



MINISTRY OF SCIENCE, ENERGY & TECHNOLOGY

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# Science Energy Technology for Prosperity



PRESENTED BY:

**Hon. ANDREW WHEATLEY, PhD**  
Minister of Science, Energy & Technology  
MEMBER OF PARLIAMENT  
South Central St. Catherine

*S*ectoral  
*P*resentation

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# **S.E.T. for Prosperity**

Sectoral Presentation 2016

Hon. Andrew Wheatley PhD.

Minister of Science Energy & Technology

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## ACKNOWLEDGEMENTS

Mr. Speaker, it is with a sense of purpose and a commitment to the task that I rise to make this, my maiden presentation in the Sectoral Debate as Minister of Science, Energy and Technology.

Let me take this opportunity to commend you on your elevation to the Speaker's chair. I have every confidence that you will be as judicious, impartial and professional in the discharge of your responsibilities as the position requires.

Mr. Speaker, the Prime Minister has demonstrated the confidence he reposes in me by entrusting this critical portfolio to me, and for that I am humbled and grateful.

Mr. Speaker, I must also take this opportunity to specially recognize:

- My Family
- My Constituents – the industrious and resilient men and women of South Central – St. Catherine. They are my extended family. They have stuck with me and have renewed my mandate to represent them. Today, I use the opportunity to publicly thank them for their role in delivering victory to the Jamaica Labour Party.
- My Cabinet colleagues and Members of this Honourable House
- Officers, Delegates and Members of the Jamaica Labour Party (JLP)
- My Three (3) Councillors – Councillor Owen Palmer of the Homestead Division, Councillor Jennifer Hull of the Horizon Park Division, and Councillor Hawthorne Thompson of the Sydenham Division.
- My Constituency Executive
- My Constituency Office Staff
- Other members of my Personal and Support Staff
- My Advisors
- My hardworking Permanent Secretary, and team at the Ministry, who, since I assumed office in March of this year, have given me their unwavering support.
- I wish to also thank the various Heads of Agencies and Divisions within the Ministry, as well as the new Chairpersons and Directors of the state boards falling under the Ministry, who have hit the ground running since their appointment.
- Mr. Speaker, I must register my gratitude to the former Minister - the Member from East Kingston & Port Royal, as well as the former State Minister - the Member from South East St. Andrew and the personnel who piloted various programmes and initiatives aimed at advancing Science, Energy and Technology. Their input has undoubtedly played a role in shaping the future of these critical areas of government and national life.

## OPENING REMARKS

Mr. Speaker, Science, Energy and Technology are extremely important to national development. Their potential to impact our development by generating increased economic growth and job creation cannot be over-emphasized.

I have come to this important office with a clear sense of what is required and where we intend to go in moving our people from Poverty to Prosperity.

Mr. Speaker, I am not inhibited by the vestiges or politics of the past. Upon taking office, my team and I carefully examined existing programmes and those that were in the pipeline.

Mr. Speaker, political maturity and good sense compel me to retain, tweak, improve and expand where necessary, programmes that make eminent sense, and reconsider or recast those that don't.

We on this side Mr. Speaker, are not in the business of self-aggrandizement or political immaturity. We are not in the business of discontinuing programmes simply because they were introduced by the previous administration.

My presentation today Mr. Speaker, heralds the beginning of a new discourse, a much needed discussion that centres on advancing three key areas of national development and prosperity for our nation, and these three areas form the pillar of my portfolio responsibility – Science, Energy and Technology.

Mr. Speaker, my presentation today will take a slightly different slant from the type, to which we have long become accustomed in this Honourable House. I will not be expending too much energy on a laborious presentation that takes us through the facts, figures and performance of the various agencies within the Ministry's portfolio. These are detailed in the Ministry Papers, which I now lay before the House.

Along that vein, I wish to table the Ministry papers which capture:

The Agencies' plans and programmes for the financial year 2016/17; and highlights of the Ministry's policies, programmes and achievements for the review period 2015/16.

## OUR PLAN MOVING FORWARD

Mr. Speaker, I have made it clear and the Ministry is very clear that it will not be a part of the:

- business as usual culture
- premature and excessive announcements or
- projects started that cannot be completed culture.

I find that we tend to celebrate announcements when we should really be celebrating achievements.

Under my stewardship Mr. Speaker, The Ministry of Science, Energy and Technology will adopt a “**can do**” culture in which all plans and projections are actualized and the initiatives and projects entered into are successfully completed.

## ENERGY

Mr. Speaker, on assuming office a careful inventory of the energy sector by the incoming administration was very revealing. We found that significant progress has been made in a collection of areas within the energy sector but the state's energy infrastructure was still not enabling the economic growth for all practical purposes.

So, while historically sections of our country received electricity even before the United States, we have remained vulnerable to price shocks, an unwieldy energy intensity and insufficient value creation from the very expensive commodities we consume, as reflected by our energy inefficiency.

Mr. Speaker, this suggests the absence of a strategic theme grounded by a vision of what is expected from Energy. As such, it is necessary that we come to terms with the role and purpose of Energy. Energy is a wherewithal in furtherance of a greater purpose and objective, which is, to be the cornerstone of a production platform that engenders and yields competitiveness, growth and development.

And so Mr. Speaker, everything we do by way of the National Energy Policy must pass the litmus test of how it improves Jamaican GDP as a result of a greater energy efficient economy.

The challenge before us is therefore very clear and, surmounting it requires an even clearer vision.

## THE VISION

Mr. Speaker, MSET envisions a fit for purpose energy architecture that is a part of the production platform that can deliver the economic growth and inclusive development required by our people; building on all the targets included in Vision 2030.

Mr. Speaker, this vision now creates the call to action, and energy matters can no longer be talk. With world oil prices set to rise again and with the impacts of fossil fuels on the environment staring starkly in our face, the time for talk has long passed!



## 10 POINT ENERGY PRIORITIES

We MUST take action and the opportunity for action is now before us. As such the new administration will deliver on its commitment to:

1. Create a Competitive Energy Environment
2. Modernize the nation's power generation
3. Diversify energy sources with a strong emphasis on Renewables because of our vulnerability to the insecurities of fossil fuels
4. Overhaul all regulations to create a true 21st century framework combined with newer and relevant institutions which together provide the state infrastructure capable of delivering sustainability and innovation.
5. Transform the energy efficiency of the Jamaican economy to include amongst other things, world class conservation techniques
6. Ensure that the National Energy Policy as part of the economic growth model addresses socio-economic issues to create inclusiveness in our development
7. Manage our carbon footprint to preserve Jamaica's natural environment and fulfill our international agreements and obligations
8. Set targets for the reduction of national demand for energy over a 5 year period
9. Usher in a Green Energy Economy with:
  - a. Market and BSJ standards for an adequate supply of energy efficient appliances – refrigerators, air conditioning units, washers, dryers, ovens and televisions
  - b. Enforce energy efficiency standards and codes for appliances and buildings with the aim to:
    - i. Reducing energy consumption in new buildings by 50% by 2020
    - ii. Ensuring that all new buildings use zero net energy ie, Net zero by 2025.
10. Revise the Refinery Reference Pricing system and JPS fuel pass through to ensure in a transparent fashion that Jamaican consumers enjoy the best prices for energy supplies be it petroleum products or electricity.

**Mr. Speaker, the time has come for monumental and seismic shifts which will require serious ACTION! To SET us on a path for prosperity.**

And so Mr. Speaker, the programmed MSET activities for the 2016/ 17 cycle will include the following:

#### LICENCE AND PPA WITH EIGHT RIVERS ENERGY COMPANY

Mr. Speaker we will be looking to finalize in short order a license and Power Purchase Agreement (PPA) with Eight Rivers Energy Company to supply 33MW of solar energy to the grid at US eight and a half cents per kWh.

This project is located in Negril Westmoreland and will have an investment of US\$50m and will employ approximately 200 persons during construction and some 50 permanent employees. Construction is slated to start in 2016/ 2017 and first supply to the grid will be in 2018.

**This is how we get S.E.T. for Prosperity**

#### Renewables and Waste to Energy - 30 in 30

Mr. Speaker, the commissioning of a 20MW Photovoltaic plant by WRB Limited at Content, Clarendon, with capital investments of US\$65million, and the BMR Wind Farm at Munroe in St Elizabeth will happen in just a few weeks. Mr. Speaker, BMR will supply 36MW with a capital investment of US\$78million.

Mr. Speaker, together Content Solar, BMR and the recently commissioned Wigton III 24MW Wind will add over 80 MW of Renewables to the energy mix, putting us on track to having 15% renewable capacity to the grid for 2020.

Mr. Speaker, Government will return to the markets with another RFP for 100MW of Renewables during the course of this year once the Eight Rivers License is completed.

Mr. Speaker, we will also seek an additional 50MW in a separate Waste to Energy RFP. Mr. Speaker, I can assure you that the turnaround time for this particular tranche of generation procurement will be very quick.

Mr. Speaker, these are key moves towards the diversified energy mix and a competitive supply, to deliver 30% of the generation to the grid from renewables by 2030 or 30 in 30.

**This is how we get S.E.T. for Prosperity.**

## THE S.I.L.C. (PRONOUNCED SILK) PROJECT

Mr. Speaker, I want to introduce to Parliament the S.I.L.C. Initiative, which stands for **S**treet **L**ighting, **I**nstallations, **L**oss Reduction and **C**ommunity Renewal.

**Mr. Speaker, “Light is Life”.**

Our social fabric is challenged in too many dimensions when our people are, for whatever reason, without electricity.

Aimed at civic and security improvements, safety protection, loss reduction and affordability to our communities in especially difficult circumstances, the SILC project Mr. Speaker, will build on existing initiatives between JPS, NESOL, JSIF and MSET.

**Mr. Speaker, a total of \$1.25billion is earmarked in 2016/ 17 to energizing the lives of people in 25 communities in St James, St Catherine, Kingston and St. Andrew. Mr. Speaker WE will “bring these communities into the light” and giving them a better quality of life.**

**Mr. Speaker, This is how we get S.E.T. for Prosperity.**

## POLICY AND LEGISLATION IMPROVEMENTS

Mr. Speaker, another priority of this administration entails policy improvements in overhauling the Electricity, Petroleum Quality Control, Petroleum Acts; and their related regulations and licensing processes to support investments, competition and consumer protection.

Furthermore Mr. Speaker, the Ministry will lead by example in its roll out of an Integrated Resource Plan, as required by law, to ensure a reliable electricity sector that recognizes the needs, technologies and systems required for covering generation, transmission, distribution, supply and dispatch.

Mr. Speaker, we will continue to supervise the project developments for all licenses issued for generation replacement in Bogue and Old Harbour as well as to JAMALCO and Alpart. The administrative structures required by law for a Generation Procurement Entity GPE, will be similarly implemented.

**Mr. Speaker, This is how we get S.E.T. for Prosperity.**

## THE BAD GAS RESOLUTION

Mr. Speaker, there are some moments in life, where there is an assumption of duty, and with that duty, an inheritance of responsibility.

When I assumed responsibility for the Energy portfolio, Mr. Speaker, I inherited a major dilemma of contaminated gas that had been plaguing the country's petroleum sector. Jamaicans now know, the findings of the Petroleum Trade Reform Committee (PTRC) were disappointingly inconclusive in identifying the source and cause of substandard product which entered the trade.

Mr. Speaker, the PTRC identified several gaping holes in the sector's modus operandi, particularly as it relates to the chain of custody of petroleum products as well as with operating standards and arrangements throughout the distributive trade.

Mr. Speaker, a number of recommendations were made by the PTRC and these will be primarily addressed by new legislation and regulations, which are currently being developed as a matter of priority and urgency!

Mr. Speaker let me also make particular mention about consumer compensation. The matter of redress for affected consumers is being pursued by the Consumer Affairs Commission which has claims totaling some \$25 Million.

The Government remains resolute in our commitment to ensure that measures are in place to protect consumers.

I am pleased to see the sense of responsibility and maturity being demonstrated by all players in the market who are volunteering to make their customers whole.

In summary Mr. Speaker, we will do everything in our power to ensure that this sort of thing never happens again by taking the following measures:

- Re-establishment of a fully staffed petroleum inspectorate under the purview of the Ministry to among other things, regulate, oversee and monitor the petroleum sector, and process the granting of licenses and renewals;
- Amend legislation to strengthen the stewardship requirements for importing and distributing petroleum products;
- Introduce significantly stricter licensing conditions for all players in the sector; and test each shipment of fuel imported ;

## NET BILLING

**Mr. Speaker, one of the first major achievements of this administration in the Energy sector has been the re-instatement of Net Billing. In the two months, since the programme has re-started there have been over 90 applications, and I have granted more than 30 Net Billing licenses.**

**Mr. Speaker, This is how we get S.E.T. for Prosperity.**

## EXPANDING LOC FOR MSME'S

Mr. Speaker, the Development Bank of Jamaica (DBJ) will expand the Line of Credit (LoC) to facilitate investments in Renewable Energy by Micro Small and Medium Enterprises (MSMEs). MSET has provided an additional US\$1.0M, bringing the total disbursement available to US\$5.6M. Several entities have already benefitted from this LoC and are reporting significant reduction in their electricity consumption and improvements in their productivity.

**AGAIN, Mr. Speaker, this is how we get S.E.T. for Prosperity.**

## PROMOTING ENERGY EFFICIENT AND RENEWABLE ENERGY TECHNOLOGIES

Mr. Speaker, the removal of duties and GCT from several energy efficient and renewable energy technologies and devices is making it easier for consumers to take control of their electricity demand and costs. I will work with the stakeholders, including my colleague Minister from the Ministry of Finance to consider additional measures to expand these opportunities. Already, electric cars are on the island and may very well be a way to start the transformation of the transportation sector.

Mr. Speaker, as a scientist I appreciate research. Research work in alternative and supplemental biofuels feedstock will be used to expand the country's energy options, creating backward and forward linkages with the agricultural sector, create jobs and resuscitate rural socio-economic development.

## ENERGY SERVICES COMPANIES

Mr. Speaker, Energy Services Companies (ESCOs) is a developing sector with tremendous opportunity for job creation and productivity improvement. These companies provide turnkey energy solutions for their clients.

Access to finance Mr. Speaker, remains a challenge but MSET will work with the relevant stakeholders, including the PCJ to support this development for Public Sector Buildings such as schools and hospitals. This year, the PCJ will continue with the development of solar projects

One example of this Mr. Speaker is the Jamaica Defense Force Pedro Cays – off grid system;

- Estimated Capital cost: JA\$15M
- Proposed Annual Energy Savings: 17 MWh and
- Proposed Annual Cost Savings: JA \$12M; **all work to be done by local contractors.**

Mr. Speaker another example is the retrofitting of the Development Bank of Jamaica (DBJ): Estimated Capital cost: JA\$ 45mil, Proposed Annual Energy Savings: 201 MWh, Proposed Annual \$ Savings: JAD \$ 6.2mil and **all work to be done by local contractors.**

**Mr. Speaker, this is how we get S.E.T. for Prosperity.**

## **ENERGY EFFICIENCY & CONSERVATION (EEC)**

Mr. Speaker, Energy Conservation and Efficiency are now key parts of our energy strategy. The Petroleum Corporation of Jamaica has now assumed responsibility for all EEC Projects. This is part of MSET's re-organization for effectiveness and seamlessness in its business processes.

All related projects will promote eco-efficiency and the green economy by:

1. Encouraging energy efficiency and conservation in Government Agencies
2. Developing the capacity of local companies to meet international environmental standards and
3. Promoting green jobs and industries.

Mr. Speaker, the PCJ will continue retro-fittings for energy efficiency and conservation in public sector and other buildings. **To this end Mr. Speaker, 2016/ 17 will see the roll out of UNDP/IDB supported Projects targeting 50 schools, hospitals, government Institutions Island wide. This represents a total capital expenditure of USD\$50M for a Proposed Annual Energy Savings of 27,000 MWh and cost savings of USD\$6.7M per annum.**

Most importantly again Mr. Speaker, all work is to be completed using local suppliers and labour over the 3-4 years of the projects.

**Mr. Speaker, once again, this is how we get S.E.T. for Prosperity**

## GROWTH BEYOND PLAN

Mr. Speaker, in every endeavor from sports, to business, industry, academia and administration, there comes a time when one has to lift his or her game to meet the challenge that is being confronted. Our present challenge is to be competitive with trading partners who generate at between US 5-10 cents per kWh for electricity.

Mr. Speaker, we have to take bold steps and pursue a plan beyond the easy, in order to get into this range. We should not be afraid because we have already drawn that line in the sand with the Eight Rivers Solar Project at 8.5 cents.

Going forward Mr. Speaker, MSET will therefore push an ambitious agenda, one which is achievable, through the following initiatives aimed at creating affordable and competitive energy.

1. Production Clusters
2. Research and Development
3. Hydro Electricity
4. Ethanol and Sugar Cane Recovery
5. LNG
6. Smart Grid Road Map
7. Oil and Gas Exploration and
8. Grid Code Regulations

## PRODUCTION CLUSTERS

Mr. Speaker the concept of production clusters is the basis of the Special Economic Zones (SEZ) that have the support of both side of the isle as vehicles for driving economic development. MSET will add its leadership in catalyzing these developments with the start-up of the Caymanas SEZ. The Integrated Resource Plan mentioned earlier will investigate the locating of a 200MW dual fired power generation plant in this Special Economic Zone. Already other players have demonstrated interest in positioning in this estate in which such a supply will have synergistic value.

## RESEARCH AND DEVELOPMENT

Mr. Speaker, as it relates to research and development, PCJ will develop with UTECH a programme of scholarship and research in renewables, starting with final year engineering students' research projects as part of the marrying of industry and academia.

## **HYDRO ELECTRICITY**

Mr. Speaker, Hydro Electricity is clean energy currently supplying 30.0MW to the grid. Various levels of feasibility studies have been completed for five (5) new run of the river projects and an additional six (6) sites have been identified, representing a total of 33 MW of capacity and capital investments of over US\$100 Million. Potential benefits include reducing imports by 66,000 bbls or \$426 Million and emissions by 93,000 tonnes of CO<sub>2</sub>.

These projects, Mr. Speaker, could provide electricity for 65,000 households or bring viability to related production facilities such as our sugar factories and could create over 500 new jobs. Government will mandate the PCJ to pursue these developments starting with 2MW on the Laughlands River in St Ann. This project's capital cost is estimated to be US\$8.9 Million, with the job creation potential for construction and operation of about 40 jobs.

## **ETHANOL AND SUGARCANE RECOVERY**

Mr. Speaker, the promise of extracting the full benefits of mandating ethanol in fuel has not been fully realized. The country has not successfully linked this initiative with turning around the sugar cane industry. We will explore the options for developing local feedstock to sustain and expand the contribution of ethanol as fuel. This could see up to another 15% of petroleum import substitution if we could move from E1-10 to E-25.

## **LNG**

Mr. Speaker, the PCJ will have a major duty during 2016-17 to support this energy transition program by developing the in country pipeline distribution network and business model for natural gas end users.

## **SMART GRID ROAD MAP**

Mr. Speaker, in an effort to modernize the existing electricity distribution grid systems we expect the JPS to facilitate and expand the developments in smart technologies to ensure that the grid is adequate to integrate additional renewables and clean energy solutions.

## **OIL AND GAS EXPLORATION**

Another exciting initiative Mr. Speaker is that of oil and gas exploration. The PCJ has been tasked to develop a progressive and competitive fiscal regime for oil and gas exploration. This will guide all new arrangements for the entering into the country's third Production Sharing Agreement in 2016-17.



## GRID CODE REGULATIONS

Mr. Speaker, while a Generation Code has been in existence for some time, and draft Transmission and Distribution Codes developed, the new Electricity Act mandates that the draft codes are finalized and in addition, a Supply Code and a Dispatch Code be developed together covering all aspects of the electricity sector for its development, operation and management.

The Electricity Codes of Practice are required to guide good practice by individuals and their organizations to have a level of knowledge and understanding to manage the risks associated with an electrical system.

Mr. Speaker, these Codes are international best practices and helps the regulator to intervene and make enforcement decision as necessary.

Their promulgation provides transparency and certainty to the investing community as new developmental opportunities are contemplated. The OUR with support from the USAID and its affiliate Caribbean Clean Energy Program (CARCEP), will complete this exercise in August of this year consistent with the mandate of new Electricity Act of August 2015.

## A REGIONAL LEADER IN ENERGY

Mr. Speaker, recently, I participated with the leaders of the region in the United States-Caribbean-Central American Energy Summit, which "...launched the results of the energy task force for the Caribbean and Central America, which were announced by President Obama last year, and identified steps that the United States and regional leaders can take to ensure that citizens of these regions achieve a more secure, affordable, and clean energy future."

Mr. Speaker, we at the MSET recognize that we have the potential to fuel growth by creating a policy and legislative framework that facilitates investment from local and international spheres. We therefore intend to make Jamaica a regional Leader in Energy and build on the successes made thus far and through the implementation of even bolder initiatives, improve the lives of every Jamaican and secure brighter prospects for the future generation.

## TECHNOLOGY - ICT

Mr. Speaker, I now turn to the second pillar of the portfolio, ICT. As I have said many times before, this administration firmly believes that technology is the catalyst for the enablement of economic growth and prosperity. Accordingly Mr. Speaker, **WE are the first administration to put forward a definitive 10 point plan for ICT. We campaigned on it and we intend to deliver on that plan. It is our roadmap Mr. Speaker, and it is the benchmark by which we will be judged.**

### OUR ICT 10 POINT PLAN PRIORITIES

Mr. Speaker allow me to highlight the priority components of our 10 point ICT plan for this year and explain how these form a recipe which will make us **S.E.T for prosperity.**

Mr. Speaker this year's priority components of the ICT 10 point plan are as follows:

1. Establish true universal access by providing free Internet access to essential Government and educational services for every citizen.
2. Make Jamaica the Caribbean's leading producer of technology, not just consumers of technology, by creating a technology innovation fund to provide sustainable financing of technology-based projects and start-ups.
3. Work closely with the Ministry of Education to ensure holistic, efficient and effective use of technology to support teaching and learning as well as improved education administration throughout the system.
4. Collaborate closely with the new Ministry of Economic Growth and Job Creation to broaden support for BPO beyond just call-centre services so employment opportunities for university graduates and professionals are expanded.
5. Drive better ICT governance practices throughout Government to make it more efficient and make information more accessible, including use of the corps of young people trained through the National Service Programme and National Apprenticeship Programme.
6. Repeal the 16-year-old Telecommunications Act and replace it with a new ICT Act. Harmonise all relevant ICT legislation to ensure cohesion across the regulatory elements of ICT to create a more modern fit for purpose framework, including creation of a single ICT regulator.
7. Promulgate and pass into law: legislation that deals with data protection

## ESTABLISH TRUE UNIVERSAL ACCESS FOR CITIZENS

Mr. Speaker, I have long held the view that there is no reason for any Jamaican to pay for access to essential online government services. Some of us would say that citizens can already freely use these services online but **THERE IS A DISTINCTION BETWEEN ACCESS AND USE.**

**Currently, use is free; access is not!**

Mr. Speaker, we believe that removing these barriers to access to essential government and educational services for every citizen will have far reaching benefits. For example, this will:

- spur the development of “citizen to government (C2G)” mobile apps;
- boost interaction between government and citizens;
- broaden the tax net and improve collections, since access will now be easier and more convenient.

Additionally, students will be able to access various content and learning materials provided by the Ministry of Education, Youth and Information at home. This will boost the benefits that can be derived from greater use of technology in education.

The means and technology to do this are already available. Everyone with a smartphone is already connected to the network. Most smartphones have hotspot capabilities so the anytime, anywhere access is there.

**Mr. Speaker, WE will create true universal access enabling citizens**

**As I stand here today Mr. Speaker, I take this opportunity to inform this Honourable House and the Jamaican people, that this is no longer JUST a concept. After a number of discussions with the major service providers, they have assured me, that within the next couple of weeks they will zero rate access to key Government of Jamaica sites, services and Ministry of Education Content. What this means Mr. Speaker is even if your credit is done, if your data plan is exhausted or if your data package at home is in arrears, Jamaicans will be able to access key Government of Jamaica sites, services and Ministry of Education Content to pay taxes; apply for birth certificates; and access educational materials online for FREE.**

**Mr. Speaker, this is how you get S.E.T for Prosperity.**

Obviously Mr. Speaker, with the over 200 sites and services that the GoJ has, it won't be possible to provide access to these sites and services all at once so, in keeping with the trend set by my colleague Minister of Finance, we will **PHASE IT IN!**

## TABLETS IN SCHOOLS - A NEW BEGINNING

Mr. Speaker, we intend to work closely with the Ministry of Education, Youth and Information to ensure holistic, efficient and effective use of technology to:

- a) Support teaching and learning; and
- b) Improve education administration throughout the system.

This component will be executed in large part through the e-Learning program with a major part being the Tablets in Schools (TIS) Project.

*[Let me take a moment Mr. Speaker to extend my gratitude to the e-Learning Jamaica team and all relevant stakeholders for the work done to date on the pilot TIS Project. Their continued commitment to work collaboratively to ensure the successful implementation of the TIS Project has not gone unnoticed.]*

**Mr. Speaker, let me state here and now, that the Tablets in Schools Project is here to stay...but it is time to move out of the pilot phase and look to implement the next phase of this Project.**

Mr. Speaker a comprehensive review of the TIS Pilot Project was done and we intend to move forward with a restructured version of this Project based on lessons learned. I will give more details of this in the coming days.

## INCORPORATING ICT INTO EMPLOYMENT AND ECONOMIC GROWTH

### BROADEN SUPPORT FOR BUSINESS PROCESS OUTSOURCING (BPO)

Mr. Speaker, my Ministry will collaborate closely with the Ministry of Economic Growth and Job Creation to broaden support for Business Process Outsourcing (BPO) beyond **just** call-centre services so employment opportunities for university graduates and professionals are expanded.

I have recently heard comments from the Chairman of EPOC confirming exactly what we have been proposing for some time now and I am encouraged by the support that we are getting for our idea of expanding BPO.

Mr. Speaker, we must actively promote broadening the BPO/ICT sector and services beyond the traditional customer service call center. The talents and capabilities of our people extend way beyond the routine handling of customer service calls. We **MUST** advance, foster and create the environment for more sophisticated services and provide more opportunities for secondary and tertiary graduates in creating a highly skilled and competitive knowledge-based society.

To support this, we need greater alignment of the curricula at the various levels of our educational system. *This, coupled with enabling policies and legislation, will make the environment not only more attractive to potential clients but just as important, to our own local talent.*

**So today Mr. Speaker, I am calling on the major groups in the Education, BPO and ICT sectors (UWI, UTECH, NCU, BPIAJ, JCS, JITSA, ISACA) to come together and work with us to formulate a plan to bring this to fruition.**

**Together we can get S.E.T for Prosperity.**

#### BPO IN GOVERNMENT - B.I.G. INITIATIVE TO PROPEL DIGITIZATION IN GOJ

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To take it a step further Mr. Speaker, in an effort to advance the Digitization of Government, while, providing jobs and training for the youth, this Administration will explore a concept that is relatively new for governments in this Region.

Mr. Speaker I call this one **B.I.G. - BPO in Government**; because it is just that! This is “*Shared Services with a twist*”. What it entails is the creation of a BPO entity within Government that will in effect act as a centralized provider for common or shared tasks within Government. For example, Data Entry, Paper to Digital/Backfile Conversion, Operator Services, Call Routing, and specific services which fall under the Corporate Services umbrella.

This approach will:

- accelerate the GoJ digitization process
- consolidate tasks
- drive down costs
- increase productivity within Ministries, Departments and Agencies (MDA’s)
- allow employees in MDA’s to focus more on providing the services to citizenry and
- create new job opportunities

This is something we intend to seriously look at in the short to medium term as we believe that direct benefits exist here.

#### REVAMPING THE YOUTH EMPLOYMENT IN THE DIGITAL AND ANIMATION INDUSTRY (YEIDAI) PROJECT

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Mr. Speaker, another program that is slated to provide significant opportunities for our young people is the Youth Employment in the Digital and Animation Industries (YEIDAI) Project. It is a

joint partnership between the Government of Jamaica, the World Bank and local private sector stakeholders, Jamaica National Building Society and FLOW.

*And I want to say a very special thank you to our private sector stakeholders (JNBS & FLOW) for the continued support they have given to this Project and I certainly look forward to their continued support.*

Mr. Speaker, The YEIDAI Project seeks build the capacity and skills of Jamaican youth to improve their employability in the nascent animation industry; as well as, provide critical skills to the young tech entrepreneurs to bring ideas to the market.

Mr. Speaker, let me admit a certain degree of disappointment with what I found on assuming office as it relates to the way this Project was being managed.

Mr. Speaker, parts of this Project had gone off-track and was under threat of losing its funding. Since assuming office though Mr. Speaker, we have taken immediate action to rescue this Project and are putting the necessary structures and framework in place to ensure the proper management and desired outcomes of this Project.

Mr. Speaker, with respect to the Start Up Jamaica (SUJ) component of the Project, we have:

- Completed the incorporation of SUJ as a company.
- Appointed a board of directors
- Started the process of finalizing the Business Plan

We anticipate that within the next 6-9 months the performance and outcomes from SUJ will exceed what it has experienced in the last year of operation.

As it relates to the animation component of the Project Mr. Speaker, we are in the process of creating an Animation Industry Advisory Council comprised of representatives from the GOJ, key players in the Animation Industry, Education Institutions and other Private sector organisations. Mr. Speaker, this Council not replace the role of the Project Steering Committee, but will have the specific task of ensuring that the implementation of the Animation Component meets the targets set by the World Bank and the Government as well as the expectations of the industry.

Mr. Speaker, this Government is serious about ensuring productivity and prosperity among our youth; and through this Project, we will look to attract, train and qualify enterprising young Jamaicans to become entrepreneurs and animators.

**This is how we get S.E.T for Prosperity.**

## OPEN DATA POLICY AND OPEN DATA PORTAL

Mr. Speaker, as a carryover from the previous administration, the Government of Jamaica is on a mission to make certain types of data freely and openly available to all Jamaicans. A draft Open Data Policy is being developed by the Government and an Open Data Portal will be established.

Mr. Speaker, this Portal is consistent with the wider Government Transformation Initiative and will enable active engagement of government with citizens and businesses using open source software, by making government data available online in machine readable form.

Mr. Speaker, we believe that there is tremendous value surrounding open access and use of government data. It opens market opportunities for economically or socially viable services which are in high demand by our citizens.

**So Mr. Speaker, this Friday, June 24, 2016, the Ministry of Science, Energy and Technology, on behalf of the Government of Jamaica, along with its partners, will officially launch the Government of Jamaica Open Data Portal.**

**Once again Mr. Speaker, this is how we get S.E.T for Prosperity.**

## MAKING OUR TECHNOLOGY SYSTEMS SECURE

Mr. Speaker, I want to turn briefly now to cyber security and making our systems and national assets safe.

As ICT applications become more pervasive, attacks against ICT infrastructure and Internet services increase and creates the possibility for more serious, critical and extensive harm to society in new ways.

## AUDIT OF GOJ WEBSITES AND SYSTEMS

Mr. Speaker, as you may or may not have known, over the past 2 years numerous government websites have seen an increase in the number of cyber-attacks including defacements, denial of service and more recently spear-phishing and ransomware. In some cases critical systems have been taken offline in an effort to protect us against malicious threats. This level of vulnerability is not acceptable.

Accordingly, Mr. Speaker I instructed that a comprehensive audit and assessment plan be prepared and implemented to determine the current state of vulnerability of all government websites and systems so that appropriate action can be taken to address any and all gaps that exist.

## CYBER SECURITY PUBLIC AWARENESS

Mr. Speaker, Our Ministry is committed to developing a culture of cyber security. With the growing number of Jamaicans using ICT platforms for email, social media and other engagement, it becomes an imperative to ensure our people are not only protected, but educated. The Ministry has embarked on a number of public education and awareness activities which will be launched in a few days.

## AN AGGRESSIVE POLICY AND LEGISLATIVE AGENDA

Mr. Speaker, the rapidly changing ICT landscape has outpaced the laws that we use to govern the sector. This can have devastating effects on local and foreign direct investments and innovation.

## ICT ACT

**Mr. Speaker, let me state emphatically that, by this time next year WE WILL table a new ICT Act and repeal the now 16 year old Telecoms Act. We have talked about it for long enough. This Administration will make it happen.**

A key component outcome of this new Act will be the **creation of a Single ICT Regulator**. This will ensure cohesion across the regulatory elements of ICT thereby creating a more modern, fit for purpose framework.

## DATA PROTECTION ACT

Mr. Speaker, with increased use of technology and the use of electronic methods of storing data, we must ensure that the personal information of the people of Jamaica is safe and secure. **The protection of our information IS A RIGHT, NOT A PRIVILEGE.**

Mr. Speaker, digital information is much easier to access and manipulate. Measures must be put in place to ensure that personal information is kept secure.



Mr. Speaker, we must also ensure that the gatekeepers of citizen's information are held accountable for its use. This is why the Data Protection Act is so critical.

**With that said Mr. Speaker, by this time next year I will be Tabling for debate and passage into law a new Data Protection Bill.**

#### **ESTABLISH THE TECHNOLOGY INNOVATION FUND**

Mr. Speaker, we intend to make Jamaica the Caribbean's leading producer of technology, not just a consumer of technology

Innovation leads to prosperity Mr. Speaker. We will invest more in science and technology innovation and cultivate a more sustainable and vibrant environment for start-up initiatives. We will create a **Technology Innovation Fund (TIF)**. This will be a self-sustaining, revolving door facility geared at catalysing the growth of technology-based ventures by providing sustainable financing of technology-based projects and start-ups.

Initial seed funding Mr. Speaker, could come from the USF or some other facility. By doing this **Mr. Speaker, I believe that this is how we can SET Jamaica up to be the Silicon Valley of the Caribbean.**

## SCIENCE

Mr. Speaker, saving the best for last, I now turn to the area of Science. This portfolio, as you might well imagine is near and dear to my heart, being a scientist myself.

I am humbled by the awesome responsibility and indeed the opportunity for science to truly impact Jamaica's economic growth and prosperity.

Mr. Speaker, for far too long, we as a country, have failed to use scientific research to drive our decision-making processes. It is NO secret that almost every country (Singapore, South Korea, Costa Rica etc.) that has made significant economic advances within the last 40 years, has done so primarily on the basis of investment in Science, Technology and Innovation (ST&I). Science, Mr. Speaker provides a tangible basis for us to make sound decisions.

Mr. Speaker, it is for this reason that I am concerned about the lack of attention that has been given to Science over the years. Currently, we spend less than 1% of our Gross Domestic Product (GDP) on research and development (R&D) and, in general, the overall national investment in STI is low.

A 2015 study of some Government research facilities painted a worrying picture. It revealed that:

- Only one (1) institution was found to be certified to ISO 9001:2008 QMS standard and only one (1) accredited to the ISO 17025
- The overall condition of the laboratories facilities in general presents a major constraint towards moving towards accreditation and services are being lost due to lack of accreditation status
- Widespread problem with the storage of hazardous waste chemicals
- The majority of critical equipment in many of the laboratories have been out of calibration for some time

Mr. Speaker, this situation CANNOT continue. Our Government recognizes that these issues prevent ST&I from being leveraged in our economic and industrial development.

I will ensure major changes are made to facilitate the development of infrastructure for research and development.

**Mr. Speaker, as a priority, during this Fiscal year, we will be finalizing the Science, Technology and Innovation Policy. There is universal acceptance that this is now a critical tool for the development of innovation in Jamaican enterprise.**

The National Commission on Science and Technology (NCST) will work alongside the Ministry to implement this new ST&I policy, which is already entrenched in Vision 2030.

Mr. Speaker, the policy will network and integrate the many disparate institutions, activities and resources that are unfocussed in their approach to impact a national development agenda.

As such, key components of the Policy will address:

- **establishment of a specific division within the Ministry with responsibility to lead ST&I policy development**
- training and producing more scientists in the various disciplines and specialties relevant to Jamaican industry; with particular emphasis on the post-graduate and post-doctoral levels
- national funding for scientific research & development
- strengthening the legal and regulatory framework to support the protection and commercialization of scientific research
- incentivizing patent registration by local scientists and deepening the collaboration between science and business enterprises
- quality assurance and standards for laboratories and research facilities; and

**Mr. Speaker, this is how we get S.E.T for Prosperity.**

## NATIONAL NUTRACEUTICALS INDUSTRY

Mr. Speaker, of the 160 plants declared worldwide as having medicinal properties, over 50% are endemic to Jamaica.

Many of the nutraceuticals (or traditional herbal medicines that we know) like guinea hen weed etc. grow wildly in our backyards and in many rural areas right across Jamaica. Even, coffee Mr. Speaker, is a nutraceutical and so too cocoa. Both contain the very important compound Xanthine; which is the stimulant in coffee and *the language of love* in chocolate.

The same holds for ginger, marijuana and many other plants in our everyday lives which hold powerful nutraceutical properties.

Mr. Speaker, this demonstrates yet another opportunity to create new industries that can transform Jamaica's economic growth.

## GLOBAL VALUE OF THE NUTRACEUTICAL INDUSTRY & POTENTIAL IMPACT ON JAMAICA

Mr. Speaker, the World Health Organization (WHO) estimates that approximately 80 percent of the world population uses herbal medicine for some aspect of primary health care.

Today, in premium markets such as Europe and the United States, there is growing demand, as part of the “green wave” for products derived from nutraceuticals.

Though the Jamaican Nutraceutical industry is in its infancy Mr. Speaker, in 2014 the estimated value of nutraceuticals exported from our country was over US\$12 million.

Mr. Speaker, a modest target of one percent (1%) of the global market share would be of great value to Jamaica because that would more than double our current exports. We can enhance these earnings even more, Mr. Speaker, by supplying local demand through:

- a) import substitution, for example, importation of antacids while we produce pharmaceutical grade limestone
- b) local content in the new products we develop and ensure the Jamaican “*value-add*” to existing product ideas
- c) developing local market demand based on our aging demographics and the new demands from the emerging health tourism market

Mr. Speaker for the obvious market opportunities that Jamaica’s rich nutraceutical legacy represents, we will fast-track the development of the framework for the coordination and standardization of the National Nutraceutical Industry in Jamaica.

**Mr. Speaker, this is how we get S.E.T for Prosperity**

## CLOSING

Mr. Speaker, we have hit the ground running at the Ministry of Science, Energy and Technology.

We recognize that the people of Jamaica are impatient of administrative dithering, missed opportunities and announcements with little or no actual result or tangible outcome to show for it.

Mr. Speaker, the people want Government that works. And we are giving them precisely that.

They want leaders who will serve them and work in their interest in bringing the increased economic growth, job creation and prosperity they deserve and have been awaiting. And that is precisely what we are working to deliver Mr. Speaker.

Mr. Speaker, at the Ministry of Science, Energy and Technology:

- We are **SETTING** the stage for sustained reductions in the cost of electricity
- We are **SETTING** the stage for even greater diversification of our energy mix
- We are **SETTING** the stage for a cleaner healthier environment through use of renewable energy
- We have **SET** a mechanism to militate against Bad Gas and facilitate redress to consumers
- We are **SETTING** the foundation for a more harmonized & effective ICT regulatory environment
- We are **SETTING** the stage for increased innovation and employment for our people through ICT
- We are **SETTING** the stage for more effective leveraging of our national potential in Science
- Mr. Speaker, we are **SETTING** the stage for increased economic growth, job creation and prosperity.

Mr. Speaker, personal development pioneer Paul Meyer said

***“Productivity is never an accident. It is always the result of a commitment to excellence, intelligent planning, and focused effort.”***

With fixity of purpose and an unwavering commitment to getting the job done on behalf of the people of Jamaica, I am confident that we will achieve what we have set out to achieve.

Mr. Speaker, I thank you and I thank this Honourable House.

May God continue to bless us as a Parliament, and may He continue to bless Jamaica - land we love.