regulatory standards - environmental and food safety. **Programme Coordinator: Managers, Product Research and Development (PRD) and Process Development**
Supporting Ministry Programme/Sub-programme	**Programme: Research and Development** **Sub-programme: Product Research and Development**

RESULTS MATRIX									
Programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
Support to MSME	Increased compliance of MSMEs to food	**Outcome:** # of MSMEs	**300**	**300**	**350**	**400**	**450**	**500**	**SRC/PRD & PDD**

RESULTS MATRIX									
Programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
	safety, health and environmental regulatory standards	assisted annually							
Staff Costs					**$135.67M**	**$143.93M**	**$151.70M**	**$159.24M**	
Cash Grants					N/A	N/A	N/A	N/A	
Administrative Costs					**$98.98M**	**$85.87M**	**$88.36M**	**$88.09M**	

RESULTS MATRIX									
Sub programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
SUB-PROGRAMME									
Analytical Services **Objective:** To support the growth and development of MSMEs in meeting regulatory standards - environmental and food safety **Budget No:**	Increased compliance to local and international food safety and regulatory standards	**Outcome:** # of customers assisted in analytical services	100-120 /month	100-120/ month	120/ month	150/ month	160/ month	180/ month	SRC/Analytical Services Dept, Product R&D
		Output: # of new COAs and tests completed within standards annually	17,000	17,000	10,000	12,000	18,000	22,000	SRC/Analytical Services Dept, Product R&D
		Efficiency	At least 65% of requests complete	At least 65% of requests completed	At least 80% of requests completed	At least 80% of requests completed	At least 85% of requests completed	At least 85% of requests completed	SRC/Analytical Services Dept,

RESULTS MATRIX									
Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
SUB-PROGRAMME									
			d within 10 working days.	within 10 working days.	within 10 working days.	within 10 working days.	within 10 working days.	within 10 working days.	Product R&D
		Effectiveness SMEs operations, quality control systems are improved and they are able to access markets local and internationally.							
Food Services **Objective:** To support the growth and development of MSMEs to meet international food safety standards and improve access to export markets **Budget No:**	Increased production for local and export markets	**Outcome:** # of Customers assisted with food services annually, for improved quality food products introduced in the market	80	80	100	90	100	130	SRC/Food Pilot Plant, Process Development Division
		Output: # of production cycles annually for food products introduced to the market	140	140	180	180	200	200	SRC/Food Pilot Plant, Process Development Division
		Efficiency % increase in production efficiency	75	75	80	85	90	100	SRC/Food Pilot Plant, Process Development Division
		Effectiveness: Increased customer productivity through compliance to international food safety standards and increase in exports.							
Wastewater Services **Objective:**	Environmental protection	**Outcome:** Volume decrease in pollution load (wastewater	90 m^3/day	90 m^3/day	100- 120 m^3/day	120-130 m^3/day	130-140 m^3/day	140-150 m^3/day	

RESULTS MATRIX									
Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
SUB-PROGRAMME									
To contribute to enhanced environmental protection through reduction in pollution load		flow) to the environment							
		Output: # EFWWTS constructed in Jamaica and the region	**2**	**2**	3 local	2 local	3 local	4 local	SRC/ Wastewater Unit, PDD
		Efficiency % completion within project constraints	25%	25%	75%	80%	85%	90%	SRC/ Wastewater Unit, PDD
		# of feasibility studies for construction of EFWWTS annually (at least 12)	**4**	**6**	**6**	12	12	13	SRC/ Wastewater Unit, PDD
		Efficiency % completion within quality objectives	85%	85%	90%	90%	95%	95%	SRC/ Wastewater Unit, PDD
		Consultancy contracts for monitoring NEPA regulated systems	**3**	**3**	**5**	4	5	6	SRC/ Wastewater Unit, PDD
		Efficiency % completion quality objectives	70%	70%	75%	80%	85%	85%	SRC/ Wastewater Unit, PDD
		Effectiveness Reduction in pollution load will be achieved which will lead to enhanced environmental protection.							
Training services: Objective: To meet demand for knowledgeable personnel to stimulate productivity and innovation	Better equipped personnel for jobs; creation of job opportunities	**Outcome:** Certificates of trained personnel in the various targeted sectors	45	45	50	50	60	60	SRC/MCCD, PRD, PDD

RESULTS MATRIX									
Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
SUB-PROGRAMME									
Budget No:	in the various sectors	**Output:** Training Services in targeted areas at scheduled times meeting customer demands	**5**	**5**	Execute at least 7 training course(s)	Execute at least 7 training course(s)	Execute at least 7 training course(s)	Execute at least 7 training course(s)	

PROGRAMME: RESEARCH, DEVELOPMENT AND INNOVATION

Programme Objective: *Customer needs and demand are satisfied through the development of new products and processes*	This programme supports the provision of Science and Technology (S&T) information in general and increasing public awareness of the relevance of S&T to national development. **Programme Coordinator: Manager, Product Research and Development (PRD)**
Supporting Ministry Programme/Sub-programme	**Programme:** Research and Development **Sub-programme:** Product Research and Development

RESULTS MATRIX									
Programme/ Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
Client-requested Natural Product Development	New prototypes and formulations are developed	**Outcome: #** of customers assisted in natural product	8	8	8	12	15	20	SRC/ Natural Products/ PRD

Programme Objective: *Customer needs and demand are satisfied through the development of new products and processes*	This programme supports the provision of Science and Technology (S&T) information in general and increasing public awareness of the relevance of S&T to national development. **Programme Coordinator: Manager, Product Research and Development (PRD)**
Supporting Ministry Programme/Sub-programme	**Programme:** Research and Development **Sub-programme:** Product Research and Development

RESULTS MATRIX

Programme/ Sub programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
Objective: To support the development of innovative products **Budget No:**	in natural products	development services							
		Output: # of successful natural product-based prototypes and formulations developed for customers annually	20	20	30	30	35	40	SRC/ Natural Products/ PRD
		Efficiency At least 80% of requests for product formulations are completed within agreed time frames	80%	80%	85%	85%	90%	90%	SRC/ Natural Products/ PRD
		Effectiveness Increased opportunities for business creation in the health and wellness industry based on new formulations							

Programme Objective: *Customer needs and demand are satisfied through the development of new products and processes*	This programme supports the provision of Science and Technology (S&T) information in general and increasing public awareness of the relevance of S&T to national development. **Programme Coordinator: Manager, Product Research and Development (PRD)**
Supporting Ministry Programme/Sub-programme	**Programme:** Research and Development **Sub-programme:** Product Research and Development

RESULTS MATRIX

Programme/ Sub programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
Staff Costs									
Cash Grants		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	
Administrative Costs									
Client-requested Food Product Development **Objective:** To support the development of innovative products **Budget No:**	New prototypes and formulations are developed / standardised in food-based products	**Outcome:** # of customers assisted in food product development services	14	25	30	30	45	50	**SRC/Food Product Development/PRDD**
		Output: # of food –based products finalised annually	20	20	15	20	25	30	**SRC/Food Product Development/PRDD**
		Efficiency At least 80% of request for food product formulation and standardization are completed	80%	80%	85%	85%	90%	90%	**SRC/Food Product Development/PRDD**

Programme Objective: *Customer needs and demand are satisfied through the development of new products and processes*	This programme supports the provision of Science and Technology (S&T) information in general and increasing public awareness of the relevance of S&T to national development. **Programme Coordinator: Manager, Product Research and Development (PRD)**
Supporting Ministry Programme/Sub-programme	**Programme:** Research and Development **Sub-programme:** Product Research and Development

RESULTS MATRIX

Programme/ Sub programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
		according to the agreed time frame							
		Effectiveness Increased opportunities for business creation in the agro-industry based on new food formulations							
Client-funded biotechnology projects **Objective:** To support the increase in production and quality of agricultural produce **Budget No:**	Increase in the development of tissue culture protocol and production of disease-free planting materials to satisfy client contracts	**Outcome:** # of client contracts completed for supply of disease-free planting materials to meet market demand	1	1	2-3	2-3	3-4	3-4	SRC/ Biotechnology Dept/ PRD
		Output: annual production of disease-free planting materials as per client contracts	Based on client contract(s)	Based on client contract(s)	Based on client contract(s)	Based on client contract(s)	Based on client contract(s)	Based on client contract(s)	SRC/ Biotechnology Dept/ PRD
		Effectiveness Increased availability of clean planting materials to sustain agricultural production							

Programme Objective: *Customer needs and demand are satisfied through the development of new products and processes*	This programme supports the provision of Science and Technology (S&T) information in general and increasing public awareness of the relevance of S&T to national development. **Programme Coordinator: Manager, Product Research and Development (PRD)**
Supporting Ministry Programme/Sub-programme	**Programme:** Research and Development **Sub-programme:** Product Research and Development

RESULTS MATRIX

Programme/ Sub programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
Research Development and Innovation **Objective:** Provision of current, reliable and needed S&T information and solutions to target markets, scientific community and the general public	New products developed and commercialised	**Outcome:** Increase in # of available formulations for commercialisation	**15**	**1**	**3**	**4**	**6**	**7**	**SRC /PRD**
		Output: # of new innovative and functional products developed for commercialisation annually	**15**	**1**	**2**	**3**	**4**	**5**	**SRC /PRD**
		# of base formulations completed and documented annually			**1**	**1**	**2**	**2**	**SRC /PRD**
Staff Costs									
Cash Grants		N/A	N/A	N/A	N/A	N/A	N/A	N/A	

PROGRAMME: SCIENCE EDUCATION AND POPULARISATION

Programme Objective: *To utilize non-traditional learning methods that encourage innovation in Science & Technology among Jamaican youth*	This programme enables sustainable growth and development by popularizing Science & Technology through strategic alliances. **Programme Coordinator: Divisional Manager, Information Services**
Supporting Ministry Programme/Sub-programme	**Programme: Science Education and Popularisation** **Sub-programme: Science Education and Popularisation**

RESULTS MATRIX									
Programme/ Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
Science Education and Popularisation	Improved public awareness and education in ST&I and increased number of innovations in schools	**Outcome:** % of targeted audiences sensitized							**SRC/Science Education Unit/ISD**
Staff Costs									
Cash Grants			N/A	N/A	N/A	N/A	N/A	N/A	
Administrative Costs									
SUB-PROGRAMME									
Science & Technology Education **Objective:** To stimulate and encourage innovation among Jamaican	Increase in innovations developed by Jamaican Youth	**Output:** # of S&T solutions produced by students	30 prototypes	30	50	75	80	100	ISD/Science Education Unit/SRC
	Increased membership and activity of S&T clubs across the island	**Output:** # of schools implementing	20	20	24	30	40	50	ISD/Science Education Unit

RESULTS MATRIX									
Programme/ Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
youth and promote a culture of ST&I communication **Budget No.:**		Ambassador programmes							
	Interest in Science via non-traditional means	**Output:** # of entries in the Poster/Oratory/ Performing Arts Competitions	75	75	100	125	150	200	ISD/Science Education Unit
	Increased visibility of R&D output to the public	**Output:** # of articles published (journal and newsletter)	15	15	20	25	30	35	ISD/ Publications
		Output: # of events held	4	4	6	8	10	12	ISD/ Science Resource / Documentation Center
		Efficiency Delivery of products and services within agreed timeframes							
	Increased application of S&T in school communities	Output: # of externally funded projects implemented	3	3	5	7	10	12	ISD/Projects
		Efficiency Delivery of services within agreed timeframes							
Community Development	To improve the prospects of self-employment upon release of the incarcerated	**Output:** # of prisoners trained in food-based processes	**20**	**20**	30	40	50	60	ISD/Community Development

RESULTS MATRIX									
Programme/ Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
Objective: To facilitate community based business ventures agro processing	Model programme in food based training established at the St. Catherine Adult Correctional Facility	**Output:** # of community groups trained in food based processes and business development	4	4	6	10	15	20	ISD/Community Development
Budget No.:		**Efficiency** Delivery of services within agreed timeframes							

10.1.2 MEDIUM-TERM FINANCIAL RESOURCE PLAN

Prog. #	Programme	Sub-Prog. #	Sub-Programme	2019/20	2020/21	2020/21	2020/21	2022/23	2023/24	2024/25
				Actual Outturn	Approved	Revised	Estimates	Forecast	Forecast	Forecast
				(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)
003	ADMIN	04	Product Research and Development	**173,164**	**206,743**		**183,986**	**224,480**	**187,925**	**194,271**
003	Process Development	04	Product Research and Development	62,421	114,049		101,012	118,530	125,268	129,498
003	Product R&D	04	Product Research and Development	120,251	135,853		131,858	137,424	178,519	184,548
003	Information Services	04	Product Research and Development	47,829	85,295		66,032	80,068	76,758	79,350
003	Marketing & Corporate Communications	04	Product Research and Development	33,959	44,697		32,297	47,878	42,541	43,979
			Sub-Total	**437,624**	**586,637**		**515,185**	**608,380**	**611,011**	**631,646**
003	Capital B/Programme Name and No IAEA Mutagenesis Project	04	Product Research and Development					**6,073**		
003	Appropriations in	04	Product	68,385	86,408		51,846	72,878	98,177	108,009

	Aid		Research and Development							
			Sub-Total	68,385	86,408		51,846	72,878	98,177	108,009
	Programme Summary		**Total Funding**	**523,718**	**673,045**		**567,031**	**687,331**	**709,188**	**739,655**

10.1.3 HUMAN RESOURCES CAPACITY PLAN

Units/Divisions or Projects	Staff Complement	Planned 2021/22	Planned 2022/23	Planned 2023/24	Planned 2024/25	Financial Implication	Source of funding
Executive Director's Office	5	5	5	5	5		
Finance and Accounting Division	9	9	9	9	9		
HR&A Division	24	24	24	24	24		
Information Services Division	13	13	13	13	13		
Marketing & Corporate Communications	6	6	6	6	6		
Product R&D Division	35	35	35	35	35		
Process Development Division	21	21	21	21	21		
Total	**112**	**112**	**112**	**112**	**112**		

10.2 NATIONAL COMMISSION ON SCIENCE AND TECHNOLOGY

The National Commission on Science and Technology (NCST) was established in 1993 as a broad based, cross-sectoral national advisory body to the government on policies and strategies related to Science, Technology and Innovation (ST&I). The Commission undertakes programmes in keeping with its mandate to utilize ST&I to drive national, social and economic development. It aims to galvanize action in areas pertinent to national development.

As a coordinating and management body for Science and Technology (S&T) in Jamaica, the NCST is contributing to the shaping of a modern infrastructure to better support the country's vision of being a developed society by 2030. It identifies and develops mechanisms for the funding of Science and Technology activities; and fosters local and international partnerships and conceptualizes the shaping of pathways and initiatives for public private partnerships.

DEVELOPMENT OF NEW POLICY AND LEGISLATIVE FRAMEWORK FOR SCIENCE

Programme Objective: To plan, coordinate and implement activities towards the development of a new ST&I Policy	This programme in the NCST supports the development of a new Science, Technology and Innovation Policy towards deepening the application of science, technology and innovation to benefit all aspects of national development. **Programme Coordinator [if available]:**
Supporting Ministry Programme/Sub-programme	**Programme: Science, Technology and Innovation Development** **Sub-programme: Science Policy and Regulatory Framework**

RESULTS MATRIX									
Programme/ Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/32**	**2023/24**	**2024/25**	
Development of Policy and legislative framework for the Science sector	An approved Science, Technology and Innovation Policy =	**Outcome:** % amendments of Policy development	**0**	**70**	**100 Cabinet submission as White Paper**	**-**	**-**	**-**	
	Amended Food and Drug Act to include nutraceuticals	**Outcome:** % completion of drafting instructions to the CPC	**0**	**70**	**100**	**-**	**-**	**-**	
	Regulatory framework developed for NNI	**%** completion of regulation	**0**	**60**	**90**	**100**			
	Complementary and Alternative Medicinal Practitioners (CAM) Act developed	**% completion of CAM Act**	**0**	**-**	**-**	**5**	**7**	**10**	
Staff Costs					**$4.68M**	**$4.68M**	**$4.87M**	**$5.06M**	
Cash Grants									
Administrative Costs					**$14.27M**	**$5.68M**	**$5.86M**	**$13.40M**	

INFRASTRUCTURE DEVELOPMENT OF S&T INSTITUTIONS

Programme Objective: *To conduct a strategic review of GOJ Scientific Laboratories and other related institutions in keeping with the GOJ Public sector Transformation Plans*	This programme in the NCST supports the strategic review of GOJ Scientific Laboratories and related institutions and to facilitate the development of procedures and standards as it relates to the handling and disposal of hazardous laboratory waste. The Hazardous Laboratory Waste Clean-Up Ad-Hoc Committee (HALWAC) constituted in 2017 by the Minister of Science Energy and Technology in response to the recommendations emanating from the 2015 Audit of the Hope Gardens Laboratories, resulted in a number of recommendations to be implemented. **Programme Coordinator [if available]:**
Supporting Ministry Programme/Sub-programme	**Programme: Science, Technology and Innovation Development** **Sub-programme: Planning Innovation and Popularisation**

RESULTS MATRIX

Programme/ Sub programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
Infrastructure Development of S&T institutions	Improved procedures and systems and greater efficiency in the operations of GOJ Laboratories	**Outcome:** % completion of Strategic Review	**0**	**0**	**-**	**20**	**30**	**50**	
	Feasibility study completed for a S&T Research Park	**Outcome:** % completion of study	**0**	**90**	**100**	**-**	**-**	**-**	
	RDI survey of public, private and academic institutions to determine the National Gross Expenditure on	# of components completed for RDI survey	**0**	**0**	**3** Surveyors and data technician trained	**2** Data recorded and analysed Database for	**1** Coordination and monitoring of research projects	**1** Data technicians deployed for biennial collection of data	

RESULTS MATRIX									
Programme/ Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
	Research and Development (GERD)				Testing of survey instrument Field deployment of technicians	Research Projects developed		Analyse national GERD	
Staff Costs					**$3.12M**	**$3.12M**	**$3.24M**	**$3.38M**	
Cash Grants									
Administrative Costs					**$9.52M**	**$3.79M**	**$3.91M**	**$8.93M**	

POPULARISATION OF SCIENCE TECHNOLOGY AND INNOVATION

Programme Objective: *To promote the use of ST&I and R&D to stimulate innovations, enhance growth and national development*	This programme in the NCST supports the promotion of the use of R&D and ST&I to create innovations and form scientific partnerships that will enhance STEM education and advance national development **Programme Coordinator [if available]:**
Supporting Ministry Programme/Sub-programme	**Programme: Science, Technology and Innovation Development** **Sub-programme: Planning Innovation and Popularisation**

RESULTS MATRIX									
Programme/ Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
National Medal and Innovation Awards	Promotion and support of the work of scientist, inventors and innovators	**Outcome:** # of Patents or IPR registered locally by innovators	**78**	**TBD**	**3**	**2**	**2**	**2**	
Science Popularisation	Improved capacity in STEM education	**Outcome:** # of awareness raising initiatives	**0**	**2**	**2**	**2**	**2**	**2**	
Staff Costs					**$7.80M**	**$7.80M**	**$8.11M**	**$8.44M**	
Cash Grants									
Administrative Costs					**$23.79M**	**$9.47M**	**$9.77M**	**$22.33M**	

MEDIUM-TERM FINANCIAL RESOURCE PLAN

Prog. #	Programme	Sub-Prog. #	Sub-Programme	2019/20	2020/21	2020/21	2020/21	2022/23	2023/24	2024/25
				Actual Outturn	Approved	Revised	Estimates	Forecast	Forecast	Forecast
				(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)
129	Science, Technology and Innovation Development	21	Planning, Innovation and Popularisation		**35,341**	**35,341**	**63,175**	**34,549**	**35,774**	**61,542**
			Sub-Total		**35,341**	**35,341**	**63,175**	**34,549**	**35,774**	**61,542**
002		01								
		02								
			Sub-Total							
	Programme Summary		**Total Funding**		**35,341**	**35,341**	**63,175**	**34,549**	**35,774**	**61,542**

HUMAN RESOURCES CAPACITY PLAN

Units/Divisions or Projects	Staff Complement	Planned 2021/22	Planned 2022/23	Planned 2023/24	Planned 2024/25	Financial Implication	Source of funding
Office of Director General	1	1	1	1	1		
Programmes development and policy- Senior Technology Officer	1	1	1	1	1		
Research and Data- Director of Research	1	1	1	1	1		
Administrative Support- Secretary	1	1	0	0	0		
Administrative and Board Support- Executive Secretary	0	TBD	1	1	1		Post upgrade
Auxiliary- Driver	0	TBD	TBD	TBD	TBD		
Programmatic Support- Programme Officer	0	TBD	1	1	1		New post
Survey Data Technician (Temporary 6 months consultancy/contract)	0	2	2	2	2		Temporary post 6 months + mileage (new)
Total	**4**	**6**	**7**	**7**	**7**		

10.3 INTERNATIONAL CENTRE FOR ENVIRONMENTAL AND NUCLEAR SCIENCES

The Government of Jamaica and the University of the West Indies (UWI) established the Centre for Nuclear Sciences (CNS) on the Mona campus of the UWI in 1984, supported by the European Union which provided a SLOWPOKE research reactor. The CNS was set up to help resolve critical socio-economic challenges of Jamaica by means of integrated multidisciplinary research and development programmes. In 1994, the CNS was chosen as one of the first ten nodes in the Commission of Science and Technology for Sustainable Development in the South (COMSATS) network, thereby changing its name to the "International Centre for Environmental and Nuclear Sciences" (ICENS). The ICENS main role and functions are:

- The application of nuclear and other state of the art analytical techniques to investigate the impacts of the elemental content of soils and climate change on agricultural productivity, land use, food safety & security and the health of animals and man.
- Increasing the safe and secure applications of nuclear sciences and technology in support of our National Development Plan Vison 2030 and Sustainable Development Goals (SDGs) in Jamaica and the region.
- Storing the analytical data in an in-house data repository and transforming it into multidimensional data and visualisations utilizing Geographical Information Systems (GIS).

PROGRAMME: UTILIZATION OF NUCLEAR TECHNOLOGY/RADIOLOGICAL SAFETY AND SECURITY

Programme Objective: To ensure a sustainable, safe, adequate and permanent "cradle-to-grave" control over radioactive sources, implementing a harmonized approach consistent with the IAEA Basic Safety Standards (BSS) and other international best practices.	This programme in the ICENS aims to execute activities to protect the people and the environment from potential adverse effects of ionizing radiation. **Programme Coordinator [if available]:**
Supporting Ministry Programme/Sub-programme	**Programme: Research and Development** **Sub-programme:**

RESULTS MATRIX									
Programme/ Sub programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
Mosquito Sterilization	Reduction in the *Aedes aegypti* Mosquito population	**Outcome:** # of mosquitos irradiated	**0**	**20,000/Week**	**50,000 / week**	**500,000/week**	**1,000,000 /week**	**1,000,000 /week**	
Plant Mutagenesis (disease resilience for crops)	Creation of climate change and disease resilient crops	**Outcome:** # of plantlets irradiated	**0**	**200**	**500**	**2,000**	**4,000**	**10,000**	
Staff Costs					**$36.19M**	**$37.35M**	**$38.57M**	**$39.99M**	
Cash Grants									
Administrative Costs					**$8.87M**	**$9.05M**	**$9.26M**	**$9.49M**	

PROGRAMME: FOOD SAFTEY/SECURITY & PROVENANCE

Programme Objective: To determine the beneficial and potential toxic element content of Jamaican foods and to inform industries and health professionals, and boost consumer confidence and protection.	This programme in the ICENS supports the inorganic chemical analysis of Jamaican foods by Instrumental Neutron Activation Analysis and Spectrochemical Techniques. **Programme Coordinator [if available]:**
Supporting Ministry Programme/Sub-programme	**Programme: Research and Development** **Sub-programme:**

RESULTS MATRIX									
Programme/ Sub programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
Medical Cannabis regulation	Database of samples from various growing regions and varieties of cannabis	**Outcome:** # of samples analysed	**0**	**50**	**150**	**200**	**300**	**300**	
Food safety	Current database of food composition	**Outcome:** # of samples analysed/ year	**0**	**100**	**250**	**400**	**600**	**1,000**	
Staff Costs					**$18.09M**	**$18.68M**	**$19.29M**	**$19.99M**	
Cash Grants									
Administrative Costs					**$4.44M**	**$4.52M**	**$4.63M**	**$4.75M**	

PROGRAMME: TRACE ELEMENTS IN THE JAMAICAN ENVIRONMENT (LAND, MARINE & AIR)

Programme Objective: To determine the particulate matter and trace element concentrations in the Jamaican atmosphere	This programme in the ICENS supports activities to trace elements in the Jamaican Environment: Air Quality Monitoring (RLA 7023 - ARCAL CLIV). **Programme Coordinator [if available]:**
Supporting Ministry Programme/Sub-programme	**Programme: Research and Development** **Sub-programme: Product Research and Development**

RESULTS MATRIX									
Programme/ Sub programme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	Estimates	Projection (Forecast) & Costs ($'000)			Functional Agency/ Dept/ Div
					2021/22	2022/23	2023/24	2024/25	
Air Quality monitoring	Inventory of particulate matter and trace element data usable by stakeholders in planning, health and for source apportionment of pollutants	**Outcome:** # of samples analysed	**0**	**20**	**50**	**150**	**300**	**300**	
Soil Monitoring	Radiation map to determine population exposure	**Outcome:** # of samples analysed	**0**	**80**	**150 determinations / year**	**150 determinations / year**	**150 determinations / year**	**150 determinations / year**	
Staff Costs					**$18.09M**	**$18.68M**	**$19.29M**	**$19.99M**	
Cash Grants									
Administrative Costs					**$4.44M**	**$4.52M**	**$4.63M**	**$4.75M**	

PROGRAMME: CLIMATE CHANGE AND SUSTAINABLE LAND MANAGEMENT

Programme Objective: To inform sustainable land management practices as a primary component of food security, as well as to assist the local climate change division with preparations of the national GHG inventory.	**Description/Context:** This programme is designed to support data gathering that will provide greater knowledge and understanding of how sources and sinks for CO_2 vary in both time and space, and to evaluate the potential impacts of different land-use types and management practices on GHG flows. **Programme Coordinator [if available]:**

Supporting Ministry Programme/Sub-programme	**Programme: Research and Development** **Sub-programme:**

RESULTS MATRIX									
Programme/ Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
Greenhouse Gas Emission from Land Sector (Agriculture, forestry and other land use)	Generation of greenhouse gas data in fulfilment of our National obligations to PARIS Climate Agreement	**Outcome:** % of areas surveyed (Agriculture, forestry and other land use)	**0**	**10**	**30**	**60**	**100**	**-**	
		Outcome:							
Carbon storage/sequestration in coastal wet lands (mangrove forest)	**Quantifying carbon stocks to inform the Blue carbon Economy**	**%** of mangrove area surveyed			**20**	**60**	**100**	**-**	
Staff Costs					**$18.09M**	**$18.68M**	**$19.29M**	**$19.99M**	
Cash Grants									
Administrative Costs					**$4.44M**	**$4.52M**	**$4.63M**	**$4.75M**	

MEDIUM-TERM FINANCIAL RESOURCE PLAN

Prog. #	Programme	Sub-Prog. #	Sub-Programme	2019/20	2019/20	2019/20	2020/21	2022/23	2023/24	2024/25
				Actual Outturn	Approved	Revised	Estimates	Forecast	Forecast	Forecast
				(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)
003	Research and Development	04	Product Research and Development		96,375		112,640	115,994	119,597	123,708
			Sub-Total		96,375		112,640	115,994	119,597	123,708
002		01								
		02								
			Sub-Total							
119,597	Programme Summary		Total Funding		96,375		112,640	115,994	119,597	123,708

HUMAN RESOURCES CAPACITY PLAN

Units/Divisions or Projects	Staff Complement	Planned 2021/22	Planned 2022/23	Planned 2023/24	Planned 2024/25	Financial Implication	Source of funding
HRM, Finance & Admin staff	6	7	7	7	7		
Researchers	5	5	6	7	7		
Scientific Staff	10	12	12	12	13		
Engineers/Computer Analyst	4	4	5	5	5		
Ancillary Staff	4	4	5	5	5		
Total	29	32	35	36	37		

10.4 e-LEARNING JAMAICA LIMITED (e-LJam)

Established by a Cabinet Decision, e-LJam was incorporated on July 6, 2005 as a limited liability company and carries out its mandate with funding from the Universal Service Fund (USF). e-LJam is an electronic learning initiative with the main objectives of facilitating web-based and computer-based learning and virtual classrooms utilizing information and communications technology (ICT). The e-Learning Project, in collaboration with the Ministry of Education (MOE), targets students at the secondary level with applications and processes of an electronic nature geared towards the improvement of performance at the CSEC examinations

Programme Objective: To Procure, distribute and integrate ICT equipment to Infant and Primary Schools towards improving students learning.	This programme seeks to promulgate relevant policies and modern legislation to repeal, replace and update existing laws and to introduce new laws to govern the ICT sector and to support the development of a digital society. The digitisation of GOJ business processes is a critical element being supported by this programme and this new framework will, among other things, address the collection, storage, processing and confidentiality of personal data and new forms of cybercrimes. The programme is designed to support the eight (8) key pillars that will enable the transformation of the country into a digital society. **Programme Coordinator [if available]:**
Supporting Ministry Programme/Sub-programme	**Programme: ICT Development, Access and Use** **Sub-programme: ICT Propagation**

RESULTS MATRIX									
Programme/ Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
ICT Development, Access, and Use	**Increase in ICT connectivity in educational institutions & public facilities**	**Outcome**: # of educational institutions & public facilities connected	**0**		**$700**	**$700**	**$700**	**$700**	**Executive Office**

RESULTS MATRIX									
Programme/ Sub programme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**Estimates**	**Projection (Forecast) & Costs ($'000)**			**Functional Agency/ Dept/ Div**
					2021/22	**2022/23**	**2023/24**	**2024/25**	
Sub-Programme: ICT Propagation **Project/ Programme:** Tablets in Schools (TIS) Roll-Out Project: To invest J$7.9B over 11years commencing 2017 to provide connected devices, supporting services and accessories for public schools in Jamaica.	**Procure, Contract, import, and distribute ICT equipment to education institutions and students island wide**	**Outcome:** % of TIS Tablets Procured	**19,350**	**40,000**	**12,000**	**12,000**	**12,000**	**12,000**	
		# of Content Access Point Servers Procured (Internet in a Box)	**0**	**886**	**400**	**400**	**400**	**400**	
		# of TIS Tablets Contracted	**19,350**	**40,000**	**12,000**	**12,000**	**12,000**	**12,000**	
		% of Laptops Procured	**0**	**0**	**100**	**100**	**100**	**100**	

MEDIUM-TERM FINANCIAL RESOURCE PLAN

Prog. #	Programme	Sub-Prog. #	Sub-Programme	2019/20	2019/20	2019/20	2020/21	2022/23	2023/24	2024/25
				Actual Outturn	Approved	Revised	Estimates	Forecast	Forecast	Forecast
				(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)
128	ICT Development, Access and Use	22	ICT Propagation		**156,729**		**236,193**	**247,419**	**260,285**	**272,603**
		01	Central Administration	160,024			**257,420**	**270,291**	**283,805**	**297,995**
			Sub-Total		**856,729**		**936,193**	**947,419**	**960,285**	**972,603**
002	Appropriate in Aid (Universal Service Funds)	01					**700,000**	**700,000**	**700,000**	**700,000**
			Sub-Total							
119,597	**Programme Summary**		**Total Funding**		**856,729**		**936,193**	**947,419**	**960,285**	**972,603**

HUMAN RESOURCES CAPACITY PLAN

Units/Divisions or Projects	Staff Complement	Planned 2021/22	Planned 2022/23	Planned 2023/24	Planned 2024/25	Financial Implication	Source of funding
Chief Executive Officer	1	1	1	1	1		
Directors	9	6	6	6	6		
Managers/Professionals	6	13	15	15	15		
Other Staff	18	27	30	33	33		
Total	**34**	**47**	**52**	**55**	**55**		

10.5 eGOV JAMAICA LIMITED

eGovJa was entrusted in 2013 with the responsibility for implementing ICT projects across the GOJ. The repositioning involved the restructuring of the organisation and the changing of portfolio ministry.

eGovJa is a full service ICT company that offers a wide range of ICT services to its various clients. These services include software development, hardware maintenance, network communication, software quality assurance, application hosting and technical support. It is the only Government organization of its kind within the Caribbean region. The entity will be transitioned into the ICT Authority to be a central government body that will be the hub for all GOJ ICT systems and applications to support the transformation to a digital society in the country.

PROGRAMME NAME: DATA CENTRE & GOVNET PROJECT

PROGRAMME OBJECTIVE:	**Description & Context:** To upgrade the GOJ ICT infrastructure to increase the use of shared services across government over the next four (4) years.
GIT 2 To upgrade the GOJ ICT infrastructure to increase the use of shared services across government over the next four (4) years.	**Programme Coordinator:**

RESULTS MATRIX									Owner: Dept/ Div
Programme/ Subprogramme	**Intended Results**	**Performance Indicator**	**Base Line 2019/2020**	**2020/21**	**Projection (Forecast) & Costs ($'000)**				
				Estimate/ Target	**2020/21**	**2021/22**	**2022/23**	**2023/24**	
GIT 2.1 Upgrading of facilities to create/ support a GOJ Shared Service Data Centre at Tier III Standard	GIT2.1.1 Facility at Tier III Standard	% Completion	Formal Project Concept Summary submitted to the Project Portfolio Management Committee	**33%**	33 % Full implementation and commissioning of new Power Infrastructure	**100%**	All shared systems hosted		**OSS/ PRMD**

RESULTS MATRIX									Owner: Dept/ Div
Programme/ Subprogramme	Intended Results	Performance Indicator	Base Line 2019/2020	2020/21	Projection (Forecast) & Costs ($'000)				
				Estimate/ Target	2020/21	2021/22	2022/23	2023/24	
			(PPMC) for review/support. Procurement Committee approved the Generator Upgrade. Approval for the UPS Upgrade pending. Civil works project re-routed from the Transformation and Implementation Unit (TIU) to eGovJa. Design phase in progress.						
	GIT 2.1.2 Cloud Infrastructure capable of supporting GoJ shared and common services	% Completion	Financial Investigations Division (FID) added to the GovMail platform, Office of the Services	**50%**	Contract for HCI signed with vendor by Quarter 4	**100%** Commence Implementation			**OSS/ PRMD**

RESULTS MATRIX									Owner: Dept/ Div
Programme/ Subprogramme	Intended Results	Performance Indicator	Base Line 2019/2020	2020/21	Projection (Forecast) & Costs ($'000)				
				Estimate/ Target	2020/21	2021/22	2022/23	2023/24	
			Commission (OSC) underway.						
	GIT 2.1.3 GovMail	% Completion	Two entities Gov Mail platform Business case sent to MSET for submission to PIMSEC	**40%**	40%	Expansion of the pilot Programme Completed	70%	100% TAJ, MSET entities connected	**OSS/ PRMD**
GIT 2.2 Design and implementation of the government wide area network (GovNet)	GIT2.2.1 GovNet: GOJ entities are connected and are able to share data/information and other resources	% Completion	25% completed	**50%**	50%	Gov Net Phase 1 completed All MDA's within KMA connected	100%		**OSS/ PRMD**
GIT2.3 Development and implementation of a shared voice platform	GIT2.3.1Gov Talk: Voice Services provisioned to all GOJ entities	% completion # of connected entities	There was no activity for this in 2019/2020	50%	50%	Three (3) MDAs migrated to shared platform	100% of TAJ, MSET entities connected		**OSS/ PRMD**
GIT2.4 Implementation GOJ Closed User Group (CUG) Agreement	GIT2.4.1 Implementation of the Framework Agreement	% completion of framework	Draft 10% Completed - Proposed GoJ CUG	**100%**	Framework submitted to cabinet by Quarter 4	Implementation Completed			**OSS/ PRMD**

RESULTS MATRIX									Owner: Dept/ Div
Programme/ Subprogramme	Intended Results	Performance Indicator	Base Line 2019/2020	2020/21	Projection (Forecast) & Costs ($'000)				
				Estimate/ Target	2020/21	2021/22	2022/23	2023/24	
			Framework Agreement						

PROGRAMME NAME: SHARED ICT SERVICES (SIS) PROVISION

PROGRAMME OBJECTIVE:	Description & Context: To provide Core and Common GOJ ICT Solutions and Services
GIT 3 To provide Core and Common GOJ ICT Solutions and Services	Programme Coordinator:

RESULTS MATRIX									Owner: Dept/ Div
Programme/ Subprogramme	Intended Results	Performance Indicator	Base Line 2019/2020	2020/21	Projection (Forecast) & Costs ($'000)				
				Estimate/ Target	2020/21	2021/22	2022/23	2023/24	
GIT 3.1 Provide project management, application development/ integration and infrastructure support services.	GIT 3.1 Jamaica Data Exchange Platform (JDXP)	100% of scheduled activities completed	80% Completed - Development work for Release 1 was completed	**100%**	Release 1 Completed	Release 2 Completed			BSS/ PRMD
	GIT 3.2 eParticipation	% Completion	70% Completed - Release 1	Release 1 (Webservices) Completed	Release 1 (Webservices) Completed	Release 1 (Webservices) Completed			BSS/ PRMD

RESULTS MATRIX									Owner: Dept/ Div
Programme/ Subprogramme	Intended Results	Performance Indicator	Base Line 2019/2020	2020/21	Projection (Forecast) & Costs ($'000)				
				Estimate/ Target	2020/21	2021/22	2022/23	2023/24	
	Platform (MyGovJm)		0% Completed - Release 2	and in use by at least 2 customers		and in use by at least 2 customers			

PROGRAMME NAME: GOJ TRANSFORMATION PROGRAMME

PROGRAMME OBJECTIVE: GIT 3 To provide Core and Common GOJ ICT Solutions and Services	**Description & Context:** To provide Core and Common GOJ ICT Solutions and Services **Programme Coordinator:**

RESULTS MATRIX									**Owner: Dept/ Div**
Programme/ Subprogramme	**Intended Results**	**Performance Indicator**	**Base Line 2019/2020**	**2020/21**	**Projection (Forecast) & Costs ($'000)**				
				Estimate/ Target	**2020/21**	**2021/22**	**2022/23**	**2023/24**	
GIT3.3 Establishment and operationalization of Innovation practices	GIT3.3.1 Innovation ideas generated and managed Ideas converted to viable solutions/ prototypes	% of viable solutions/prototype developed	Yahso web and mobile prototype developed. Coronavirus self-assessment mobile application being reviewed.	**>7%**	Solutions/ prototypes > 7% of ideas in the year	Solutions/ prototypes > 7% of ideas in the year			Innovation

PROGRAMME NAME: CUSTOMER EXPERIENCE PROGRAMME

PROGRAMME OBJECTIVE: CSE 1 To increase customer satisfaction rating to 80% by 2021	**Description & Context:** Increasing customer satisfaction rating to 80% by 2021 **Programme Coordinator:**

RESULTS MATRIX									**Owner: Dept/ Div**
Programme/ Subprogramme	**Intended Results**	**Performance Indicator**	**Base Line 2019/2020**	**2020/21**	**Projection (Forecast) & Costs ($'000)**				
				Estimate/ Target	**2020/21**	**2021/22**	**2022/23**	**2023/24**	
CSE 1.1 Improving our Service Delivery Culture	CSE 1.1.1 Customer Experience (CX) Programme implemented	% of viable solutions/prototypes developed	66.76% satisfaction from Annual Customer Survey	66.76%	Customer Satisfaction Survey Completed	Customer Satisfaction Survey Completed			**PRMD**
		% of scheduled activities in the CX Programme	No Activity	**100%**	100% of scheduled activities completed	100% of scheduled activities completed			**PRMD**

PROGRAMME NAME: OPERATIONS MANAGEMENT

PROGRAMME OBJECTIVE: HRE1 Acquire and retain the most suitably qualified human resources to achieve the organisation's objectives	**Description & Context:** HRE1 Acquire and retain the most suitably qualified human resources to achieve the organisation's objectives

RESULTS MATRIX									**Owner: Dept/ Div**
Programme/ Subprogramme	**Intended Results**	**Performance Indicator**	**Base Line 2019/2020**	**2020/21**	**Projection (Forecast) & Costs ($'000)**				
				Estimate/ Target	**2020/21**	**2021/22**	**2022/23**	**2023/24**	
OE 1.1 Implementation of DevSecOps	OE1.1.1 Mature Software Delivery Process	Continuous Delivery Maturity Model (CDMM) attained Open Web Application Security Project OWASP DevSecOps maturity model level 1 Attained	25% Intermediate Level attained	100%	Ongoing work: Intermediate Level Attained	100% Intermediate Level Attained Level 1 Achieved			BSS OSS
OE1.2 Create & maintain a performance driven & accountability culture	OE 1.2.2 Organisational Performance Score is at 75%	% of Organisational Performance Score	Performance Rating conducted and score is > 75%	≥ 75%	Performance Rating conducted and score is ≥ 75%	Performance Rating	Performance Rating	Performance Rating	HRM, BSS, OSS, PRMD, FP&E – All Departments

MEDIUM-TERM FINANCIAL RESOURCE PLAN

Prog. #	Programme	Sub-Prog. #	Sub-Programme	2019/20		2020/21	2020/21	2022/23	2023/24	2024/25
				Actual Outturn	Approved	Revised	Estimates	Forecast	Forecast	Forecast
				(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)
128	ICT Development, Access and Use	21	ICT Infrastructure and Development	897,283	970,801	967,438	1,176,270	1,176,270	1,176,270	1,176,270
				208,465	233,521	219,742	259,006	259,006	259,006	259,006
				29,873	27,009	27,009	28,014	28,014	28,014	28,014
				109,469	107,785	107,785	120,495	120,495	120,495	120,495
				495,380	448,795	380,051	584,133	584,133	584,133	584,133
				121,099	39,999	13,206	115,717	115,717	115,717	115,717
			Sub-Total Sub-Total							
119,597	**Programme Summary**		**Total Funding**	**1,861,569**	**1,827,910**	**1,715,231**	**2,283,636**	**2,283,636**	**2,283,636**	**2,283,636**

HUMAN RESOURCES CAPACITY PLAN

Units/Divisions or Projects	Staff Complement	Planned 2021/22	Planned 2022/23	Planned 2023/24	Planned 2024/25	Financial Implication	Source of funding
Executive Office	13	14	14	14	14		
Internal Audit	5	6	6	6	6		
Programme &Relationship Management	31	32	32	32	32		
Operations & Support Services	80	107	107	107	107		
Business Solutions Services	85	119	119	119	119		
HRM & Administration	31	30	30	30	30		
Finance, Enterprise, Procurement & Planning	16	18	18	18	18		
Total	**261**	**326**	**326**	**326**	**326**		

10.6 POST AND TELECOMMUNICATIONS DEPARTMENT

The Post and Telecommunications Department (PTD) is mandated to provide efficient and cost effective postal and related services to its customers. It operates through a head office and a network of 241 post offices and 173 postal agencies that offers a full range of postal services including the acceptance and delivery of local and overseas mail, local and international delivery of parcels, the sale of postage stamps and other services such as bill payment and remittance services. It is also a major conduit through which the GOJ channels pensions and PATH benefits.

Programme Objective: To deliver better and new products and services to Jamaicans in order to improve their overall quality of life and to generate revenue for the PTD.	This programme supports activities that are geared towards increasing products and services to the customers. It also supports the expansion of market share for the PTD's products and services. **Programme Coordinator [if available]:**
Supporting Ministry Programme/Sub-programme	**Programme: ICT Development, Access and Use** **Sub-programme: ICT Propagation**

RESULTS MATRIX									Owner: Dept/ Div
Programme/ Subprogramme	**Intended Results**	**Performance Indicator**	**Baseline**	**2020/21 Projected Outturn**	**2021/22 Estimate/ Target**	**Projection (Forecast) & Costs ($'000) 2022/23**	**2023/24**	**2022/25**	
New revenue stream	Increase revenue generation	# of services implemented	**30**	1 new service	1 new service	1 new service	1 new service	1 new service	
	Increase property rental/ utilisation	# of properties leased		2 locations	2 locations leased	4 new leased locations	4 new leased locations	4 new leased locations	
Products and Services Market Expansion	Increase brand awareness and market expansion	% increase in the usage rate		25%	25%	25%	25%	25%	

RESULTS MATRIX									Owner: Dept/ Div
Programme/ Subprogramme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	2021/22 Estimate/ Target	Projection (Forecast) & Costs ($'000) 2022/23	2023/24	2022/25	
Improve quality and service delivery	Delivery standards improved	% increase in end-end mail delivery	75% - end to end delivery in 3-5 days	75% of mail volume	80% mail volume	85% mail volume	90% mail volume	95% mail volume	
	Improved customer service delivery	% of customer transformation programme implemented		100% implementation plan completed	20%	25%	25%	30%	
	Efficient service delivery	# of Post Shops operationalised		1	1	1	1	1	
	Standardised operating practices	Phased implementation of Standard Operations Procedures		Implementation plan developed	Phase 1	Phase 2	Phase 3	Monitoring and evaluation	
	Reengineered operational processes	% of Operational processing reengineered			100% of packets	100% of EMS	% of Letters	% of Parcels	
ICT improvements	Enterprise wide Counter Automation System implemented	Phased implementation of Counter Automation System in the Department		Counter Automated System procured	Phase 1	Phase 2	Phase 3	Phase 4	
	Full IPS implemented	IPS.Post upgraded to Full IPS	IPS.Post	100% completion of procurement process	100% implementation of Full IPS	Review and evaluate full IPS system	Review and evaluate full IPS system	Review and evaluate full IPS system	
	Department equipped with	Phased implementation of telephony solution			Phase 1	Phase 2	Phase 3	Monitoring and	

RESULTS MATRIX									Owner: Dept/ Div
Programme/ Subprogramme	Intended Results	Performance Indicator	Baseline	2020/21 Projected Outturn	2021/22 Estimate/ Target	Projection (Forecast) & Costs ($'000) 2022/23	2023/24	2022/25	
	telephony (PBX) solutions							evaluation of PBX system	
Risk Management	Risk Management Programme	% of risk management programme developed and implemented			50%	30%	20%	Monitoring and evaluation of risk management	
	Centralised security system	# of locations monitored remotely			12	12	12	12	
Prudent financial management	Increase postal administration revenue collection	% increase in postal administration revenue collection		10%	15%	15%	15%	15%	
Corporate Image improvement	Model post offices	# of archetype Post Offices developed			1	1	1	1	
	Increase brand awareness	# of public education campaign activities implemented			2	2	2	2	
	Improved corporate image	# of Corporate Social responsibilities initiatives conducted			1	2	4	4	

MEDIUM-TERM FINANCIAL RESOURCE PLAN

Prog. #	Programme	Sub-Prog. #	Sub-Programme	2019/20	2020/21	2020/21	2020/21	2022/23	2023/24	2024/25
				Actual Outturn	Approved	Revised	Estimates	Forecast	Forecast	Forecast
				(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)	(J$ 000)
555	Postal Operations and Courier Services	21	Postal Operations		561,773		2,315,474	2,391,248	2,444,641	2,444,641
			Sub-Total		561,773		2,315,474	2,391,248	2,444,641	2,444,641
		24	Courier Operations		539,987		724,463	724,463	724,463	724,463
			Sub-Total		539,987					
119,597	Programme Summary		Total Funding		1,101,760		3,039,936	3,114,711	3,169,104	3,169,104

HUMAN RESOURCES CAPACITY PLAN

Unit/Division	Staff Complement	Planned 2021/22	Planned 2022/23	Planned 2023/24	Planned 2024/25	Financial Implications	Source of funding
Building Repairs and Maintenance	18	26	26	26	26		
Public and Customer Relations	9	9	9	9	9		
Finance and Accounts Division	71	85	85	85	85		
General Admin. – Training	5	6	6	6	6		
General Administration	4	4	4	4	4		
General Admin. – Directorate	1	1	1	1	1		
General Admin. – Human Resource Management and Administration	62	66	66	66	66		
General Admin. – Internal Audit	9	11	11	11	11		
Personnel and Establishment	1	1	1	1	1		
General Admin. – Quality Assurance	3	3	3	3	3		
General Admin. – Registry	4	7	7	7	7		
General Admin. – Security	6	9	9	9	9		
General Admin. – Stores	11	13	13	13	13		
General Admin. – Typing and Miscellaneous	8	9	9	9	9		
Information	7	9	9	9	9		

Unit/Division	Staff Complement	Planned 2021/22	Planned 2022/23	Planned 2023/24	Planned 2024/25	Financial Implications	Source of funding
Technology							
Internal Mail Transport	104	159	159	159	159		
Mail Planning Branch	3	4	4	4	4		
Overseas Mail	8	8	8	8	8		
Postal Division 1 – Corporate Area	539	884	884	884	884		
Postal Division 2 – Regional Area	991	1031	1031	1031	1031		
TOTAL	1864	2345	2345	2345	2345		

11.0 LIST OF PUBLIC SECTOR ENTERPRISES (SELF-FINANCED)

Public Sector Entity	Purpose	CEO	Contact	Income (Investment income, Revenue – all cash inflows) ($'000)				Expenditure ($'000)				Funding (Loans & Grants) ($'000)			
				YR1	YR2	YR3	YR4	YR1	YR2	YR3	YR4	YR1	YR2	YR3	YR4
Spectrum Management Authority Limited (SMA)	To ensure the efficient management of Jamaica's radio frequency spectrum in keeping with international best practices.	Mrs. Maria Myers-Hamilton	13-19 Harbour Street Kgn. Tel: 92-28884 mmyers-hamilton@sma.gov.jm	621.62	628.30	635.42	643.95	1,088.33	646.80	654.51	662.60	-	-	-	-
Universal Service Fund Limited (USF)	To facilitate the provision of universal access by the deployment of high capacity networks.	Mr Daniel Dawes	36 Trafalgar Road Kgn. 10 Tel: 926-1727 ddawes@usf.gov.jm	552,000	470,000	515,000	515,000	2.35B	2.24B	2.11N	2.19B	2.0B	2.0B	2.0B	2.0B
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 Kingston 15. winston.watson@petrojam.com	913,684	1,200,992	1,219,334	1,227,596	914,062	1,158,298	1,238,457	1,267,814	-	-	-	-

ANNEX TO THE STRATEGIC BUSINESS PLAN 2021-2025

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ANNEX A – SITUATIONAL ANALYSIS

STRENGTHS		
AREA	**DESCRIPTION**	**OPTIONS FOR PRESERVING OR ENHANCING EACH STRENGTH**
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 legal, science & technology are adequate.	Continuous implementation of structured training and mentorship programs.
Sufficient physical resources enabling staff to execute their function efficiently.	The ministry has been periodically upgrading ICT hardware and software and replacing old and obsolete furniture and equipment.	Continuous review and strengthening of asset maintenance system.
Ability to interact and communicate effectively with stakeholders.	The ministry has periodic stakeholder meeting with key stakeholders in Science, energy and Technology areas.	Effective communication plan and periodic stakeholder analysis.
Significant Science and Technology Institutions.	Local entities within the Science and Technology sectors that are accredited and operate within the conformity of ISO, HACCP and other international voluntary standards.	Continuous review and adjustments to procedures and systems that will enhance the compliance to the requirements as stipulated by standards.
Dedicated subjects assigned to the Ministry.	With dedicated portfolio areas assigned, the Ministry is able to plan and respond more quickly to an industry that changes rapidly and will have a more proactive approach to issues.	Effective strategic planning and monitoring and evaluation of programmes, policies and projects towards desired results.

Strong institutional knowledge	The majority of the Ministry's key senior officers are in their respective positions for over five years resulting in greater understanding of processes, frameworks, and relationships that facilitate the organization's effective and efficient execution.	Implement strategic programmes that will support an effective succession planning and staff retention.
WEAKNESSES		
AREA	**DESCRIPTION**	**OPTIONS FOR MINIMISING OR OVERCOMING EACH WEAKNESS**
Absence of the use of GOJ Performance Management Appraisal System (PMAS) for the evaluation of staff performance.	The absence of the GOJ PMAS in the ministry to evaluate results based performance would make it difficult to assess the achievement of individual key work targets.	GOJ PMAS to be fully implemented by end of March 2021.
Unprofessionalism and need for improved work ethic among some staff.	Unprofessionalism, 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.
Weak Monitoring and Evaluation.	Monitoring and Evaluation (M&E) by the Ministry is mostly done through reporting by the agencies, with no access to the original data. There are gaps in the process to do evaluation of projects/programmes.	The Ministry is to organize a Monitoring and Evaluation Committee to lead and direct M&E.
Lack of a formal data collection system to support performance indicators within the science, energy and technology portfolios.	Data collection is done in an ad hoc manner and does not support policy/programme development and M&E in a strategic way.	Establish a structured data collection system that facilitates targeted research and credible data sources.

Lack of timely implementation of policies, programmes and projects.	The development and implementation of some policies such as the Energy sub-policies, Postal services policy and the FOSS policy have experienced long delays.	A more strategic and realistic approach to be taken in setting targets and timelines for development and implementation of policies.
OPPORTUNITIES		
AREA	**DESCRIPTION**	**OPTIONS FOR TAKING ADVANTAGE OF EACH OPPORTUNITY**
New and Supporting legislation/policies/plans/roadmap/blueprint that promotes the development of the Ministry's portfolios.	The country has a myriad of legislations, policies, plans, roadmaps and other documents that all support the development and expansion of the Science, Energy and the ICT sectors of the country.	Continue to engage our stakeholders to ensure that there is policy coherency and to form strategic synergies in pursuit of national development.
Growing access and use of ICT in Jamaica.	According to the ESSJ 2019 Report, at the end of 2019, there were 317,907 subscribers of fixed broadband, while mobile broadband had 1,630,742 subscribers	The Ministry will design policies and programmes to maximize this level of ICT penetration towards growth of the ICT Sector and to support the transformation to a digital society.
Membership with key International Organizations and development partners.	The Ministry's membership in international agencies such as International Postal Union, the International Atomic Energy Agency (IAEA) 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.

The emerging trend globally for the use of cleaner fuel sources for the generation of energy.	Due to the growing trend for the use of cleaner fuel sources; this has provided an opportunity for Jamaica to access available technology and expertise to implement clean energy projects in the country and also to attract investors.	Membership and participation in international energy fora to form partnerships and access to technical support.
Implementation of the Public Sector Transformation Programme.	The Ministry through the Public sector transformation initiatives, has the opportunity to have direct oversight for the implementation of certain programmes and projects with the winding up of some entities such as NESol and PCJ.	The Ministry will continue to work with the Transformation Implementation Unit in implementing the best model towards achieving the ministry's mandate.
Brand Jamaica.	This can be leveraged as a great opportunity in the S&T sectors to garner investments into inventions, R&D, export of local technologies, nutraceutical branding etc.	Continued communication and promotion to create the awareness of the achievements and plans in the Science and ICT sectors.
Jamaica's Climate and Location.	Investors in alternative energy sources find countries in the tropical climate more feasible for investments in renewable energy projects such as solar, wind and hydro.	The ministry will continue to promote the potential for lucrative investments in energy generation based on the country's indigenous resources.

THREATS		
AREA	**DESCRIPTION**	**OPTIONS FOR OVERCOMING EACH THREAT/CHALLENGE**
Global Pandemic	The COVID-19 pandemic has led to change in fiscal policies that can have an impact on the timeline for delivery of services and programme implementation through the Ministry and its agencies. With an increase in services online, the vulnerability to cyberattacks also increase.	Adhering to best fiscal practices in managing programme implementation. Increase public awareness initiatives regarding cybersecurity.
Changes in international laws, regulations and treaties.	The country's growth and development can be negatively impacted by changes in international rules and agreements, which can affect the ministry's programmes, for e.g. the European Union (EU) General Data Protection Regulation (GDPR) which will restrict sharing of data and could affect trading/business with EU.	Develop and strengthen local capacities in science and technology through strengthened policy and legislative frameworks.
Lack of investments in Science Technology and Innovation (ST&I) to drive growth.	Current statistic indicates that less than 0.001% of our Gross Domestic Product (GDP) is being invested in research and development (R&D) compared to global average of 2.27% and overall investment in ST&I is very low.	Promulgation of the ST&I policy which will seek to address funding for R&D and strengthening of the legal and regulatory framework.
Lack of national scientific research agenda linked to National Development Goals.	Despite the subventions and infrastructure given to the universities locally, no mandate or directive has been given by the government to ensure coordinated research in the field of science and technology, which had direct relevance to meeting the national development goals.	The Ministry seek to address this issue through the ST&I Policy and strategic partnerships with key stakeholders.

Skills migration.	More than 400 persons in the occupational grouping "Professionals, Senior Officials, and Technicians" migrate yearly to other opportunities overseas. This includes professionals in the S&T and ICT sectors.	Develop programs to build institutional capacity and incentive schemes that will strengthen staff retention.
Dependency on imported oil for energy.	The fluctuation of oil price on the global market will impact on the country's energy security and the cost of electricity to consumers.	The Ministry through the implementation of the IRP will seek to increase the use of alternative sources of energy in an effort to reduce the dependency on imported oil.
Cyber Crime.	Cyberattacks on critical ICT infrastructure will cause disruption of important services and has the potential to reduce the flow of essential goods and services, impede or impair important economic and financial operations, and fundamentally shut down the country.	The Ministry will continue to strengthen the Jamaica Cybercrime Incidents Response Team to mitigate and respond effectively to cyberattacks in the country.

Conclusions from SWOT Analysis

The Ministry has sufficient resources and the institutional knowledge required to oversee the work of the portfolio agencies. However, there are a number of areas where further development is needed. There is need for a more robust and data-driven approach to monitoring and evaluating the work of agencies and departments within the portfolio to ensure that the strategic objectives of the Ministry are being met within stipulated timelines. There are also delays with completing and/or updating policies that have been within the plan of the Ministry for a number of years; a more strategic and realistic approach is required to overcome this. With the growing use of ICT resources, particularly in this pandemic era, now is the opportune time to more aggressively expand the island's broadband network and ensure that public sector entities are adapted to using ICT more efficiently. It is also important that as the world continues its thrust to increase the share of renewables in the energy sector, the Ministry upholds its mandate for integrating renewable energy sources in the country's energy mix. Although the greatest threat facing global economies now is the COVID-19 pandemic, there are other threats, such as the lack of investment in ST&I and R&D, migration of skilled labour, cyber threats and potential changes in international laws. The Ministry however, through *inter alia*, developing local capacities, increasing public awareness and adhering to best fiscal practices, is seeking to ensure that the effects of these threats are managed and/or mitigated as best as possible.

ANNEX B - STAKEHOLDER ANALYSIS MATRIX

Stakeholder's Perspective						Ministry's Perspective		
Stakeholder (Person, Group, Organization)	**Interests** (High or Low)	**Influence** (High or Low)	**Needs**	**Wants**	**Expectations**	**Needs**	**Wants**	**Expectations**
Honourable Minister	High	High	Policies & Programmes geared towards achieving the Vision & Mission of the Ministry	Sustained Growth of the Sectors	Sustained Growth of the Sectors	Policy Directive	Support	Support
Office of the Utilities Regulations (OUR)	High	High	Legislative and regulatory framework in which to operate	To have greater input in policy developmen t and legislative process	Structured consultation and communicatio n 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

Stakeholder's Perspective						Ministry's Perspective		
Stakeholder (Person, Group, Organization)	**Interests** (High or Low)	**Influence** (High or Low)	**Needs**	**Wants**	**Expectations**	**Needs**	**Wants**	**Expectations**
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 Programmes and projects are adequately funded and supported towards achieving the desired outcomes
Telecommunication/Internet Providers	High	High	Policy direction and an efficient process for granting of Relevant licences	Polices that allow for greater market share	A policy framework that creates an environment in which they can operate in a sustainable manner to maximize return on their investment	Sustainable, efficient and affordable services that will contribute to growth and development	Better communication as it relates to their operational challenges and risk	Improvement in service delivery and greater competition
The Jamaican Public	High	Low	Improved service delivery in Science, Energy and	Greater input in policy development	Science, Energy and Technology sectors that will provide quality	To take advantage of the opportunities available in	Greater buy-in on policies and programmes	Sustainable development of businesses and improved standard of living

Stakeholder's Perspective						Ministry's Perspective		
Stakeholder (Person, Group, Organization)	**Interests** (High or Low)	**Influence** (High or Low)	**Needs**	**Wants**	**Expectations**	**Needs**	**Wants**	**Expectations**
			Technology that will contribute to self-empowerment		service and provide opportunities for investment, growth and development	the Science, Energy and Technology sectors		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	Greater degree of autonomy	Well defined policy and legislative	Programmes and projects to promote	Greater buy-in on policy direction	More investment in ST&I and creation of jobs

Stakeholder's Perspective						Ministry's Perspective		
Stakeholder (Person, Group, Organization)	**Interests** (High or Low)	**Influence** (High or Low)	**Needs**	**Wants**	**Expectations**	**Needs**	**Wants**	**Expectations**
			articulation of the major priorities for the Science, Energy and Technology sector		framework for the Science and Technology sector to facilitate achievement of their mandate	investments in ST&I, and the energy sector. Programmes to improve the GOJ ICT infrastructure Timely reporting and reports aligned to plans submitted	Better communication and collaboration	Programmes execution that will support the energy security of the country 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

ANNEX C - RISK MANAGEMENT – ENTERPRISE RISK REGISTER 2021/22

Programme/Sub-Programme Objectives	Risk Description	Opportunity/ Threat	Risk Category	Likelihood (P)	Impact (I)	Risk Score [P*I]	Response Category	Response	Risk Owner
Programme 1.0: Executive Direction and Administration	Operating without the GOJ Performance Management and Appraisal System (PMAS) may result in not meeting critical targets and performance below standard	Threat	Operational Risk	4	4	16	Reduction	Strengthen internal management systems to promote results-based performance and accelerate the implementation of PMAS	1. Permanent Secretary 2. Heads of Divisions and Department
Sub-programme 01: **Objective: To provide/support Financial Management and Corporate Services in pursuit of the Ministry's mission, vision and mandate**	Procurement failure and delays due to mis-procurements. This will impact the timely execution of programmes and projects	Threat	Short-term Strategic Risk	4	4	16	Reduction	Encourage proper procurement planning and training in the interpretation of the procurement law and regulations	1. Senior Director, Corporate Services 2. Director of Procurement
	Ineffective budget preparation and management can result in	Threat	Short-term Strategic Risk	3	4	12	Sharing	Programme Managers are to be trained in budget preparation and to make more realistic expenditure projections. It is expected	1. Heads of Divisions, Department & Agencies 2. Director of Budget

Programme/Sub-Programme Objectives	Risk Description	Opportunity/ Threat	Risk Category	Likelihood (P)	Impact (I)	Risk Score [P*I]	Response Category	Response	Risk Owner
	lack of adequate funds to execute programmes and excess surplus (money not spent)							that the Programme managers will manage their budgets according to plans	
Sub-programme: ICT Infrastructure Developments *Establishment of Government Network Infrastructure (GovNet)* **Objective:** To secure, wide area network infrastructure that will link government ministries, departments and agencies to facilitate shared services.	Funding Project Management Deficit	Threat	Medium-term Strategic Risk	4	5	20	Reduction	Implement highly skilled & qualified project management team, monitoring and evaluation	eGov Jamaica Limited

Programme/Sub-Programme Objectives	Risk Description	Opportunity/ Threat	Risk Category	Likelihood (P)	Impact (I)	Risk Score [P*I]	Response Category	Response	Risk Owner
Sub-programme: Energy Policy Administration Implementation of the National Energy Policy	Delays in implementing key strategies of the National Energy Policy in a timely manner Failure to engage required staff complement	Threat	Medium-term Strategic Risk	4	4	16	Sharing	Recruit required staff and technical assistance to engage private sector stakeholders and to encourage investments in the energy sector and improve planning, management and implementation	Energy Division
ICT improvement	Non approval of IT projects by respective authorities Inadequate internet connectivity Cyber crime	Threat	Medium-term Strategic Risk Short-term Strategic Risk	3	4	12	Reduction	Submission of all required documentation/information for granting approval Establish reliable ISP in addition to redundant ISP for critical functions	Post & Telecommunications Department

Programme/Sub-Programme Objectives	Risk Description	Opportunity/ Threat	Risk Category	Likelihood (P)	Impact (I)	Risk Score [P*I]	Response Category	Response	Risk Owner
Supporting Micro, Small & Medium Enterprises	Increased drought / temperatures / flooding impacting agriculture and sustainable livelihood options Potential food insecurity Opportunities re renewable and waste to energy	Opportunity	Operational Risk	4	4	16	Reduction	Promote use of treated wastewater to irrigate crops Seize opportunities for increased demand for tissue culture and biotechnology, produce drought resistant varieties Identify facilities for large supply of T/C plants Participate in waste to energy projects	Scientific Research Council

ANNEX D - PROCUREMENT PLAN MATRIX

FOR GOODS (MATERIALS, EQUIPMENT AND SUPPLIES)

Item description (What to buy?)	Month when needed (When to buy?)	Quantity (How many to buy?)	From where to buy?	Estimated cost	Procurement Method	Procurement Schedule				
						Advertise (Insert dates)	Submission of Bids (insert dates)	Bid Evaluation and recommendation approval (insert dates)	Contract award (insert dates)	Delivery (insert dates)
YEAR 1 (2020/2021)										
Item description (What to buy?)	**Month when needed (When to buy?)**	**Quantity (How many to buy?)**	**From where to buy?**	**Estimated cost**	**Procurement Method**	**Procurement Schedule**				
						Advertise (Insert dates)	**Submission of Bids (insert dates)**	**Bid Evaluation and recommendation approval**	**Contract award (insert dates)**	**Delivery (insert dates)**
YEAR 2 (2021/2022)										
Stationery supplies				9,982,758	RB					
First Aid/ Pharmaceutical -				154,000	RB					

Cutleries				131,250	RB					
Item description (What to buy?)	**Month when needed (When to buy?)**	**Quantity (How many to buy?)**	**From where to buy?**	**Estimated cost**	**Procurement Method**	**Procurement Schedule**				
						Advertise (Insert dates)	**Submission of Bids (insert dates)**	**Bid Evaluation and recommendation approval**	**Contract award (insert dates)**	**Delivery (insert dates)**
Food & Drinks				1,000,000	RB					
Office Furniture				854,000	RB					
Cleaning Products				264,300	RB					
Security Surveillance Systems		1		700,000	SS	May-20			Apr-20	Apr-20
Motor Vehicles		0		-	NCB	Apr-20			May-20	May-20
Office Furniture				2,055,000	RB	Apr-20			Apr-20	Apr-20
Software and licences		15		2,330,632	NCB	May-20			May-20	May-20
Computers and laptops		0			RB	01-Jun			Jun-20	Jun-20
Multifunction printer		0			NCB	Jun-20			Jun-20	Jun-20
Office Equipment				4,393,376.28	NCB/RB	Sept-2020			Sept-20	Sept-20
Closed User Group (CUG)				4,000,000	RB	Apr-20			Apr-20	Dec-20

ANNEX E - BALANCED SCORECARD (MEDIUM TERM 2020 – 2024)

Objectives	Measures (Performance Indicators)	Targets	Initiatives	Medium- term Budget ($)
STAKEHOLDER PERSPECTIVE				
To Increase access to and use of ICT in educational institutions and public facilities	• # of new CAP to be established • # of public Wi-Fi hotspots across the Country • # of Community Wi-Fi locations • # of Tablets in Schools (TIS) tablets procured • # of laptops procured • # of Content Access Point Servers (Internet in a Box)	20 New sites by March 2024 14 new public Wi-Fi by March 2024 25 Community Wi-Fi locations by March 2024 48000 by March 2025 400 by March 2025 1600 by March 2025	• USF to establishment Community Access Points (CAP) at strategic locations island-wide • Establishment of Public Wi-Fi (Hot spots) across the country • Provide communities with central locations to access the ICT and training programmes ▪ Tablets in School (roll out) Project to provide connected devices, supporting devices and accessories for public schools.	
Provide a reliable and secure ICT infrastructure and service delivery model to MDAs	▪ % completion of Cloud Infrastructure, GovMail, GovNet, GovTalk and CUG Framework ▪ % Completion of ICT Solutions – JDXP, MyGovJM ▪ % completion of assessment of GOJ MDAs and Stakeholders' cyber security infrastructure ▪ % increase in investments in the ICT sector	100% by 2025 100% by 2021 20% by March 2025 15% by March 2025	• Develop a shared GOJ private cloud (Gov-Cloud) • Develop a shared email platform with Low, medium and High cost solutions offerings across GOJ • Upgrade existing facilities to create a GOJ shared service Data Centre at Tier III standard • Installation of early warning systems on GOJ websites • National Cyber Security Standards implemented • Sensitization and training in Cyber Security	

Objectives	Measures (Performance Indicators)	Targets	Initiatives	Medium- term Budget ($)
Increase energy security and facilitate affordable energy cost	▪ % renewables in electricity generation ▪ % of LNG in electricity generation ▪ # of new investments in the energy sector	27% by 2025 61% by 2025 3 by 2025	• Procure new generating capacities from renewables • Utilise strategies in the IRP and continue to revise the document • Review and finalize Renewable Energy Policy and develop regulations for the RE Sector • Develop Energy from Waste Policy • Develop regulations for the RE Sector	
Increase energy efficiency and conservation in specific Public Sector Entities	▪ Energy consumption savings (kWh/year) ▪ # of facilities retrofitted	TBD	• Review and finalize Energy Efficiency and Conservation Policy • Facilitate projects for the retrofitting of Public Sector Buildings to be energy efficient	
Promulgation of the National Energy Policy	Policy reviewed in agreed timeframe	By March 2022	• Revise the National Energy Policy • Complete the development of the sub-Policies • Develop the National Energy Action Plan • Complete the monitoring and evaluation framework	
To facilitate the increased application of ST&I.	• Number of publications and public engagement activities • Number of science interventions in schools	6 per year TBD	• Public engagement initiatives e.g. national medal & innovation awards, science exhibitions, seminars, television features etc. • Science in Schools project. • Strengthen Science Clubs in schools • Facilitate capacity building support for innovators	
To Increase investments in Research and Development (R&D) in S&T	• % of GDP on public and private expenditure on R&D • % completion of strategic review of GOJ laboratories	0.01 by March 2025 2 labs upgraded	• Survey on R&D expenditure in public and private sectors • Support and implement the Jamaica-South Africa Joint Research Call initiatives • Implementation of key audit recommendations and the strategic review and assessment of Government labs with the Public Sector Transformation Implementation Team • In collaboration with BIRD, develop an S&T park.	

Objectives	Measures (Performance Indicators)	Targets	Initiatives	Medium- term Budget ($)
Increase development of new services and products in ST&I	• # of new products developed for market • # of Wastewater treatment system constructed	At least 21 by March 2025 At least 12 wastewater treatment systems by March 2025	• SRC will continue to respond to client needs for the development of new products • SRC continues to provide technical expertise for the construction of Waste Water Treatment systems locally and in the Caribbean	
Improve access to information and maintain an effective communication among all stakeholders.	• % increase in public awareness of MSET services • % of access to information (ATI) request satisfied	40% by 2025 100% ATI request satisfied	• Execute targeted campaigns • Public relation activities • Media management • Internal communication with staff and MDAs • Increase level of visibility of MSET • Maintain an effective system to deal with ATI request in the stipulated timeframe	
FINANCIAL PERSPECTIVE				
Improve fiscal management in keeping with the FAA Act Improve the performance of programmes & projects against actual budget.	▪ % compliance with GoJ procurement guidelines. ▪ % compliance with Integrity Commission's requirement .	100% 100%	• Knowledge transfer/training/ retraining in government procurement standards. • Effective budget management training and audits.	
	▪ Budget submitted within stipulated timeframe ▪ % expenditure against budget	By November 30 ≥ 95%	• Budget and planning process begins in August each year. • Conduct analysis of financial reports	
Improved Audits and compliance with reporting requirements in accordance with the PBMA	# of Audit queries	Zero	• Ongoing Monitoring and review of internal controls • Conduct audits and process reviews	

Objectives	Measures (Performance Indicators)	Targets	Initiatives	Medium- term Budget ($)
Improve risk assessment and risk management	% of identified gaps that are addressed	≥90%	Implement control self-assessment	
To Improve cost savings and reduce waste	▪ % reduction in expenditure on consumables	15% by March 2023	• Implement internal policies to conserve consumables (e.g. stationery, energy reduction etc.) • Incentivise the staff to become environmental stewards	
INTERNAL PROCESS PERSPECTIVE				
Implement comprehensive result-based performance and appraisal management system. To improve the strategic planning process and execution and alignment of plans with budget.	• % implementation for PMAS • Strategic Corporate Plan and Operational Plans developed in agreed timeframe • Monitoring & evaluation done in agreed timeframe	100% of staff on PMAS by March 2023 Plans submitted by November 30, 2020 M&E reports submitted quarterly	• Implement the PMAS. • Conduct PMAS training and sensitization • Conduct pilot in selected divisions • 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	

Objectives	Measures (Performance Indicators)	Targets	Initiatives	Medium- term Budget ($)
Maintain a modern policy, legislative and regulatory framework.	• # of key legislations drafted or reviewed and updated. • # of policies developed/amended and submitted to Parliament. • Establishment of regulatory authorities within agreed timeframe	▪ 4 by 2025 ▪ 6 by 2025 ▪ Establishment of single ICT regulator	▪ Postal Services Act. ▪ ICT Act (repeal and replace the Telecommunications Act) ▪ Review of Cybercrimes Act ▪ Petroleum (Downstream Activities) Act ▪ Open Data Policy ▪ Spectrum Management Policy ▪ Open Source Software Policy ▪ Postal Services Policy ▪ Broadband Policy ▪ Establishment of a Single ICT Regulator ▪ Establish ICT Authority ▪ Review and implementation of the National Energy Policy ▪ Finalization of the 6 energy sub-polices	
Provide clear policy direction to support investment in ST&I	ST&I Policy promulgated in agreed timeframe	Policy promulgated by September 2021	▪ Execute implementation plan and M&E ▪ Promulgation of the ST&I Policy	
Improve service delivery and procurement processes.	• % of procurement delivered in agreed timeframe • # of Help Desk request dealt with in a timely manner	▪ ≥95 ▪ ≥95%	• Strengthen the capacity of the Ministry's Procurement Unit • Implementation of IT Security Policy and Appropriate/Social Media Use Policy.	
LEARNING AND GROWTH PERSPECTIVE				
To develop a knowledge management framework that will	• % improvement in performance scores	≥10-15%	• Performance reports generated and evaluated • Manpower Planning • Organizational review. • Continued training and development.	
Maintain an efficient and robust management information system	% improvement in service delivery	% increase over baseline	• Client satisfaction survey to establish baseline performance • Develop service standards	

ANNEX F – MONITORING AND EVALUATION PLAN

ANNEX F1 - MONITORING PLAN

Sub-programme	Output Performance Indicator(s)	Baseline Data (2019/2020)	Departmental-level major tasks to realise the objective of the programmes/ sub-	Monitoring Frequency						Monitoring Method(s)
				Year (2021/2022)		Year (2022/2023)		Year (2023/2024)		
				Target	Monitoring Timeline	Target	Monitoring Timeline	Target	Monitoring Timeline	
Central Administration	% compliance in submission of financial reports in stipulated time	75%	**Execute Financial accounting and budget management**	100%	Quarterly	100%	Quarterly	100%	Quarterly	- Quarterly progress reports - Performance review meetings
	% of payments process accurately and paid in agreed timeframe	80%		**≥90%**	Quarterly	**≥90%**	Quarterly	**≥90%**	Quarterly	- Quarterly progress reports - Performance review meeting
	% of funds available for execution of the Ministry's Prog./projects			**≥85%**	Quarterly	**≥85%**	Quarterly	**≥85%**	Quarterly	- Quarterly progress reports - Performance review meeting

Sub-programme	Output Performance Indicator(s)	Baseline Data (2019/2020)	Departmental-level major tasks to realise the objective of the programmes/ sub-	Monitoring Frequency						Monitoring Method(s)
				Year (2021/2022)		Year (2022/2023)		Year (2023/2024)		
				Target	Monitoring Timeline	Target	Monitoring Timeline	Target	Monitoring Timeline	
	# of agencies receiving Quarterly Performance scorecards	0	Develop scorecard to monitor agencies' performance based on targets and alignment with plans submitted	**100%**	Quarterly	**100%**	Quarterly	**100%**	Quarterly	- Quarterly performance reports - Performance review meetings with agencies
	Output: % completion of manual	0	Develop and implement the Records & Information Management (RIM) Procedural Manual	**100%**	Quarterly	**-**	-	**-**		- Quarterly progress reports - Performance review meeting
	% of staff with required skills and competencies	50%	Maintaining a stable workforce with required skills and competencies	**60%**	Quarterly	**70%**	Quarterly	**80%**	Quarterly	- Quarterly progress reports - Performance review meeting

Sub-programme	Output Performance Indicator(s)	Baseline Data (2019/2020)	Departmental-level major tasks to realise the objective of the programmes/ sub-	Monitoring Frequency						Monitoring Method(s)
				Year (2021/2022)		Year (2022/2023)		Year (2023/2024)		
				Target	Monitoring Timeline	Target	Monitoring Timeline	Target	Monitoring Timeline	
	% completion of the implementation of PMAS	10%	PMAS implementation in the Ministry	**85%**	Quarterly	**100%**	Quarterly	**-**	-	- Quarterly progress reports - Performance review meeting
Policy planning and Development	# of policies drafted and submitted to Cabinet	1	Policy development and analysis	**4**	Quarterly	**3**	Quarterly	**2**	Quarterly	- Quarterly progress reports
	# of legislation drafted and submitted to CPC	2	Development of various pieces of legislation to support the execution of programmes	**1**	Quarterly	**1**	Quarterly	**1**	Quarterly	- Quarterly progress reports
Science Policy and Regulatory Framework	% completion of Policy development	80%	Finalise the development of a Science Technology and Innovation Policy	100%	Quarterly					- Quarterly progress reports

Sub-programme	Output Performance Indicator(s)	Baseline Data (2019/2020)	Departmental-level major tasks to realise the objective of the programmes/ sub-	Monitoring Frequency						Monitoring Method(s)
				Year (2021/2022)		Year (2022/2023)		Year (2023/2024)		
				Target	Monitoring Timeline	Target	Monitoring Timeline	Target	Monitoring Timeline	
	% completion of Strategic Review	0%	Review and Coordinate the execution of key recommendations of the Hope Gardens Lab Audit	-	-	**20%**	Quarterly	**30%**	Quarterly	- Quarterly progress reports
Planning, Innovation and Popularization	**Output:** % completion of feasibility study for S&T Park	90%	Execution of a feasibility study with international partners to establish a Science Park in Jamaica.	**10%**	Quarterly					- Quarterly progress reports
Product Research and Development	# of successful new product in the market Annually	15	To help the country resolve critical socio-economic challenges through integrated multidisciplinary R&D.	**3**	Quarterly	**4**	Quarterly	**6**	Quarterly	**-**Monthly & quarterly reports

Sub-programme	Output Performance Indicator(s)	Baseline Data (2019/2020)	Departmental-level major tasks to realise the objective of the programmes/ sub-	Monitoring Frequency						Monitoring Method(s)
				Year (2021/2022)		Year (2022/2023)		Year (2023/2024)		
				Target	Monitoring Timeline	Target	Monitoring Timeline	Target	Monitoring Timeline	
	# of mosquitos sterilised	0	Reduction in Mosquito population	2.6 million	Quarterly	25 million	Quarterly	50 million	Quarterly	-Monthly & quarterly reports
ICT Policy and Regulation	6 Policies developed	0 policies	Draft Policy Prepared Stakeholder consultations held	Open Data Policy	Quarterly	Open Source Software Policy	Quarterly	ICT Policy	Quarterly	ICT Policy and Regulation
				Spectrum Management Policy	Quarterly					
				Broadband Policy/Strategy	Quarterly					

Sub-programme	Output Performance Indicator(s)	Baseline Data (2019/2020)	Departmental-level major tasks to realise the objective of the programmes/ sub-	Monitoring Frequency						Monitoring Method(s)
				Year (2021/2022)		Year (2022/2023)		Year (2023/2024)		
				Target	Monitoring Timeline	Target	Monitoring Timeline	Target	Monitoring Timeline	
	7 legislation developed	1 Bill passed by Parliament	Drafting Instructions prepared Legislation submitted to stakeholders Legislation tabled in Parliament	Infrastructure Sharing Rules Resolution of Interconnection Dispute Rules Quality of	Quarterly	Data Protection Regulations ICT Bill	Quarterly	Cybercrimes Bill	Quarterly	
Energy Management and Implementation	% renewables in electricity generation	**15%**	Increase in the use of alternative sources of energy	12.5%	**Quarterly**	12.5%	**Quarterly**	19	**Quarterly**	- Manager's progress report - Quarterly progress reports

Sub-programme	Output Performance Indicator(s)	Baseline Data (2019/2020)	Departmental-level major tasks to realise the objective of the programmes/ sub-	Monitoring Frequency						Monitoring Method(s)
				Year (2021/2022)		Year (2022/2023)		Year (2023/2024)		
				Target	Monitoring Timeline	Target	Monitoring Timeline	Target	Monitoring Timeline	
Energy Policy Administration	# of key policy strategies implemented # of Sub-policies reviewed and updated	**2**	To support the activities relating to the development and implementation of the National Energy Policy and the energy sub-policies. Energy Sub-Policies promulgated	5	Quarterly	2	Quarterly	TBD	Quarterly	- Quarterly progress reports

ANNEX F2 - EVALUATION PLAN

Programmes / Sub programme	Objectives	Expected Outcome(s)	Evaluation Type (Frequency) and Completion Date	Evaluation Questions	Evaluation Method(s)	Entity Responsible for Evaluation
Sub-Programme: Central Administration	Provide/support Financial Management and Corporate Services in pursuit of the Ministry's mission, vision and mandate.	Improved Customer service for internal and external stakeholder	Mid-Term Annually March 2021	▪ How well is the Ministry meeting the needs of its internal and external customers ▪ Are stakeholders satisfied with the services of the Ministry	Surveys Focus groups	MSET
Sub-programme: Planning, Innovation and Popularization	Increased innovations and greater use of science and technology	Increased awareness on the use of S&T to drive innovations and development	Mid-Term Biennial March 2022	▪ How aware are Jamaicans about the use of ST&I ▪ How well is ST&I driving national development ▪ How much is invested in ST&I	Surveys Focus groups Document review	MSET/NCST
Sub-programme: Product Research and Development	To help the country resolve critical socio-economic challenges through integrated multidisciplinary R&D.	Reduction in Mosquito population	Terminal Annually March 2021	▪ After 1st year of sterilization programme, is there any decrease observed in Mosquito population ▪ Is there any reduction in vector-borne diseases	Data gathering Data analysis surveys	ICENS

Programmes / Sub programme	Objectives	Expected Outcome(s)	Evaluation Type (Frequency) and Completion Date	Evaluation Questions	Evaluation Method(s)	Entity Responsible for Evaluation
Sub-Programme: Energy Management	To provide energy efficiency and conservation opportunities that will result in cost savings and reduction in public sector electrical energy consumption while increasing awareness in EC and EE.	Reduction in the electricity consumption in the Public Sector	Terminal Annually March 2021	▪ After installation of retrofits in public buildings, what is the reduction in energy consumption	Data gathering Data analysis	MSET/EMEP
		Jamaicans are more aware of energy efficiency and conservation	Mid-term Annually March 2021	▪ How aware are Jamaicans about energy conservation and energy efficiency? ▪ What percentage of Jamaicans are practising energy conservation	Surveys Focus group Data analysis	EMEP/MSET

Programmes / Sub programme	Objectives	Expected Outcome(s)	Evaluation Type (Frequency) and Completion Date	Evaluation Questions	Evaluation Method(s)	Entity Responsible for Evaluation
Sub-programme: ICT Infrastructure Development	To support the implementation of a modern ICT system and an integrated GOJ Wide Area Network for the country that will facilitate a digital culture in doing business across government	Modern ICT Infrastructure to support s digital culture in Jamaica	Mid-term Annually March 2021	How many GOJ Services are being offered online? What percentage of Jamaicans are accessing GOJ services electronically?	Surveys Focus group Data analysis	MSET/ICT Authority

ANNEX G – LOGIC MODELS

PROGRAMME: ***RESEARCH AND DEVELOPMENT***

SUB-PROGRAMME: ***Product Research and Development***

Intermediate Outcome(s):

- Increase in disease free agricultural products
- Improved quality of Products and services from MSMEs
- Improved technology in the supply of goods and services
- Reduction in Vector-Borne diseases

Immediate Outcome(s):

- Increase use of R&D to inform product development and quality
- Increase awareness of the importance of R&D
- Increase in mew products and services
- Increase capacity in R&D

Output(s):

- New products developed
- Disease resistant agricultural products developed
- *Aedes aegypti* Mosquitos sterilized
- wastewater treatment systems (EFWWTS) developed
- MSMES assisted with products and services
- Formulations for food products developed

Activities:

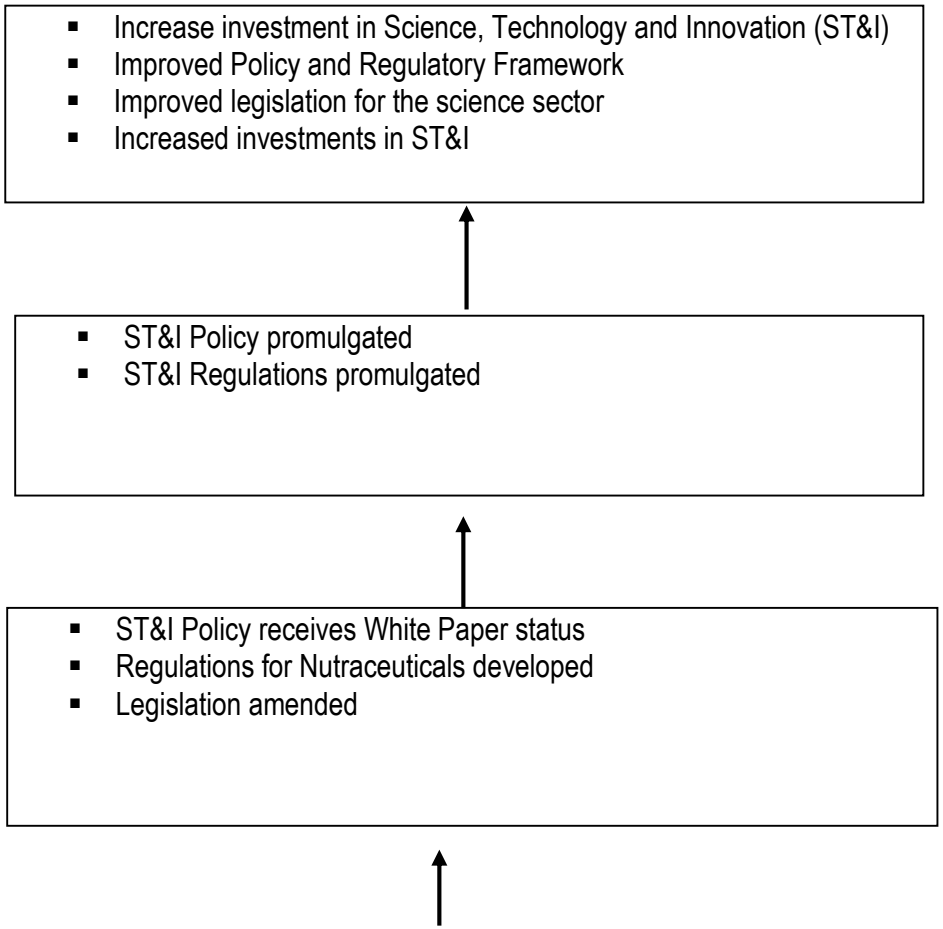
- Meeting with key stakeholders
- Conduct sensitization sessions on R&D
- Conduct research on plantlets
- Carry out research on food products
- Conduct test on sample products
- Carry out sterilization of batches of *Aedes aegypti* mosquitos
- Conduct procurement process
- Conduct training in R&D
- Conduct cost benefit analysis
- Conduct monitoring and evaluation of projects

Inputs:

- Consultation hours
- Training material
- Technical Staff
- Research data
- Office supplies and equipment – computer, printer, etc.
- Science publications
- Laboratory equipment and supplies
- Approved budget
- Project management staff

PROGRAMME: ***SCIENCE, TECHNOLOGY AND INNOVATION DEVELOPMENT***

SUB-PROGRAMME: ***Science Policy and Regulatory Frameworks***



Activities:

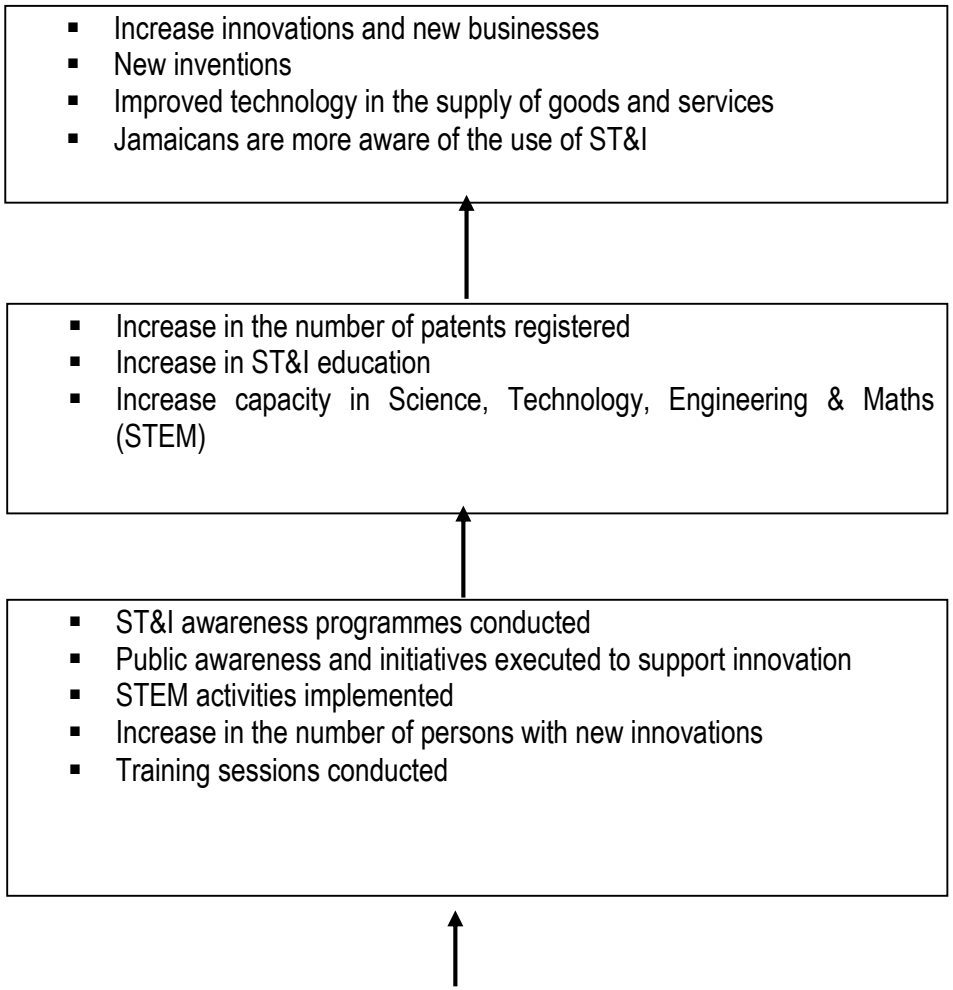
- Meeting with key stakeholders
- Conduct internal consultation
- Prepare drafting instructions
- Conduct procurement process
- Conduct research
- Prepare concept paper
- Conduct cost benefit analysis
- Conduct monitoring and evaluation of projects

Inputs:

- Consultation hours
- Research report
- Technical Staff
- Office supplies and equipment – computer, printer, etc.
- Relevant documentation
- Approved budget

PROGRAMME: ***SCIENCE, TECHNOLOGY AND INNOVATION DEVELOPMENT***

SUB-PROGRAMME: ***Planning, Innovation and Popularisation***



Activities:

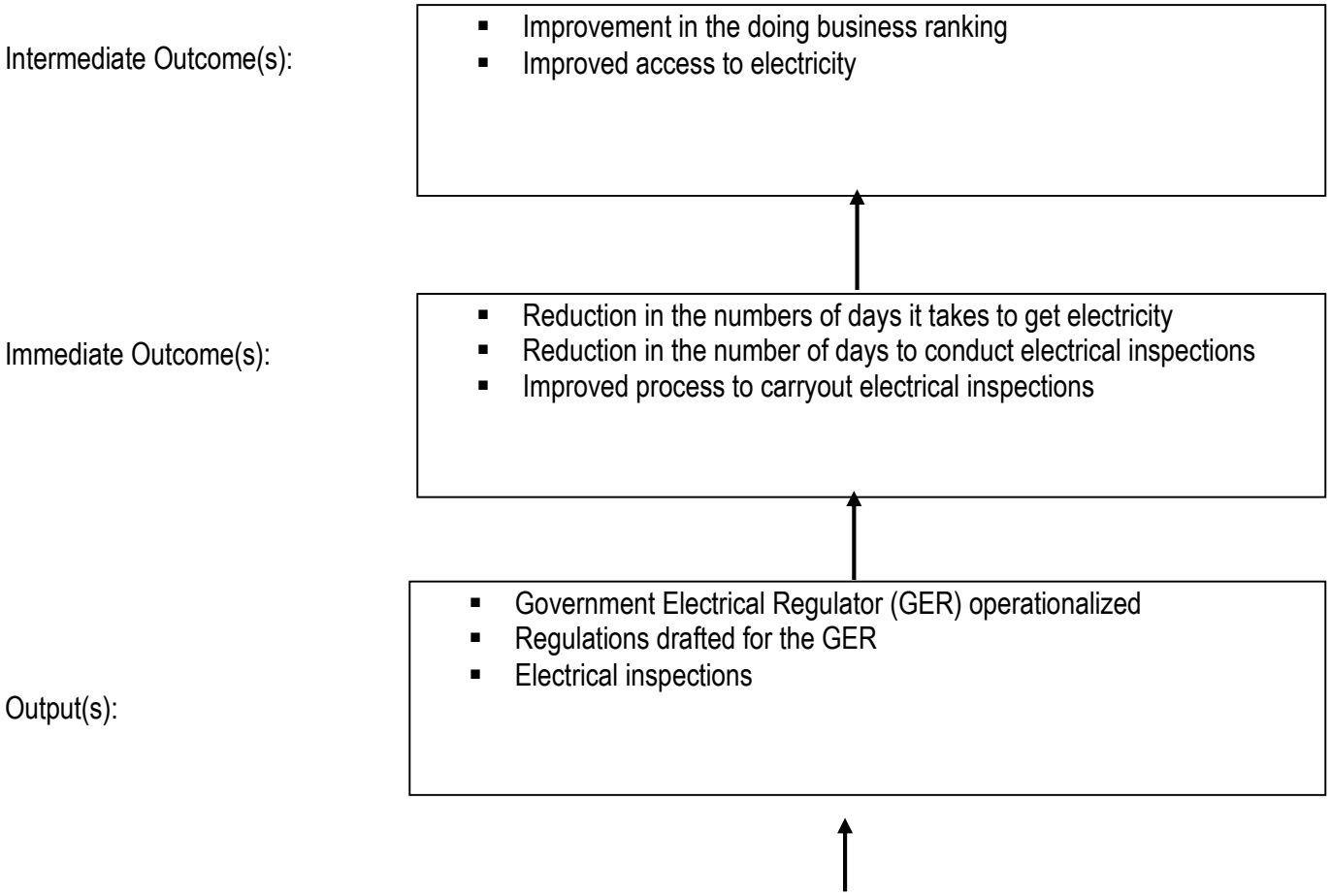
- Meeting with key stakeholders
- Conduct sensitization sessions in ST&I
- Conduct sensitization sessions in STEM education
- Organize and execute biennial Innovation Awards
- Conduct procurement process
- Conduct training in science institutions
- Conduct cost benefit analysis
- Conduct monitoring and evaluation of projects

Inputs:

- Consultation hours
- Training material
- Technical Staff
- Office supplies and equipment – computer, printer, etc.
- Science publications
- Approved budget
- Project management staff

PROGRAMME: ***ENERGY MANAGEMENT AND IMPLEMENTATION***

SUB-PROGRAMME: ***Electrification Services***



Activities:

- Meeting with key stakeholders
- Conduct electrical audits
- Develop Request for Proposals (RFP) to engage contractors for Pole Line and House wiring works
- Carry out supervision of works done by contractors
- Conduct procurement process for contractors
- Conduct electrical inspections
- Draft GER regulations
- Conduct monitoring and evaluation of projects

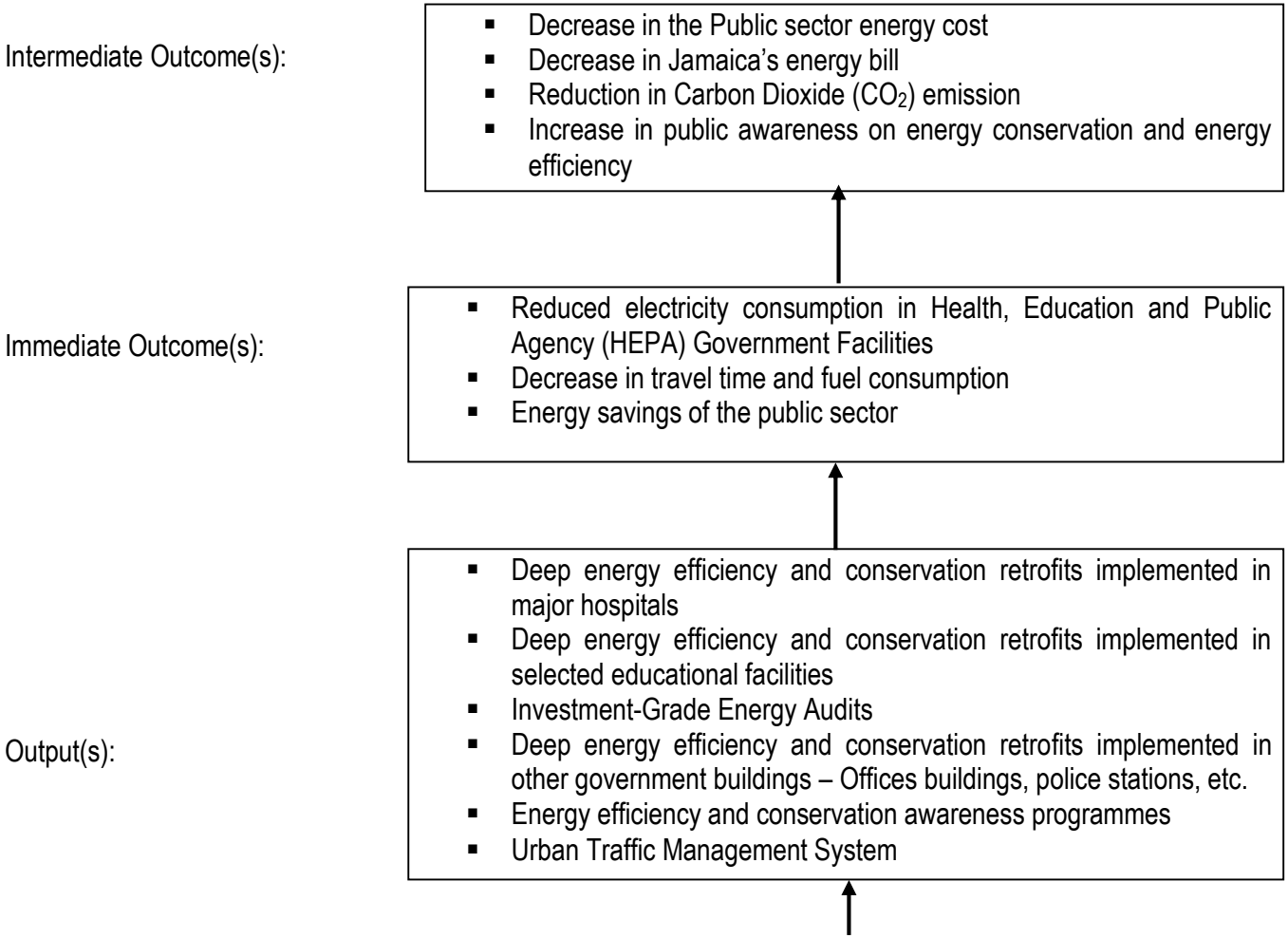


Inputs:

- Consultation hours
- Electrical Inspectors
- Requests for electrical inspections
- Technical Staff
- Office supplies and equipment – computer, printer, etc.
- Tools and material
- Approved budget
- Project management staff

PROGRAMME: ***ENERGY MANAGEMENT AND IMPLEMENTATION***

SUB-PROGRAMME: ***Energy Management***



.

Activities:

- Meeting with key stakeholders
- Conduct energy audits
- Develop Request for Proposals (RFP) and Terms of References to engage contractors
- Carry out supervision of works done by contractors
- Conduct procurement process
- Conduct training energy conservation measures
- Conduct cost benefit analysis
- Conduct monitoring and evaluation of projects

Inputs:

- Energy data on selected building
- Consultation hours
- Electricity bills
- Technical Staff
- Office supplies and equipment – computer, printer, etc.
- Energy efficiency tools and material
- Approved budget
- Project management staff

PROGRAMME: ***ENERGY MANAGEMENT AND IMPLEMENTATION***

SUB-PROGRAMME: ***General Policy Administration***

Intermediate Outcome(s):

- Improved policy and regulatory framework
- Increase use of renewables in the energy mix
- Increase use of natural gas for energy
- Decrease in energy cost
- More efficient electricity grid

Immediate Outcome(s):

- Policies and legislations promulgated
- Increased investments in renewable energy projects
- Increased investments in Natural gas projects
- Improvement in electricity planning

Output(s):

- National Energy Policy updated
- Research Paper
- Regulations drafted
- National Energy Action Plan developed
- Integrated Resource Plan developed
- Strategic Framework for electro-mobility developed

Activities:

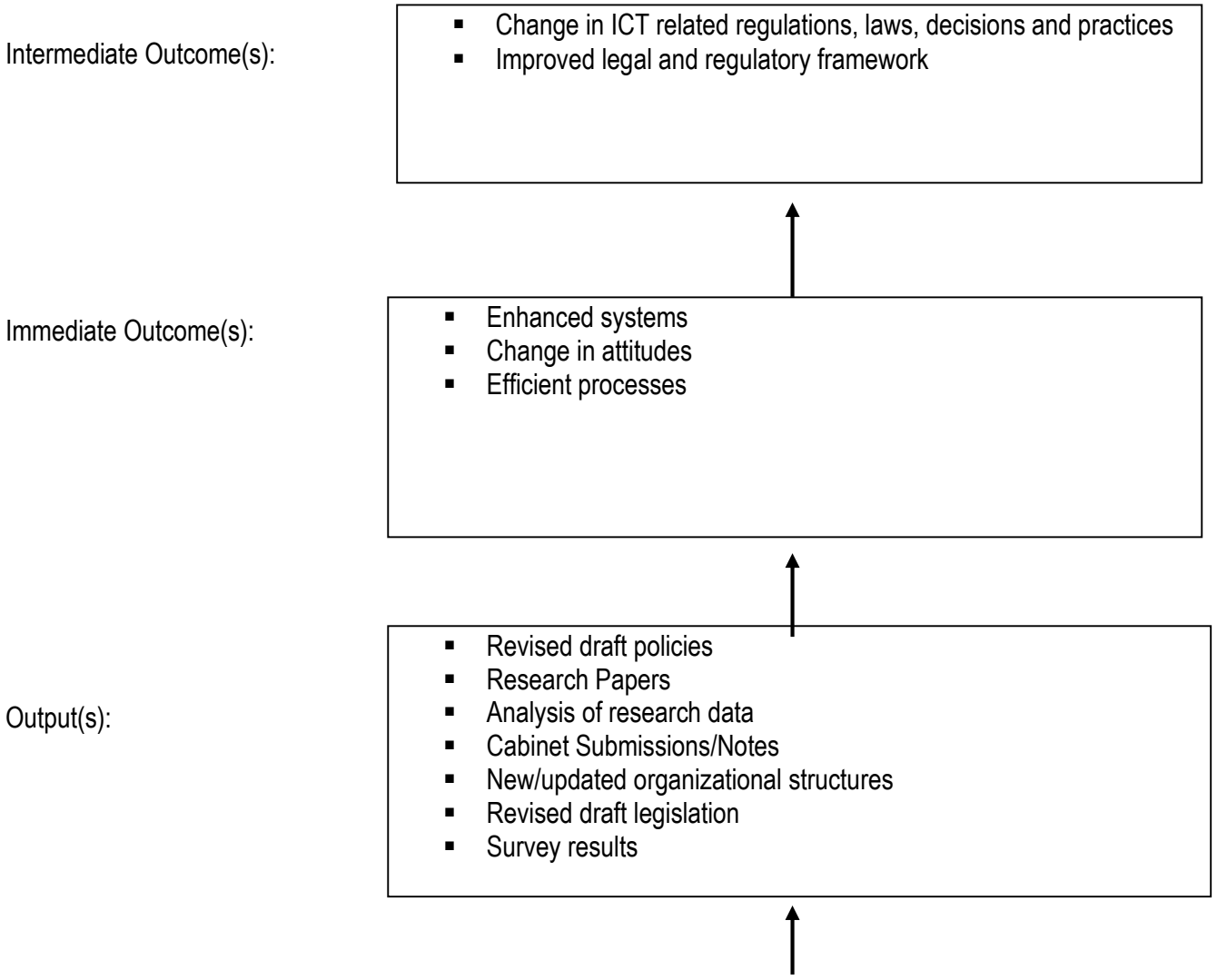
- Meeting with key stakeholders
- Drafting revised policy
- Conduct research
- Drafting of regulations
- Circulate draft policies and regulations for review and comments
- Analysis of data for IRP
- Conduct monitoring and evaluation

Inputs:

- Research hours
- Consultation hours
- Research documents
- Technical Staff
- Office supplies and equipment – computer, printer, etc.

PROGRAMME: ***ICT DEVELOPMENT, ACCESS and USE,***

SUB-PROGRAMME: ***ICT Policy and Regulation***



Activities:

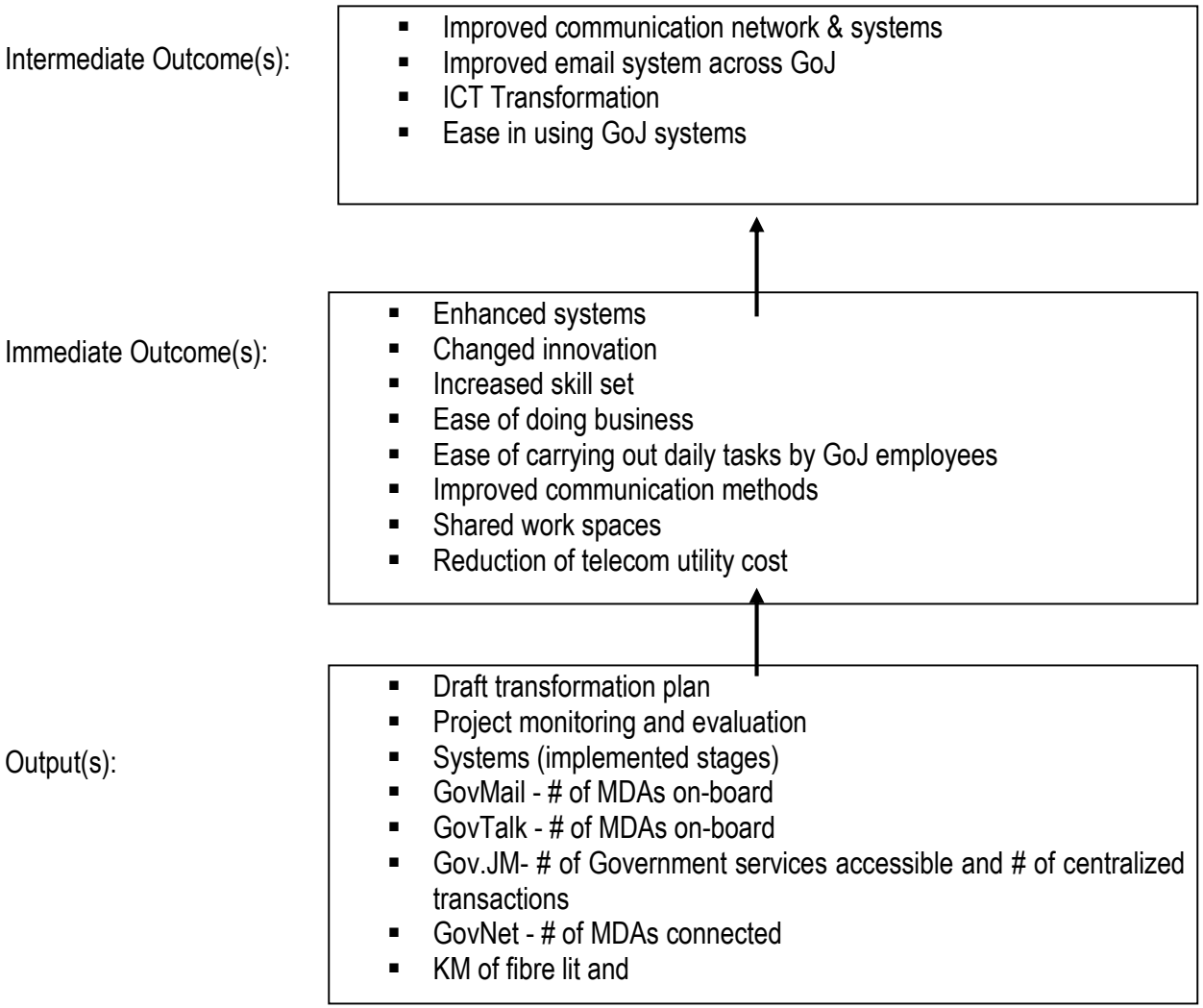
- Consultation with key stakeholders
- Drafting revised policies
- Conduct research
- Develop survey
- Draft Cabinet Submissions
- Review consultant's reports

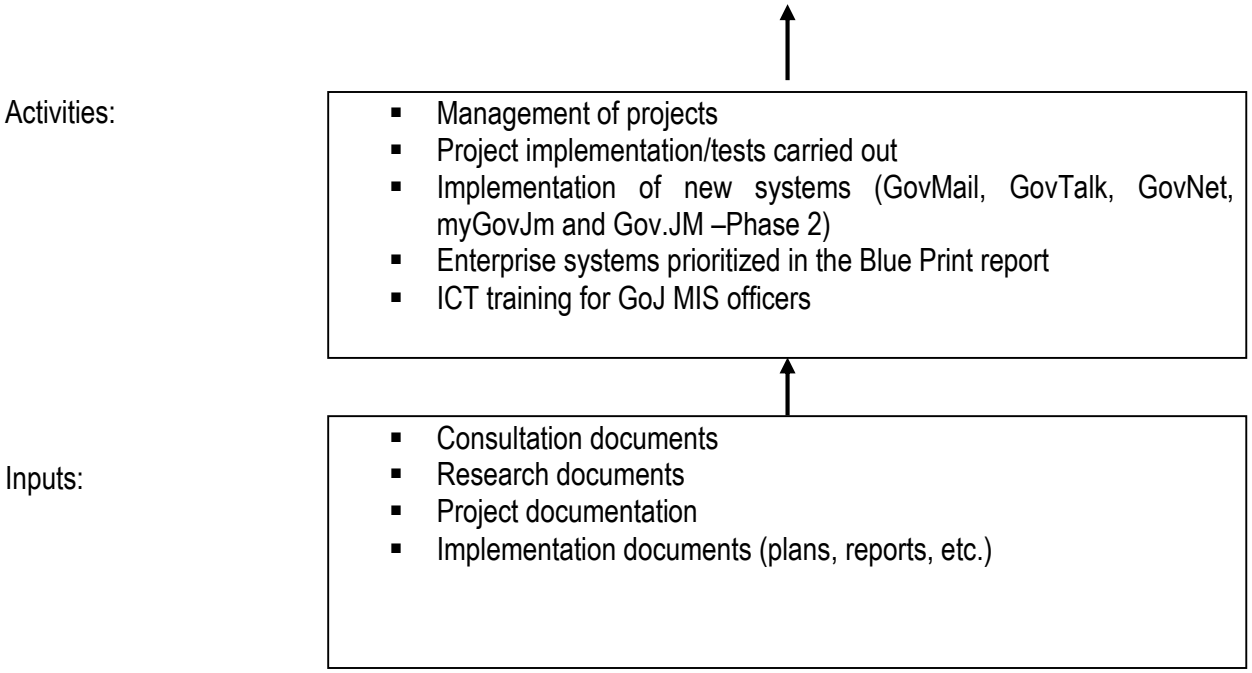
Inputs:

- Research hours
- Consultation hours
- Research documents
- Project documents/ consultant reports

PROGRAMME: ***ICT DEVELOPMENT, ACCESS and USE,***

SUB-PROGRAMME: ***ICT Infrastructure Development***




Activities:
Management of projects
Project implementation/tests carried out
Implementation of new systems (GovMail, GovTalk, GovNet, myGovJm and Gov.JM –Phase 2)
Enterprise systems prioritized in the Blue Print report
ICT training for GoJ MIS officers
Inputs:
Consultation documents
Research documents
Project documentation
Implementation documents (plans, reports, etc.)

PROGRAMME: ***ICT DEVELOPMENT, ACCESS and USE,***

SUB-PROGRAMME: ***ICT Propagation***

Intermediate Outcome(s):

- Improved and increased usage in ICT in schools
- Accessible ICT access points
- Disabled community increase in access and use of ICT
- A technology enabled society

Immediate Outcome(s):

- Increase in number of access points
- Increased skill sets
- Reduction in technology gaps (more equitable access)

Output(s):

- Project evaluation and implementation documents
- Evaluation and monitoring
- # of equipment delivered
- Test results
- Cabinet submissions/notes

Activities:

- Management of projects
- Project implementation/tests carried out
- Procurement conducted
- Works carried out to install ICT infrastructure

Inputs:

- Research hours
- Research documents
- Consultation hours
- Consultation documents
- Project documentation
- Implementation documents (plans, etc.)

PROGRAMME: ***ICT DEVELOPMENT, ACCESS and USE,***

SUB-PROGRAMME: ***Security of ICT Systems***

Intermediate Outcome(s):

- Implemented Cyber Security Strategies
- Improved security of GoJ ICT Websites
- Protection of Cyber Infrastructure
- National Cyber Security Centre operational

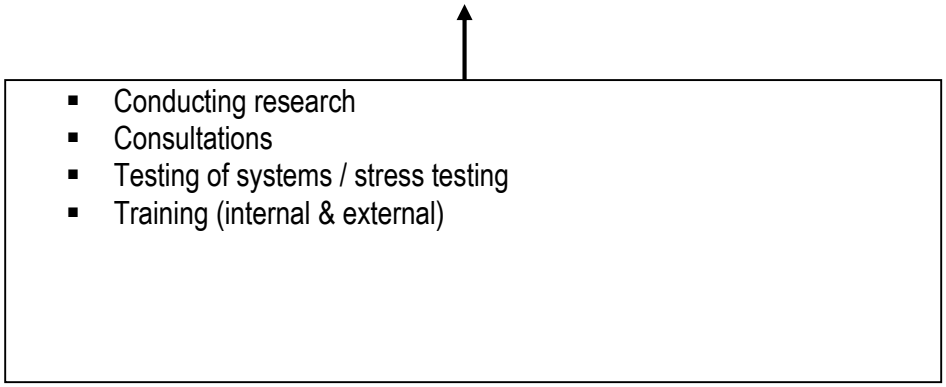
Immediate Outcome(s):

- Increase preparedness for cyber attacks
- Decrease number of cyber incidents

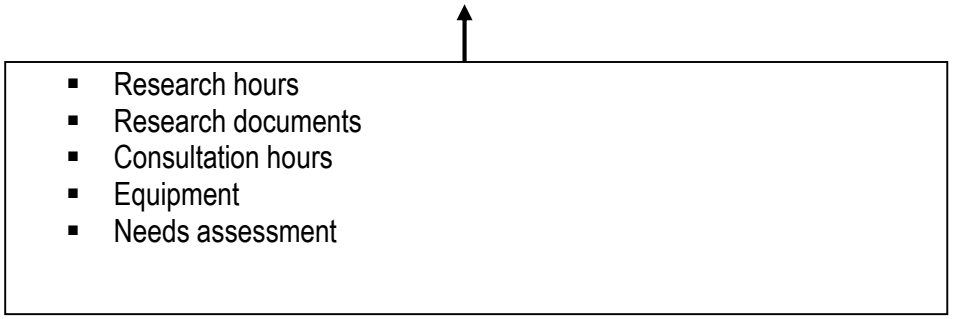
Output(s):

- Research documents
- Recommendations from consultations
- Test results
- Early warning system

Activities:



Inputs:



ANNEX H - GLOSSARY OF RISK TERMS

Heading/Item	Definition/Description	Instructions
Acceptance	No action is taken to affect the likelihood of the risk occurring or its impact.	
Avoidance	Action is taken to withdraw the activities giving rise to the risk.	
Financial Risk	The possibility that actual fiscal outcomes will deviate from the fiscal outcomes expected based on budgetary allocations approved.	Risks must be related to budgetary allocations/expenditures
Impact	This is the evaluated effect, consequence or result of the risk event based on the scale detailed in the scoring section of the risk tables	The risk Impact Table in the 'Risk Tables' sheet guides the impact level to be applied.
Medium-term Strategic Risk	This risk affects the expected intermediate outcomes of the Ministry.	These risks are at the Programme level.
Operational Risk	The risk of loss resulting from inadequate or failed internal processes, people and systems or from external.	Risks that lead to ineffective and inefficient use of the organization's resources.
Opportunity	The possibility that an event will occur and positively affect the achievement of objectives.	The three treatment options available for opportunity are Accept/exploit, Avoid, Share.

Heading/Item	Definition/Description	Instructions
Probability (Likelihood)	The chance of something occurring	The weight of chance or possibility of the risk being realised (occurring) is guided by the scale in the scoring section.
Reduction	Action is taken to reduce the likelihood of the risk occurring and/or its impact. Decisions regarding daily operations may need to be taken.	
Response	This outlines the options and actions that enhance opportunities or reduce threats.	The Response plans should be specific enough to implement.
Risk	The effect of uncertainty on objectives. Event or incident that may affect the Authority's ability to effectively continue business functions necessary to meet its objectives or which may result in the Authority missing significant opportunities	A risk may either be a threat to the achievement of an objective and/or an opportunity to be exploited.
Risk Category	Classification of all risks into groups for ease of management.	The following Risk Categories are utilised in classifying the risks Compendium of Annex: Medium-term strategic risks, Short-term strategic risks and Operational risks.
Risk Description	A brief description of the potential risk.	This should include the cause of the risk, the risk itself and the impact the risk could have; e.g. "Due to (cause)…there is a risk that (statement)…therefore (impact)…"
Risk Matrix	Tool used to rank the risks based on the score derived from the likelihood and impact.	
Risk Owner	The person accountable for the implementation of the strategies to treat (mitigate or eliminate) the risk; is responsible for agreeing, overseeing and implementing stated response actions (i.e. manage the risk)	

Heading/Item	Definition/Description	Instructions
Risk Register	The primary tool used to record the details of all risks identified. The register will capture risk information from the "bottom up" in each function area. It is used to manage and track risks; document treatment options and strategies for mitigation/elimination; provide the basis for risk reports and provide evidence to support decisions for resources, prioritization and general business strategies	
Risk Response	Measures developed to limit the adverse impact of identified risks. The treatment is intended to reduce or eliminate the likelihood or impact of the risk	Must be preventative, detective or corrective
Risk Score	The numerical value of an identified risk determined to prioritize a risk for treatment.	This is an automated field which will calculate the score based on likelihood*impact.
Risk Type	Risk may either be a threat (negative impact on objectives) or an opportunity (positive impact on objective).	
Sharing	Action is taken to reduce the likelihood of the risk occurring or its impact. The action could be aimed at transferring or sharing a portion of the risk.	
Short-term Strategic Risk	This risk impacts the expected immediate outcomes of the Ministry. That is, the results expected directly from a deliverable.	These risks are at the Sub-Programme level.
Threat	An impending or imminent peril that will have a negative effect on objectives	