

Government of the Republic of Trinidad and Tobago

ADDRESS

BY

THE HONOURABLE STUART R. YOUNG, M.P.

MINISTER OF ENERGY AND ENERGY INDUSTRIES

AND

MINISTER IN THE OFFICE OF THE PRIME MINISTER

AT

TRINIDAD AND TOBAGO ENERGY CHAMBER CONFERENCE

LEADING THE ENERGY TRANSITION

JUNE 7 2021

Salutations:

Dr The Honourable Keith Rowley, Prime Minister of the Republic of Trinidad and Tobago

The Most Honourable Andrew Holness, Prime Minister of Jamaica;

His Excellency, Dr. Mohammed Irfaan Ali, President of Guyana;

His Excellency, Chandrikapersad Santokhi, President of Suriname;

Mr. Dwight Mahabir, Chairman of the Energy Chamber;

Dr. Thackwray Driver, President and CEO of the Energy Chamber;

Executives of Energy Companies and Industry Leaders;

Specially invited guests;

Members of the Media;

Ladies and gentlemen,

I am pleased to participate in this year's Energy Chamber Conference as the Minister of Energy and Energy Industries at an exciting and pivotal time not only in Trinidad and Tobago's energy history but at a time when the global energy sector is rapidly evolving, literally, before our eyes.

I intend to use my short time on stage this morning, to set out the Government's vision, our plan, our intentions to carry Trinidad and Tobago forward through the transitions taking place. Allow me the opportunity to share with you how we can

navigate in this dynamic fossil fuel world leveraging the many advantages that we have thereby ensuring our continued successful and beneficial participation on the global platform as a country and with our stakeholders who have invested in Trinidad and Tobago over the decades.

It would be remiss of me not to recognize my predecessor, Minister Franklin Khan. Minister Khan was a dear colleague and a friend. Someone I worked closely with and had a great deal of respect for. 'Frankie' contributed to this Country and to this industry in many ways and was a proud Trinidadian through and through. I salute him and thank him.

I also thank the Honourable Prime Minister of Trinidad and Tobago, Dr. Keith Rowley, for the confidence he placed in me when he assigned me to the role of Minister of Energy and Energy Industries at a critical and crucial time in the sector. The responsibility is significant, as we plot and navigate, in difficult times, to ensure the continuation of our oil and gas sector in this rapidly changing environment.

This Conference is highly reputed both locally and internationally and is well known for its content, the quality of its participants and the relevance of its agenda. This year's Conference is no different and its theme "Leading the Energy Transition" is highly topical.

There is a global movement transitioning from traditional sources of energy to the use of renewables and cleaner forms of energy. As part of this transition we are witnessing the mass introduction of electric transport infrastructure, energy storage, improved transmission and distribution networks, coupled with the increased usage of technologies to improve energy efficiency. The transition is a massive undertaking with major implications for both developed and developing countries. There is a global call for cleaner energy and a reduction in the carbon footprint at a much faster pace than may have been envisaged five to ten years ago.

In this transition there will be triumphs and casualties. As an oil and gas economy, Trinidad and Tobago is vulnerable but we are not flat footed. We have to act now. The government is conscious and aware of how stakeholders in the industry are being affected. We have some of the leading multinational players as major stakeholders here in Trinidad and Tobago. We are confident that Trinidad and Tobago is well positioned and poised to manoeuvre to ensure the continuation and growth of the sector for decades to come.

We must identify what are the advantages we have and leverage them. This is happening, and the government has demonstrated from top down, that we are willing to work with stakeholders to find the balance that is required to continue mutually beneficial relationships. We must all recognize that times are changing and we must work together to find solutions. We are prepared to be creative and flexible to ensure longevity. This has been demonstrated by the Cabinet and the Ministry of Energy and Energy Industries as we have negotiated and re-negotiated many deals in the sector in the last five years. This will continue. We will stay

engaged and will think outside of the traditional boxes as we appreciate the competition for global growth and capital investment.

However, in doing so, we ask that our partners in the industry recognize that our shareholders are the Citizens of Trinidad and Tobago. Those of you who have interacted with the Honourable Prime Minister and me over the past six years appreciate that we take our responsibility to ensure that the people of Trinidad and Tobago get fair returns for their resources, very seriously. They are our shareholders. You would also bear testimony that we recognize and appreciate that stakeholders also need to ensure returns for their shareholders and it is our commitment to continue working day and night to find the balance ensuring that there are fair and sufficient mutual returns.

There was once a notion that fossil fuels and particularly oil would go into an irreversible decline. That notion was debunked. Today, however concerns about carbon emissions and climate change mean that it is increasingly unlikely that the world's reserves of oil and gas will ever be exhausted. Instead of peak oil we are looking at the point where we have peak demand for fossil fuels followed by a gradual decline in demand due to environmental concerns. It seems that it is no longer going to be a situation when the oil resources run out, the pressure is on to move away from the dependency on oil to cleaner forms of energy.

As the world navigated the pandemic that is COVID-19 one of the effects, in addition to an increased volatility in commodity prices, was that the transition taking pace was quickened. Major players cut costs significantly, including the

plans for oil and moves to invest more into renewables. These changes are taking place and we must move swiftly to engage and continue to encourage investment in the industry in Trinidad and Tobago. We have all witnessed changes taking place in the past months and even weeks with Courts and shareholders taking unprecedented action against major multinationals to increase pressure to reduce carbon footprint.

There is much conversation taking place about global reduction of carbon footprint and the obligations and projections coming out from the 2015 Paris Agreement on climate change. Countries are being challenged to reduce global warming by, inter alia, reduction of fuels and emissions.

Interestingly, the US Energy Information Administration has projected that there will be a 50% increase in world energy usage by 2050 with renewables accounting for 28% of primary demand and fossils fuels oil, gas and coal accounting for 69% of primary demand with nuclear accounting for the remaining 3%.

There have been other projections such as the BP 2020 Energy Outlook which provided three scenarios for primary energy demand leading to net zero carbon dioxide by 2050 comprising a business as usual case, a rapid case and a net zero case. Under these scenarios Renewables are projected to move from 5% of primary energy in 2018 to 28% in business as usual, 40% in the rapid case and 60% in the net zero case by 2050. Of the hydrocarbons, natural gas is the most resilient

remaining at the current level in the rapid case, 35% higher in business as usual but lower by 40% from current levels by 2050 in the net zero scenario. Oil demand is projected to decline marginally in business as usual, by 50% in the rapid case and 80% in the net zero case by 2050.

The implications for the wider global community are that with a redirection of capital into low-carbon energy markets, and the effects of the pandemic, investment by companies in the upstream energy sector have been declining. In 2020 global oil and gas corporations were reported to have reduced capital expenditure by 34%. The net outcome has been a drop of proven reserves of oil and gas which will impact on production in the outer years and could create a demand/supply inequity with a corresponding hike in energy prices. It is therefore crucial that investment in the upstream sector be maintained even during the rapid transition to renewables and other low carbon alternatives.

In reducing capital expenditure, companies refocused their efforts on areas where they have a competitive advantage and could deliver greater productivity at lower cost. They have redesigned their portfolios around particular regions, types of asset, the level of country risk, and opportunities for value chain integration. It is in this environment that Trinidad and Tobago is competing for upstream investment. We have had a harmonious and mutually beneficial relationship with upstream companies thus far. A testimony to the adage that "Investment goes where it is welcomed". However, the relationship is not taken for granted and as I stated, we will continue to work at maintaining and improving it.

As countries and corporations trend to a carbon neutral world, the reality is that the increase in energy demand by a growing global population, rising incomes and poverty alleviation measures cannot be met in the medium term by renewable technologies and energy efficiency. The key to the abatement of the negative impacts is the investment in low carbon technologies and the rebalancing of portfolios. We believe that Trinidad and Tobago is well positioned to add value to the balance sheets of the stakeholders invested here.

We intend to work with the industry to transition to cleaner and more efficient plants and products. There is a lot of opportunity here in Trinidad and Tobago as the plants in the gas sector can be transformed with the right investments to ensure cleaner and lower carbon energy. We will continue to work with the various downstreamers as there are also exciting opportunities in ammonia, methanol and other commodities.

Trinidad and Tobago, as a net exporter of oil and gas, is cognizant of the impact of greenhouses gases on the climate. As a result, the Government has undertaken a number of measures aimed at mitigating the impact of greenhouse gases. In the transportation sector, CNG has been actively promoted as it produces fewer harmful emissions than gasoline. In the power generation sector, we have started the transition to green energy with the planned introduction of new capacity from solar energy and there are plans to utilize excess power in the system to produce hydrogen from electrolysis. This is in addition to incentives provided for the adoption of solar energy by households and enterprises. We are looking forward to

the completion of the Joint Venture Solar Park project and thank BP and Shell for this commitment. We will work assiduously to have this completed.

In coming months we look forward to the exciting development of a hydrogen industry which would keep us competitive in the global markets.

In pursuing our goal of a reduction in the carbon footprint we are exploring measures aimed at carbon capture, utilization and storage. However, you need to quantify the extent of emissions in order to prescribe solutions and there is an ongoing exercise for verification of country's greenhouse gas emissions. A study commissioned by the Ministry of Planning in 2015 is to be updated not only to gain an accurate account of the greenhouse gas emissions but also to engender a shared responsibility in reducing the country's greenhouse gas emissions.

The information gained from the study will be made available to a Committee under the Chairmanship of the Ministry which is currently pursuing measures aimed at carbon capture utilization and storage. The benefits include not only the sequestration of carbon dioxide but also has the potential to improve our oil production through carbon dioxide flooding.

It is estimated that the country emits approximately 40 million tons of carbon dioxide which has the potential to be utilized in oil recovery while reducing the country's carbon footprint. In May 2020, the Ministry approved an EOR CO pilot project operated by Columbus Energy in the Inniss-Trinity IPSC

(Guayaguayare). The outcome has been positive and there is a potential for additional recovery of up to 9 million barrels of oil. This form of initiative is welcomed by the Government and will be supported.

The transition to renewables requires significant investment. In the present climate, the oil and gas sector is best equipped to provide the financial resources to facilitate the transition to a low carbon economy. In this regard the road ahead is clear. We must maximize the monetization of our hydrocarbon resources or risk leaving them stranded. As the Minister of Energy and Energy Industries, I have started a process of engagement with all upstream stakeholders to determine what is required to bring on stream or to exploit in the shortest time frame all sanctioned and unsanctioned projects and prospective resources.

This conversation has already started with the state oil company Heritage Petroleum Company Limited which possesses the majority of the country's prospective crude oil resources. In our consultation, the company has mapped out an action plan aimed at optimizing exploration and development of its acreage on land and in marine areas. A key element in the action plan is attracting private investment which has shown a renewed interest in oil exploration with the improvement in the oil price. In this regard the company has issued new land sublicences to a number of operators and executed a joint venture agreement with EOG Resources Limited for the development of acreage in South West Soldado. The company is also currently reviewing expressions of interest from several parties in respect of its Jubilee field which is candidate for EOR CO flooding.

These initiatives are designed to maintain the momentum in oil production which has been buoyed by the Touchstone Chinook oil discovery and redevelopment work by BHP on its Block 3a acreage and is projected to increase from 57,000 bopd to 80,000 bopd by 2022. I will personally continue to work with and drive Heritage and other oil producers to ensure that we maximize oil production with a horizon of 2028. We welcome any expressions of interest especially by smaller and nimble operators who are interested in exploration and production of fields in Trinidad and Tobago.

In 2020, the domestic gas industry experienced a reversal in the upturn in production. This was occasioned by the negative impact of the global pandemic which delayed the implementation of projects, and which resulted in the temporary closure of petrochemical plants due to demand destruction. Major turnarounds were also undertaken at upstream production platforms and at ALNG Train 1 and Train 3. These activities resulted in a reduced gas intake and a curtailment of gas production by upstream companies.

An uplift in gas production is expected in 2021 with first gas from BHP's Delaware and Ruby fields and Shell's 5c project comprising its Bounty and Endeavour fields on the East Coast Marine Area. The momentum continues in 2022 with BPTT's Matapal in the South East Coast Marine Area and its Cassia Redevelopment Project, Shell's Colibri Project comprising its Cassra and Orchid field in the North Coast Marine Area and EOG's Osprey East field in the East Coast Marine Area. These projects will add one (1) billion cubic feet of gas per

day to the existing production by the end of 2022. At which time it is expected that gas production would return to the pre-covid 2019 levels.

Beyond 2022 there is bank of upstream gas projects on land and in the shallow and moderate marine areas which are awaiting sanctioning. These projects possess proven reserves and contingent resources amounting to 3 tcf and probable and possible reserves and contingent resources of approximately 2 tcf. These projects have the potential to produce up to 1.8 bcf per day. In addition, there are the deepwater gas resources of BHP's Calypso Gas Development which are currently being appraised but are estimated at approximately six (6.0) tcf with a potential gas production of 600 mmcf per day to 1000 mmcf per day. This development is one that I will focus on and prioritize. I intend to engage BHP and explore new opportunities as they work out plans to monetize this gas and bring it to production.

The near-term outlook for the demand for oil and gas and petrochemicals is positive. The global demand for oil and gas and petrochemicals has recovered following the advent of covid-19. Oil prices have consistently surpassed US\$60 per barrel, Henry Hub our marker gas price has been near US\$3 per mmbtu and petrochemicals ammonia and methanol have rebounded from the low 2020 prices. Ammonia prices which reached as low as US\$180 per ton have reached as high as US\$600 per ton. Methanol prices have moved along a similar price curve.

We therefore must seize the opportunity to bring these resources to market at the earliest opportunity as we prepare for a low carbon economy. My focus at this

juncture is the engagement of the upstream companies to achieve the approval of all unsanctioned projects in the shortest possible time. In this regard, the Ministry is currently in advanced negotiations with Shell Trinidad and Tobago Limited on the terms and conditions of the Production Sharing Contract for the Manatee Field for which the recoverable natural gas reserves are estimated at 1.8 tcf. Subject to the completion of the negotiations and approval of Cabinet, I hope to make an announcement shortly on this project. Other announcements will follow as I engage the other upstream companies on their plans for the monetization of their assets.

The engagement with upstream companies is not limited to unsanctioned projects but will include their plans for prospective resources. All companies will be requested to provide a work programme and definitive schedule for the maximum exploration and development of licensed and contracted acreage. Acreage not required for exploration and/or development must be returned to state. Such cooperation is critical as the Ministry over the next twelve months will be embarking on a deep-water bid-round, an onshore bid-round and a shallow-water bid-round. In addition to open acreage, shallow acreage would be considered for inclusion in the bid-rounds. The bid-rounds are essential for identification and sustained replacement of replacement of oil and gas reserves. Over the period 2016 to 2019 Government has been successful in achieving a 100 per cent replacement of proven gas reserves. Further, as part of the bid process I have been reviewing the fiscal terms which would be applicable to future contractual arrangements and your comments will be appreciated.

In the engagement with the Upstream, I also propose to address an inequity in the gas supply arrangements between the upstream, and ALNG and the downstream. Whereas the LNG producers have long term contracts the downstream companies are afforded short term contracts of five-year duration. This limits the ability of downstream companies to plan long term and subject them to a price revision every five years. This has led to an inordinate amount of resources being focused on negotiations instead of business operations. There has been meaningful progress in the negotiations by NGC on outstanding contracts with downstream companies and it is my intention to make the cycle of protracted negotiations a thing of the past.

We are all in this together and must work to align the upstream plans for exploration and production with the downstream demands outside of LNG.

As regards LNG, the Government is currently in discussions with the LNG stakeholders for restructuring of the LNG business in Trinidad and Tobago. It has been determined that current model is not most efficient. It is proposed to consolidate the existing ALNG joint ventures into a Unitized Facility with a common ownership and commercial framework. The Government is amenable to this proposal and a Government Appointed Team is in negotiation on a new commercial structure and long term licence for the proposed facility.

The continuation of a viable downstream sector and a LNG industry is essential to development and monetization of the country's natural gas resources. The exploitation and monetization of these resources carry increased significance given

the drive to a low carbon world. Time is of the essence. As Government, we will be moving with dispatch to monetize these resources by ensuring an enabling environment that ensures their maximum recovery and development.

As a Government, we have always been in the forefront of change in the energy sector of Trinidad and Tobago. We welcome, embrace and overcome challenges. The adaptation to the transition to a low carbon economy is a major undertaking. However, we are confident that the transition is achievable and, in our journey, we look forward to the co-operation and collaboration of our energy stakeholders, many of whom are aligned with the Government in the transition to a low carbon economy.

Your deliberations at this year's Energy Conference are important. The movement to a carbon neutral world is consistently evolving and as policy makers we depend on your expertise and advice in the setting of goals and structuring of strategies for their achievement. I therefore look forward to the outcome of your deliberations. In closing let me express my congratulations to the Energy Chamber on the staging of another premier event and to wish participants a successful conference.

I thank you and look forward with renewed enthusiasm as we chart the course for our future.

Minister