Government of the Republic of Trinidad and Tobago
MINISTRY OF ENERGY AND ENERGY INDUSTRIES

SPEECH

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MINISTER OF ENERGY AND ENERGY INDUSTRIES

ENERGY SPOTLIGHT

OUR OIL, OUR GAS, OUR FUTURE

HYATT REGENCY, PORT OF SPAIN

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Introduction

Good morning, this is the first public account of the energy sector of Trinidad and Tobago (T&T). It comes on the heels of our successful spotlight presented on the economy which was a pre-budget presentation.

In keeping with the theme, **Our Oil, Our Gas, Our Future**, my address will cover the state of the industry, the challenges and the future from a Government perspective. The presenters who will follow are, Permanent Secretary, Ministry of Energy and Energy Industries, Mr Selwyn Lashley, Permanent Secretary, Ministry of Finance, Mr Vishnu Dhanpaul, Mr Tony Paul, Chairman, Local Content Committee, and Mr Graham Hartnell and Mr Graeme Wildgoose of Poten and Partners will provide a more in-depth account of specific areas within their purview and area of expertise. The ultimate objective is to provide to you the people of (T&T), the resource owner an account of the stewardship of the sector and the plans for the future.

The underlying theme of the presentations is that T&T continues to be an important and viable oil and gas province. This is evidenced by our upstream stakeholders who, as in the case of BPTT and Shell, are among the top five (5) oil and gas producing companies in the world. Other companies such as BHP, EOG Resources and Perenco are highly regarded in the industry.

When this administration took office in September 2015 the industry was saddled with a number of challenges and uncertainties. There was declining production, low levels of investment, outstanding contract negotiations to be concluded for the supply of gas with both upstream and downstream companies and major claims on the NGC.

As a responsible Government, we took immediate steps to address these issues by effecting the following:

- The reactivation of the Cabinet Standing Committee on Energy, chaired by the Honourable Prime Minister
- Established as a Sub-Committee of the SCE-The Energy Task Force which is headed by former Minister of Finance, Mr Wendell Mottley.
- Receipt of the Poten and Partners Gas Master Plan Report in September 2015.
- Appointed the Lashley Committee on the Restructuring of Petrotrin in February 2017.
- Brokering by the Honourable Prime Minister of firm gas supply commitments from upstream producers BPTT and EOG at the Houston Meeting in April 2017.
- Issued a mandate to the restructured Petrotrin Board of Directors to return the company to viability pursuant to the Lashley Report submitted on June 3, 2017.
- Laid the Gas Master Plan Report in Parliament.
- Continuous action by NGC to settle outstanding downstream claims.
- Re-establishment of the Permanent Petroleum Pricing Committee.

Upstream Activity

Let me start with the good news. The upstream companies have committed to spend over US$10Bn in exploration and development activities over the next five (5) years. The positive effect of such investment is already being realized. In December 2017, natural gas production which had fallen to 3.2Bcf/d per day reached a daily production of 3.8Bcf/d the highest since 2011.

Given the investment commitment by the upstream the gas shortage or curtailment that has been a negative feature of the industry operations for the last seven (7) years will be now be minimized if not eliminated.

These investments include the BP Angelin project which is due to come on-stream in the first quarter 2019 and will provide in excess of 550Mmscf/d, the De Novo project which is due to come on-stream by first quarter 2019 with 60 Mmscf/d.

Other imminent projects are the East Coast and North East Coast Development projects of Shell, such are Starfish, Dolphin, Dolphin Deep, Endeavour and Bounty Fields on the East Coast and the Cassra and Orchid on the North East Coast. There will be a phased development of these fields over 2018 to 2019 with first gas coming from the Starfish in the Second Quarter of 2018. EOG Resources have also indicated its intent to pursue over the period 2018 to 2022 exploration and development activity in its SECC block and with BPTT in the deep horizons of the Teak, Samaan and Poui Block. BHP will be pursuing development activity in its Block 3a.

There are also proven gas fields such as the Venezuelan Dragon Field and the cross-border fields with Venezuela, the Loran-Manatee, the Kapok-Dorado and Manakin-Cocuina for which development plans are currently being worked on and from which gas will be available in the next two to three years. The picture would not be complete without mention of recent gas finds of approximately seven (7) TCF.

BPTT recently announced the discovery of two (2) TCF of natural gas in the Savannah and Macadamia fields in its acreage in the South East Coast Area of Trinidad. These discoveries put to rest any lingering doubts on the continued prospectivity of the shallow and near shore areas, which have been the location of past major discoveries. New technological innovations such as the Ocean Bottom Cable survey has given a new lease of life on these areas and have confirmed the assertions by eminent geologists both locally and internationally that significant quantities of oil and gas are yet to be found.

BHP also announced a natural gas discovery in Block 5 in our deep-water area on the East Coast. Preliminary indications are that the find ranges between five to ten Tcf and there is also evidence that the block possesses oil. In the coming months exploration activity will be conducted by BHP in blocks 5, 14 and 29 in our deepwater area. In 2018, nine (9) exploration wells are to be drilled and these include three (3) deep-water wells.

In a regional context, the Caribbean Region has become the focus of oil and gas companies in their quest for new hydrocarbon resources. Success in exploration in the deepwater areas of Guyana has stimulated interest in other Caribbean

Countries. There are currently exploration activity being conducted in Suriname, Cuba, Barbados, Grenada and Guyana. This provides opportunities for T&T in all aspects of the oil and gas value chains. I intend to lead the charge in a new Caribbean Energy Diplomacy in the coming months.

Our Oil and Gas Resources

Exploration activity is a costly and risky business. The cost of drilling an exploration well in deep-water runs into the tens of US million dollars and development cost are in US billion dollars. Therefore, energy companies expect to realize a fair rate of return on their investment and rightly so. Concomitantly, the resource owner, the people of T&T expect to receive a premium for the monetization of its non-renewable oil and gas resources. Indeed, I will go further and state unequivocally that the State, as the resource owner, has a sovereign right to extract a fair economic rent on behalf of the people of T&T.

Our 3P gas reserves based on the last Scott Reserves audit were 22.7Tcf and gas resources were estimated at 43.7Tcf. The audit information does not include the gas finds of the BHP discovery in its deep-water Block 5 which is an estimated five TCF or the BP Savannah and Macadamia fields of two (2) TCF. Our gas reserves are consumed at the rate currently estimated at 3.5Bcf/d or 1.2 to 1.4 TCF per annum.

The current gas utilization of 3.5Bcf is apportioned between LNG (60%) and the downstream industries including power generation (40%). Between 2018 and 2019 most of the gas contracts between NGC, the aggregator of gas for the downstream industries and the upstream companies expired and likewise the petrochemical companies. Yet it was only when a new Board at the NGC was appointed by this Government that negotiations for new gas contracts commenced with the upstream companies. This dereliction of its responsibility by the former NGC Board and by extension the then Government, put the future of the petrochemical industry at risk, and also placed this Government, in a disadvantageous negotiating position.

The situation required the intervention of the Honourable Prime Minister, who in April 2017 met with senior executives of BPTT and EOG Resources at the famous Houston meeting at which gas supply issues were resolved. Discussions with Shell are ongoing and a favourable outcome is expected. Gas supply arrangements are already in place with BHP.

Economic Rents

Data from the Ministry of Energy and Energy Industries (MEEI) and the Ministry of Finance (MOF) reveal that taxes and royalties collected from the sector have been on a diminishing trend. Energy sector revenue which peaked at TT$28Bn in 2008 fell to TT$1.0Bn in 2017. Falling energy prices may account in part for the reduction in revenue. Oil prices which averaged US$97 per barrel in 2008 averaged US$54 per barrel in 2017. Henry Hub gas prices on which most contracts are based fell from US$9 per MMBtu to US$2.99 per MMBtu.

The fall in energy prices and declining production, as significant as they were could not be solely responsible for precipitous fall in revenue. **A survey of other oil and gas producing countries was undertaken to ascertain whether our experience was**

shared. This was not case. The research indicated that we are singular in this matter. In one example, whereas the upstream company in that other jurisdiction paid taxes of US$3.6Bn or 53% on its gross revenue of US$6.8Bn that said company paid only US$31M or 0.6% in taxes from its gross revenue of US$5.3Bn in T&T. A comparative analysis of the T&T competitiveness showed that T&T is in the median range with respect to fiscal incentives and the rate of return achieved by investors was among the highest in oil and gas economies.

Also, of immense concern is the fact that while the Minister of Finance is challenged by revenue collections, upstream companies holding substantial assets in T&T are reporting record profits.

State owned Petrotrin is also complicit in the under-payment of revenue due to Government. Petrotrin which produces approximately 60% of the country's crude oil has been withholding payment due to its financial challenges and other financial obligations. As at December 31, 2017, the company owed Government TT$2.0Bn in taxes and royalties. With current prices averaging US$60 per barrel the debt continues to accrue at TT$70M per month without any indication by Petrotrin of any forthcoming payment. Obviously, this is an unacceptable position which the Board of Directors has been requested to address. Let me clear up another misconception. Most people feel when oil prices are high-"thing nice". That is no longer the case. Our oil production is significantly now lower than in the past and because of Petrotrin's inability to meet its commitment to the Exchequer, the situation is compounded.

The increase in oil prices has resulted in a fuel subsidy liability to Government. Based on the budgeted oil price of US$52 per barrel and the increase in fuel prices Government was not liable for payment of subsidy. However, crude oil prices are averaging US$60 per barrel. As at February 2018, the subsidy liability was $TT326M and is estimated to increase to TT$950M by end of fiscal year 2018. Government's liability is estimated at TT$650M with the balance of TT$300M being met through the Petroleum Levy.

In the 2018 Budget, it was decided that the MEEI would publish on a monthly basis the wholesale and retail product prices of liquid petroleum fuels based on the prevailing crude oil prices to maintain a zero subsidy to Government. The MEEI is currently working on the legal and other arrangements to effect the decision.

Gas Master Plan Report

Poten and Partners authors of the report in the Gas Master Plan advised that T&T was systematically being denied of its revenue entitlements. They deduced that commercial and contractual structures of the ALNG trains had been such, that little of the benefit from high global LNG prices had flowed back to the Government of Trinidad and Tobago (GORTT) in period under review 2010 to 2014. This was because the low weighted average netback price for LNG in T&T under the commercial arrangements was inconsistent with the high prices of LNG prevailing in global markets.

It has been estimated that the country would have lost up to US$6Bn annually from such transfer pricing practices for the period 2010 to 2014. This is not an understatement as the MEEI has recorded instances where the net back prices from LNG sales have been negative. In such instances, it is tantamount to paying the companies for the utilization of your own natural gas resources. Poten and Partners have indicated that at current prices T&T continues to lose up to US$1.5Bn annually.

In the Gas Master Report it was noted that over the period 2009 to 2014 petrochemicals net back prices were significantly higher than the net back prices from LNG. In 2014, LNG realized a netback price of US$3.32 per MMBtu compared to a methanol net-back price of US$4.80 per MMBtu and an ammonia net-back price of approximately US$6.00 per MMBtu. The position is unchanged as according to the MEEI's records the net back LNG prices for the period 2015 to 2017 are at least US$1.00 per MMBtu less than prices received for petrochemicals ammonia, methanol and their derivatives.

Notwithstanding the super profits achieved by the upstream companies they maintain that they share a disproportionate share of the rewards for the level of risk they take. In their view the maturity of T&T as a hydrocarbon province has been occasioned by greater sub-surface and geological risks without the commensurate reward. In their opinion NGC and the downstream companies have benefitted disproportionately in the returns accruing to the sector. This in their view is compounded by the arbitrary tax reviews by the Board of Inland Revenue and the subsidized gas for T&TEC for power generation. In the final analysis, their position is that unless the reward matches the risk, there will be reduced investments in the upstream and consequently less gas.

The upstream companies' position with respect return on investment is at odds with findings in studies commissioned by the MEEI of the competitiveness of T&T as a hydrocarbon province. The past studies have shown that T&T has consistently had the higher rates of investors return compared with respect to other jurisdictions such as Colombia, Ghana, Brazil, Norway and Nigeria.

Given their demands, recent gas contracts with upstream companies have been at significantly higher prices. These prices pose a challenge to both the NGC and the downstream companies. The situation is compounded by the preference of upstream companies to provide gas for LNG rather than downstream industries. As a consequence the future of our downstream industry is being jeopardized. The Government is acutely aware of the situation and will not allow our downstream industry to fold up. **We are currently reviewing our options which may include a gas allocation policy to ensure the sustainability of our downstream industries.**

Transfer Pricing

Poten and Partners have determined that transfer pricing is the main cause for the under reporting of revenue by energy companies in T&T. They further determined that transfer pricing was endemic in Atlantic's transactions. In the case of LNG, the absence of clarity and precision in the existing long-term contractual and commercial arrangements has severely compromised the value received by T&T for LNG sold by the four (4) Atlantic LNG (Atlantic) Trains in marketing arrangements to either related parties of the owners of the Trains or to other marketing agents.

In addition, deficiencies in the current tax laws and current contracts provide opportunities for reduced taxation in T&T.

Review of Fiscal Regime

In order to positively re-balance this unacceptable situation the Government is taking a comprehensive review of the contribution available from the energy sector of T&T.

In the 2018 budget, the Minister of Finance introduced changes to the royalty system which increased the royalty rate to 12.5 % on oil and gas revenue. Prior to this adjustment the royalty rate on gas was a low as 0.01% in some instances. The net impact of the adjustment of the royalty rate is an increase in royalty from TT$1.00Bn in 2017 to in excess of TT$3.0Bn in 2018. The first royalty payment on gas is due at the end of March 2018. This royalty payment is to be borne by the upstream companies and should not be passed on to the NGC nor the downstream sector.

The Ministry of Finance is also reviewing changes in the taxation system to improve Government's take from the revenue earned from oil and gas operations in this country. One such review is in respect of allowances granted to upstream companies as a deduction from revenue. In 2014, the then Government agreed to grant of accelerated allowances which entitled companies to write development costs against revenue over a period of three (3) years as compared to a period of five (5) years. As a consequence, recent upstream developments while contributing significantly to oil and gas production has impacted disproportionately on Government's take from the sector.

Given the magnitude of cross-border transactions and transactions between related parties the introduction of transfer pricing rules and mechanisms is being expedited. The existing tax laws in T&T include generic anti-avoidance provisions which encapsulate the 'arm's length principle'. However, there are deficiencies of the tax laws as they relate to artificial and non-arm's length transactions which challenge and limit the tax authorities in the implementation of these laws. These are being currently addressed. Parallel steps are being taken to strengthen the public institutions which are responsible for the administration of these areas.

In this regard, there has been a reactivation of the Permanent Petroleum Pricing Committee which is the mechanism through which the Minister of Finance establishes a fair market value for the disposal of petroleum and petrochemical products The determination of the fair market prices will allow the Board of Inland Revenue to recoup taxes that are under-reported.

Review of LNG Marketing Arrangements

Poten and Partners have identified the LNG Trains as the avenue of the largest leakage of revenue from T&T. There are four (4) LNG Trains, Train 1 which began operations in 1998, Trains 2 and 3 in 2002 and 2003 respectively and Train 4 in 2005.

Train 1 is a merchant train in that Atlantic buys and takes title to the natural gas from BPTT and converts it to LNG and NGLs and sells these products. The LNG is sold under two 20 year LNG Sales Agreements with off-takers that have no nexus with T&T. In the mid-2000s, consequent on the intervention by Government that this country was not receiving the benefit of diversions to higher price markets the contract went to arbitration which resulted in a revision to the price formula. The outcome was not favourable to T&T and resulted in significant erosion to value flowing back to Atlantic 1. Poten and Partners have estimated the value loss to T&T as at least US$1.4Bn per annum for each year from 2011 to 2013.

Trains 2 and 3 are quasi tolling facilities. Atlantic buys and takes title to the natural gas supplied by BPTT and Shell which is converted to LNG and NGLs at a fee charged by the plant. These products are sold by the company and the value of the LNG is passed back upstream. While Atlantic is a party to and administers the contracts the upstream companies and marketing companies have the right to participate in negotiations and approve any adjustment to the pricing provisions of the contracts. Some contracts provide for the sharing of upsides and in others there is no sharing.

Train 4 is a pure tolling arrangement. The shareholdings are BP (37.8 %), Shell (51.1%), and NGC (11.1%). The Gas Supply/LNG offtake mirrors the shareholdings in the Train, with Shell buying gas upstream from BPTT and NGC buying gas from BPTT and EOG Resources. The offtake arrangements for BPTT and Shell involve FOB sales to a downstream marketing affiliate, with pricing based on indexation to Henry Hub adjusted for the location of buyer’s specified terminal capacity in the US. In principle there is sharing of the upside in diversions.

The Atlantic's off-takers have taken full advantage of the terms of their contracts to employ marketing strategies to improve their revenue position to the detriment of this country.

Poten and Partners have highlighted the case of Shell which following the acquisition of BG and Repsol's LNG interest began to take supplies of Train 2/3 volumes in lieu of Train 4 volumes to higher value markets, as it does not have to share any upside diversion revenues realized. For the Train 4 contract, where sharing is provided, these volumes are being supplied to the lower value markets. Objections raised by the MEEI to the diversions by Shell have been ignored by the company.

An analysis of the marketing arrangements revealed that is no transparency in the execution of contracts, the marketing companies interpret contract provisions to their own benefit and the lack of audit rights by Government limits its ability to determine contract violations. In addition, several of the marker prices which govern LNG sales from Atlantic are tied to the US Henry Hub Price which has been depressed and as result have impacted negatively on revenue derived from LNG. So much so that in the extreme case in Train 4, there have been negative upstream netbacks while the marketing companies are achieving positive margins offshore.

Government finds the situation with the LNG marketing arrangements to be untenable, in that significant revenues are flowing offshore while Government is facing severe revenue shortfalls. Ladies and Gentlemen, this administration plans to deal frontally and decisively with these matters. In that regard the Government has retained the services of Poten and Partners and the international energy law firm of White and Chase to advise on this matter.

As a consequence, Government has communicated to the upstream companies and their affiliates that the status quo in relation to LNG marketing arrangements cannot be maintained and a new framework that is beneficial to T&T will have to be instituted.

The dialogue between companies and Government has already been initiated. In particular, discussions currently are ongoing on the future of ALNG Train 1, as that contract expires in the third quarter 2018. ALNG Train 2, Train 3 and Train 4 contracts expire in 2022, 2023 and 2027 respectively. Notwithstanding, the Government is seeking to review terms of the marketing arrangements of their contracts to improve the revenue stream to T&T.

Local Content

The oil and gas sector is a very capital intensive industry. The US$10Bn projected to spend by upstream companies will be on substantially capital goods such rigs, sub-sea equipment, seismic equipment, platforms, turbines and pipes. All such equipment with the exception of platforms cannot be built in this country.

We have established at La Brea a world class fabrication yard, which is a joint venture between Weldfab Limited a local company and Chet Morrison Contractors of the USA. The joint-venture company, Trinidad Offshore Fabricators Company

(TOFCO) has built nine (9) offshore platforms for upstream companies over the period 2005 to 2017.

Yet, the procurement of the local fabrication business by TOFCO is not guaranteed and often requires the intervention of the Government. It is apparent that the upstream companies despite their overt promotions are not entirely committed to the development of local industries.

We have come to the realization that the 2004 Local Content and Local Participation Framework and Policy is ineffective, outdated and needs to be urgently reviewed. Accordingly, the Government will be reconstituting and strengthening the Permanent Local Content Committee to review the local content policies and guidelines.

The employment record of upstream companies also leaves much to be desired. As indicated by Poten and Partners the companies have been making super profits. Yet, there has been continuous downsizing by companies which have thrown experienced local professionals on the bread line and have denied opportunities to our young energy sector graduates. Over the period 2014 to 2017 there was a reduction of 33% of the workforce employed in the sector.

We have also recognized that the work permit procedures and systems are not rigorously implemented and that companies ignore the requirement for participation of our nationals. An overhaul of the system will be undertaken and conditions attached to work permits will be strictly enforced.

Renewable Energy

Pursuant to its commitment to the global environment, on February 22, 2018 the GORTT deposited its instrument of ratification of the Paris Agreement confirming its pledge to assist in the reduction of greenhouse gas emissions. By this act which is a formal commitment, the country can be held accountable if its climate change targets are not met.

Power Generation, Transportation and Industrial Sectors are the main emitters of greenhouse gases. Accordingly, a carbon reduction strategy has been developed for these sectors. Arising from this strategy, it is proposed to reduce greenhouse gas emissions by 15% and public transport emissions by 30% by December 2030.

With regard to Power Generation, we have set a target of 10% renewable power generation by 2021. The peak system demand in T&T is currently 1371 megawatts and the total contracted capacity is 1758 megawatts. By 2021 peak system demand is projected at 1496 megawatts. **This means that 149 megawatts of installed capacity from renewable sources will have to be provided to meet the 10% target.**

In pursuit of this objective expressions of interest have been invited for utility scale renewable projects for grid integration and for the development of a Waste to Energy Facility at the Beetham Landfill for the conversion of municipal waste for power generation.

Currently 99.8 % of power generation is fueled by natural gas and 0.2% by diesel. T&TEC acquires the gas from NGC for conversion by power generation companies, Trinity, PowerGen and TGU into electricity which is transmitted through the T&TEC network.

T&TEC's financial position has been challenging and the Commission has only been able to stay afloat by deferring payments, especially gas payments to NGC which currently amounts to US$654M.

In order to mitigate the gas costs to T&TEC the Government will be pursuing the establishment of a power tranche of gas among all of the upstream companies at a negotiated gas cost. At present BPTT provides a tranche of 100MMscf per day out of T&TEC's current requirement of 260MMscf per day. **It is proposed to make power tranche mandatory for all companies.**

Conclusion

In closing, I wish to assure the national community that the Energy Sector of T&T is resilient, viable and despite recent challenges, will maintain and strengthen its position as the main driver of the economy.

The new technology and innovations that have developed for the industry such as the Ocean Bottom Cable Seismic Survey have brought a new dimension to oil and gas exploration. This has created a new impetus in oil and gas exploration in T&T. We propose to seize on this moment by making available new acreage for exploration. In this regard the MEEI is currently finalizing a new competitive bid-round comprising blocks in shallow and moderately deep areas. Based on nominations by companies we are confident in the prospectivity of the acreage to be put on offer.

In moving forward, steps will be taken to ensure that the country receives the optimum value for the monetization of oil and gas resources. The establishment of a royalty rate of 12.5% across the board was the first of the fiscal adjustments that are being proposed.

This issue obviously will require legislative modification to existing legislation and more importantly honest and frank re-negotiation of contracts with the relevant companies. However, I am pleased to add there is a clear indication that companies are prepared to discuss these matters and hopefully as matured stakeholders we can arrive at an amicable settlement with all of the parties.

The ultimate objective is that the rights of the resource owner, the people of T&T, to a fair economic rent for what are wasting assets, are respected and honoured.
The recent past has been a challenging period for the industry. We believe that we are progressively turning around the situation and that a more secure and promising future lies ahead.

I thank you.