Feature Address

by

The Hon. Dr. Keith C. Rowley

Prime Minister of the Republic of Trinidad and Tobago

at the

Energy Efficiency and Renewables Conference 2020

June 24th, 2020

Port of Spain

SALUTATIONS

• Senator the Honourable Franklin Khan, Minister of Energy and Energy Industries

• Honourable Fitzgerald Hinds, Minister of Public Utilities

• Mr Eugene Tiah, Chairman of the Energy Chamber of Trinidad and Tobago

• Dr Thackwray Driver, Chief Executive Officer of the Energy Chamber of Trinidad and Tobago

• Members of the Diplomatic Corps

• Permanent Secretaries and other Senior Government Officials

• Energy Companies Executives

• Renewable Energy and Energy Efficiency Stakeholders

• Members of the Media

• Ladies and Gentlemen

Ladies and Gentlemen, a very good morning to you all.

I am once again honoured to be among such a knowledgeable gathering, even if it has to be in this virtual setting. I must say that the hosting of this conference is a promising sign and testament to the resilience and adaptability of our local energy sector.

Despite the current restrictions that are in place regarding travelling and gathering, the Energy Chamber of Trinidad and Tobago has found a way to ensure that stakeholders have a forum to gather and engage in meaningful discussions and the sharing of ideas for a future that is of mutual benefit to all of us. Such discussions have become increasingly important, especially given the global events that have taken place in the first half of calendar year 2020.

Ladies and gentlemen, as we turn our attention to a topic that has undoubtedly been on the minds of many, which is the future of our energy sector, we find ourselves in an interesting position. We are on the cusp of an inevitable paradigm shift. For almost two decades now, the world has been preparing for such change. We have already begun experiencing the gradual transition to cleaner energy sources and renewable energy.

Three of the main drivers that prompted the start of the transition to renewable energy and the adoption of energy efficiency measures were the increase of global fuel prices, the increase of energy demand against the backdrop of finite resources, and ongoing threats from climate change.

While fuel prices have been gradually decreasing within recent years with the advent of the shale revolution, the events of recent months have caused a historical collapse of energy prices. The Covid-19 pandemic has caused an unprecedented reduction in energy demand as movement of people for work and or leisure almost ground to a halt. Meanwhile, the oil price war between Russia and Saudi Arabia resulted in a supply glut, exacerbating a situation that was already precarious.

Ladies and gentlemen, the combined effect of drastically reduced demand and energy prices could set back the global energy transition by reducing the push for adoption of energy efficiency policies. In its Renewable Energy Market Update for May 2020, the International Energy

Agency has noted that the Covid-19 crisis is negatively impacting the global growth in renewable power capacity. However, it is expected that renewable energy technologies would show resilience, with the majority of delayed projects still expected to come online.

The Covid-19 crisis has also presented an opportunity for renewable energy and energy efficiency measures. Two of the biggest European economies, France and Germany, are factoring green energy more heavily into their post-Covid recovery plans. Last month, these two countries called for an acceleration of the transition to green economies. In the UK, companies including Shell and BP are calling on the government to deliver a clean, inclusive and resilient recovery plan.

Our very own Roadmap to Recovery recommends stimulating activity in the area of energy efficiency and setting ambitious targets for increased power generation from renewables.

The drastic reduction demand in the energy industry caused by the Covid-19 pandemic is expected to be a relatively short-term event as more countries begin to cautiously emerge from lockdown.

But the dust is yet to settle.

The full extent of the new normal is still to be determined, and it may involve a globally lower energy demand if people continue to work from home and are reluctant to resume recreational travel in the near future. The Short

Term Energy Outlook in May 2020 from the IEA is expecting recovery of energy prices in the latter half of 2020, and recovery in demand during 2021.

While two of the three main drivers for the increased use of renewables and energy efficiency measures were negatively impacted by the Covid-19 pandemic and the Saudi Arabia-Russia oil price wars, the third, and most important factor remained relatively unchanged. The ongoing threats of climate change persist, even with a temporary reduction in global emissions over the lockdown period.

Increased levels of energy efficiency and power generation from renewables remain key components in the fight against climate change. As a Small Island

Developing State (SIDS), and with the majority of our CARICOM neighbours also being Small Island Development States, it is our duty, as an energy leader in the Caribbean, to make responsible decisions on behalf of our citizens, and to plan for our future generations.

Deployment of renewable energy for power generation has become a reality in many countries as they sought to provide energy security and protection from volatile energy prices.

However, we in Trinidad and Tobago have been sitting in a privileged position for many years, since becoming one of the earliest global adopters of power generation from natural gas, almost seventy years ago. For almost seventy years, our electricity sector has been shielded from the

volatility of energy prices and threats to energy security faced by many other countries, thanks to our available natural gas resources. While other countries focused their attention on moving away from traditional, “dirty” energy sources, such as coal, Trinidad and Tobago sat comfortably ahead of the curve, using one of the cleanest and most reliable fuels for power generation.

Perhaps we have sat comfortably for too long. While T&T’s access to reliable and affordable electricity has been insulated from energy price volatility and external threats to energy security, we are now faced with the challenge of climate change at our doors. Now more than ever, renewable energy and energy efficiency initiatives are needed as we come face to face with a rapidly changing energy and economic landscape, combined with

the threat of climate change.

However, in addition to looking to renewable energy and energy efficiency to secure a clean, sustainable future for generations to come, it is also our duty as the Government of the Republic of Trinidad and Tobago to ensure that we are maximizing the use of the country's rich natural resources to the benefit of the citizens. We must therefore re-examine how we derive the greatest value from our natural gas.

Renewable energy technologies are expected to bring electricity prices on par with the current average subsidized cost of electricity generated from natural gas in Trinidad and Tobago. Perhaps we can begin to look at our relationship with natural gas in the power generation

sector to see how this usage can be supplemented by alternative forms of energy.

The significant improvements in renewable energy and energy storage technologies over the years mean that we can now begin to consider gradual diversification of our local energy mix, knowing that we are not compromising the reliability and affordability of electricity supply to our citizens and industries, whilst also reducing our carbon footprint as a country.

All around the world, in a multitude of sectors, companies are leaning into the challenge of reducing their carbon footprints, for both the environmental and economic benefits. Some of the industries that are setting aggressive targets to increase energy efficiency and

reduce their carbon footprints include: agriculture and food processing, transportation, hospitality and restaurants, retail and manufacturing, and construction.

Unsurprisingly, the energy sector is leading the charge to secure their futures as the transition to low-carbon energy picks up momentum. Companies such as Shell, BP, Total, ConocoPhillips and ENI have set targets to cut emissions from their operations through carbon capture and consumption strategies, improved processes and technological development.

In April 2020, Shell's Net Carbon Footprint ambition, which was announced in December 2017, was accelerated. This means that Shell is now aiming to reduce the net footprint of its energy products by 65% by 2050, with an interim

target of a 30% reduction by 2035. Shell has demonstrated its firm commitment by taking the bold step of linking the remuneration of its executives to the established targets.

In February of this year, BP announced its intentions to become a net zero company by 2050 or sooner, supported by aims such as a 50% cut in the carbon intensity of BP products, and an increased proportion of investment into non-oil and gas businesses over time.

Danish energy giant Ørsted is aiming to become carbon neutral by 2025, having already reduced their carbon emissions by 86% from 2006 to 2019. The company intends to phase out coal completely by 2023 and to replace all vehicles in its fleet with electric vehicles, as well

as offset any residual emissions through verified, measurable and additional carbon removal projects by 2025.

So we can see that the race to develop successful low-carbon business models is evidently well underway as the world's major energy companies compete to overcome the challenges and quickly adapt to the new energy reality. All this while collectively working towards the stringent targets set out in policies and agreements such as the Paris Accord.

As we have just heard from Dr. Driver, our local energy companies, spanning the upstream, downstream and service companies, are determined not to be left behind. I am encouraged to hear that such a great number and

wide cross-section of our local energy companies have risen to the challenge of increasing energy efficiency and conservation in their operations by signing the Energy Efficiency Declaration. I applaud the initiatives taken by these companies and by the Energy Chamber in the interest of the country.

Rest assured, ladies and gentlemen, that the Government of the Republic of Trinidad and Tobago has not been sitting idly by, as a mere observer, while the rest of the world adapts and adopts renewable energy and energy efficiency practices and technologies in a bid to mitigate the effects of climate change.

On April 22nd, 2016, Trinidad and Tobago, along with one hundred and seventy-four (174) other countries, signed

the Paris Climate Change Agreement (Paris Agreement), in New York, USA. On February 22nd, 2018, Trinidad and Tobago deposited its Instrument of Ratification, signaling the formal commitment to reduce this nation’s Greenhouse Gas (GHG) emissions.

T&T's Nationally Determined Contribution (NDC) under the United Nations Framework Convention on Climate Change (UNFCCC) is based on its Carbon Reduction Strategy. The Carbon Reduction Strategy was developed for the major emitting sectors, namely power generation, transportation and industrial sectors. It is consistent with implementing the provisions of the National Climate Change Policy. The aim of Trinidad & Tobago is to achieve a reduction in overall emissions from the three (3) sectors by 15% by 2030 from Business as Usual (BAU),

which in absolute terms is an equivalent of one hundred and three million tonnes (103,000,000) of carbon dioxide equivalent (CO_2e).

The Government is committed to reducing this country's Greenhouse Gas emissions through the use of cleaner forms of energy, and the promotion of Renewable Energy and Energy Efficiency. This commitment was elaborated in Government's National Development Strategy "Vision 2030", under "Theme V - Placing the Environment at the Centre of Social and Economic Development". The incorporation of RE and EE into the country's energy mix was identified as key medium-term sustainable development goals for Trinidad and Tobago over the next ten (10) years. Further to the National Development Strategy, the Government has also committed to the 10%

RE power generation by 2021, which was outlined in the 2015/2016 National Budget.

To this end, as you may be aware, the Ministry of Energy and Energy Industries (MEEI) recently announced the winning bid in response to a Request for Proposals (RFP) for Utility Scale Renewable Energy Projects. A consortium formed by Lightsource Renewable Global Development Limited (Lightsource BP), Shell Trinidad and Tobago Limited and BP Alternative Energy Trinidad and Tobago Limited submitted successful proposals for two projects. These projects will generate 92.2 MW of electricity from solar photovoltaic (PV) sources at Couva; and 20 MW of electricity from solar PV sources at Trincity, at a cost that is on par with the current electricity prices in T&T.

In March of this year, I had the pleasure of meeting BP's newly-appointed CEO, Mr. Bernard Looney, in London. During our meeting, we had rich discussions on the future of renewable energy and the possibility of a partnership in this area for T&T. The involvement of major energy players with the expertise and track record of managing large projects bodes well for this particular utility-scale RE project, and will set the tone for the RE industry in T&T.

In May 2020, the inaugural meeting of an Inter-Agency Steering Committee was held. This Steering Committee is tasked with assisting in facilitating and expediting the completion of key documents and finalization of Power Purchase Agreements (PPA). Among other duties, the Committee will also provide technical and legal input throughout the development of the project.

At this time, the Renewable Energy Division (RED) at the Ministry of Energy and Energy Industries (MEEI) is engaged in numerous other initiatives. These initiatives range from:

- utility scale to distributed and smaller scale RE projects;
- education and awareness projects;
- participation in technical studies;
- and development of regional and local standards and codes.

Another area that has shown great potential for Trinidad and Tobago is the hydrogen economy. You may recall that in our Budget Statement for Fiscal Year 2020, this Government announced its intentions to collaborate with

key stakeholders to explore different applications of hydrogen within the local economy.

Over the last few weeks, we have seen unprecedented support being given to the hydrogen economy, from long-time supporters like Japan, to newcomers like Australia. Germany's economic stimulus package has a €7bn provision for hydrogen.

Trinidad and Tobago stands to benefit from the rapid development in hydrogen technology and policies. Our ammonia and methanol plants utilize a significant amount of natural gas, as a source of both hydrogen and carbon. Hydrogen production from the electrolysis of water can provide an alternative source of hydrogen for the ammonia industry. In the case of the methanol industry, some of the

natural gas feedstock can be supplemented by hydrogen produced by electrolysis, because the natural gas remains the primary source of carbon.

The use of hydrogen to supplement the natural gas feedstock of our petrochemical industry, whether produced from existing excess power generation capacity or from renewables, is a promising launching point for a local hydrogen economy.

I see that a discussion on opportunities for hydrogen development in T&T is on the agenda later this afternoon. We welcome this type of discussion and I look forward to hearing updates from NewGen Energy Limited on their progress since the Energy Conference in February of this year.

Another utility-scale RE project in the works at the Ministry of Energy and Energy Industries is a Waste to Energy Facility, to produce up to 10MW of electricity at the Beetham Landfill. Bids for this project are in the process of being evaluated. In terms of distributed and smaller scale RE projects, the MEEI is engaging with stakeholders to review the Feed-in-Tariff (FIT) Policy, which would allow for grid-interconnection for renewable electricity generators in T&T.

A key element that is necessary for the adoption of renewable energy and efficient energy practices is a change in consumer behaviour. As I have mentioned before, in T&T we have gotten accustomed to using our electricity quite liberally. Education and awareness

projects, such as those being undertaken by the Renewable Energy Division at the MEEI, are crucial in ensuring that residential and commercial consumers, who account for approximately 45% of the country's electricity consumption, are fully aware of the need for a necessary change in consumer behaviour, and the tools available to them to actualize this shift.

Initiatives being taken by the RE Division include the installation of Solar Light Emitting Diode (LED) lighting in the nation's play parks and basketball courts, the proposed installation of two (2) electric vehicle charging stations at UDeCOTT's Hyatt carpark, and planning and hosting events for CARICOM Energy Month. The Division also engages with international bodies and local stakeholders to secure funding and expertise for projects

through avenues such as the United Arab Emirates (UAE) Caribbean Renewable Energy Fund (CREF) Project, and the Global Climate Change Alliance Plus (GCCA+) Initiative.

In addition to developing awareness amongst consumers, there is also an urgent need to develop the necessary competencies amongst our local human resources to manage and support the RE and EE industry as it begins to take root in T&T.

The Ministry of Public Utilities has also been working to ensure that T&T is well placed to meet its commitments under the Paris Accord. In September 2019, a Cabinet-appointed multi-sectoral committee, led by the Ministry of Public Utilities, completed and delivered the Energy

Conservation (EC) and Energy Efficiency (EE) Policy Action Plan for 2020 to 2024. The EC & EE Policy and Action Plan will be reviewed by Cabinet before implementation can begin but I will share with you a few of the nine (9) short-term goals identified in this Action Plan. These are:

a. To mobilise our citizenry to be more energy and resource conscious and to actively practice EC&EE in the conduct of their daily lives and in the operation of their businesses;
b. To advance the achievement of our commitments under the Paris Agreement as well as the UN SDGs for reducing Greenhouse Gas Emissions;
c. To aggressively pursue EC&EE in all sectors of the economy, working with key stakeholders to create a

new industry and build an effective enabling environment;

d. To invest in the continued development of the power sector to provide an adequate, reliable and resilient electricity supply consistent with our economic and social development goals

From the goals that I have presented to you, we can see that a collaborative effort is needed to achieve these goals. We all have our part to play, from the Government, to major companies to the average citizen.

Ladies and gentlemen, as I conclude, I wish to reaffirm this Government's commitment to renewable energy and energy efficiency initiatives in Trinidad and Tobago. I eagerly anticipate the many exciting and promising

initiatives on the horizon for the energy sector, both globally and locally, and I stand ready to do everything within my power to ensure a reliable and affordable electricity supply and a sustainable future for Trinidad and Tobago.

As I take my leave, I would like to once again thank the Energy Chamber of Trinidad and Tobago for the work that they continue to do to stimulate discussion in the local energy sector. I applaud all of you for remaining firmly committed to the shift to a low-carbon economy, despite the distractions that abound in the form of the historically low demand for oil and the subsequent unprecedented decline in prices.

I wish you all a productive and enlightened conference in

the coming days and I look forward to the change that can be brought about by the outcome of these dynamic discussions.

Ladies and gentlemen, thank you very much.