



**GOVERNMENT OF THE REPUBLIC OF TRINIDAD AND TOBAGO
OFFICE OF THE PRIME MINISTER**

Keynote Address

by

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It is my pleasure to be here with you all today at this the 2023 Energy Conference staged by the Energy Chamber of Trinidad and Tobago. The theme of this year's Conference "Navigating a Complex Energy Future" is highly relevant as the global energy market is at a critical point and hydrocarbon countries like ours, and our neighbours Guyana and Suriname, must ensure that we are part of the conversations taking place.

The ongoing energy crisis, the role of fossil fuels, issues of energy security and the cost and limitations of renewables, have highlighted the challenges of the energy transition. The situation is, as it always is, further complicated by geopolitics and we do have the Ukraine - Russian War which is undermining efforts to achieve energy security and energy affordability, across the world.

The World Bank in its June 2022 global outlook reported that Russia's invasion of Ukraine and its effects on commodity markets, supply chains, inflation, and financial conditions has

steepened the slowdown in global growth. All this is happening in the middle of a stubborn pandemic.

A key concern raised by the World Bank is the possibility of high global inflation accompanied by slow growth, reminiscent of the stagflation of the 1970s. This according to the World Bank could result in a sharp tightening of monetary policy in advanced economies, which could have potentially harmful consequences on highly indebted developing and emerging markets. Therefore, Government and Business must work together to develop strategies to ensure that the pursuit of critical energy goals remains on track. This is even more important to energy-driven countries such as ours.

This analysis is shared by many of our associate leaders and was a major plank in the discussions that Caricom leaders had with the President of the United States at the recently concluded Summit of the Americas. It is out of this background that President Biden proposed to us that we form a Caricom/US team

chaired by Vice-President Kamala Harris and co-chaired by a Caricom leader (yours truly). The main focus of our assignment is to establish and develop sustainable energy security for the Caribbean region. This development has seen many contacts and discussions between Caribbean/US leaders and technocrats who are currently engaged in delivering on the promise of these new initiatives.

In this uncertain global environment, energy is a key if not the major factor for economic growth which has a direct impact on standards of living. For industrialisation and economic development, economic growth and energy consumption have a positive and linear correlation. It is established that a rise in the level of energy consumption translates to a corresponding rise in the level of GDP. In the past year the importance of energy security has been brought to the forefront of conversations around the world.

Global energy consumption rose consistently every year over the last two decades except for 2009 and 2020, following the global financial crisis and the coronavirus pandemic. We do not expect this pattern to be reversed anytime soon.

In the last decade 2011 to 2021 energy consumption has grown by 1.3% over that period, with the increase in energy consumption being driven by Non-OECD countries. Energy consumption in Trinidad and Tobago has followed the trend of OECD countries with energy consumption falling marginally that is by 2.9% over the period 2011 to 2021.

The US Energy Information Administration (EIA) has predicted that by 2050, global energy use will increase by 50% compared with 2020, mostly a result of Non-OECD economic growth and population, particularly in Asia. Liquid fuels remain the largest energy source, but renewable energy use grows to nearly the same level at 27% of total energy consumption. Supply of petroleum and other liquids continue increasing to meet growing

world demand through 2050. Natural gas production increases worldwide to help satisfy key demand markets and represents 22% of total project energy consumption. We, in Trinidad and Tobago, have been a part of the conversation professing the benefits and sustainability of energy security by using natural gas. Our Minister of Energy and Energy Industries the Hon. Stuart Young and myself spent significant time in 2022 having conversations globally as to the importance of natural gas and its derivatives and the role that Trinidad and Tobago plays and will continue to play in this particular space.

Trinidad and Tobago, one of the earliest exporters of LNG and a country whose economy is very heavily dependent on sales of this product, has participated fully, at the highest levels of discussions of the recent forum of Gas Exporting Countries which was held in Qatar in February 2022. At that gathering it was projected that the demand and utilization of gas will grow steadily

towards 2050 even as sustained efforts are made to bring about a reduction in general fossil fuel utilization.

The increase in energy consumption has seen growth in global GDP by 27% over the period 2011 to 2021. However, based on the outlook of the IMF and other commentators such as the World Bank the prospects for global growth in the near term are not promising. The World Bank has predicted that global growth will drop from 2.9% in 2022 to 1.7% in 2023. The IMF in its October 2022 release predicted that global growth would fall from 3.2 percent in 2022 to 2.7 percent in 2023 and more recently on January 12, 2023 maintained its position. In monitoring the situation, the IMF has suggested that monetary policy should stay the course to restore price stability, and fiscal policy should aim to alleviate the cost-of-living pressures while maintaining a sufficiently tight stance aligned with monetary policy.

Trinidad and Tobago's GDP is closely aligned with the performance of the energy sector. With the volatility in energy

prices, the contribution of the sector to GDP fell from 46.8 per cent in 2011 to 26.8 per cent of GDP in 2021. The preliminary results for 2022 show an improved contribution of 33.7 per cent of GDP due to the start-up of new major upstream projects and buoyant energy prices. However for 2023, the outlook is not as buoyant as oil and gas prices are predicted to be average to moderate, due to the global economic slowdown, tight hydrocarbon markets and OPEC's conservative production strategy. The EIA has predicted that West Texas Intermediate, our benchmark crude, will average US\$77 per barrel in 2023 as compared to the 2022 average of US\$95 per barrel. Henry Hub is predicted to average US\$4.90 per MMBtu in 2023 as compared to the average price of US\$7.42 per MMBtu in 2022.

The consistently low Henry Hub price, over the years, is the reason that we have committed so much effort aimed at moving away from Henry Hub and the Spanish fuel prices in the marketing arrangements for gas processed for LNG in the

Restructured Atlantic LNG. The history and projections of the new marker prices show that they are superior to Henry Hub and will generate greater revenues for the country. This has been substantiated by the revenue earned for those LNG contracts that are already operating under these arrangements. We took on the task in 2018 and 2019 of beginning the difficult re-negotiating our energy contracts across the whole value chain and I am pleased to report that as a direct result of these negotiations the citizens of Trinidad and Tobago have been earning higher revenue for our gas from upstream, midstream and downstream due to the new formulae that were agreed to.

Had these negotiations not been successful, given the lower production volumes, and the initial lopsided sharing of benefits then it is easy to calculate the dire consequences for the national revenue streams which we would have been experiencing at this time. Another important subset of the domestic energy sector is the downstream industry which is dominated by petrochemicals,

ammonia and methanol. Within recent years the industry has had to overcome severe economic conditions brought on by faltering demand, oversupply and of course the pandemic. The growth in global GDP occasioned by increased demand and robust petrochemical prices has helped the industry to weather the storm. This has enabled a resurgence in the domestic petrochemical industry.

Ammonia prices which fell to US\$226 per ton in June 2020 have steadily increased reaching \$1,300 per ton by the start of 2022. Argus Consulting Services in its 2023 Ammonia Outlook has projected a decline in ammonia prices from US\$995 per ton in first quarter 2023 to US\$445 per ton by the third quarter 2023. The decline in ammonia has been attributed to an oversupply which is generated by the prospect of an improved supply from Trinidad, Libya and Brazil and lower demand from European countries.

Methanol, the other major petrochemical followed a similar path as ammonia. Methanol prices which fell to US\$148 per ton in May 2020 steadily increased reaching US\$437 per ton in October 2021 but have been trending downwards as supply exceeds demand. Argus Consulting Services has predicted moderate growth in 2023 with prices ranging between US\$298 to US\$328 per ton. These price movements are symptoms of the global energy commodity prices that we are subject to and one of the ways that my government has sought to mitigate the effects of volatility is the negotiating of new pricing formulae across the value chain.

Based on information provided by the World Bank, through its World Integrated Solution, Trinidad and Tobago ranks as one of the largest exporters of ammonia and methanol. In 2021 Trinidad and Tobago's exports of methanol were valued at US\$1.53 billion or 17.7% of total global methanol exports and the country ranked second to Saudi Arabia. As regards ammonia, exports for 2021

were valued at US\$1.68 billion or 19.2% of total global exports and the country ranked as the number one exporter.

These achievements have been as a result of the collaboration of stakeholders, namely the Government, NGC and the Upstream, in managing a tight gas situation. In this regard NGC must be complimented for its role in ensuring the supply of gas to the downstream. This has been achieved through the execution of twenty-nine upstream gas sales contracts, ninety-seven downstream gas sales contracts and the resolution of “**failure to supply gas**” claims amounting to over TT\$8 billion. The National Gas Company will shortly begin the round of discussions on new gas sales contracts.

We are cognizant that the petrochemical industry is undergoing major changes. There is a universal and unrelenting movement towards low carbon and “greening” of petrochemicals. Therefore, if Trinidad and Tobago is to maintain its position, as a leading exporter of ammonia and methanol, or even as a mere participant

in the future international market we must embrace the change.

Current technology offers transitional abatement options to existing processes, such as carbon capture, utilization and sequestration, pending generation of feedstock from renewables.

The initiatives for expansion of renewables in our energy mix and the development of a hydrogen economy is in keeping with our strategy for the greening of the economy, which includes the generation of renewable feedstock in the production of petrochemicals.

We are in a period of global economic uncertainty. The outlook is subject to multiple risks which include worsening global growth prospects, the pace of recovery in China, macroeconomic uncertainties, a prolonged and deeper conflict in Ukraine along with protectionist trade policies. In this time of global market uncertainty one inescapable fact is that the world needs energy in increasing quantities to support economic and social progress and to build a better quality of life, in particular in developing

countries. The question is, who will supply that energy and in what forms and volumes. It is Trinidad and Tobago and its Caribbean neighbours (Guyana, Suriname, Barbados and Grenada) expectation to be ever cognizant of the necessary changes to be made whilst remaining in the marketplace for energy as long as there is such a market for the careful supply of hydrocarbon products.

Today most of the energy the world consumes comes from hydrocarbons, with crude oil being the dominant source of transportation fuels. Even with significant strides in improved energy efficiency, global energy demand is expected to rise by about fifty percent by 2050. All sources of energy are needed as the global population is projected to grow from current estimates of eight billion people to ten billion people by 2050. The United Nations in its 2022 Sustainability Report indicated its Goal 7 was not achievable. Goal 7 is about ensuring universal access to clean and affordable energy by 2030. However rising commodity,

energy and shipping prices have increased the cost of renewables worldwide and it is estimated that some 670 million people will not have access to energy in 2030.

The UN has determined that achieving energy and climate goals will require continued policy support and the mobilization of public and private capital for clean and renewable energy, especially in developing countries. The recently executed Agreement between the Government of Trinidad and Tobago and the Consortium of Lightsource bp, BP and Shell on the 112.2 Mw Solar Utility Project is an affirmation of the fundamentals required to achieve this objective.

Construction of the Solar Parks is scheduled to commence in the first quarter 2023 with full operationalization of the Project by fourth quarter 2024. The Solar Utility Project will, on completion, meet 8% of the country's power generation requirements. It is the Government's stated objective to increase power from renewables to meet 30% of the country's requirements. This

current project is the largest in the English-speaking Caribbean and I have challenged the Ministry of Energy and Energy Industries, in a whole of Government approach, to move quickly to bring on more renewable energy projects on stream.

A review of the country's power requirements has projected peak demand to increase from the 1400 MW in 2022 to 1600 MW by 2032. During this period the PPAs of two of the country's major independent power producers representing 40% of the country's installed generation capacity are due to expire. We therefore have an opportunity to achieve much of the target of 30% of power from renewables. However the transition to renewables is not without its challenges. Prices for wind and solar power increased nearly 30 percent in the past year due to global supply chain issues, significant price increases for components and increases in labour costs in producing countries, reversing a decade of cost declines. Another hurdle, as encountered by the Solar Parks

Project, is the competition with prevailing low cost of electricity in Trinidad and Tobago.

Notwithstanding the current issues the outlook for renewables is technically promising but widespread cheap energy from these myriad sources are still some time away. Deloitte, in its new 2023 renewable energy industry outlook, predicted that while growing demand could exacerbate supply chain constraints the evolving trends that follow could help the renewable industry navigate the early headwinds and set the stage for faster growth in 2024.

While our primary focus is the optimum development of our hydrocarbon resources, we cannot ignore the initiatives being taken globally to develop low carbon economies. In particular new legislation passed in the EU and US in 2022 are expected to provide momentum to renewables in 2023 with tax incentives, grant funding and other financial support for new technologies and existing projects. Other jurisdictions such as ASEAN countries, have found that the use of feed-in tariffs (FIT) as a

price-based instrument combined with soft loans and tax incentives provide the highest performance in terms of the growth of renewable power and its cost-efficiency.

In the near future we, in Trinidad and Tobago will be introducing **Feed In Tariff** legislation as part of our strategy to encourage low carbon power generation technologies and renewable energy generation. **Feed-In-Tariffs** have proven to be an effective policy instrument in encouraging investment in renewable energy technologies and in the growth of domestic renewable industries. It is currently being reviewed by the Ministry of Energy and Energy Industries and will be brought to Cabinet this quarter.

We are currently at the early stage in the development of the domestic renewable energy industry. The Lightsource bp, bp/Shell Solar Parks can provide the impetus for the development of a renewable energy industry. We need to build on this experience. Our permitting process needs to be drastically shortened and we may need to review the suite of incentives if we

are to attract further investment not only at the corporate level but also at the individual level. Given the global momentum, we must accelerate our transition to a low carbon economy as to delay necessary change will put at risk current and future energy related prospects, as energy transformation will have significant impacts on a broader economic scale.

On November 29, 2022, the Government launched the Roadmap for a Green Economy in Trinidad and Tobago. The Roadmap was developed by the IDB in collaboration with the Ministry of Energy and Energy Industries and National Energy. The study determined that of all the potential renewable energy sources in Trinidad and Tobago, offshore wind offers the largest potential for the country with a projected output of approximately 25 gigawatts of levelized energy. The initial goal of the roadmap is the establishment of a wind pilot project, demonstrating visible end-use applications of green hydrogen in Trinidad and Tobago. Towards this end, the Ministry of Energy and Energy Industries in

collaboration with National Energy and the European Union will be conducting a National Wind Resource Assessment, to identify potential sites for wind farm development in Trinidad and Tobago. While the outlook for development of renewable energy industry is promising and attainable, we recognise that renewables cannot in the near to medium term replace oil and gas. Long-term strategies that promote renewable energy and energy efficiency are necessary to attain carbon neutrality. Further, the shift to carbon neutrality is not a spontaneous event as there are a number of challenges such as the cost, reliability and stability of renewable energy systems. As a consequence, low-carbon technologies must be competitive in order to facilitate this energy transition. New breakthroughs in technology are making renewable energy reliable and viable. Notwithstanding, fossil fuels generally cost less than renewables. Therefore, the cost-competitiveness of renewable energy technologies will be one of the main factors dictating the pace of deployment.

In the current global energy scenario our policy is to take a measured approach to the energy transition. In this regard we will be pursuing the accelerated exploration and development of our hydrocarbon resources as we transition to a lower carbon economy. Our strategy is not unlike that of countries, who, given the intermittency of renewable energy generation, and technical immaturity in storage are building a mix of energy sources, with high energy security. Others such as the Europeans, as reported by the Washington DC, Institute of Energy Research in its December 19, 2022 commentary on global energy markets, are facing an energy crisis due to reduction in the use of fossil fuels, the variability of renewable energy and the impact of Ukraine-Russian war. Yet other countries such as China and India are continuing to invest heavily in oil, natural gas and coal as well as nuclear and renewables to improve their national security and the welfare and economic well-being of their citizens.

In my address to participants at the 2022 Energy Conference, I informed that we would be pursuing an aggressive bid-round programme for the exploration of our hydrocarbon resources. This programme was initiated with a deep-water bid-round our next frontier, in which we received four bids by a Consortium of BP and Shell. These bids are currently the subject of negotiations between the Ministry of Energy and Energy Industries and the Consortium. The deep-water bid-round was followed by the 2022 Onshore and Nearshore Competitive Bid Round which opened on July 8th, 2022 and closed on January 9th 2023. We received sixteen bids for eight of the eleven blocks that were offered. It is the most successful Onshore/Nearshore Bid-Round to date surpassing the Onshore/Nearshore Element of the 2005/2006 Bid Round in which eight bids were submitted for six of the eight blocks offered.

The success of the recent Bid-Round is a testimony to policies introduced by Government, including constant engagement with

stakeholders, to encourage upstream investment both onshore and offshore and the confidence of industry participants in the geological prospects of the Trinidad and Tobago provenance. I take this opportunity to congratulate the Minister of Energy and Energy Industries and his Team for a job well done. The bids are currently being evaluated by an Evaluation Team led by the Ministry of Energy and Energy Industries. The results of the evaluation will be disclosed within three months. This Bid Round will be followed by a shallow-water bid-round which is scheduled to be opened at the end of the first quarter 2023. The Ministry of Energy and Energy Industries invited and received nominations from upstream operators for the twenty-three eligible open shallow-water blocks. The Ministry is currently evaluating the responses in its determination of the blocks to be offered in the bid-round.

Government intends to maintain the momentum of upstream exploration through improved fiscal incentives and the availability

of acreage both on land and offshore. Accordingly, we will continue the dialogue with upstream companies on the incentives required to stimulate activity for the exploration of upstream resources. As a consequence of such dialogue, fiscal incentives as outlined by the Minister of Finance in the 2023 Budget Statement were approved and implemented by Government. The Ministry of Finance in collaboration with the Ministry of Energy and Energy Industries, will be continuing the engagement with upstream companies to assess and determine any reasonable and necessary additional fiscal stimuli which might be required to ensure that Trinidad and Tobago remains an internationally competitive hydrocarbon provenance.

The competitive bid round process has been successful and has ensured that Trinidad and Tobago realise the optimum value from the exploitation of its remaining hydrocarbon resources.

However, a number of countries such as Indonesia in order to maximize the exploration and development of their hydrocarbon

resources have included a direct proposal arrangement. Given the uncertain global energy environment Trinidad and Tobago may need to consider such options to maximise the extraction of our hydrocarbon resources, both oil and natural gas.

Natural Gas in particular is required as fuel for our power plants and as feedstock for our gas-based industries, inclusive of LNG and is currently at 2.8 bcf per day, down from about 4.1 bcf at its highest, at peak production of our now matured fields. Gas production will improve in 2023 based on projects which came on stream in mid-to-late 2022 such as Shell's Colibri project, BPTT's Cassia Compression Project and EOG Resources Osprey West Project. Gas production will be given a further boost in 2023 by BPTT's infill programme and EOG Resources Osprey East Development. In the period 2024 to 2026 projects with a production capacity of 1.5 bcf per day will serve to stabilize natural gas production pending the coming on stream of mega-projects such as Shell's Manatee Project and Woodside's

Calypso project. However, there is much work to be done to bring these projects to Final Investment Decision. As a Government we are doing our part, working alongside the major explorers and investors, to expedite the process and we are quietly confident that these projects will be brought on stream at the earliest date.

Crude oil is an important revenue earner and it has benefitted from the high crude prices in 2022, which, for domestic crude, averaged approximately US\$100 per barrel. Production which had declined during the pandemic is on the rise and averaged approximately 59,000 barrels a day in 2022. The outlook in the near term is positive given the aggressive drilling programme of Heritage, the country's largest oil producer, new production by EOG and Trinity, recent discoveries by Touchstone and the generous fiscal incentives made available to onshore producers and shallow water marine areas in recent times. We have been working tirelessly to encourage further increased onshore oil

production and I hope to see success in this area as time progresses.

As a small producer of oil and gas Trinidad and Tobago exerts no influence on the gas markets. We are essentially a price-taker in a global energy sector which has a history of extreme price volatility and which is likely to persist in the future. The combination of price volatility, the uncertainty for future oil and gas markets and the push for de-carbonization and other climate control efforts has created a complex energy future. What is certain is that the global energy sector is undergoing transformational change. It is a challenging period which will require a clear vision, astute management and the seamless integration of mixed fuel systems.

Transformation is not a single event but a journey, an ongoing process that requires adaptation based on ever-changing conditions and increased synergy between government and its stakeholders. Stakeholder collaboration is paramount in order to successfully manage the energy transformation. The Solar Parks

Project is an example of such collaboration, as transpired between Government and Energy Sector Stakeholders, BP and Shell. It is about mutually beneficial, respectful relationship. We intend to deepen this relationship and draw on stakeholder experiences and investments as we navigate this complex and vital energy future. It is only from such co-operation that we will be able to meet the challenges that confront us. As a Government, we have had a fruitful relationship with you, our energy sector shareholders, local and foreign, and we look forward to your continued collaboration as we navigate the way forward.

In closing, I wish to thank the Energy Chamber for the opportunity to deliver the keynote address to this distinguished audience and to provide Government's take on **“navigating a complex energy future”**.

To all our participants, particularly those who have traveled from abroad to join us, please have a great and rewarding conference and thank you very much for your kind attention. Please enjoy

your stay in Trinidad and Tobago and we trust that you will continue to report favourably on us and our efforts here as we make this journey together.