

**HON. KENRED DORSETT
MINISTER OF ENVIRONMENT AND HOUSING
BAHAMAS INTERVENTION
5TH HIGH LEVEL FORUM ON KOREA-CARIBBEAN
PARTNERSHIP**

Greetings and Salutations.

Good Afternoon,

I extend warm greetings to you on behalf of the Government and people of the Commonwealth of The Bahamas. I would also take this opportunity to thank the government of the Republic of Korea for the hospitality extended to me and my delegation. To the Secretariat of the 5th High-Level Forum on the Korea-Caribbean Partnership, let me begin by thanking you for the opportunity to speak on behalf of my country. I am certainly grateful for the opportunity to participate in a discussion that is so timely and vitally important to the future development of The Bahamas. I would also wish to congratulate the government of Korea on the election of Dr. Hoesung Lee as the new chairman of

the IPCC.

The Commonwealth of The Bahamas is an archipelagic ocean nation located in the North Atlantic Ocean, consisting of a chain of 700 hundred low lying islands and cays. The islands of The Bahamas are heavily driven by the tourism and banking sectors.

The Bahamas Government takes its commitment to the advancement of renewable energy deployment very seriously, as The Bahamas is almost 100% dependent on imported oil. Moreover, today the electricity cost for the average Bahamian is more than 40 cents per kWh. In 2012, it was reported that The Bahamas was the second largest importer of oil in the Latin American/Caribbean Region, placing our spending on oil at 13-14 % of the national GDP in 2006. Recently, the Prime Minister of The Bahamas made a presentation in Tennessee, USA where he stated that oil import for consumption expenditure peaked in 2008 to \$1.1 billion and \$900 million in 2012.

To assist in reducing the cost of electricity for Bahamian

consumers, the government of The Bahamas awarded a 5 year management contract to Power Secure, a US based company whose goal is to advance a business model for the Bahamas Electricity Corporation which hopefully will result in a modern and efficient entity providing affordable energy to our people. It is our hope that their efforts will result in a reduction in the cost of electricity in The Bahamas to a price in the range of \$0.20 per kWh, representing an approximate 30-50 percent reduction in The Bahamas Electricity Corporation's average tariff. This is an ambitious objective, but one that is necessary to improve the quality of life for our people and enhance our international competitiveness and prosperity.

As an archipelagic nation, although our land mass is approximately 5,400 square miles, the country spans over a marine territory of over 100,000 square miles. We are an ocean nation and the cost of infrastructure as it relates to the provision of the basic necessity of energy to all of our islands is extremely costly. Unlike, many of the other

countries in the Caribbean, where they may have one power plant, we have over 20. Where they may have one airport we have approximately 30 that are maintained and funded by the State. We have to replicate infrastructure throughout our chain of islands. Each island has its own power generating station or multiple stations. Each island has its own transmission and distribution network and infrastructure. Our inhabited islands outside the capital have smaller populations with settlements scattered all over each island. This means the cost of distributing power to remote settlements becomes very costly and often times, not economically feasible. However, a Government's obligation is to provide its citizens with basic services such as electricity. So, the Government understands that not only is advancing renewable energy the right thing to do, but the smart thing to do. For this reason, among others, The Bahamas Government has advanced several national efforts to assist in meeting its prescribed renewable energy goals of a minimum of 30% renewables in the energy mix

by 2033 and has made the use of off-grid and grid-tied solar and wind generating systems lawful.

Colleagues, when one considers the challenges faced by low lying Small Island Developing States, in addition to energy one has to also consider Climate Change. The Bahamas now faces the road to recovery after the destruction brought about by the recent landfall of Hurricane Joquain, rendering many of our southern islands powerless. Two weeks ago, while it may have been business as usual for the northern and central Bahamas, over 10 of our Southern islands were devastated by a Category 4 hurricane. The damage is estimated to be in excess of \$100 million dollars. Power plants were also destroyed. Climate Change and the adverse effects thereof, has literally wiped out the economies of some of our islands. I urge you all to keep us in your thoughts and prayers as we advance our restoration efforts and for those who are able to provide support, we welcome it.

There is great potential for use of Renewable Energy

Sources in The Bahamas. Possible Alternative Energy Sources include bio-energy, solar (hot water and power generation from photovoltaic systems), wind, ocean thermal energy conversion, tidal, and waste – to- energy sources. With over 500,000 acres of pine forests and more agricultural land in excess of our forests, we see an opportunity for bio-mass on the islands of Andros, Grand Bahama and Abaco. With over 300 solar irradiation days in every calendar year, the sun, which is free, provides a wonderful source of energy. In addition, the technology continues to improve and prices continue to drop. That is certainly good news for us. However, we certainly would welcome more research into storage for utility scale solar to enable us to ramp up the use of solar throughout our islands. There are certain islands, where wind is viable and being an ocean nation, it should be evident that there is a significant potential for ocean thermal conversion.

Waste management is also an issue for us on many of our islands, we see an opportunity for a “win-win” scenario

which would enable us to use waste a resource to generate electricity on many of our islands.

The Bahamas started on its journey towards lowering the cost of electricity and increasing the deployment of renewable energy across the country through legislation and policy changes. In 2014, the Government of The Bahamas, through my Ministry, advanced amendments to the Electricity Act; setting the legal framework for Independent Power Producers to sell to the national grid and to allow for grid-tie connected renewable energy sources. Moreover, the country advanced The Bahamas National Energy Policy (2013-2033), which presents the vision and goals of the Government for a reformed energy sector. This policy framework was compiled in consultation with public, private and non-governmental organization stakeholders. The vision for the energy sector reform is to create, a "modern, diversified and efficient energy sector, providing Bahamians with affordable energy supplies and

long term energy security towards enhancing international competitiveness and sustainable prosperity.”

The Policy sets out 4 goals:

Goal 1: Bahamians will become well aware of the importance of energy conservation, use energy wisely and continuously pursue opportunities for improving energy efficiencies, with key economic sectors embracing eco-efficiency.

Goal 2: The Bahamas will have a modern 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.

Goal 3: The Bahamas will become a world leader in the development and implementation of sustainable energy opportunities and continuously pursue a diverse range of well-researched and regulates, environmentally sensitive and sustainable energy programmes, built upon our geographical, climatic and traditional economic strengths.

Goal 4: The Bahamas will have a dynamic and appropriate governance, institutional, legal and regulatory framework advancing future developments in the energy sector underpinned by high levels of consultation, citizen participation and public-private sector partnerships. This is a long-term strategic policy and is expected to guide the advancement of the Bahamas' energy sector.

In 2013, all import tariffs levied on inverters for solar panels and solar systems and LED lights and appliances were eliminated to encourage our citizens to purchase these energy saving devices. With the assistance of the Global Environment Facility (GEF), we were also able to outfit scores of homes with solar water heaters and photovoltaic units as part of two pilot programmes. Both were aimed at collecting data which would help us ascertain the most feasible renewable energy technologies in our market. The results of this programme were encouraging. As Minister responsible for Housing and Alternative Energy, we have continued to provide

alternative energy devices, such as PV systems to residents of Government built homes. The government has also embarked on the design of a "Green Community". Each unit will be equipped with a 5kW solar system, in addition to solar water heating and energy efficient appliances. The community will incorporate green spaces, walking and biking trails. All of which have multiple benefits to the citizens of The Bahamas.

In 2014, the Bahamas Agricultural and Industrial Corporation, a Government agency, officially opened its new head office building. This building is the first 'green building' to be built for the Government of The Bahamas. It is outfitted with solar panels and solar lighting in the parking lot. Plans are underway to continue this trend by providing a 2.6 MW solar farm for the Bahamas Agriculture and Marine Science Institute (BAMSI) located on the island of Andros.

My Ministry launched the Renewable Energy Self Generation Programme in May, 2015. This programme

attests to the fact that The Bahamas has made bold steps to facilitate grid tie connection and net billing systems in The Bahamas. Further, the RESG programme will provide a means by which residential and certain commercial customers with renewable energy generation capabilities on their respective properties can connect to the grid; serving their own electricity requirements. The applicable renewable energy technologies in this initiative will be the use of wind turbines and solar photovoltaic power sources. On May 11th, 2015, The Bahamas Electricity Corporation in conjunction with my Ministry, the Ministry of the Environment and Housing began registering all RE systems in the country. This is a mandatory process in order for The Bahamas to gather needed data to determine the actual level of RE deployment in the country. This comprehensive programme of efficiency, improvement and energy diversification will allow The Bahamas to provide high-quality, affordable, environmentally-friendly energy, and reduce the amounts of imported oil that the country

uses. The Bahamas is a member of the International Renewable Energy Agency (IRENA) and we are a founding member and participant of the SIDS Lighthouse Initiative. The Renewables Readiness Assessment being prepared by IRENA will assist us understanding what is required for further deployment of renewable energy.

The Bahamas has also a member of the Carbon War Room Ten Island Challenge. This project will provide up to 20MW of solar generated utility scale power for 5 islands. A Request for Qualifications has been drafted and will be issued shortly as my Ministry is in the final stages of preparations for this project. The Government is also in the initial stages of implementing a LED Street Lighting Programme. This will result in all non LED street lights being changed, presently approximately four percent of public lighting is now LED based. This effort will be continued until all public lighting is powered by alternative energy sources.

The Government of The Bahamas is also proposing to

embark on energy efficiency upgrade projects to the Thomas A. Robinson National Stadium and one of our Government schools-Anatol Rodgers High School, both located on the island of New Providence. The retrofitting of the National Stadium will include the installation of roof top solar panels as well as solar canopies for the parking lots. The energy efficiency upgrade to Anatol Rodgers High School will include a 250 kW roof top solar system. Further, a 6kW solar PV system will be installed at the Nassau Botanical Gardens.

I assure colleagues here that The Bahamas is focused and determined to raise the level of RE deployment within our country. We have made great strides toward that end and continue every day on the journey to our goal of a minimum of thirty percent RE penetration by the year 2033, as stated in our National Energy Policy document. Further research and investment in our grid technology throughout our islands will enable us to go well beyond 30%. Through legislation, policy and initiatives, and pilot

projects, The Bahamas Government has been able to heighten awareness of alternative energy sources available to our citizens and encourage them to utilize these energy saving systems. The country has made major strides in our quest to lower our dependency on fossil fuels, but there is still great work to be done as we are extremely vulnerable to the impact of Global Climate Change, an example of which occurred with the passing of the category 4 Hurricane Joaquin over the central and southeast Bahamas for over 36 hours. Although The Bahamas' contribution to global warming can be considered negligible, like many SIDS, our focus must be on mitigation through the use of RE and lessened use of fossil fuels. Our commitment is unwavering in this effort as we understand that our country is exceptionally vulnerable, on a number of levels to the effects of climate change. That is why we must achieve a legally binding framework in Paris. We must have a new climate change framework for holding temperature increase to well below 1.5 degrees Centigrade

above pre-industrial levels. Loss and Damage must not be damaged or lost in Paris. If the sea level rises 3-5 feet, 80 percent of my country will no longer exist. As the oceans continue to acidify it is impacting the biodiversity and marine resources which sustain our way of life. However, this is just not about saving a way of life, this is about saving lives!

Thank you