ANNEX TO THE
STRATEGIC BUSINESS PLAN
2022-2026

Contents

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, energy, ICT and 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.
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.
Science, Technology and Innovation (ST&I) Policy promulgated.	The ST&I policy was approved as a White Paper by Cabinet and this is a key factor for strengthening the ST&I system going forward.	Implementation of the strategies in the ST&I Policy.

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.
ST&I and R&D Solutions.	ST&I solutions such as SRC's anaerobic digester results in more environmentally friendly waste disposal. There is a large variety of endemic plants and crop that are being used in innovation, R&D and technology applications to improve the agricultural sector and impact wider society.	Continuous maintenance of equipment required for R&D activities, and retention of specialised human capacity.
Accelerated Implementation of ICT solutions.	Accelerated implementation of policies to address the increased requirements and complexities of universal access to include data and internet communication. Increased access to spectrum and improvement in wireless and broadband connection to support the increased need for internet access to facilitate physical distancing measures during the pandemic.	Maintain the resources and capacity required to quickly respond to the global and global needs.

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.
Moderate staff turnover and lack of succession planning.	The loss of a number of staff members with the institutional knowledge on critical portfolio areas within the Ministry, coupled with no succession planning has negatively impacted the rate at which work is completed.	Implement strategic programmes that will support an effective succession planning and staff retention.
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. Additionally, the review of the National Energy Policy and ICT Policy has also been behind schedule.	A more strategic and realistic approach to be taken in setting targets and timelines for development and implementation of policies.
Deficiencies in the ST&I Landscape	There is lack of investments and human resources in ST&I; lack of a solid innovation system to optimise human capacity; lack of collaboration between academia and	Implementation of the strategies in the ST&I Policy.

	policy makers; and lack of sufficient scientific data to guide government decisions. There is no legislation for the S&T industry and there are also limited career opportunities for graduates of Science, Technology, Engineering and Mathematics.	
Delay in Operationalisation of key ICT Systems and Establishments	The ICT Authority needs to be fully operationalised to support the ICT needs in the Government sector, particular implications for health, national security, justice and education. Additionally, the National Public Key Infrastructure System needs to be operationalised to allow for example, the use of digital signatures.	A more strategic approach is required to ensure that the targets for these activities are met.
Deficiencies in the Legislative and Regulatory Frameworks for key areas in the portfolio.	• Update of the Telecommunications Act is needed in order to address issues of convergence, increased competition and emerging technologies. • Regulations are required to support infrastructure sharing and improved quality of service. • A number of energy legislation that are to be passed, have been lagging; e.g. Petroleum (Downstream Activities) Bill and Regulations for Net Billing, Power Wheeling and Auxiliary Connections. • The electric mobility framework will require legislative and regulatory changes.	Increased capacity within the Ministry and collaboration with partner ministries to advance passing of required legislation.

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 legislation, 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.
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.
Global and local interest in electric mobility	There is growing interest locally and globally for the transition to electric vehicles (EV) to be facilitated by governments. There is also availability for finding and technical support to facilitate this transition; as well as opportunities for training and development of local capabilities.	The Ministry will need to implement the action items within the Electric Mobility Strategic Framework and also finalise an EV Policy.
Growing access and use of ICT in Jamaica.	According to the ESSJ 2020 Report, at the end of 2020, there were 385,603 subscribers of fixed broadband, while mobile broadband had 1,741,980 subscribers. This was an increase over 2019 (317,907 and 1,630,742, respectively).	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.

	The use of ICT services is now centre stage in the pandemic while more persons are working from home and particularly for the educational and health sectors (e.g. streamlining patient tracking, record keeping and case management).	
Convergence in the ICT sector.	There is a global shift towards converged regulation of telecommunications, broadcasting and content and the need for an appropriate regulatory framework and institution(s) to support a converged ICT sector.	Promulgation of relevant ICT legislation, regulations and policies to facilitate convergence in the sector.
Global move towards establishing a digital society.	There is increased focus on establishing a digital society leading to increased focus on digitalisation and digitisation. This is driven by the need for access to ICT services by the public, particularly the more vulnerable social groups (e.g. elderly, students, those in poverty, persons with disabilities). This is the opportune time for the National Broadband Network to be expanded.	The Ministry needs to keep up to date with its ICT policies and programmes to facilitate the establishment of a digital society.
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.	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.
Loss of Revenue for universal access to ICT	Loss of revenue (universal service funds) due to the increased use of Over the Top technology and less reliance on traditional telecommunications.	Adherence to best fiscal policies will assist with managing the finances that are available.
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.	Targeting of critical infrastructure and services by cybercriminals; with increased services online, there is the potential that cyberattacks could lead to financial loss; reduce the flow of essential goods and services; impede or impair important economic and financial operations.	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 is equipped with competent, trained and experienced staff for the critical portfolio areas. There has also been a significant development in the Science, Technology and innovation (ST&I) landscape, with the approval of the ST&I policy as a White Paper; the Ministry now has the responsibility of ensuring that the strategies within the policy are implemented. The ongoing Research and Development (R&D) programmes continue to perform well in responding to environmental issues and improving the quality of our agricultural sector. The Ministry also showed remarkable initiative in accelerating the implementation of critical ICT solutions which are necessary in light of the global pandemic; examples can be found in the increased access to spectrum and accelerated pace of establishing community Wi-Fi access points.

However, there are a number of shortcomings within the Ministry and its agencies. The implementation of the GOJ Performance Management Appraisal System (PMAS) has been delayed for a number of years and there is loss of institutional knowledge for some key areas due to lack of succession planning. There has been delays in the development and implementation of a number of policies, particularly all the energy sub-policies, postal services policies and the FOSS policy; as well as, delays in revising the National Energy Policy and ICT Policy. More specific to the portfolio areas, there are continued deficiencies in the ST&I landscape due to lack of investments, lack of collaborative efforts and limited opportunities for STEM graduates; while the operationalisation of the ICT Authority is still pending. A number of legislation and regulations are also pass the due date for completion; however, the Ministry continues to work arduously on completing these.

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 development and legislative process	Structured consultation and communication on legislative and policy matters	A regulatory environment for the efficient delivery of affordable utility services to all its customers	Buy-in on all legislative and policy requirements	To have a regulatory environment where all stakeholders are the beneficiaries of satisfactory and affordable utility services

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 and the Public Service	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

	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
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	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,	Energy Division

	Failure to engage required staff complement							management and implementation	
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
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 (2021/2022)										
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 (2022/2023)										
Stationery & other supplies				8,101,000	RB					
First Aid/ Pharmaceutial				120,000	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)
Culteries				250,000	RB					
Food and Drinks				2,168,000	RB					
Office furniture				4,534,000	RB					
Cleaning products				10,000,000	RB					
Security Surveillance				0	SS					
Office Appliances				550,000	RB					
Software and licenses				120,803,780	SS					
Computers, laptops and				20,825,000	RB					
Computers parts, supplies,				1 1,227,480						
Multifunction Printer				5,000,000	NCB					
Closed User Group (CUG)				6,000,000						

ANNEX E - BALANCED SCORECARD (MEDIUM TERM 2022 – 2026)

Objectives	Measures (Performance Indicators)	Targets	Initiatives	Medium- term Budget ($)
STAKEHOLDER PERSPECTIVE				
Secure and reliable ICT infrastructure and solutions	• % Completion of National Broadband Strategy • # of tablets delivered to schools	100% by March 2023 51,000 by March 2026	• Consultant to be engaged to develop the Strategy being pursued by the Ministry. • Tablets in School (roll out) Project to provide connected devices, supporting devices and accessories for public schools	
	• % completion of Cloud Infrastructure, GovMail, GovNet, GovTalk and CUG Framework • % completion of Cyber Security Standards	100% by 2025	• Develop a shared GOJ private cloud (Gov-Cloud) and shared email platform • Upgrade existing facilities to create a GOJ shared service Data Centre at Tier III standard • National Cyber Security Standards implemented	
Increase energy security and facilitate affordable energy cost	• % renewables in electricity generation • # of new investments in the energy sector	27% by 2026 4 by 2026	• Procure new generating capacities from renewables • Review and finalize National Energy Policy and sub-polices	
Increase energy efficiency and conservation	• Energy consumption savings (kWh/year) • # of facilities retrofitted	8.5M KWh by 2026 80 by 2026	• Review and finalize Energy Efficiency and Conservation Policy • Facilitate projects for the retrofitting of Public Sector Buildings to be energy efficient	
To facilitate the increased application of ST&I and investment in R&D.	• % implementation of the ST&I Policy • % completion of Mapping the National ST&I Ecosystem • % Gross Expenditure on R&D	60% by 2026 100% by 2024 1.0% by 2026	• Implement the activities within the ST&I Policy • Engage consultant to carry out mapping activities • Establish strategy for mid to long-term investment in Science and R&D	

Objectives	Measures (Performance Indicators)	Targets	Initiatives	Medium- term Budget ($)
FINANCIAL PERSPECTIVE				
Improve fiscal management in keeping with the FAA Act	▪ % compliance with GoJ procurement guidelines and the Integrity Commission's requirement .	100%	• Knowledge transfer/training/ retraining in government procurement standards. • Effective budget management training • Conduct audits and process reviews	
Improve the performance of programmes & projects against actual budget.	▪ 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	
INTERNAL PROCESS PERSPECTIVE				
Implement comprehensive result-based performance and appraisal management system.	• % implementation for PMAS	100% of staff on PMAS by March 2023	• Implement the PMA and conduct training and sensitisation	
To improve the strategic planning process and execution and alignment of plans with budget	• Strategic Corporate Plan and Operational Plans developed in agreed timeframe • Quarterly performance reports submitted in agreed timeframe	Plans submitted by November 30, 2022 Quarterly reports submitted on time to Office of the Cabinet.	• Develop the Strategic Business and Operational plans aligned with GOJ Priorities and budget. • Develop and implement Monitoring and Evaluation framework Ongoing performance reporting to Cabinet under PMES.	
Maintain a modern policy, legislative and regulatory framework.	• # of policies developed/amended and submitted to Parliament.	• 12 by 2026	• Increase staff capacity • Knowledge capacity training to improve efficiency among staff	

Objectives	Measures (Performance Indicators)	Targets	Initiatives	Medium- term Budget ($)
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	Infrastructure Sharing Rules	Quarterly	Data Protection Regulations	Quarterly	Cybercrimes Bill	Quarterly	
			Legislation submitted to stakeholders	Resolution of Interconnection Dispute Rules		ICT Bill				
			Legislation tabled in Parliament	Quality of						
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 2023	▪ 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 2025	▪ 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

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 2026	▪ 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 2023	▪ 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 2024	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

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

ACTIVITIES

- Meeting with key stakeholders
- Conduct sensitization sessions on R&D
- Conduct research on plantlets
- Carry out research on food products
- Conduct tests on sample products
- Carry out sterilization of batches of *Aedes aegypti* mosquitos
- Complete feasibility studies for construction of Environmentally Friendly Wastewater Services
- Conduct cost benefit analysis
- Conduct monitoring and evaluation of projects

OUTPUTS

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

OUTCOMES

Short-Term

- Increased use of R&D to inform product development and quality
- Increased awareness of the importance of R&D
- Increased products and services for natural products
- Increased capacity in R&D

Long-Term

- 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

PROGRAMME: *SCIENCE, TECHNOLOGY AND INNOVATION*

SUB-PROGRAMME: *Science Policy and Regulatory Frameworks*

INPUTS

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

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

OUTPUTS

- ST&I Policy White Paper approved in Parliament
- Regulations for Nutraceuticals developed
- Mapping of ST&I Ecosystem
- NCST Act reviewed
- ST&I Landscape mapped

OUTCOMES

Short-Term

- Increased knowledge of the ST&I sector
- Improved policy and legislative framework for ST&I.

Long-Term

- Increased investment in Science, Technology and Innovation (ST&I)
- Increased compliance with the policy and legislative requirements of the science sector
- Increased investments in ST&I

PROGRAMME: *SCIENCE, TECHNOLOGY AND INNOVATION DEVELOPMENT*

SUB-PROGRAMME: *Planning, Innovation and Popularisation*

INPUTS

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

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

OUTPUTS

- ST&I awareness programmes conducted
- Public awareness and initiatives executed to support innovation
- STEM activities implemented
- Increase in the number of persons with new innovations
- Training sessions conducted

OUTCOMES

Short-Term

- Increase in the number of patents registered
- Increase in ST&I education
- Increase capacity in Science, Technology, Engineering & Maths (STEM)

Long-Term

- Increased innovations and new businesses
- Increase in number of inventions
- Improved technology in the supply of goods and services
- Increased awareness among the use of ST&I

xxxvi

PROGRAMME: _ENERGY MANAGEMENT AND IMPLEMENTATION_

SUB-PROGRAMME: _Electrification Services_

INPUTS

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

ACTIVITIES

- Meeting with key stakeholders
- Conduct electrical audits
- 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

OUTPUTS

- Government Electrical Regulator (GER) operationalized
- Regulations drafted for the GER
- Electrical inspections completed timely

OUTCOMES

Short-Term

- Reduction in the numbers of days it takes to get electricity
- Reduction in the number of days to conduct electrical inspections
- Improved process to carryout electrical inspections

Long-Term

- Improvement in the doing business ranking
- Improved access to electricity

PROGRAMME: *ENERGY MANAGEMENT AND IMPLEMENTATION*

SUB-PROGRAMME: *Energy Management*

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

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

OUTPUTS

- Deep energy efficiency and conservation (EE&EC) retrofits implemented in public sector, educational facilities and government buildings
- Investment-Grade Energy Audits done
- Energy efficiency and conservation awareness programmes
- Urban Traffic Management System completed
- Decreased energy bill for Jamaica

OUTCOMES

Short-Term

- Reduced electricity consumption in Health, Education and Public Agency (HEPA) Government Facilities
- Decreased travel time and increased fuel consumption
- Increased energy savings in the public sector

Long-Term

- Decreased energy cost in the Public sector
- Reduced Carbon Dioxide (CO_2) and greenhouse gas emissions
- Increased public awareness on energy conservation and energy efficiency

PROGRAMME: *ENERGY MANAGEMENT AND IMPLEMENTATION*

SUB-PROGRAMME: *General Policy Administration*

INPUTS

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

ACTIVITIES

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

OUTPUTS

- National Energy Policy updated
- Research Papers
- Regulations drafted for the energy sector
- National Energy Action Plan developed
- 2nd Integrated Resource Plan developed
- Strategic Framework for electric mobility implemented

OUTCOMES

Short-Term

- Policies and legislation promulgated
- Increased investments in renewable energy projects
- Increased investments in Natural gas projects
- Improvement in electricity planning
- Electric Mobility policy completed

Long-Term

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

xxxix

PROGRAMME: _ICT DEVELOPMENT, ACCESS and USE,_

SUB-PROGRAMME: _ICT Policy and Regulation_

INPUTS

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

ACTIVITIES

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

OUTPUTS

- Revised draft policies
- Research Papers
- Data Protection Regulations promulgated
- ICT Act reviewed
- Analysis of research data
- ICT Policy reviewed
- Postal Sector policy developed
- New/updated organizational structures
- Revised draft legislation
- Survey results
- Office of the Information Commissioner fully staffed as per Data Protection legislation

OUTCOMES

Short-Term

- Strengthened legislative and policy framework for ICT
- Data controllers in compliance with the Data Protection Act

Long-Term

- Improved ICT related regulations, laws, decisions and practices
- Personal data and sensitive personal data of Jamaican citizens are protected.

xl

PROGRAMME: _ICT DEVELOPMENT, ACCESS and USE,_

SUB-PROGRAMME: _ICT Infrastructure Development_

INPUTS

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

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

OUTPUTS

- Draft transformation plan
- Project monitoring and evaluation
- Systems (implemented stages)
- Number of MDAs on-board with GovMail, GovTalk, GovNet and Gov.JM

OUTCOMES

Short-Term

- Enhanced systems
- Increased skill set
- Ease of doing business increased
- Ease of carrying out daily tasks by GoJ employees increased
- Improved communication methods
- Shared work spaces
- Reduction of telecom utility cost

Long-Term

- Improved communication network & systems
- Improved email system across GoJ
- ICT Services Transformed
- Ease in using GoJ systems increased

PROGRAMME: _ICT DEVELOPMENT, ACCESS and USE,_

SUB-PROGRAMME: _ICT Propagation_

INPUTS

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

ACTIVITIES

- Management of projects
- Project implementation/tests carried out
- Procurement conducted for tablets, laptops and projectors
- Works carried out to install ICT infrastructure

OUTPUTS

- Project evaluation and implementation documents
- Evaluation and monitoring
- Number of tablets and laptops delivered
- Cabinet submissions/ notes

OUTCOMES

Short-Term

- Increased number of ICT devices available in schools
- Increased skill sets
- Reduction in technology gaps (more equitable access)
- Increased number of accessible ICT access points
- Improved and increased usage in ICT in schools

Long-Term

- Improved quality of learning enabled through ICT
- Improved standard of ICT access for the Disabled community
- A technology enabled society established

PROGRAMME: _ICT DEVELOPMENT, ACCESS and USE,_

SUB-PROGRAMME: _Security of ICT Systems_

INPUTS

- Research hours
- Research documents
- Consultation hours
- Equipment
- Needs assessment

ACTIVITIES

- Conducting research
- Consultations
- Testing of systems / stress testing
- Training (internal & external)

OUTPUTS

- Research documents
- Recommendations from consultations
- Test results
- Early warning system
- Cyber Security Strategy completed

OUTCOMES

Short-Term

- Decreased number of cyber incidents
- Improved security of GoJ ICT Websites
- Cyber Security Strategies implemented

Long-Term

- Increased preparedness for cyber attacks
- Cyber Infrastructure protected
- National Cyber Security Centre operational

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.

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)	

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	