

THE NATIONAL ENERGY POLICY 2009 – 2030
STATEMENT FOR PARLIAMENTARY DEBATE
BY THE MINISTER OF ENERGY & MINING,
HON. JAMES ROBERTSON
ON TUESDAY OCTOBER 4, 2010

Introduction

Mr Speaker, one of the most pressing issues facing our beloved nation today is the need to find solutions to our energy crisis, starting with the implementation of our National Energy Policy. Let me from the outset indicate that this Administration is committed to affording our nation the prospect of cheaper and more environmentally friendly sources of energy. Additionally, energy efficiency and the development of local energy resources, especially economically competitive sources of renewable energy, will become major parts of our approach to resolving our energy crisis.

The Jamaican economy is currently heavily dependent on imported fuel. As a net importer of fuel the country is therefore susceptible to the volatilities of the world oil market – both in terms of supply and the price of oil. And it is clear that in order to minimize these effects on the economy, we must diversify our energy base.

Oil Imports

During calendar year 2009, Jamaica imported 22 million barrels of oil for which we spent US\$1.3 billion. This is a marked reduction compared with 2008, when US\$2.8 billion was spent on oil imports. We must appreciate that this drastic reduction was largely due to the downturn in the bauxite and alumina sector, which saw the closure of three of the four alumina plants.

For calendar year 2008 the Bauxite and Alumina Sector accounted for 9 million barrels of oil or 31 per cent of total petroleum imports, while for calendar year 2009 it only accounted for 3 million barrels of oil or 14 per cent of total petroleum imports.

Impact of Higher Oil Prices

Higher oil prices also have a significant impact on our balance of payments and the current account deficit. The deficit in the current account, Mr Speaker, measures the extent to which Jamaica is depending on the rest of the world to satisfy our import needs. During the period under review the current account deficit is projected to drop to an accumulated total of US\$3.7 billion.

Increased energy prices also fuels inflation. Every Jamaican consumer – business persons and consumers alike are aware that there is a snowballing effect of increased energy prices on all goods and services consumed. Increased energy prices results in higher electricity prices and transportation costs for the delivery of goods and services to all Jamaicans, whether we live on the plains of St. Catherine, Clarendon and Westmoreland or in the hills of St. Thomas, Portland, St. Mary or the interior of other parishes.

It is therefore incumbent on all of us as a nation to develop a national consensus on the way forward in lowering the cost of energy as a major input in the overall cost of production. And it is in this context that work has been undertaken in recent years in the development of a comprehensive National Energy Policy.

THE DEVELOPMENT OF A NATIONAL ENERGY POLICY

Mr Speaker, our Administration cannot take sole ownership of the development of a National Energy Policy, rather work was started under the last Administration of the People's National Party. The records of this Honourable House will show that a draft National Energy Policy 2006 – 2022 was tabled in 2006. And as soon as the current Administration of the Jamaica Labour Party took office in September 2007, the Ministry of Energy, under the leadership of the former Minister Clive Mullings, continued the development process for the Energy Policy.

I therefore wish to thank both Members – the member from East Kingston and Port Royal and the member from West Central St. James – for the significant work that was done under both Administrations up to the beginning of the 2009 – 2010 Fiscal Year.

Mr Speaker, one of the challenges which I received in April 2009 from the Hon. Prime Minister was the challenge for my Ministry -- the Ministry of Energy and Mining -- to expeditiously complete the National Energy Policy in order to present a very clear policy position on energy for the country.

The timing was critical because we were in the heights of the recent global recession that had a most adverse impact on the bauxite, tourism and the local manufacturing sectors. To compound the problem, the price of oil, which is our most utilized source of energy, skyrocketed to US\$148.00 per barrel in summer of 2008, thereby dealing a cruel blow to our productive sector and ordinary consumers.

Mr Speaker, we accepted the Prime Minister's challenge and in July 2009 the Ministry of Energy and Mining completed the first draft of the National Energy Policy 2009 – 2030. The approach taken to develop the policy was to do an analysis of the local and international energy situation, taking into consideration the global trends against our local realities. After wide scale stakeholders' consultations, we then prepared a comprehensive policy to meet the immediate, medium and long-term strategic objectives of the country.

Key inputs included, but were not limited to:

- the work done by the National Energy Task Force,
- feedback from the public consultations done in the first Quarter of 2008, involving discussions with the Private Sector Organization of Jamaica (PSOJ), Academia, NGOs and other representatives of Civil Society.
- Comments were also received from our International Development Partners (IDPs).

All made invaluable contributions in ensuring that the Policy took into account all the key factors that needed to be addressed.

I therefore wish to thank all those who participated and contributed to this important policy development process. Thank you to the members of the Energy Policy Working Group (EPWG) that was chaired by the then **Permanent Secretary - Mrs. Marcia Forbes** and which chairmanship was continued by the current Permanent Secretary – **Ms. Hillary Alexander**. Both were ably supported by the very committed team of technocrats in the Ministry.

Thank you also to representatives of the other Government Ministries, Departments and Agencies who also dedicated their time and expertise in research, document reviews and data / information analyses.

Special mention must be made of:

- the Petroleum Corporation of Jamaica (PCJ),
- the Office of the Prime Minister (OPM), including the Environmental Management Department (EMD),
- the National Environmental Planning Agency (NEPA),
- Jamaica Promotions (JAMPRO)
- the Bauxite and Alumina Sector
- the Ministry of Transport and Works,
- the Ministry of Industry, Investment and Commerce
- The Ministry of Agriculture and Fisheries,
- The Ministry of Finance and the Public Service, and
- The Ministry of Foreign Affairs and Foreign Trade to name a few.

Thank you once again to the Private Sector Organization of Jamaica (PSOJ) and representatives of their several umbrella groups, members of the Academic community, the various NGOs, Churches, and Civil Society, and all other persons who all participated in the consultative process and provided extremely useful comments.

Mr Speaker, because of the collaborative work and contributions, for the first time in recent history, Jamaica now has a National Energy Policy that is long term, visionary,

comprehensive, progressive and responsive to changes in the local and international energy environment.

Jamaica's National Energy Policy 2009 – 2030 was approved by Cabinet in October 2009 and subsequently laid in the Houses of Parliament on December 8, 2009.

Mr Speaker, this policy aims to facilitate the establishment of a comprehensive programme of efficiency improvement and energy diversification in order to provide high-quality, affordable, environmentally-friendly energy and to reduce the country's dependence on high-cost imported oil. And it is designed to ensure that by 2030 Jamaica will be classified as a developed country.

The National Energy Policy 2009 – 2030 is Jamaica's first long-term energy policy. It is especially timely in light of the increasingly important role of energy in the socio-economic development of the country.

As I stated previously, Mr Speaker, Jamaica's future is inextricably linked to finding cost-effective, environmentally sustainable energy solutions. Therefore, the formulation, and more importantly, the implementation of this policy is critical in helping Jamaica to achieve overall sustained national development.

Our National Energy Policy recognizes the role and importance of energy in the socio-economic and development of Jamaica. The policy examines the energy situation we face and proposes a range of options and strategies which the Government is committed to pursue over the short, medium and longer term.

The National Energy Policy will support our *Vision 2030 Jamaica – National Development Plan*, providing the enabling environment for the achievement of the national outcome of “a secure and sustainable energy supply for our country.”

It is important to note that the policy incorporates actions to deal with global trends such as climate change, energy conservation and efficiency, and renewable energy, and establishes linkages with other sectors such as agriculture, transport, construction, bauxite, and finance to achieve policy coherence and fulfil the country's energy goals.

THE MAIN TENETS OF THE NATIONAL ENERGY POLICY

Mr Speaker, the main tenets of the National Energy Policy are specifically designed to encourage wise energy use, energy conservation and efficiency nationally through discrete projects aimed at reducing the nation's energy bill.

The policy envisions the creation of a modern and appropriate energy infrastructure to promote economic development, which includes promoting the diversification of our

energy base to include natural gas, ethanol and other bio fuels. In addition, it envisions the development of indigenous energy sources, which could possibly involve further oil and gas exploration, both onshore and offshore.

Mr Speaker, the policy promotes the development of renewable energy sources – specifically solar, wind, mini-hydro, biofuels/biomass (including bagasse) – and a reduced carbon footprint.

The policy also promotes energy sufficiency and security of energy supplies through facilitating negotiations to ensure stable and adequate energy supplies at least cost (for example, the San Jose Accord, Petro Caribe, Nigerian agreements and Ecuadorian crude oil purchases).

Another critical element of the policy is the establishment of a modern and well-defined legal and regulatory framework for the energy sector which seeks to protect consumers, investors and the environment against unsafe conditions and unsafe practices. It is further expected that government ministries, agencies and other state entities will distinguish themselves as models of energy conservation and environmental stewardship.

Similarly, Mr Speaker, it is envisioned that the productive sector and individual households will embrace eco-efficiency and the green economy.

RESPONSIBILITY FOR IMPLEMENTING THE NATIONAL ENERGY POLICY

The Ministry of Energy and Mining has the dual responsibilities of articulating the policy and coordinating the monitoring of its implementation. As such, the Ministry will provide leadership for the achievement of an efficient, diversified and sustainable energy sector.

One of the important activities will be the Policy Review Process, which will need to be both dynamic and responsive. It is anticipated that the first review will be conducted shortly and every three years thereafter unless events require earlier reviews.

Implementation of the National Energy Policy

The implementation of this policy will be led by the Ministry of Energy and Mining, and the Petroleum Corporation of Jamaica, with the assistance of several other departments and agencies of Government. However, the involvement of all stakeholders is fundamental to the successful implementation of this policy and as such we will be seeking the support and assistance of non-state stakeholders including the private sector, non-governmental organizations (NGOs) and community-based organizations (CBOs). In addition, the support of our International Development Partners (IDPs) continues to provide much needed financial and technical assistance to the Ministry as it proceeds to move the energy agenda forward.

ACHIEVEMENTS TO DATE

Mr Speaker, the following are some of the achievements to date:

1. The first 3-year Action Plan was completed in April, 2010.

This Action Plan covers the period 2009 – 2012 and is the roadmap that will start us along the road to achieving the goals set out in the Policy. The major objective of this first planning period is to decrease the country's dependence on imported oil and improve efficiency in the use of energy.

2. Energy Security and Fuel Diversification Strategy.

Mr Speaker, in 2009 the Government announced that it was interested in pursuing Liquefied Natural Gas (LNG) as the preferred fuel diversification option for Jamaica. This announcement was against a background in which energy forecasts predicted that natural gas prices would be low relative to oil for the foreseeable future. Long-term natural gas supply contracts would seek to take advantage of the low prices. And the introduction of LNG offers the prospects of lower electricity rates and a more competitive bauxite and alumina industry.

Cabinet, advised by experts in the gas industry, decided that floating LNG terminal technology was to be used because it offers the quickest prospect for involvement of all stakeholders which is fundamental to the successful implementation of this policy. As such the introduction of LNG is ideally suited to deliver the volume of gas we will require. The project should be implemented as a private sector financed Build, Own and Operate (BOO) project.

In November 2009 the Petroleum Corporation of Jamaica (PCJ) issued Request for Proposal (RFP) to pre-qualified applicants in order to select a firm to be given the right to develop the LNG terminal and gas pipeline network. Responses to this RFP were received in February 2010 and after a process of bid evaluation, a consortium of investors was selected for negotiations to construct the Floating Storage Re-gasification Unit (FSRU) and the requisite pipeline infrastructure.

LNG SAVINGS

Mr Speaker, the LNG Option offers significant benefits to the country. It is important, for example, to point out that at the current differential between crude oil and natural gas prices Jamaica would save at least US\$300 million per annum on energy import costs, even after taking into account the cost of the infrastructure necessary to handle LNG.

In this regard, the US\$300 million per annum that we could now be saving if we had LNG, excludes the loss of earnings by the plants in the Bauxite and Alumina Sector that had to cease or reduce operations due to their inability to compete with plants elsewhere due primarily to their use of oil as the main source of energy.

Another major benefit, Mr Speaker, is that the generation of electricity by modern, efficient plants, using a cheaper source of fuel will also reduce the cost of electricity to

consumers. This is a **key** aim of the Energy Policy and a matter we will pursue with urgency!

Procurement of New Generating Capacity

Mr. Speaker, Goal # 2 of the policy addresses the need for modernization of the energy infrastructure. This is in tandem with Goal #4 of the said policy which addresses the energy security and fuel diversification strategy.

As a result of these two policy goals along with the need to improve the overall efficiency in the use of energy the OUR has invited bids from local and international firms to supply up to 480 MW of new generating capacity to the system. This will allow for the displacement of old and inefficient generating plants and provide for growth in demand over the medium term.

This will result in improved system heat rate, which is the rate at which fuel is converted to electricity. This along with the expected reduction in fuel price as a result of the introduction of Natural gas will translate into a reduction of Jamaica's energy costs and eventually the customer's electricity bills.

RENEWABLE ENERGY DEVELOPMENT

Mr Speaker, I now turn your attention to Renewable Energy Solutions. Our Administration is committed to leading the continued development and promotion of renewable energy options that will reduce the country's dependence on imported fossil fuel by increasing the percentage of Jamaica's energy being generated from renewable sources from the current level of about 9% to 15% by 2020 and further to 20% by 2030.

Members in this Honourable House will recall that when I gave my contribution to the Sectoral Debate in 2009, I mentioned that we had approximately 5% of renewables in our then energy supply mix, and now one year later the records show that the use of renewables has increased and now accounts for 9% of the country's energy supply mix.

The truth is, Mr Speaker that the figure of 20% will be achieved long before 2030, and it is imperative that we ensure that the best options are taken to attain this goal, for example, the use of waste to energy and bio-fuels. In essence, the targets for renewable energy contribution are **clear, realistic and achievable!**

The main renewable energy technologies that are of interest to Jamaica, and those that have recently engaged the interest of the local, multilateral and bilateral agencies are solar and photovoltaic, wind, mini-hydro and biofuels/biomass, including bagasse. In fact, Mr Speaker, only yesterday I was made aware of a serious thermal energy interest.

Mr Speaker, the National Energy Policy supports the use and deployment of renewables in the country's energy mix, but we need to ensure that this is supported by proper, empirical data and Jamaican studies, and not driven by emotion, exuberance and the

cutting and pasting from the policies of other countries. For example, countries that can afford to subsidize their energy programmes or that have natural energy advantages such as hydro, or that have huge reserves of natural gas, etc.

Key recent developments are:

- Mr Speaker, in December 2009 the hydroelectric power plant at Constant Spring was re-commissioned into service after extensive rehabilitation. The plant, which had been out of service since 2001, now adds 0.77 megawatts of electricity to the national grid. This is a co-operation between the Jamaica Public Service Company Ltd. (JPS) and the National Water Commission (NWC).
- Through a competitive bidding process, JPS received approval from the Office of Utilities Regulation (OUR) for the construction of a 3.0 megawatts Wind Plant in Munroe, St Elizabeth. The construction of the plant is virtually completed and testing and commissioning in progress. It is to be opened by the Hon. Prime Minister on October 13, 2010.
- Ground was broken in March 2010 for the expansion of the 20.7 megawatts Wigton Wind Farm to 38.7 megawatts. Construction is well on the way and the plant is expected to be commissioned into service by the end of the current year. When completed the project will:
 - i. Provide 55 gigawatts (GWs) of electrical energy, capable of powering approximately 24,000 homes;
 - ii. Reduce consumption of imported fuel by approximately 32,400 barrels of oil and save the country US\$3.2Million of foreign exchange per annum (based on current prices which average US\$70 per barrel of oil);
 - iii. Avoid the emission of approximately 45,954 tonnes of carbon dioxide, and
 - iv. Lower the overall fuel charge on consumers' electricity bill as fossil fuel energy is substituted by renewable energy.
- **Biofuels** – In terms of Biofuels, Mr. Speaker, Jamaica is fortunate both geographically, and by experience, to produce the commonly acknowledged best source of biomass, sugarcane. Through divestiture of our public sugarcane estates, Jamaica is providing an investment opportunity to produce indigenous ethanol and power generation for sale to the grid. We recognize global markets for ethanol, sugar and rum are currently in flux and investment decisions regarding these co-product ratios will be largely determined by prevailing markets.

Incentives

Mr Speaker, another pressing issue is that of incentives. Our Administration is quite aware of the various calls for incentives to encourage renewable energy development. Here again the National Energy Policy prescribes various initiatives to allow for serious investments in renewable energy technologies.

A range of fiscal, legislative and regulatory issues are to be addressed, most of which are further articulated in the draft Renewable Energy Policy, which is already posted on the Ministry's website as part of the public consultation process.

It is worth mentioning that while the Ministry develops and articulates policies, the Office of Utility Regulations (OUR) has a regulatory role to play in establishing electricity tariffs – re our electricity rates. We therefore continue to look to the OUR to take effective measures to implement the relevant policy prescriptions. Some of us in this House cannot be forgiven for not understanding this or conveniently forgetting the independence of the OUR!

NET METERING, NET BILLING, SMART METERS AND POWER WHEELING

Under Goal 2 of the National Energy Policy 2009-2030, the Government has committed to “Implement appropriate energy distribution and transmission systems”, and to “Unbundle generation and transmission and distribution creating an energy efficient electricity structure.” These commitments allow for the introduction of new technologies such as smart metering, net metering, net billing and power wheeling as options to create access to the Transmission and distribution systems. We are committed to these policy issues, which will promote the development of renewable energy and small-scale investment in the electricity sector.

How do we create this access?

An important factor for Renewable Energy to be successful is the matter of access to the electric grid. This access avoids the investments in battery storage which are costly, accounting for about 30 – 40 % of renewable energy systems as well as being unfriendly to the environment. These batteries have to be changed frequently and create a problem for disposal.

Net metering, net billing and power wheeling can create this access as each provides a channel for the customer to sell its excess electricity to the electricity grid instead of investing in expensive battery storage or operating inefficiently from various locations in the case of wheeling.

Net Metering

Net Metering is the system whereby an electric utility company (Jamaica Public Service (JPS) as in the case of Jamaica) buy excess power from its customers at an agreed rate compared to what it retails to its customers. A premium would be necessary as a

“facilitation /licensing fee” for the utility to be compensated for the cost for the use of the grid by the customer. This system requires only one (1) meter at the point of interconnection with the electric grid. The customer is billed or credited for the net amount of electrical energy, measured in kilowatt-hours, consumed from or delivered to the utility grid.

Consistent with the National Energy Policy Green Paper, the system of Net Metering is one of the recommendations to ensure there is a “prescribed protocol for the supply of electricity to the national grid.”

Under Goal Number 5 of the National Energy Policy 2009 – 2030 dealing with the establishment of a well-defined governance, institutional, legal and regulatory framework, one of the strategies articulated is “*Conduct studies to include Net Metering and Wheeling in the tariff rates and introduce appropriate mechanisms for net metering and wheeling procedures and standards to encourage the development of renewable energy and cogeneration opportunities.*”

Net Billing

Net Billing is the system whereby an electric utility company (Jamaica Public Service (JPS) as in the case of Jamaica) buy excess power from its customers at the “Generation Avoided Cost”, plus a premium (currently set at up to 15%), if the source is renewable energy. The system normally requires two (2) meters to be installed at or about the point where the customer is connected to the electric grid.

In the case of Net Billing, the customer is billed or credited separately for the amount of electricity produced and electricity consumed by the customer.

The system of Net Billing has been in place in Jamaica for a very long time and where it exists, it is working very well and only subject to contractual arrangements between the JPS and the power provider.

Power Wheeling

Power Wheeling is the concept whereby a generator of electricity will transport electricity across the national grid for its own use at another location. The electric grid is essentially used as a transport mechanism. This concept is not new and the protocol for its application locally is being developed.

The Office of Utilities Regulations is responsible for ensuring that pricing mechanisms are fair and that neither the investor, the customer, nor the utility is unfairly treated in the agreements that are reached for these arrangements. To this end the OUR along with the JPS are finalizing the details of a Standard Offer Contract which will become available in short order for the customers with renewable energy installations to access the electricity grid at a fair price and on reasonable terms.

In the case of wheeling appropriate contracts will need to be developed for companies operating at one geographical location and needing to use power at another location. This power could be passed by feeding into the JPS transmission and distribution system and extracting a similar amount at the other location.

Smart Meters

A key objective of the policy is the modernization of the energy infrastructure and to ensure that electricity customers are better informed about their consumption patterns, cost of energy and other relevant information.

Smart meters are increasingly used in modernized electricity system. These are an advanced meters that record consumption in intervals of an hour or less and communicates that information at least daily via some communications network back to the utility company for monitoring and billing purposes. The consumers are able to see the same information from the meters.

Traditional electrical meters only measure total consumption and as such, provide no information of when the energy was consumed. Smart meters provide an economical way of measuring this information, allowing price setting agencies to introduce different prices for consumption based on the time of day and the season.

The use of Smart meters is one of the new technologies that Jamaica must adopt to better manage its electricity systems such as energy consumption, costs and losses.

THE CENTRE OF EXCELLENCE FOR RENEWABLE ENERGY (CERE)

Mr Speaker, I next want to turn your attention to the Centre of Excellence for Renewable Energy. CERE continues to partner with tertiary institutions, and collaborate with those government and private sector agencies which are able to strike the proper balance between environmental protection, economic growth and the demonstration of renewable energy sources.

Some of the Achievements of the CERE and the PCJ to date include:

1. CERE actively collaborates with local, regional and international development partners and has developed a portfolio of projects to attract financing for the development of hydro, solar, wind, biomass and biofuels projects.
2. Introduction of Ethanol in gasoline fuel (E-10 for 87) in November, 2008.
3. Island wide roll-out of Ethanol in gasoline fuel (E-10 in 87 and 90 fuel blends) in November, 2009.
4. Technical assistance has been received from our international partners for conducting studies in renewable energy technologies. In this regard we have received assistance as follows:
 - The Inter-American Development Bank (IDB) recently signed Technical Assistance (TA) for US\$1.0M

- World Bank has signed a recently agreed Aide Memoire, including support of US\$5.15M.
- United Nations Development Programme (UNDP) is providing US\$60,000.00 to support the implementation of the Energy Policy “Next Steps” programme.
- United States Agency for International Development (USAID) in collaboration with Brazil is providing Technical Assistance for Biofuels Policy and Industry Development (US\$350,000).
- PetroCaribe Corporation Agreement is financing the expansion of the Wigton Wind Farm from 20.7MW to 38.7MW (US\$49.9M).
- Latin American Energy Organization (OLADE) continues to provide ongoing Technical Assistance for Training and Capacity Building within the Ministry of Energy and Mining and the wider energy sector.

A longstanding matter is the establishment of the OLADE / Caribbean sub regional office in Jamaica. This matter has received strong support from all the Caribbean member countries as this office will ensure that all the energy programs and plans for the region are consistent with the priorities of the member countries. The location of the office in Jamaica will result in increase financing for renewable energy development, energy efficiency improvement, improved capacity building and the creation of jobs for energy professionals.

This is a matter of priority and every effort is being made to establish this office.

- International Atomic Energy Agency (IAEA) continues to provide Technical Assistance for Energy Modeling and Resource Assessment, Planning and Evaluation.
- Global Environment Fund (GEF) provides Technical Assistance to the tune of US\$750,000.00 for the introduction of Renewable Wave Energy Technology to isolated coastal communities.

NEXT STEPS

Mr Speaker, what are the Next Steps? With the support of UNDP, as mentioned above, the Ministry of Energy and Mining is now working with a consultant to develop and finalize some critical Energy Policy “next steps” including:

- a) Establishment of key sector indicators and targets,
- b) Development of the first 3-Year Implementation Plan, and
- c) Development of six addenda policies to give focus to key areas of the energy sector. These addenda policies are:

- i. Renewable Energy Policy
- ii. Energy from Waste Policy
- iii. Bio-fuels Policy
- iv. Energy Conservation and Efficiency Policy,
- v. Carbon Emissions and Trading Policy, and
- vi. Electricity Sector Policy and Strategy.

Also, with the support of CARICOM, a National Electricity Policy and Strategy document is being developed and is in its final stages of completion. Attention will also be paid to Energy Conservation and Efficiency (ECE) Improvement for the Private Sector to Improve Business Competitiveness.

General initiatives which are currently being implemented include:

1. A programme for the efficiency branding of facilities (greening, if you will) – Tourism, Commercial, Manufacturing and Industrial sectors.
2. A programme providing financial and technical support for ECE implementation for Commercial, manufacturing and Industrial (C, M &I) sectors.
3. Establishing targets for energy use reduction for large Commercial, Manufacturing and Industrial enterprises. Some facilities will be deemed energy management facilities and will be required to appoint an energy manager, have an updated energy audit, and implement a system of tracking and reporting.
4. Expanding the financing facility for householders to access solar water heaters, photovoltaic home systems and other Energy conservation and Efficiency (ECE) devices at low interest rates.
5. Replacing incandescent lamps with compact fluorescent lamps in homes and businesses. There is significant potential for energy savings from the replacement of incandescent light with compact fluorescent bulbs, LEDs and other energy efficient devices.
6. Encouraging the National Housing Trust to introduce ECE initiatives as a condition of home improvement loans.
7. Other financing agencies are also to be encouraged to include as a requirement ECE efforts (e.g. energy audit of facilities) for loans at preferential interest rates.

These areas present several opportunities for the private sector and for financial institutions such as:

- i. New financial instruments to support energy conservation and efficiency
- ii. Development of Energy Services Companies (ESCOs)
- iii. Introduction of new products and
- iv. Manufacturing and local assembling of products

Conclusion

In conclusion, Mr Speaker, the National Energy Policy prescribes the framework within which the Jamaica Energy Sector can be developed, modernized and provides the medium to long term energy needs of the country. It is being enhanced by the development of several sub-policies, strategies and the requisite legislative, regulatory and institutional provisions to ensure success.

What is needed now is investment capital to further develop the country's renewable energy potentials in solar, wind, hydro and biofuels.

We recognize the limitations in the present legislative and regulatory framework but we are taking the required steps to do whatever is necessary, within the context of the overall operations of the Government.

It is through the policy prescriptions of the National Energy Policy and the several sub-policies and the collaboration with the key stakeholders that we will achieve full scale deployment of renewable energy technologies, improve energy conservation and efficiency, diversify the energy supply mix and place the Jamaica Energy Sector on a sustainable development path.

Mr. Speaker, members of this Honourable House, listeners and viewers far and near, Jamaica is open for business as we transform the energy sector from one that is characterized as overly dependent on imported oil, and an old and inefficient energy sector into one that is a modern, diversified and cost effective. And this development thrust will be pursued in a sustainable manner in harmony with the **green** environment.

I thank you.

**THE NATIONAL ENERGY POLICY 2009 – 2030
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HON. JAMES ROBERTSON
ADDENDUM**

National Energy Policy Priorities and Goals

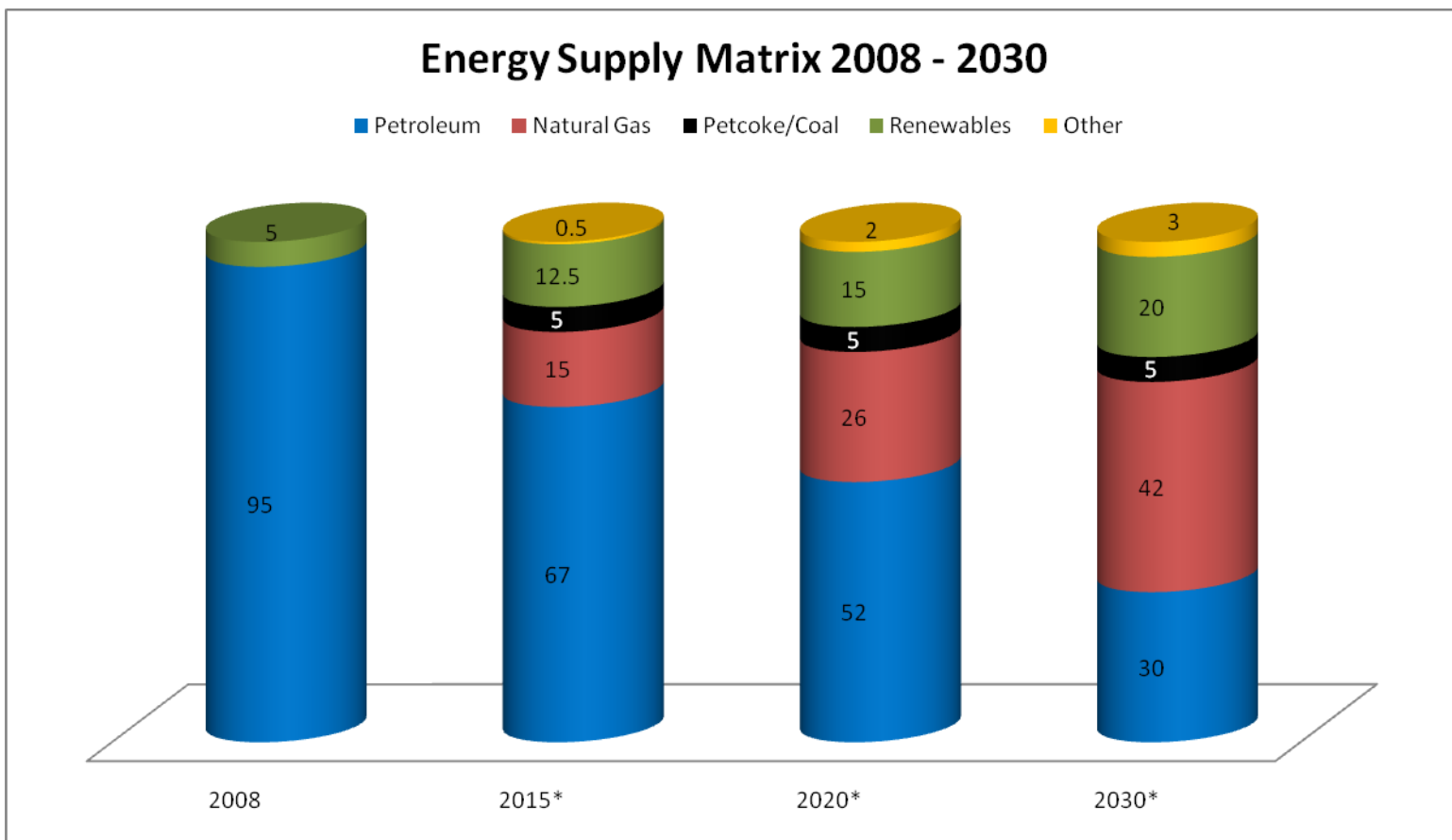
NO	GOALS	PRIORITIES
1	Jamaicans use energy wisely and aggressively pursue opportunities for conservation and efficiency	Energy Conservation and Efficiency
2	Jamaica has a modernized and expanded energy infrastructure that enhances energy generation capacity and ensures that energy supplies are safely, reliably, and affordably transported to homes, communities and the productive sectors on a sustainable basis	Modernized Energy Infrastructure
3	Jamaica realizes its energy resource potential through the development of renewable energy sources and enhances its international competitiveness, energy security whilst reducing its carbon footprint	Renewable Energy Sources
4	Jamaica's energy supply is secure and sufficient to support long-term economic and social development	Security of Energy Supplies – Diversification of Fuels
5	Jamaica has a well-defined and established governance, institutional, legal and regulatory framework for the energy sector, that facilitates stakeholder involvement and engagement	Governance /Regulatory Framework
6	Government ministries and agencies are a model/leader in energy conservation and environmental stewardship in Jamaica	Government Ministries and Agencies as Leaders
7	Jamaica's industry structures embrace eco-efficiency, natural capitalism and moves towards building a green economy	Eco-Efficiency and Green Economy

Jamaica's National Energy Supply Matrix 2008 – 2030

National Energy Policy - “Next Steps”

Status Report

The current status for each deliverable for the contract on the “Next Steps” for the National Energy Policy 2009-2030 is detailed in the table below.



Deliverables	Progress	Status
D1.3-year action plan for the National Energy Policy for the period 2009-2012	<ul style="list-style-type: none"> • Preliminary drafts provided to MEM March/April 2010 • 1st draft presented at April 13 Stakeholder Workshop (see below) • Workshop held April 13, 2010 with approximately 50 stakeholders from across the public sector • Workshop report submitted April 16, 2010 • Revised draft prepared, incorporating input from April 13 workshop • Draft tabled at a meeting of the Vision 2030 Jamaica Energy and Minerals Development Thematic Working Group on April 21, 2010 • Meetings held with MEM officers to set priorities during April and May 2010 • Final draft submitted to MEM June 2010 	<ul style="list-style-type: none"> • 100% complete
D2.Facilitation of process to develop specific targets for the energy sector for the Management & Evaluation framework	<ul style="list-style-type: none"> • Draft report with indicators and methodology prepared • Meeting held with key stakeholders June 24, 2010. List of indicators agreed. Baseline and forecasting data being obtained to determine targets. • Meeting to be held with MEM to finalize targets 	<ul style="list-style-type: none"> • 80% complete • To be completed on or before September 24
D3.Renewable Energy Policy	<ul style="list-style-type: none"> • Policy working group (PWG) formed¹ • Three meetings of PWG held: May 2010, August 13, August 20, 2010 • Table of Contents finalized • Draft of policy prepared for August 20 meeting for discussion and review • Final draft presented to MEM August 31, 2010 	<ul style="list-style-type: none"> • 100% complete • Posted on the MEM's Website to initiate public consultation

¹ Note that the policy working groups are aligned to the Energy and Minerals Development Thematic Working Group under Vision 2030 Jamaica and it is envisaged that its membership will serve on the various policy working groups.

Deliverables	Progress	Status
D4.Waste-to-Energy/Energy-from-Waste Policy	<ul style="list-style-type: none"> • 6 PWG workshops held • Final draft submitted to MEM August 17, 2010 • Feedback from MEM received August 20, 2010 • Final draft re-submitted to MEM August 26, 2010 • Further feedback received from MEM September 8, 2010 	<ul style="list-style-type: none"> • 100% complete • To be completed on or before September 24
D5.Biofuels Policy	<ul style="list-style-type: none"> • 8 PWG meetings held • Review conducted of draft policy/situation analysis of biofuels sector prepared by biofuels consultant • Strategic framework (goals and strategies) prepared • Draft policy being prepared 	<ul style="list-style-type: none"> • 95% complete • To be completed on or before September 24
D6.Energy conservation and efficiency (ECE) policy and protocols for the operation of public sector facilities and entities	<ul style="list-style-type: none"> • Review conducted of existing draft policy • 3 PWG workshops held • Draft policy and protocols being prepared • PWG meeting planned for Sept 10 	<ul style="list-style-type: none"> • Policy and protocols 90% complete • To be completed on or before September 24
D7.Finalized Carbon Emissions Trading Policy and Implementation Plan	<ul style="list-style-type: none"> • Review conducted of existing draft policy • 3 PWG workshops held • Discussions conducted with MEM lead officer for this policy • Preliminary draft of revised policy provided to MEM June 2010 • Draft policy provided to MEM September 7, 2010 • Revisions to be done based on PWG feedback 	<ul style="list-style-type: none"> • Policy 98% complete • Implementation Plan 80% complete • To be completed on or before September 24
D8.Curriculum for the training of public sector officials on energy conservation	<ul style="list-style-type: none"> • Development commenced of curricula for training of 3 target groups – public sector officials, private sector leaders and communities • Curriculum document submitted to MEM Aug 24, 2010 	<ul style="list-style-type: none"> • 100% complete
D9.Policy paper on incentives/disincentive	<ul style="list-style-type: none"> • The paper will provide critical analysis of paper on incentives/disincentives in 	To be completed on or before September 24

Deliverables	Progress	Status
s for the development and use of innovative technologies to improve energy efficiencies	<p>the energy sector recently published by IDB.</p> <ul style="list-style-type: none"> • Draft paper being prepared 	
D10. Recommendations for inclusion of energy issues in Revised National Transport Policy	<ul style="list-style-type: none"> • Meeting held March 7, 2010 with representatives of the MEM and the Ministry of Transport & Works to begin discussions about incorporating energy efficiency & conservation and fuel diversification issues into the National Transport Policy. • Document, <i>Jamaica's National Energy Policy – Proposed Linkages with Transport Policy</i>, presented and discussed at the March 7 meeting. • Final report with recommendations submitted to MEM August 31, 2010 	<ul style="list-style-type: none"> • 100% complete
D11. Online energy information clearing house mechanism	<ul style="list-style-type: none"> • Draft concept paper for energy clearing house prepared • Demonstration website in place August 31, 2010 	<ul style="list-style-type: none"> • 100% complete

Inter-American Development Bank Support for Public Sector Energy Efficiency Improvement

In August, 2009 the Inter-American Development Bank (IDB) signed an agreement with the GOJ for Technical Assistance (TA) to assess public sector electricity costs and consumption patterns and to develop a comprehensive investment programme for improving public sector energy efficiency.

- i. In October, 2009 a Project Manager was contracted.
- ii. In December, 2009 a Memorandum of Understanding (MOU) was signed between the Ministry of Energy and Mining (MEM) and the Jamaica Public Service Company (JPS) to share electricity consumption data for public sector entities.
- iii. In December, 2009 a request for Expressions of Interest (EOI) to undertake the energy assessment was made in the local and international marketplace.
- iv. In January, 2010 22 Expressions of Interests (EOIs) were received from local and international companies.
- v. In April, 2010 Request for Proposals (RFPs) were issued to the six prequalified companies.
- vi. During April - May, 2010 four (4) bids were received, evaluated and a successful bidder decided. Negotiations ensued and a contract was awarded to the successful bidder.
- vii. As we speak, the Contractor is carrying out energy audits in order to identify energy efficiency opportunities within the public sector. This very Parliament building is one of the entities scheduled to be audited. The monthly costs of electricity for this Parliament building is approximately J\$600,000.00 per month. The overall monthly cost for the public sector is approximately J\$900.00 M or over J\$8.0B per annum. The objective is exercise is to prepare an investment programme/plan to improve energy efficiency on the public sector. The government is being called upon to lead by example. The Government will demonstrate the benefits of improvements in energy conservation and efficiency.

World Bank Support for the Operationalization of the Energy Policy

In March 2010, the Aide Memoire for Energy Security and Efficiency Enhancement Project between GOJ and the World Bank was finalized and approved. This Aide Memoire with value of US\$15.00 Million and up to an additional amount of US\$2.00 Million making a total of up to US\$17.00 Million to provide further support for the implementation of key elements of the National Energy Policy with focus on strengthening the legislative, regulatory and institutional capacities for the fuel diversification programme (introduction of LNG and development of the natural gas industry, renewable energy development, and energy efficiency improvement in the private sector). Several of the projects to be supported include the following:

- i. The introduction of Natural Gas as the country's diversification fuel of choice
- ii. Energy conservation and efficiency in the transportation sector
- iii. Further development of the renewable energy potential of the country with emphasis on solar, wind, hydro and biofuels. The objective here is to, where necessary, to complete the pre-feasibility and feasibility studies, prepare project documents and bring several renewable energy projects to "Investment Ready Status" so that the private sector can be facilitated to commit their capital. All the studies would have been completed and the projects promoted to investors.
- iv. Modernization of the country's energy infrastructure
- v. Improvement in public sector energy efficiency and
- vi. Provide incentives to support energy efficiencies within the private sector. Through the Development Bank of Jamaica (DBJ),
- vii. Creation of a comprehensive governance framework by implementing appropriate policies, legislations and other regulatory instruments.

SUPPORT FOR THE PRIVATE SECTOR, INCLUDING MSMEs

Revolving Financial Facility for Energy Efficiency and Renewable Energy Implementation in the Private Sector

Through the World Bank Energy Security and Efficiency Enhancement Project, US\$2.5 Million will be made available to support efficiency improvement in the private sector. This is one of the components under the World Bank Loan Financing to support the operationalization of the National Energy Policy 2009 – 2030. It will provide additional financial resources to the Energy Fund for which key activities include the following:

- This component will finance the initial endowment for a pilot Energy Efficiency (EE) and Renewable Energy (RE) revolving facility aimed at testing the Energy Efficiency market in the private sector.
- Grant funds from the Global Environment Facility (GEF) and the Multilateral Fund (MLF) for Implementation of the Montreal Protocol, and Carbon Finance will also be mobilized, as appropriate, to support the proposed facility and technical capacity downstream to ensure sustainable penetration of EE and RE equipment.
- It was agreed that it is prudent that the initial endowment be limited to \$2.5 million as the rate of uptake by the private sector is not well known;
- It was decided to work with the Development Bank of Jamaica (DBJ) for the following reasons:
 - ❖ DBJ has developed procedures and documentation with the financial institutions doing the retailing, Authorized Financial Institutions (AFIs),
 - ❖ DBJ has tested procedures to select certified energy auditors and engineers working with Centre of Excellence for Renewable Energy (CERE) and the University of Technology (UTech),
 - ❖ DBJ offers Partial Guarantee to deal with the collateral issue, and has experience working with multilateral and bilateral institutions;
 - ❖ It is important that DBJ continues to promote and assess the demand for such financial product.

If the pilot is successful, additional resources (Donors, International Finance Corporation (IFC), etc) would be available for this facility.

Other Initiatives to Improve Energy Efficiency Within the Private Sector includes the following:

- Special arrangements have been made with AFIs to issue letters of undertaking to Certified Energy Auditors/Managers (CEA/M) for them to conduct audits and other preliminary works and then allow the cost to be included in the loan.
- Authorized Financial Institutions (AFIs) will incorporate the Certified Energy Auditors / Managers (CEA/M) fee/costs in the loan.

Application has been made for additional funding from the World Bank for US\$4.5M – we anticipate approval as soon as the current initiatives prove successful.

DBJ's lending guidelines for accessing EE improvement funds supported by the Caribbean Development Bank (CDB)

- DBJ has committed \$700M from the CDB Agriculture Support Fund line of credit for on-lending via Authorized Financial Institutions (AFIs), including the National Peoples' Corporative Bank (NPCB).

DBJ's lending guidelines for accessing other Energy Funds

- DBJ has committed \$500M to SME enterprises lines of credit (DBJ/PetroCaribe/SME Energy Fund) - this will be on-lent to Authorized Financial institutions (AFIs). This means that the Commercial banks, Merchant banks, Credit Unions, National People's Cooperative banks and other Authorized Financial Institutions (AFIs).

Eligible enterprises:

- Commercial and Industrial companies
- Energy Service Companies (ESCOs)
- Manufacturers of energy efficiency equipment and devices

Use of the Funds:

- Retrofitting to accommodate energy conservation and Efficiency
- Retrofitting to accommodate renewable energy sources
- Retrofitting to accommodate alternate energy sources
- Specific emphasis on conservation of electricity consumption by promoting the use of renewable energy solutions to include solar thermal, solar photovoltaic, wind, hydro etc.

List of Organizations Which Participated in National Consultations and Stakeholders' Discussions

This Policy Development Process included the inputs of various stakeholders in the public and private sectors as well as from non-governmental and civil society organizations. The policy development benefitted from island-wide consultations as well as from information received from various groups including academia and industry groups. The development process also benefitted from input and review of all Ministries of GOJ.

Below is a list of the various organizations that participated in the national consultations. While we tried to capture all organizations here, if you have been inadvertently omitted, rest assured that your comments were not.

1. 3 JR, 'C' Company
2. AIJCFA
3. ALPART
4. Andrew United Church
5. Automatic Control Eng. Ltd.
6. Automobile Dealers Assoc.
7. Bahia Principe Hotel
8. Baija Partners Ltd
9. Barefoot Environmental Solutions
10. BH Paints (W.I.) Ltd
11. Boucher Park
12. Braeton Citizens Assoc.
13. Bridgeport Branch Library
14. B-W Paints
15. Campbell's Greens Inc.
16. Caretaker
17. Catholic Pastoral Centre
18. Chamber of Commerce
19. Children's World Academy
20. Christa Villa Hotel
21. Christiana Potato Growers
22. Church of God of Prophecy
23. Churches Co-op. Credit U.
24. Constituency Office, East St. Thomas
25. ECO-TEC
26. El Greco Resort
27. Fair Trading Commission
28. Frome Technical High School
29. G.E.I.
30. Gleaner Co. Ltd.
31. Global Travel
32. Golden Shore Resort
33. Golf View Hotel
34. Green Energy Technologies
35. Guardian Asset Management
36. Half Moon Club
37. Holiday Inn Sunspree
38. Hotel Gloriana & Spa
39. IP
40. Isratech Ja. Ltd.
41. JIS.
42. JAECOM Limited
43. Jamaica 4-H Clubs
44. Jamaica 4-H Clubs
45. Jamaica Broilers
46. Jamaica Library Service
47. Jamaica Observer
48. Jamaica Railway Corp.
49. JAS, Cave Valley
50. JBU Brotherhood
51. JBU Brotherhood
52. Jimmy Palmer & Associates
53. JLP Caretaker, Bath
54. JN Small Business Loans
55. JNBS
56. JNBS Foundation
57. JPSCO
58. Kennedy Communications
59. Kiwanis Club
60. KSAC

- 61. Lions Club
- 62. MAC Limited
- 63. Manchester 4-H Clubs
- 64. Manchester Parish Council
- 65. Manchester Parish Library
- 66. Manchester PDC
- 67. Mandeville Weekly
- 68. Mannings School
- 69. Marcant Jamaica
- 70. Maxie Dept. Stores
- 71. Mayberry Investments
- 72. Mayor's Office, Savanna-lamar
- 73. MBJ Airports Ltd
- 74. Melrose Primary & Jr. High
- 75. Middleton Primary
- 76. Ministry of Transport & Works
- 77. Montego Community College
- 78. Morant Bay Vendor's Assn
- 79. Moravian Church Ja. & Cay. Is
- 80. Mount Royal Dev.
- 81. National Environment and Planning Agency
- 82. National Housing Trust
- 83. New Haven Citizens Assoc.
- 84. New Testament Church
- 85. Northern Caribbean University
- 86. NSWMA
- 87. PCJ
- 88. PETCOM
- 89. Planning Institute of Jamaica
- 90. Portmore Chamber of Commerce
- 91. Portmore Community College
- 92. Portmore Cultural Development Committee
- 93. Portmore Municipal Council
- 94. Portmore Shopping Centre
- 95. Porus Primary School
- 96. Post & Telecom Dept.
- 97. President, Vendors Assn
- 98. Pyramid Tour Co.
- 99. Robbie's Restaurant
- 100. Rural Agricultural Development Authority
- 101. S.B. Citizens' Assoc.
- 102. S.E. Corp
- 103. SDC
- 104. SERHA
- 105. Shaun Jones Texaco
- 106. Small Business Assoc.
- 107. Small Business Assoc.
- 108. Solar Lighting & More
- 109. Southboro Citizens Assoc.
- 110. SSDO
- 111. St. Thomas Baptist Youth
- 112. St. Thomas Brotherhood
- 113. St. Thomas Parish Council
- 114. St. Thomas PDC
- 115. STARDO
- 116. STATIN
- 117. Supt. of Police
- 118. Technical Engineer, PCJ
- 119. The Book & Star Place
- 120. Torrington Community
- 121. Transport Sector
- 122. University of the West Indies
- 123. Westmoreland Parish Council
- 124. Westmoreland Parish Council
- 125. Wincar Dev. Constr. Ltd
- 126. Winston Trading Co. Ltd.

