



MINISTRY OF SCIENCE, ENERGY AND TECHNOLOGY SECTORAL PRESENTATION 2022-2023

GEORGE WILLIAM GORDON HOUSE Tuesday May 10, 2022

BUILDING JAMAICA: Creating an enduring legacy in Science, Energy and Technology

> MINISTRY OF EDUCATION. YOUTH & INFORMATION



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

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MINISTRY OF SCIENCE, ENERGY AND TECHNOLOGY

SECTORAL PRESENTATION 2022-2023

BUILDING OUR JAMAICA: CREATING AN ENDURING LEGACY

IN SCIENCE, ENERGY AND TECHNOLOGY

HON. DARYL VAZ

MAY 10, 2022

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Acknowledgement

Madam Speaker, I commence this my second Sectoral Address as Minister of Science, Energy and Technology with a grateful heart.

Indeed, it is without question, that God has been good and equally merciful. I thank Him for having brought us all through what was undoubtedly a testing period.

Madam Speaker, I pause at this moment to also give recognition and show gratitude to:

- the Most Honourable Andrew Holness, Prime Minister of Jamaica, whose vision and leadership is a constant source of inspiration and strength;
- my life partner Ann-Marie and beautiful family, whose love and support are ever-present and unfailing;
- my constituents and the leadership of West Portland, whose continued confidence has allowed me to serve in such a pivotal role;
- my dedicated Permanent Secretary, Mrs. Carol Palmer, on whose perceptive leadership I rely to advance the work of the Ministry;
- my Boards led by Dr. Parris Lyew-Ayee for Science, Mr. Wayne Chen for Energy and Mr. Keith Duncan for Technology;
- the leadership and staff across the Ministry, its Departments and Agencies;
- and our international and private sector partners.

It would be remiss of me not to acknowledge my Parliamentary colleagues on both sides of the political aisle, as well as the Clerk to the Houses of Parliament and her staff.

Their contributions to advancing the nation's business are greatly appreciated.

I thank you all.

Building Our Jamaica

Creating an enduring legacy in Science, Energy and Technology

Madam Speaker, in this Jamaica's sixtieth (60th) year of independence, the creation of an enduring legacy in Science, Energy and Technology is paramount for the advancement of this nation.

This legacy we speak of is one that sees science taking its place within this society, as the primary system in confronting our many health and environmental challenges.

Madam Speaker, our people must KNOW, UNDERSTAND and ACCEPT it for the role it MUST play in improving our quality of life.

The legacy in energy that this Government is seeking to create, is one that MUST fuel our growth through efficiency, diversification and alternative sources. This is a society where energy is in varied forms, is in sufficient quantities, and available at reasonable prices.

Madam Speaker, the legacy in Technology that we are creating, is intended to create a society where paperless and electronic means are the norm. Where the intensive use of technologies is evidenced across all sectors, and our people not only use it but master it.

There is no better time to orchestrate this than now.

It is not lost on me Madam Speaker, that the Ministry which I lead is central to Jamaica's development efforts.

Science, Energy and Technology are critical to engineering a technology-enabled society and guaranteeing energy security and efficiency; two important outcomes under Jamaica's National Development Plan - Vision 2030.

The landmark year of 2030 to which many of our growth objectives are tied, is fast approaching. This is the time to incorporate this 'whole of country' and 'whole of government approach' we speak so much of to get the job done!

Madam Speaker, we have been through an unprecedented two years since the onset of the COVID-19 pandemic. There were moments of despair, anguish and uncertainty but in the face of adversity we did not relent, and we are stronger because of the indomitable Jamaican spirit which rises to every occasion and causes us to triumph.

Madam Speaker, in my Sectoral Presentation today I will share how this Ministry has been 'Building Jamaica' through the creation of this legacy in science, energy and technology. My presentation will comprise three sections, based on the portfolio areas. I will speak to the most notable achievements within each portfolio and the outlook for the new fiscal period.

Madam Speaker, I begin with Science.

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Science Portfolio

Madam Speaker, living in the 21st century, as a people we have been granted the opportunity to experience firsthand the power and significance of science.

As the world continues to grapple with the novel Coronavirus, science has repeatedly shown itself as our key defense against a raging pandemic; responding to this unprecedented challenge through the provision of critical information to promote knowledge and sound decision making.

This Ministry remains cognisant of the role of science in creating new knowledge, improving education, and increasing the quality of life for our people.

It is based on this premise that the commitment was made in my 2021/2022 Sectoral Presentation, to take deliberate steps towards staffing the Science Division of the Ministry, in facilitation of the proper strategic leadership of the Portfolio. The Ministry is pleased to report that senior management personnel within the division are now in place. It is the work and commitment of our stellar team of professionals, who have set us on a path of creating an enduring legacy in Science.

The Popularisation of Science

Madam Speaker, the scientific literacy of our citizens will equip them to not only make informed choices, but to also understand those decisions of Government that are founded on scientific information.

Our citizens must learn to speak and understand the language of science. To this end the Ministry, its agencies and departments commenced ensuring this legacy in science, through the building of a scientifically literate society; beginning with our children and adolescents.

Last year in this very House, I placed my colleague Minister the Honourable Fayval Williams on notice, that the Ministry would be implementing robust programmes for the popularisation of science in schools.

Madam Speaker, notice issued and action taken.

Several programmes have been designed, revised and implemented to ensure the popularisation and understanding of science in schools, as well as its promotion as a viable and rewarding profession.

The National Schools Science and Technology Society (SSTS) Programme

The National Schools Science and Technology Society (SSTS) Programme, more popularly known as Science Club, has been a feature in over seven hundred (700) schools since 1996. It is geared towards providing avenues for our youth to be immersed and garner a greater appreciation for science. This programme has been revitalised and refreshed through the efforts of the Scientific Research Council (SRC).

The SSTS now involves a yearly programme of activities including regional meetings, CSEC/CAPE/PEP workshops, Essay/Debate/Performing Arts Competitions and National Science and Technology Fairs.

Additionally, forty (40) Science, Technology, Engineering and Math Ambassadors have been trained to provide mentorship and resources to teachers and students.

Conversation in Science Series

Madam Speaker, the Conversation in Science Series, also hosted by the SRC, is another means by which science is being popularised. This series provides an opportunity for science professionals, members of the public and students to interact, with the view of strengthening their understanding of science. For the period, three such sessions have been held reaching over eight hundred (800) individuals.

Classroom to Real World STEM Mentorship Workshop

Mentorship has also been added as a key feature of the promotional activities for science. The 'Classroom to Real World STEM Mentorship Workshop' is a collaborative effort between the Ministry, the SRC and the National Commission on Science and Technology (NCST). The workshop allows students at the tertiary and secondary levels, to receive mentorship from renowned STEM professionals. As a recent initiative launched with students from University of the West Indies, the programme is showing great promise and is anticipated to be a game-changer in our efforts to create interest in science among our students.

Madam Speaker, the programmes and activities geared towards the promotion and popularisation of science will be ramped up during this new fiscal period. Specifically, the Biennial Science and Technology Conference and the National Innovation Awards, will be hosted by the Ministry, SRC and NCST in November. The NCST, will also see to the revival of the National Medal and Innovation Awards Ceremony, to acknowledge scientific achievements and encourage creativity and innovation.

I wish to therefore make a call to all innovators, creative thinkers, entrepreneurs and scientists, to be in readiness to submit their innovative products for recognition and celebration.

Science, Technology and Innovation (ST&I) Policy

Madam Speaker, this Ministry is doing the work to create an enabling and supportive environment that will guide, strengthen and improve the existing science, technology and innovation landscape through policy.

The Science, Technology and Innovation Policy prioritises the application of science in Agriculture, Health Management, Environmental Resource and Conservation, Education and Training, and Disaster Risk Management.

This Honourable House would recall the commitment given by this Ministry to advance the ST&I policy which was at the Green Paper stage, to the White Paper stage. Madam Speaker 'so said, so done'.

The ST&I Policy was tabled in this House as a White Paper on February 10, 2022 and the implementation of the activities is now in train. The mapping of the ST&I Ecosystem is the first set of activities associated with the Policy.

The UNESCO Global Observatory of Science, Technology and Innovation Policy Instrument Programme (GO-SPIN), through the Planning Institute of Jamaica, has confirmed technical support for the activity as well as the recruitment of a local consultant to complete preparatory works.

Research and Development and Climate Change Initiatives

The International Centre for Environmental and Nuclear Sciences (ICENS) continues to do commendable work in support of climate change initiatives.

Recall the regional project -'Assessing Atmospheric Aerosol Component in Urban Areas'to improve air pollution, for which the Kingston Metropolitan Area (KMA) is being sampled. Madam Speaker aided by the National Environment and Planning Agency (NEPA), one hundred and fifty-four (154) samples have been obtained so far with twenty (20) samples currently being analysed.

Also Madam Speaker, ICENS continues to forge the path of first-world, cutting-edge research and development, which focuses on finding solutions to global problems such as climate change and food security.

On the agenda for the new fiscal year, is harnessing the power of nuclear technology through the completion of a multipurpose gamma irradiation facility. This will assist in national development, particularly in agriculture, medicine, industry, research and education. In the short-term, this facility will be integral in two major International Atomic Energy Agency Technical Cooperation Projects which are of vital concern to the country. The first is crop improvement through the use of experimental technologies in Jamaica; this will significantly contribute to food security. The second project will be the Integrated Vector Management Approach, which will aid in controlling Aedes Aegypti mosquitoes which are vectors of human pathogens such as the Zika Virus.

Support to the Micro, Small and Medium Enterprise Sector

Madam Speaker, science has also been active in the support of our entrepreneurs in the Micro, Small and Medium Enterprise (MSME) Sector. For the period, the SRC supported a total of one hundred and ten (110) production cycles with MSMEs, spanning the industries of food manufacturing, beauty and personal care. This is by no means a small feat. This support offered by SRC, has facilitated the production of various products such as juices, flavoured water, sauces, jams, herbal products and meat processing. Additionally, fifty-six (56) new products formulations are ready to engage the marketplace thanks to science and the SRC.

As science moves to also ensure our food security, more than seventy-one thousand (71,000) clean, robust and disease-free plants were propagated. Madam Speaker, over eleven thousand (11,000) were handed over to various farmers. These crops included various types of pineapples, bananas, yams, ginger and sweet potatoes. Work continues using tissue culture and other biotechnology applications to develop more disease-resistant crops, and these will be made available to farmers within this new financial year.

Organisation of American States

Jamaica played a pivotal role in the hosting of the Sixth Meeting of Ministers and High Authorities of Science and Technology (VI REMCYT). This took place on December 7 and 8, 2021. The VI REMCYT meeting, allowed for Ministers and high-level authorities in science and technology of the Organisation of American States (OAS), to exchange ideas and best practices with the goal of increasing the economic and social development of the OAS member states.

In addition Madam Speaker, I am pleased to advise that Cabinet gave approval for me to assume the chairmanship of the Organisation of American States Inter-American Committee on Science and Technology (COMCYT) for the next three years (2022 – 2024). This will be formalized at the next meeting of the Inter-American Council for Integral Development (CIDI) scheduled for May 31, 2022. Assuming chairmanship of the COMCYT will position Jamaica as a key player in the global Science, Technology and Innovation landscape.



Support being offered to MSME food processors at the Food Pilot Plant at SRC

SCIENCE- Food Processing:

Science Portfolio Outlook 2022/2023

As we look towards the 2022/2023 fiscal period, the efforts of the Ministry will be geared towards:

- furthering the implementation of the ST&I Policy through the GO-SPIN Methodology;
- increase measures to popularise and promote science; and
- continue our research and development efforts to finding solutions to global problems such as climate change and food security.



ENERGY PORTFOLIO

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Energy Portfolio

Madam Speaker, let us turn our attention to Energy.

The world's energy systems are changing rapidly. Globally, energy sectors are shifting from fossil-based systems of energy production and consumption such as oil and natural gas, to renewable energy sources like wind and solar.

In recent months, the need to fast-track this transition rose to even greater prominence with the invasion of Ukraine. The world stood in a state of uncertainty, as sanctions imposed on Russia threatened a potential global energy crisis.

Madam Speaker, even before this very unfortunate occurrence, Jamaica's energy transition, diversity, and ultimate energy security was high on the list of national priorities for this Ministry.

The approach which has been taken is both measured and steady, to ensure the facilitation and creation of a legacy which includes a modern, diversified, environmentally-friendly, and sustainable energy sector.

Madam Speaker, in light of this, the mandate of the Ministry has shifted from the achievement of a thirty percent (30%) renewable energy mix for electricity generation, to fifty percent (50%).

An integral aspect of achieving this goal Madam Speaker, is an enabling and adaptive policy and legislative framework, which mirrors the transitions and developments taking place in global energy.

The development of this framework will include the review of existing or the implementation of new policies and legislation, as well as the review of the licence of the Jamaica Public Service Company (JPS) which is up for renewal in 2024.

Policy, Legislative and Regulatory Framework

Madam Speaker, the Ministry has made significant progress in advancing the policy, legislative and regulatory framework related to the sector.

Policy

Advancement of the Energy from Waste Sub-Policy

During the financial year, the Ministry continued the consultation process on the latest draft Energy from Waste Sub-Policy. Comments were received from the NEPA, the Attorney General's Chambers (AGC), the Ministry of Finance and the Public Service (MOFPS), and the Ministry of Local Government and Rural Development. The policy document is now being updated to reflect the recommended changes. The Ministry is also collaborating with the DBJ's Integrated Solid Waste Management Enterprise, to bring these initiatives to practical application.

Update of the National Energy Policy

The Ministry has been seeking to engage a consultant to review and update the 2009-2030 National Energy Policy.

This is to further safeguard against world market energy price shocks, as well as to improve energy security and protect consumers on the Grid. In light of the recent mandate given to the Ministry by our Prime Minister for the energy sector, the recently concluded Integrated Energy Plan will be subject to urgent review. Similarly, up for review, is the second Integrated Resource Plan (IRP 2).

Legislation

Madam Speaker, you would recall that in February of this year updates were provided on the following Bills and Regulations:

- Petroleum (Downstream Activities) Bill;
- Petroleum (Amendment) Bill;
- Electricity (Amendment, Indemnification and Validation) Bill;
- The Electricity (Amendment) Bill;
- The Electricity (Net Billing) Regulations; and
- The Electricity (Wheeling) Regulations.

Work is advancing in earnest to table these Bills and Regulations within the new financial year.

The Joint Select Committee on the Electricity Act, 2015

Madam Speaker, a modern and robust legislation is critical, as we seek to:

- diversify the energy mix to include increased renewable energy for electricity generation;
- lessen the dependency on fossil fuels to increase energy security;
- reduce carbon emissions; and
- ultimately achieve affordable energy.

In this regard, recall that a Joint Select Committee of Parliament has been established to review the Electricity Act, 2015. Over the period, the Committee received oral and written presentations from various private and public sector organisations.

Madam Speaker, the Committee is currently reviewing those submissions, with the support of my Ministry, the Office of the Parliamentary Counsel (OPC), the Legal Reform Department (LRD) and the AGC.

The legislators and technocrats supporting the Committee, have been working assiduously to review the submissions. This is with the intention to make recommendations to the Parliament within this financial year.

Regulatory Framework

Establishment of the Government Electrical Regulator

Madam Speaker, as promised, the Government Electrical Regulator (GER) is now fully operational.

Its establishment facilitates the closure of the Government Electrical Inspectorate, and the institution of a new system to regulate the electrical installation and inspection processes in Jamaica.

As at March 31, 2022, the GER processed and added to its portal a total of six hundred and eight (608) Registered Electricians and one hundred and seventy-four (174) Electrical Inspectors.

These numbers are set to increase significantly over time, based on an application process that accepts and processes applications on a year-long basis.

It would be remiss of me Madam Speaker, to not acknowledge the challenges which have been experienced by homeowners and developer with regard to the cost of electrical inspections.

Madam Speaker, the GER and the Ministry continue to actively monitor the situation in the marketplace and encourage individuals to lodge formal complaints concerning the conduct of inspectors. Also, we encourage members of the public to visit the GER Resource Centre on the Ministry's website for a listing of all registered electricians and private electrical inspectors to aid in comparisons and the negotiation of prices.

The Ministry, Madam Speaker, has also consulted the Fair Trading Commission on the matter, which has provided recommendations not limited to:

- increasing inspectors across the geographical area;
- advising inspectors to provide relevant and material information to consumers as per the Fair Competition Act;
- advising trade association to refrain from discussing prices as this may amount to collusion and price fixing; and
- embarking on a sensitisation and public education programme which targets consumers. Madam Speaker, these recommendations are being advanced as we speak, with the public education campaign slated to be launched within the first quarter of the new financial year.

Energy Efficiency and Conservation Initiatives

Non-Technical Loss Reduction

Madam Speaker, as we turn our focus to the electricity sector, the impact of the COVID-19 pandemic continues to drive an increase in consumer demand for electricity. Electricity generation increased by two percent during the period, with the renewable energy share of electricity remaining at thirteen percent (13%). The alternative energy share based on Liquefied Natural Gas (LNG), also remained at fifty-nine percent (59%).

Presently, non-technical losses, which include electricity theft, account for approximately eighteen to twenty percent (18% - 20%) of electricity generation.

Madam Speaker, at this juncture, I ask that you permit me the opportunity to respond to the Opposition Spokesman on Mining and Energy, Mr. Phillip Paulwell, who misguidedly stated that this government seemed to not be concerned or had plans with regards to the issue of electricity theft mitigation.

In fact, this Ministry has been receiving technical assistance from the United States Agency for International Development (USAID) and its lead consultant Deloitte, under the Strengthening Utilities and Promoting Energy Reform (SUPER) Programme. In 2021, USAID and Deloitte established a working group comprising MSET, JPS, Jamaica Social Investment Fund and the Inter-American Development Bank (IDB). The group has come to a consensus on a set of strategic policy concepts to address the issues of non-technical losses.

Madam Speaker, the concepts are grouped into four categories:

- energy efficiency programmes which will reduce the demand from illegal users;
- communication and reporting which will build trust between relevant entities and encourage cooperation on loss reduction activities and objectives;
- empowerment which will provide consumers with the tools to acquire legal electricity; and
- enforcement which will discourage the theft of electricity through prosecution capabilities.

The first activity to be implemented is a House Wiring initiative, conceptualised under the empowerment category of the solutions.

In addition, IDB is funding a National Electricity Loss Reduction Plan Consultancy for Jamaica. This is being conducted by Estudios Energeticos Consultores (EEC). The IDB's non-technical losses audit consultancy with the EEC, is allowing the Government to collaborate in conducting an Energy Loss Independent Audit Report (ELIR) and preparing a National Electricity Loss Reduction Plan (NELRP). The ELIR will focus on the factors that impact the level of technical and non-technical losses at the national, parish and feeder levels. While the NELRP will define the roles, actions, time periods, benefit-cost, targets and other elements needed to reduce losses.

Public Sector Energy Efficiency and Conservation Programme (EECP)

Madam Speaker, during the budget debates held recently, the Opposition Spokesman on Finance and the Public Service, Mr. Julian Robinson, called for an update on the Public Sector Energy Efficiency and Conservation Programme. He also noted quite erroneously that the programme had stalled.

I wish to remedy this inaccuracy by reminding my colleague that the programme ended in the fiscal year 2020/2021.

Not only did it end, but it achieved all objectives under its scope, including but not limited to:

- the installation of AC retrofits at the Kingston Public Hospital, Jamaica Information Service, Tax Administration Jamaica – Donald Sangster Building, Montego Bay Revenue Service Centre, Office of the Prime Minister, MOFPS, Blood Bank and the National Public Health Lab;
- the installation of mini-split AC units at seven facilities Jamaica College, Edna Manley College, St. Andrew High School, Montego Bay Community College, Moneague Teachers' College, Greater Portmore Police Station and HEART College of Hospitality Services/Runaway Bay Hotel.
- And the implementation of the Energy Efficiency Survey for Public Sector workers which concluded a seventy-three (73%) percent awareness level.

Energy Management and Efficiency Programme (EMEP)

Madam Speaker, the Ministry's active energy efficiency programme, the Energy Management and Efficiency Programme, is a collaborative effort between the IDB, the Japan International Cooperation Agency (JICA), the European Union-Caribbean Investment Facility and the Government of Jamaica (GoJ).

In more specific terms the components of the programme aim to:

- reduce electricity consumption within health, education and other public sector facilities;
- reduce travel times and avoid fuel consumption through improved traffic control management; and
- to support the development of Jamaica's twenty-year electricity plan.

Madam Speaker, by way of elaboration...

Retrofitting of Government facilities inclusive of Health, Education and Public Agency (HEPA) facilities

This component includes the retrofitting of eighty (80) government facilities with renewable energy and energy efficient interventions. These interventions include solar Photovoltaic technology, LED lighting upgrade and energy efficient air conditioning technology.

The structural and electrical integrity assessments of twelve (12) hospitals, ten (10) schools and other public office buildings have been completed to support this effort.

Madam Speaker the eighty (80) government facilities will be completed over the course of the next two years, at a value of US\$30M.

Implementation of the Urban Traffic Management System in the Kingston Metropolitan Area

A contract was awarded for the implementation of the Urban Traffic Management System (UTMS) in March 2021 and the project is now eighty-six percent (86%) complete. Full completion is expected for May 27, 2022.

This UTMS project is being implemented in the KMA. The UTMS seeks to modernise and automate the traffic management system, and to reduce travel time and fuel consumption by thirty percent (30%).

The project involves the installation of additional CCTV cameras, licence plate video detector cameras, and over-head Variable Messaging Signs. These will inform and warn motorists in near real-time, and modernise the traffic interconnection network with fibre optic cables and upgraded IT hardware and software.

Development of Jamaica's twenty-year (20) electricity plan

The Integrated Resource Plan (IRP) is a comprehensive decision tool and road map for meeting Jamaica's electricity needs over the next twenty (20) years. The IRP is being developed with considerable public involvement from the OUR and JPS; government agencies; the wider Caribbean Community (CARICOM); customers and industry advocacy groups; project developers; and other third party stakeholders.

Madam Speaker, we have completed the first iteration of the IRP and are now into the second iteration.

Electric Mobility

Madam Speaker, the Government is doing its part in ensuring the development of a thriving electro-mobility environment.

The foundational work to drive this sector is currently underway, with the establishment of the Electric Vehicle Council and the drafting of the e-mobility strategic framework. I am pleased to report that the Cabinet has approved the Strategic Framework for Electric Mobility which will guide the introduction of electric mobility in Jamaica.

Renewable Energy

Madam Speaker, in pursuit of the targeted fifty percent (50%) renewables on the Grid, the main drivers of this target are:

- to achieve lowered carbon emissions to ultimately achieve net zero emissions and carbon neutrality by 2037; and
- to reduce the vulnerability and variability associated with the fluctuating costs for oil and gas.

Generation Procurement Entity

Madam Speaker, as a reminder, the Generation Procurement Entity (GPE) has been given the mandate to undertake the procurement of new electricity-generation capacity to include renewables.

In light of this, the GPE has been creating strategic partnerships with entities such as the World Bank and the IDB. This is in an effort to develop rules and guidelines, increase technical and institutional capacities and improve the evaluative, procurement and generation capabilities.

The GPE is at an advanced stage with the IDB for technical assistance; we anticipate that the Requests for Proposals will be issued by the second quarter of this fiscal year.

Madam Speaker, other renewable energy initiatives which the Ministry will play an active role include the:

- Pumped-hydro Storage project; and
- the electrification of Public Sector fleets.

Petroleum

Oil and Gas Exploration

As we move to our oil and gas exploration, I note the comments of my Opposition colleague on Energy Mr. Paulwell, concerning his beliefs that at this juncture drilling should have taken place.



Madam Speaker, I wish to assure Mr. Paulwell and by extension, the Jamaican populace that the government has not, as he termed it, 'lost its appetite' for the project.

Rather, this government is doing its due diligence to ensure that a high investment exploratory activity of this nature, returns fruit. Technically, it would require about a year to prepare and plan to safely drill a deep water exploration well. Additionally, in order to begin planning for such a well, committed funding would need to be concluded.

Madam Speaker though not at the drilling phase, our oil and gas exploration efforts are advancing steadily.

United Oil and Gas Ltd (UOG) completed an agreed technical work programme, designed to address the risks associated with the frontier licence arising from the marketing campaigns under then licence holder Tullow Oil.

Some of the major activities completed under the technical work programme include:

- the Prospective Resource Audit where sub-consultant Gaffney Cline & Associates audited eleven (11) prospects and leads across the licence. The audit verified the presence of multiple prospects and leads with potentially two billion barrels of petroleum resource across the licence; and
- the Well Cost and Development Scenario Screening where sub-consultant Oilfield Production Consultants, undertook a scoping analysis of the anticipated future cost of drilling an exploration well on the main prospect Colibri. The cost ranges determined Madam Speaker, are between US\$23M to US\$28M for an exploration well, and between U\$40M and U\$48M for additional appraisal and development work in the success case.

Also included in the programme was:

- **the Petroleum Systems Modelling** where seismic interpretation and petroleum modelling were done on the Morant Basin section of licence, to predict the likelihood of hydrocarbon generation and migration in that basin;
- the Onshore and Offshore Seep Sampling both onshore and offshore near Blower's Rock;
- a Satellite Seep Study which is a visual inspection of recent satellite imagery across the licence, leading to new offshore areas with potential being identified; and
- a Regional Hydrocarbon Source Rock Study along with tectonic reconstruction.

UOG also undertook an extensive marketing campaign, even while under pandemic constraints. The results of which produced over six points of interest, which are being actively pursued under confidentiality agreements.

Madam Speaker, with the understanding of this upcoming global upswing in exploration, coupled with the additional unforeseen global pressures on the energy market; the Ministry sought and received from Cabinet authorisation to further extend the UOG licence for an additional twenty-four (24) months. This is in order to take advantage of the potential increase in exploration interest in the medium term.

The Ministry cautiously anticipates a play-opening exploration well declaration by 2024, as the oil industry looks for politically safe opportunities.

Oil and Gas Cooperation between Jamaica and Nigeria

Madam Speaker, I note also the sentiments of Mr. Paulwell concerning the sourcing of oil from Venezuela. Madam Speaker, I welcome the suggestion of my colleague and I can commit that we will have a discussion at length about the matter. I however wish to make note of another source of oil which the Ministry through Petrojam is actively pursuing.

Petrojam participated in the 4th Session of the Nigeria-Jamaica Joint Commission, which took place over the period February 22-24, 2022.



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Madam Speaker, the main discussion at this meeting concerned the finalisation of the Memorandum of Understanding on Oil and Gas Cooperation between Jamaica and Nigeria.

Arising from this meeting, the Federal Ministry of Petroleum Resources of Nigeria expressed its willingness to sell LNG to Petrojam, once there is the capability of receiving same at Petrojam. Additionally, discussions with the Group Managing Director of the NNPC, have opened up the possibility for the purchase of oil from Nigeria.

Advancing recommendations under the Zacca Report

Madam Speaker, I am once again forced to address the erroneous utterances of the Opposition spokesman on Energy; this time as it pertains to actions taken with regards to the recommendations of the Zacca Report.

There is no truth to the claim that 'Zacca report is gathering dust', 'is on pause' or that 'the Government's response has been one of inaction'.



While recommendations concerning the privatisation and future of the refinery is still before the Cabinet for deliberations, those which concern the refinery's operational efficiency have not been stymied. Rather, are being actively pursued.

One of the urgent recommendations of the report concerned the appointment of a fully functioning Board, with an appropriate mix of private and public sector individuals. As this House would recall, in November 2020 the Government made good on this recommendation through the appointment of an eight-member board headed by Mr. Wayne Chen, reflective of the conditions outlined in the report.

Since the institution of this board, Petrojam has been set on a path towards the implementation of improved terminal operations, pricing regime, cost reduction strategies and other recommendations as noted in the report.

Improved Terminal Operations

As it pertains to improved terminal operations, several initiatives have been implemented further its improvement; particularly, as it relates to demurrage costs.

A proposal to the Bureau of Standards has been developed for the restructuring of the certification of cargo at the Montego Bay Terminal, in relation to cargo carried by third party vessels. Current operations cover cargo delivered from the Kingston Refinery to the Montego Bay Terminal; therefore, this proposed new protocol will address and facilitate more testing in Montego Bay, as well as reduce the time taken for sampling of cargo on Marine Vessels.

Madam Speaker, the refinery is also pursuing an increase in the capacity of the main dock, to take advantage of the 14-meter draught channel. This would enable Petrojam to receive significantly larger cargoes, reducing the number of third party vessels calling Petrojam, and ultimately, reducing the number of opportunities for demurrage. The potential crude voyages reduction is estimated at thirty-three percent (33%) with this venture.

Additionally, an initiative is underway for the refinery's Montego Bay operation to be supplied directly from imports lifting larger cargoes. This will result in the making of fewer calls, and the discontinuation of the operation of the combined carrier round island time charter vessel.

Cost reduction strategies

Also being implemented as per the recommendations, are cost reduction strategies which form a part of a larger 'operations improvement programme'.

Petrojam in moving to advance this recommendation, has issued a Request for Proposal (RFP) for consultancy services to assess, develop and implement a plan to improve its operational performance. Arising from this process, Solomon Associates was the successful bidder. Madam Speaker, unfortunately, the advancement of this consultancy has been derailed. This is due to the effects of the COVID-19 pandemic, which has negatively impacted the financial performance of the refinery.

As this fiscal year's prospect for improved financial performance appears likely; efforts will be made to advance the programme as soon as the conditions are favourable to do so.

It must be noted however, that in lieu of the consultancy, Petrojam has pivoted to interim cost reduction measures. These include curtailing overtime expenses, administrative costs and expenses associated with utilities. Of notable mention is the refinery's commissioning of a new well to serve its water utilisation needs. This has contributed significantly towards the reduction of water related expenses for the refinery.

Sweet Crude production and supply

Madam Speaker, Petrojam has also taken the necessary steps to maximise the processing of sweet crudes to reduce the production of Heavy Fuel Oil, and increase production of more marketable Low Sulphur Fuel Oil. In fact, this has been a part of the current refinery operating strategy since December 2019 which pre-dates the publication of the Zacca Report.

As it concerns the matter of long term supply of sweet crude feedstock, Petrojam entered into an arrangement with Petrobras, the state oil company in Brazil in August 2019 for the supply of sweet crude. Based on demand, there is still a need for High sulphur fuel oil and therefore high sulphur crude is sourced from the spot market and PetroEcuador. In addition, there are ongoing efforts to secure additional low sulphur crude oil options from other suppliers, particularly state oil companies.

Feasibility Study for Extra Light Crude Processing

Madam Speaker, further action has also been taken to address the feasibility study to determine the process plant improvements required, for the refinery to process extra light crudes such as Eagleford or Permean.

I am able to report that international refinery consultant Muse Stancil, was commissioned to evaluate the way forward for the refinery. The study including recommendations was completed in 2021 and submitted to the Petrojam Board of Directors and the Ministry for deliberations and decision making.

Price Adjustment Impact Reporting

I must also mention that the recommendation to report the impact of all price adjustments separately on the refinery's financials, is currently documented as part of the process.

Activities of the Joint Petroleum Working Group

Madam Speaker, recall a Joint Petroleum Working Group was established in October 2021. The group has been making noteworthy strides.

In this regard it has agreed on the recommended minimum economic rate for tanker drivers of one thousand Jamaican dollars (J\$1,000) per hour, based on the industry norms in relation to hazardous materials and risk factors. This represents a 270% increase in relation to the lowest rate paid to tanker drivers, which equates to about Jamaican seven hundred and thirty dollars (J\$730) per hour, or the equivalent of fourteen thousand, six hundred and forty Jamaican dollars (J\$14,640) for a forty (40) hour work week.

As next steps, the MSET and the Ministry of Labour and Social Security (MLSS) are collaborating to establish the Joint Industrial Council (JIC).

The purpose of the council is to inform the structures required to maintain competitiveness in view of petroleum industry trends, and local and environmental factors. It will also seek to further improve working conditions for Petroleum Tanker Drivers, and ensure professional conduct of all stakeholders involved in the petroleum industry.

Presently, MLSS and the Ministry are preparing the Terms of Reference (TOR) for the JIC, as well as collaborating to prepare a Cabinet Note. MLSS is also preparing a template to assist with the reestablishment of the Haulage Contractor Association.

Madam Speaker, to facilitate the execution of its energy mandate, the Ministry has further bolstered its capacity with the addition of an energy advisor, with twenty-six (26) years experience in the sector.

We will continue to create this enduring legacy in the Energy Portfolio as we move into the new fiscal year.

Fibre Optic Cable Installation being conducted from Three Miles along Spanish Town Road to Downtown Kingston, as a part of the Urban Traffic Management Programme (UTMS).



MINISTRY OF SCIENCE, ENERGY AND TECHNOLOGY

ENERGY- UTMS1

Energy Portfolio Outlook 2022/2023

In this financial year, the Ministry will aggressively pursue:

Policy, Legislative and Regulatory Framework

- further the advancement of the Energy from Waste Policy;
- update the National Energy Policy;
- · advance the energy legislative agenda; and
- continue the implementation of the recommendations provided by the Fair Trading Commission, as well as execute a robust Public Education Campaign for the GER.

Energy Efficiency and Conservation

For our Energy Efficiency and Conservation efforts, we will:

- complete the implementation of the UTMS;
- advance the plans for the phasing out of incandescent light bulbs; and
- further advance the retrofitting of Government facilities inclusive of Health, Education and Public Agency facilities.

Renewable Energy

In the area of renewables, the Ministry will:

- issue the RFP concerning the GPE; and
- continue to offer its support to the Pumped-hydro Storage Project and the electrification of Public Sector Fleets.

Petroleum

Finally, for Petroleum we will move to:

- · complete outstanding recommendations from the Zacca Report;
- implement the Industrial Baseline Study completed in the fiscal year 2021/2022 for oil and gas; and
- re-establish the Petroleum Training and Education Trust Fund.

TECHNOLOGY PORTFOLIO

FELLOWSHIP

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BUILDING JAMAICA:

Creating an enduring legacy in Science, Energy & Technology













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Technology Portfolio

Madam Speaker, let us now turn our attention to the third Portfolio area of the Ministry, Technology.

Our goal as a country is to become a digital society by 2030. Underpinning the creation of this digital society are considerations related to:

- digital rights and responsibilities;
- digital privacy and security;
- digital access; and
- digital commerce.

Madam Speaker, activities to advance these areas are already in progress, as evidenced by our various policies and plans in effect.

Notwithstanding, the Ministry recognises the need to develop a single comprehensive Digital Agenda and Roadmap, to align the activities that must be undertaken in the short to medium term.

In this regard, the Ministry has partnered with the United Nations Development Fund (UNDP), with a view to advancing Jamaica's digital agenda, through the use of the UNDP's Digital Readiness Assessment Tool (DRA).

UNDP's Digital Readiness Assessment Tool

The DRA is a comprehensive diagnostic survey tool and serves the purpose of providing rapid, high-level insights into a country's digital strengths and weaknesses. The analysis of the responses from the survey administered in February 2022, confirms the need to:

- develop a Digital Roadmap;
- upskill our people with digital literacy skills; and
- build out our digital infrastructure.

These are areas we are moving to advance as we speak.

Digital Privacy and Security

Madam Speaker, as referenced earlier, an important element of the creation of this digital society, includes digital rights and responsibilities and digital privacy and security.

To this end, the Ministry continues its focus on the development of a policy and legislative framework capable of accommodating the evolution of technology, and the protection of the fundamental rights and freedoms of all Jamaicans.

Data Protection and the Office of the Information Commissioner

The passage of the Data Protection Act, 2020 ushered in the establishment of the Office of the Information Commissioner (OIC).

In my previous Sectoral, I updated the House that the recruitment of the Information Commissioner was at an advanced stage and that the House would deliberate on the compensation package.

Effective December 1, 2021, Ms. Celia Barclay assumed the role of Jamaica's first Information Commissioner. Additionally, an Oversight Committee was appointed, also effective December 1, 2021, pursuant to the Data Protection Act.

Since her appointment, the Commissioner has been taking steps to operationalise the Office. While the process is still in train, the Office has already been making strides in the Data Privacy and Protection arena. The OIC has been leveraging various public awareness strategies to facilitate preliminary consultations regarding the issues and concerns of different interest groups.

Additionally, Madam Speaker, the Office has been making introductory presentations to the Common Thread Network, a forum for data protection and privacy authorities of Commonwealth Countries, and directly engaging Data and Information Commissioners within the region. This will later inform discussions and arrangements for data sharing, and any guidance to be issued by the OIC to data controllers in different industries and sectors.

Data Protection Regulations

This Honourable House may recall my declaration that the Ministry would be undertaking a preliminary assessment of the Data Protection Act to identify Notices, Orders or Regulations critical to its initial operationalisation.

In this regard, the Ministry undertook the work to map all the provisions which would require supporting subsidiary legislation. With the assistance of the International Telecommunication Union, a consultant was engaged to assist with the preparation of drafting instructions.

Madam Speaker, the preliminary drafting instructions have since been received from the consultant and are now being reviewed by the Ministry and the Information Commissioner. This is with a view to finalise those instructions by September 2022.

Review of the Cybercrimes Act

Madam Speaker, in an increasingly connected world where data and information are the new gold, cyber security has emerged as a major priority. Therefore, the presence of modern and robust legislation is critical to our cyber security efforts.

In this regard, recall that a Joint Select Committee of Parliament has been established to review the Cybercrimes Act, 2015. Over the period, the Committee received oral and written presentations from various private and public sector organisations.

Madam Speaker, the Committee is currently in the throes of reviewing those submissions, with the support of my Ministry, the OPC, LRD and AGC.

The legislators and technocrats supporting the Committee, have been working assiduously to review the submissions. This is with the intention to make recommendations to the Parliament in short order. Recommendations Madam Speaker, that acknowledges the gravamen of the impact of cybercrimes, but equally recognise our international commitments and the need for our law to remain as technologically relevant as possible.

Cyber Incident Response and the work of JaCIRT

Madam Speaker, it is estimated that every thirty-nine (39) seconds, a cyberattack has taken place.

Within the Jamaican context, online threats, such as ransomware; targeted attacks; malicious spam emails; malicious URLs and scams were the most significant issues faced during the fiscal year. Threats which have been addressed by the Jamaica Cyber Incident Response Team (JaCIRT).
These threats are reasoned to be on the rise due to adjustments made by Ministries, Departments and Agencies (MDAs) in response to the COVID-19 pandemic, and the resultant work from home requirements.

While some MDAs have pivoted as their needs dictated, others still have some work to do with respect to implementing security measures to protect their users and systems.

Madam Speaker, I use this opportunity to appeal to all MDAs and even our private sector partners to invest in the relevant security technologies to protect their data; as well as invest in user education and training.

On the note of education and training, JaCIRT has also embarked on public awareness initiatives to educate targeted groups on cyber-security related issues. These initiatives have led to the direct engagement of more than eighty (80) entities over the course of the financial year.

Additionally, the 'Early Warning System' implemented with the assistance of the OAS, has allowed JaCIRT the capability of seeing attacks in real time, monitoring the activities of attackers and responding to them accordingly.

This facility, Madam Speaker, provides invaluable insight into attacks, which are used to provide assistance in reducing the likelihood of recurrence and shortening response times.

As it stands however, only a few organisations are party to the system. I am appealing yet again, for MDAs to do what is necessary to protect their information.

Digital Access

Madam Speaker, in the future when we consider the access to technology that we enjoy, we will look back and remember that the foundation for this access was grounded in:

- a national broadband network;
- island-wide internet access points;
- a modern, agile postal communication network; and
- readily accessible technological devices.

Madam Speaker, this is how we are creating, today, the enduring legacy in technology.

National Broadband Initiative

In my 2020/2021 Sectoral Presentation, I spoke to the importance of the National Broadband Initiative (NBI), in light of its immediate and long-term impact on the lives and livelihoods of Jamaicans. I also spoke to its ability to provide support for businesses, as well as effect improvements in the efficiency and delivery of public services.

I wish to remind this Honourable House that the National Broadband Initiative is being implemented in two phases.



Minister of Science, Energy and Technology, the Honourable Daryl Vaz (2nd right), hands over the keys and documents for the 2021 Toyota Hi-Ace bus to Chief Executive Officer of the National Works Agency (NWA) Mr. Everton Hunter. Sharing in the moment are: Permanent Secretary in the Ministry, Mrs. Carol Palmer, CD, JP. (2nd left) and Chairman of the National Information and Communications Technology Advisory Council (NICTAC) Mr. Keith Duncan (left).

The event was a Handover Ceremony for the Toyota Hi-Ace in support of advancing the Emergency Broadband Initiative.

TECHNOLOGY- BUS





Phase One

The first phase, represents a response to the connectivity needs brought about by measures implemented to address the COVID-19 pandemic.

COVID-19 made it clear that the existing Government and private sector infrastructure was unable to reach large portions of the citizenry outside of urban/major town centres, with high capacity internet. Therefore, there arose the need to buildout an emergency fibre and microwave backbone. Madam Speaker I am happy to report that ninety-five percent (95%) of the fibre backbone that we intended to construct is now complete.

With this backbone Madam Speaker, along with the Government's Wide Area Network (WAN), we will be able to provide more schools and critical Government institutions with high speed internet access.

At the end of the fiscal year, thirteen (13) Parish Courts were connected via microwave and nine (9) Parish Courts and Municipal Corporations were connected via fibre. As at last week, Madam Speaker, all Municipal Corporations are now connected via fibre.

Last year we were hampered, in part, by supply chain challenges, which saw only thirty (30) schools with high bandwidth usage being connected to the Government's WAN by the end of the fiscal year.

However, Madam Speaker, by August this year another one hundred (100) high bandwidth schools will be connected; as contracts to support the connection of these schools in the KMA and the parishes of St Catherine, Clarendon and Manchester, have already been awarded.

The remaining two hundred and forty-one (241) high bandwidth schools, Madam Speaker, will be connected by the end of the financial year.

It is important for us to note that connecting schools in this manner opens up a new world of possibilities in the delivery of services in the education sector, making more seamless, activities such as:

- · Central monitoring and management of closed circuit television cameras school campus';
- · Central monitoring and management of schools' WiFi system; and
- Reliable access to high bandwidth applications such as, video conferences.

Additionally, Madam Speaker, approximately seven hundred (700) other educational institutions will have their services provided for by a commercial provider. Four hundred and forty-one (441) of these schools are already in the process of having new services provisioned, courtesy of a successful procurement undertaken by the Ministry of Education and Youth (MOEY).

In implementing this phase, Madam Speaker, partnerships have been critical, as the Government has benefitted from:

a) access to utility poles for pole attachments; and

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 b) free access to dark fibre strands and the use of aerial fibre optic cables, which together have resulted in the Government gaining access to over six hundred and thirty (630) kilometres of fibre optic cable.

It is amazing what we can achieve when the Government and the private sector work together; and I would like to pause here to thank Cable and Wireless (Jamaica) Limited; Digicel (Jamaica) Limited; JPS; the operators of both toll roads; and our community cable operators who have come on board to make this possible.

Special mention, Madam Speaker, is to be made of my colleague Minister of Education and Youth with whom I have worked closely to get us to this point, along with the Chairman of the National ICT Advisory Council, Mr Keith Duncan. Also, Madam Speaker, the officers of the MOEY and my Ministry, eGov Jamaica Limited (eGov) and the Universal Service Fund (USF) who meet every week to ensure that all aspects of this project are successful.

The National Works Agency (NWA), Madam Speaker is critical partner in execution of the phase one activities. Separate from participating in the weekly meetings with the other Ministries and Agencies mentioned above, its officers and technicians facilitate and oversee the laying and erecting of fibre cables across the country. During the year, the Ministry procured and handed over a 2021 Toyota Hi-Ace bus to the NWA. This was in an effort to support the efficient and reliable transport of its fibre technicians and their equipment across the island.

Phase Two

Madam Speaker, the second phase was conceptualised in recognition of the fact that a robust and financially viable National Broadband Network, would require a proper due diligence assessment and a carefully planned scheme of implementation to transcend the urgent need for connectivity.

Members of this House may recall that a National Broadband Task Force chaired by the Hon. Michael Lee Chin, OJ, was established to oversee the discussions, plans and implementation of the National Broadband Network.

Madam Speaker, the Ministry is in the process of taking the necessary steps to implement the recommendations, to include a more detailed due diligence assessment and robust interrogation of the financing model. This is with the intention to complete the due diligence and commence the procurement process by the end of the fiscal year.

National Broadband Strategy

Madam Speaker, whilst achieving universal broadband access and ensuring its wider adoption is a feature of activities undertaken by the Ministry, its Agencies as well as other MDAs; we recognize that a cohesive, consistent multi-year strategy which identifies the stages of the rollout of broadband infrastructure across the country and at the same time, outlines the manner in which, and the activities which will, be used to stimulate broadband demand, is required.

To this end, the Ministry, will be developing a National Broadband Strategy which will take into account work already undertaken on the National Broadband Network, and give keen focus to broadband demand and usage. It is anticipated that this costed National Broadband Strategy will be developed, with the kind assistance of the European Union, by the close of the Financial Year.

Expansion of the GovNet Infrastructure

Madam Speaker, as we continue to increase digital access, eGov and the NWA have been spearheading the buildout and expansion of the GovNet infrastructure. This is being done with funding support from the USF and the Spectrum Management Authority (SMA). In this regard, eGov has developed the specification for the core networking equipment. The procurement of said equipment through the IDB is near completion. The Ministry anticipates the full delivery of the equipment in August 2022, having experienced delays due to supply chain and logistics issues brought on by the pandemic. Additionally, the GoJ sites earmarked for the hosting of equipment as per the GovNet design is ninety-five percent (95%) complete.

Madam Speaker, in the 2022-2023 financial year eGov will focus on the further advancement of the GovNet infrastructure. This will be done through the:

- the buildout of the fibre network in the KMA;
- the buildout of the network core by receiving, installing and configuring the networking equipment;
- the laying of the fibre cables across the KMA; and
- the connecting of the fifty (50) entities onto the network.

Minister of Science, Energy and Technology the Honourable Daryl Vaz (2nd right) joins Minister of Education and Youth the Honourable Fayval Williams (left), Chief Executive Officer of e-Learning Jamaica Mr. Andrew Lee, and representatives from the Jamaica Post to witness the arrival of 5000 laptops. The laptops were distributed to PATH students in High Schools from grades 10-13 across the island. TECHNOLOGY- Laptop



Providing Universal Access to Internet Services

Madam Speaker, it is a fact we cannot deny; we have seen them in our constituencies, and in our various communities. The USF is on a mission to enable a digital society through universal access to the internet and digital inclusion.

Connect Jamaica (Public Wi-Fi) programme

The USF Connect-JA public Wi-Fi initiative is geared towards providing free Wi-Fi internet access in major town centres, public green spaces and parks across the island.

As at March 31, 2022 the USF has established fourteen (14) sites across the island; five of which were achieved during the 2021/2022 fiscal year.

Madam Speaker, the USF will seek to establish six new public Wi-Fi Hotspots during the 2022-2023 fiscal year. Partnerships will also be forged with tourism sector interests, to provide technical and other support for the establishment of public Wi-Fi sites in resort towns and tourist and historic hotspots.

Community Wi-Fi Initiative

Further Madam Speaker, the Community Wi-Fi initiative connected one hundred and one (101) community Wi-Fi sites as at the end of March 2022. The remaining eighty-eight (88) sites will be connected by May 31, 2022.

We had originally committed to achieving the connection of all sites by March 31, 2022; however, supply chain challenges resulted in significant delays.

Community Access Points

Madam Speaker, we are still creating access through Community Access Points. Seven sites were completed during the year, with the eighth site awaiting bandwidth upgrade before completion and handover.

Support to the disabled Community

Madam Speaker, the vulnerable and disabled must also be given the tools to thrive in this digital society. Their connectivity to support educational and business pursuits is therefore a must. Through the USF, connectivity has been provided to three sites to support the disabled community. They are:

- The McCam Child Care Development Centre;
- · Salvation Army School for the Blind; and
- Portmore Self Help.

Access to Technological Devices

Madam Speaker, we would not have considered our goal achieved, until every student and teacher has access to a device; and the use of technology in the delivery of government services happens by default.

In the field of education, the Tablets in School; Tablets for Teachers; and the Own your Own Device (OYOD) Programmes are testaments to how far we have come in achieving our goals.

Tablets/Laptops in School Programme

In my last Sectoral Presentation, I informed the House that approximately forty thousand (40,000) tablets were distributed to grades four to six students enrolled in the Programme of Advancement through Health and Education (PATH).

The momentum since then has not slowed!

During the 2021-2022 period, we procured the targeted twenty-five thousand (25,000) tablets for PATH students in grades eight and nine. Of this number, over sixteen thousand eight hundred (16,800) tablets have been distributed to more than ninety (90) schools. The remaining eight thousand two hundred (8,200) tablets, will be distributed during the first quarter of the 2022/2023 financial year.

Additionally, some fourteen thousand eight hundred (14,800) of the projected fifteen thousand (15,000) laptops have been delivered to schools for distribution to PATH students in grades ten to thirteen.

Own Your Own Device Initiative

With respect to the OYOD initiative in partnership with the MOEY, approximately thirtyfour thousand (34,000) vouchers, valued at twenty thousand Jamaican dollars (\$20,000) each, have been issued. Thirty thousand (30,000) parents/guardians have since redeemed their vouchers to acquire devices for their children.

I am sure Madam Speaker, that my colleague Minister at MOEY will agree that 'good things come in twos'. We are therefore happy to partner with the Ministry for phase two of the OYOD initiative.

Madam Speaker, in the 2022-2023 financial year, the Ministry will continue to partner with the MOEY by providing support to initiatives such as the implementation of the School Management System, the Learning Management System and the Technology in Education and Literacy in Schools programmes.

Supporting the 2022 Population and Housing Census

In the delivery of government services access to reliable, up to date and relevant data captured with the highest level of efficiency and accuracy is critical to policy development and decision making.

Just in time for our 60th year of independence, eLearning Jamaica is supporting the Statistical Institute of Jamaica in the digitalisation of the 2022 Population and Housing Census. This is through the provision of tablets, charging carts, projectors, and power banks for use in the execution of the census.

No more paper Madam Speaker! No more paper!

To date, seven thousand five hundred and twenty-five (7,525) tablets, forty (40) charging carts and four thousand (4,000) power banks have been secured. The tablets are being loaded with the census and other needed software for effective data gathering.

Modern Postal Services Sector

Madam Speaker, a major part of the transformation of the Post and Telecommunication Department (PTD) into a modern agile postal services provider involves the pursuit of technological solutions to automate its services. To this end, the PTD:

- continues its acquisition and adoption of a Counter Automated System to promote efficient, transparent and accountable service delivery, as well as facilitate interconnectivity of administrative and operational functions across locations; and
- has connected seventy-three (73) post offices island-wide with internet connection.

Digital Commerce

With all that has been said regarding the creation of this digital society, a supportive digital economy which promotes innovation, creativity and expands economic potential is required.

eCommerce has become of significant importance in recent times; fundamentally changing the ways products are imagined, marketed, delivered and sustained. In fact, the agencies of the Ministry continue to lead the way by supporting electronic identity systems; expanding their ecommerce offerings and digitising licensing and service delivery offerings.

Public Key Infrastructure

Madam Speaker, the Electronic Transactions Act makes provision for a certifying authority to carry out the functions of issuing and regulating the use of public and private key infrastructures.

A Public Key Infrastructure (PKI) refers to a system for the creation, storage and distribution of digital certificates, which are used to verify that a particular public key belongs to a certain entity. The implementation of the PKI system is intended to revolutionise the way we do business and facilitate the creation and use of digital signatures for electronic transactions. This is critical for the transition to a paperless society.

Jamaica's national PKI therefore incorporates policies, institutions and technologies that will manage the distribution, authentication and revocation of digital certificates – the digital equivalent of a handwritten signature or seal.

Madam Speaker, on the 31st of December, 2021 eGov was designated the certifying authority for the national PKI under the Electronic Transactions Act.



As this Honourable House is aware, eGov Jamaica is poised to transition to the ICT Authority and as such, its designation at this time is most appropriate.

I would like to thank the Trade Board Limited for performing the functions of the certifying authority since the legislation's inception.

Bringing technology-based solutions to Government Services

eGov was also instrumental in the development of technology-based solutions to support the delivery of government services by other Ministries. During a period which was characterised by restrictive, but necessary COVID-19 measures, eGov:

- enhanced the WeCARE online application to accommodate other CARE programmes such as Workers Grant, Vaccine Grant and Independent Schools Grant; and
- developed the OYOD online application for vouchers to assist needy students.

Establishment of an e-Licensing System for Spectrum

The SMA's e-Licensing System Madam Speaker, is now operational. This e-Licensing System, is an end-to-end online system which allows the SMA to obtain information on customers' applications more readily. It also supports online submission of payments for spectrum licence applications and facilitates shorter turn-around times for generating licences.

Klick N' Ship

Madam Speaker, you may recall that the PTD developed its own freight-forwarding service, Klick N' Ship, to facilitate online shopping. In response to the surge in demand for ecommerce services, the PTD has increased its collection locations. Users of the service now have not twenty-three (23), but forty-six (46) locations island-wide from which items can be collected.

2022/2023 Technology Outlook

In this financial year, the Ministry will aggressively pursue the following:

Data Protection

• finalise drafting instructions for Data Protection Regulations by September 2022.

National Broadband Initiative

- connect one hundred (100) schools to the Government's wide area network by August 2022 and the remaining two hundred and forty-one (241) by the end of financial year.
- complete the connection of Parish Courts and Municipal Corporations to the Government's network via fibre during the financial year.
- accelerate the development of a National Broadband Strategy.
- complete the due diligence and commence the procurement process regarding the National Broadband Network by the end of the financial year.

Providing Universal Access to Internet Services

- complete all one hundred and eighty-nine (189) community Wi-Fi Hotspots.
- complete the remaining eighty-eight (88) community Wi-Fi sites by May 31, 2022.
- establish six new public Wi-Fi Hotspots by March 31, 2023.

Access to Technological Devices

- continue the procurement and distribution of technological devices under the Tablet in School Roll-Out Project.
- continue its support of MOEY initiatives such as the implementation of the School Management System, Learning Management System and the Technology in Education and Literacy in Schools programmes.

Expansion of the GOVNET Infrastructure

advance the implementation of the GovNet infrastructure through, inter alia, the buildout
of the fibre network in the KMA; buildout of the network core; the laying of the fibre
cables across the KMA; and connecting of the fifty (50) entities onto the network.

Closing

Madam Speaker, as I bring this Sectoral Presentation to a close I wish to reiterate that this Ministry is committed to advancing all areas under its purview.

Madam Speaker, as each period brings its own challenges, we are committed to staying the course as Jamaica must become a digital society and technology and innovation must reshape Jamaica and its people.

Madam Speaker, science must confront our many health and environmental challenges, and energy must fuel our growth and development through efficiency, diversification and alternative sources.

We are, Madam Speaker, committed to Building Our Jamaica: through the creation of an enduring legacy in Science, Energy and Technology.

Madam Speaker, I thank you.

Notes



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