

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

SPEECH THE HONOURABLE COLM IMBERT

MINISTER OF ENERGY AND ENERGY INDUSTRIES (Ag.)

THE TRINIDAD AND TOBAGO ENERGY CONFERENCE AND TRADE SHOW 2017

BUILDING COMPETITIVENESS IN AN EVOLVING ENERGY WORLD

HYATT REGENCY, PORT OF SPAIN

January 23, 2017

Introduction

It is my pleasure to deliver the feature address to such a distinguished audience at the Annual Energy Conference and Trade Show hosted by the Energy Chamber of Trinidad and Tobago. This annual Conference has truly developed into one of the premier energy events in the region.

Although some of our local "experts" would like us to think otherwise, as we tackle the difficult task of diversifying our economy, our energy sector will continue to be the engine of our country's growth and prosperity for some time to come. This is why it is so important that we proactively address the issues facing the sector.

This will require collaboration between Government and industry as we formulate new policy initiatives to allow us to adapt in order to be relevant, successful and competitive in the current environment of low oil and gas prices and declining production.

Today's energy outlook is very different from even the recent past. Over forty years ago, in December 1975, US President Gerald Ford signed into law the Energy Policy and Conservation Act, to ban the export of oil from the US. This ban arose after the 1973 Arab oil embargo shook the US with high world oil prices and the US felt it necessary to ensure its energy security.

However, 40 years later in December 2015, as US oil production doubled because of the shale phenomena, the US made the strategic decision to end its self-imposed ban on oil exports. This decision by the US contributed in no small way to the collapse of oil prices since US oil producers began targeting Asian markets traditionally supplied by producers in the Middle East. OPEC

subsequently reacted to the shale threat by increasing supply and creating a glut, which caused a drastic reduction in oil prices.

As we all know, oil prices are very sensitive to supply and demand and have shown considerable volatility within the last few months. The prices of natural gas and products produced from natural gas are not so sensitive but they generally follow oil prices, since gas is an alternative fuel. So as oil becomes cheaper, so in due course does natural gas and eventually, petrochemicals.

The drastic decline in commodity prices since 2014 has hurt the Trinidad and Tobago economy significantly, with revenues from petroleum dropping by over 90% over the last two years, from over TT\$19 billion in 2014 to less than TT\$2 billion in 2016. This is a staggering decline that many of our citizens still do not appreciate. Indeed, which business could survive with a 90% drop in income?

Oil prices dropped from \$107 per barrel in June 2014 to \$29 per barrel in January 2016, a decline of 73% in just 18 months. This drastic decline had a profound effect on Government revenues, especially because at prices below \$50 per barrel, the Government loses the supplementary petroleum tax, which brought in as much as TT\$4 billion in 2014.

The Henry Hub price of natural gas also dropped from over \$6 per MMBTU in 2014 to less than \$2 per MMBTU in 2016, which had a serious adverse effect on the revenue from natural gas.

And this year, 2017, will also be difficult, because although oil and gas prices are on the upswing, we in Trinidad and Tobago are still grappling with declining production, particularly of natural gas.

However, things are looking up. As OPEC and non-OPEC producers cut production by agreement, we have seen oil prices rise from the low of \$29 in January 2016 to \$52 in December 2016. Henry Hub natural gas prices have also risen from \$2.28 per MMBTU in January 2016 to \$3.59 per MMBTU in December 2016, with a similar recovery in Asian, European and South American markets

Last week Monday, Bloomberg also reported that OPEC's campaign to prop up oil prices is getting unlikely support from its biggest customer – China. Output in China slumped in 2016 as state-owned firms shut wells at mature fields that had become too costly to operate.

The improvement in hydrocarbon prices is welcome news in the sector and it is expected that the knock-on effect should drive investment in the oil and gas industry. Certainly, we can expect that the upstream companies would look to positively re-evaluate their investment position as it relates to Trinidad and Tobago, as we in the Government seek to reform the oil and gas fiscal regime to cater for the new price and supply environment.

However, there are some issues that we must confront. There is significant disparity in value accruing to Government as compared to that received by energy companies and their associates from the monetization of this country's hydrocarbon resources. It is therefore necessary to realign the interests of the companies and the Government to ensure equitable outcomes for all parties and ultimately the people of Trinidad and Tobago.

Once again, as occurred in the 1970s and 1980s, we face the challenge of restructuring our fiscal regime to produce a win-win situation for all concerned, so that oil and gas companies are motivated to explore and

increase production, and the Government can optimize its revenue from petroleum

We also need to re-evaluate the sustainable size of the natural gas industry in Trinidad and Tobago, which is currently in the region of 3.3 bcf per day, down from a high of 4.1 bcf in 2014. In this context, there needs to be greater collaboration between Government and Industry in creating an improved and stable gas supply, to alleviate the current challenges facing the industry and to enhance the distribution of value along the value chain.

As you are aware, the Government has received the Gas Master Plan Report from Poten and Partners, which will in due course be submitted to the Energy Affairs Committee of the Parliament for its examination after review by the Energy Subcommittee of Cabinet. However, pending the completion of the formal review of the Report, the Government has appointed an Energy Task Force under former Finance Minister Mottley, whose remit includes engagement of the upstream and downstream sectors with a view to the determination of measures required to sustain these sectors in the medium to long term.

The Energy Task Force has held several meetings with major stakeholders and developed an appreciation of the issues and potential solutions. In the coming weeks, these consultations will intensify and we are optimistic that the parties will arrive at an accommodation on gas supply and pricing arrangements for the medium term.

Hydrocarbon Production

In 2017 gas production is projected for the first part of the year to be approximately 3.3 billion cubic feet per day. Thankfully, this is expected to improve with the full implementation of Trinidad Regional Onshore Compression Project (TROC) and the Juniper Project, which will be coming on-stream in April 2017 and August 2017 respectively. Beyond 2018 there are number of projects, which are due to come on-stream such as Angelin, Savannah, South East Queen Beach and Offshore Compression, which will provide stability to domestic gas production. These will be supplemented by gas procured from Venezuelan fields such as the Dragon field by 2019.

However, the key to stability and security of domestic gas supply is sustained and aggressive exploration and developmental work programmes. In its 2015 Audit of Non-Associated Natural Gas Reserves, petroleum consultant Ryder Scott advised that to treat with the issue of falling gas production the upstream companies must be encouraged to explore, appraise and develop acreages under their operatorship. While most upstream companies actively exploit their acreages, there are companies that either have not fulfilled their contractual obligations or have not been optimizing the development of resources within their acreage. The Ministry will be closely reviewing these arrangements.

In 2016, BHP Billiton drilled two deep-water wells. The first well, the Le Clerc-1, was drilled in TTDAA5 to a depth of 22876 feet in a water depth of 6007 feet. The well targeted three reservoirs of which two of these targets encountered hydrocarbons. The other well drilled by the company was the Burrokeet in Block 23 (a).

The results of that exploration are currently being evaluated and it should be noted that at the time of the Natural Gas Audit for the year ended December 2015, there was insufficient data on these blocks and therefore they were not included in the Audit.

In 2017, seven exploration wells as compared to four wells in 2016 are scheduled to be drilled. These include one well by bpTT in its acreage in the Columbus Basin, which is scheduled for the 2nd quarter of 2017. In support of its exploration activities, bpTT has scheduled the conduct of seismic surveys in its geophysical programmes for 2017. It has commenced seismic acquisition in an area covering 981 square kilometres, utilizing Ocean Bottom Node technology, in a survey, which is expected to run until March 2017.

If all goes according to plan, BHP Billiton will be continuing its deep-water exploration programme with two more wells in its Deepwater Blocks, which are scheduled for the 3rd quarter and 4th quarter respectively

In respect of upstream development, the number of wells projected for 2017 has declined from 69 development wells in 2016 to 56 development wells in 2017, with 33 of the wells being under Petrotrin's Lease out/Farm out/IPSC programme. We need to reverse this trend, since in respect of crude oil and condensate, production is expected to improve only marginally from the current production of approximately 71,000 barrels of oil per day.

You should note that the major oil producer in Trinidad and Tobago at this time is Petrotrin, which accounts for almost 50% of the country's total production. Petrotrin is therefore the key to improved oil production in Trinidad and Tobago in the short and medium term. It is our best chance to

reverse the current decline and the Government will therefore be examining and implementing a wide range of strategies in 2017, including joint ventures, to boost and enhance Petrotrin's oil production, both on land and in the marine area, as outlined by the Honorable Prime Minister in his recent address to the Nation.

As part of the overall strategy to increase hydrocarbon production, the Ministry in 2017 will make available for exploration, acreage on land, and in marine areas, including our deep-water province. Such areas may include acreage that has been relinquished or that has reverted to the State by virtue of the expiration of contractual deadlines. The Ministry is currently assessing prospects and in short order will be requesting nominations from Upstream Companies as part of the process in the selection of blocks for the Bid Round.

The initiatives to stimulate the domestic energy sector will also include the review of the fiscal regime for hydrocarbon production taking into consideration the review undertaken by the International Monetary Fund and stakeholder feedback.

On the issue of pricing within the industry, the Ministry of Finance will reestablish the Permanent Petroleum Pricing Committee in 2017 to address issues such as the fair market value of petroleum and petrochemical products and arm's length transactions.

National Energy Policy

During the period August 10th to 25th, 2016, the Ministry engaged its stakeholders in the energy sector in a series of consultations to solicit their views and recommendations for a National Energy Policy for Trinidad and Tobago.

Twenty-five (25) companies representing the various stakeholder groups attended the meetings and engaged in candid discussions with senior Ministry Officials in which they articulated their views and put forward recommendations for inclusion in the National Energy Policy. The recommendations spanned the entire energy sector, including the services and downstream retail marketing sectors. The Ministry is reviewing the recommendations and will be presenting to stakeholders a Draft Energy Policy for their comments prior to submission to Cabinet for its consideration.

National Facilities Audit

I am pleased to inform the final report of the National Facilities Audit, which commenced in July 2015 and was conducted by DNV GL, an independent consulting organization with U.S. headquarters in Houston, TX has been completed. The audit covered companies operating in the domestic energy sector. In all thirty (30) companies drawn from the country's Upstream, Midstream and Downstream Sectors were selected to participate in the audit.

Individual company reports for the participating companies were prepared by DNVGL and submitted to the Ministry over the months of November and December 2016. However, DNVGL requested that the individual company reports be distributed to the companies at specific presentations conducted

by DNVGL. In December 2016, seven (7) individual reports were distributed to companies, namely Petrotrin in relation to its Refinery, Onshore and Trinmar operations, EOG Resources Trinidad Limited, Repsol, the National Gas Company of Trinidad and Tobago Limited and Phoenix Park Gas Processors Limited at individual company specific presentations conducted by DNVGL. A further eight (8) individual reports will be presented to the participating companies by the end of this week. The Ministry is currently working with DNVGL on a schedule for the delivery of the audit reports to the remaining 15 companies, with priority being given to companies, which expressed interest in receiving an individual report. It is also my understanding that DNVGL will be conducting an audit workshop at the Conference.

Following the review by companies of their audit reports the Ministry will be engaging companies on the adoption of measures required to ensure the mechanical integrity of their facilities. The companies' performance scores in the audit will serve as the basis for prioritization in the follow-up. Overall, it is expected that the exercise will result in an improvement in Asset Integrity Management Programs in the domestic energy sector.

Local Content Policy

In 2004, Government launched the Trinidad and Tobago Local Content and Local Participation Policy and Framework with a view to value maximization and increased local participation in the energy sector. This supplemented the general obligations under the Petroleum Act and Regulations, which require licensees to optimize the participation and development of nationals in their employ.

To ensure adherence to the policy by energy companies, the Permanent Local Content Committee was appointed to monitor and to devise strategies to increase local content and local participation in all energy sector projects.

Over time, provision for local participation and local value maximization have been incorporated in Exploration and Production Licenses and Production Sharing Contracts to strengthen the policy framework. However, notwithstanding these developments there have not been any significant gains in local content participation and value maximization, outside of isolated cases such as the fabrication yard in La Brea, which is managed and operated by Trinidad Offshore Fabricators.

It has been suggested that issues such as the lack of legislative measures and regulations are responsible for the less than satisfactory support in the implementation of local content participation. To this end, a reconstituted Permanent Local Content Committee has developed a work plan, which with industry co-operation, will seek to address the issues contributing to the low level of local content and participation in the domestic energy sector.

Renewable Energy

The Inter-American Development Bank (IDB), through the provision of a Policy-Based Loan, is assisting Government with development of an appropriate policy framework for Energy Efficiency and Renewable Energy, and technical assistance in evaluating the energy potential from renewable energy sources such as wind, solar and waste materials. This technical support will be invaluable to the Ministry in its fulfillment of the mandate to produce 10% of total electricity generation from renewable energy sources by the year 2021, as enunciated in the 2015/2016 National Budget.

In furtherance of its mandate, the Ministry has identified the conversion of waste to energy as a potential energy source and has initiated a Waste to Energy Project aimed at achieving this objective. The Beetham Landfill, which is the largest waste disposal site in the country, was selected for the project. The development of a Waste to Energy Facility at the Beetham Landfill will not only contribute to the achievement of the target of "10 percent Renewable Energy generation by 2021", but will also improve the system of solid waste management in Trinidad and Tobago.

International Initiatives

Trinidad and Tobago will continue to expand its energy sector globally. In addition to exporting petroleum and refined products, we plan to engage in international energy development projects.

In May 2016, we signed a Cooperation Agreement between the Government of Ghana and the Government of the Republic of Trinidad and Tobago. In addition to this Government-to-Government Agreement, a Memorandum of Understanding on joint identification and development of commercially viable natural gas projects was also signed by the Ghana National Petroleum Corporation (GNPC) and the National Gas Company of Trinidad and Tobago (NGC).

We also identified areas for regional energy collaboration, under the Caribbean Energy Security Initiative, at the CARICOM –United States Trade and Investment Council (TIC) meeting in May 2016.

Through the NGC, we are participating in the infrastructural development, processing and marketing of significant proven natural gas provinces, which

are located outside the jurisdiction of Trinidad and Tobago. In this regard, the major across the border prospect is the Dragon Field.

Furthermore, Guyana and Cuba are (two) 2 new regional markets in which this Country has already began energy discussions for future collaboration. Other significant opportunities for increased access to global markets may arise will the completion and commissioning of the expansion of the Panama Canal.

Diversification

While the focus of my presentation has been on developments in the oil and gas sectors, it is important that we understand the need for serious deliberations on the diversification imperative if we are to achieve our sustainable development goals and objectives. In this context, I wish to remind you of what was said in the Budget statement in September 2016, particularly that Trinidad and Tobago will need to respond to:

- i. Global Climate Change and the implications for Small Island Developing States;
- Our long-term overdependence on oil and gas which exposes our economy to risk and shock from the rapid changes taking place in global energy markets;
- iii. The projected decline in the use of fossil fuels (oil and gas) in the global energy mix over the next few decades; and
- iv. In general, the prevalence of low productivity along with a dependency and entitlement syndrome.

This issue of diversification has been relevant in the past and it is still very much relevant today. How we choose to action these issues will lay the foundation for our prosperity as a nation.

Conclusion

The energy sector still contributes more than one-third of the GDP of Trinidad and Tobago, down from 60% just a few years ago. Therefore, effective management of these sectors is important for our economic development.

We also must recognize that global energy market has become much more competitive through the advent of shale gas in the USA and emerging oil and gas economies in developing countries.

In this scenario, companies must harness new technology, such as digitization, robotics, and analytics, to improve efficiency and output. Other measures include the sharing of services and equipment, in particular, the sharing of rigs and seismic vessels.

Outside of our hydrocarbon potential, a major inducement to energy companies to Trinidad and Tobago has been the quality of our energy services industry. Therefore, as the industry becomes more technology oriented it is incumbent of the upstream producers to facilitate the transfer of technology to local service companies so that they continue to be equipped to effectively service the sector.

The Poten and Partners Natural Gas Master Plan 2014 to 2024 has suggested a way forward for the development of our gas industry. A Sub-

Committee of the Standing Committee on Energy has reviewed the plan and has submitted its recommendations.

However, we recognize that the way forward must be a collaborative approach in which all parties work towards their mutual benefit. We are confident that with accommodation by all parties we can overcome the current challenges and rebuild a viable energy industry in the medium to long term.

In closing, I wish to reiterate the statements made at the launch of the Juniper platform in La Brea one week ago. It is clear to the present Government that there are several pressing issues that have been left hanging for too long, such as the reform of the supplementary petroleum tax, the equitable utilization and distribution of our natural gas among downstream companies and agreement with the upstream producers on new long term gas supply contracts going forward.

What was described by our predecessors as a temporally dip in our country's natural gas supply caused by maintenance, safety and upgrade activities arising from the Macondo disaster in the USA April 2010 has turned out to be a serious supply problem caused by uncertainty in the international investment community because of indecision and procrastination in the 2010 to 2015 period. We in this Government do not intend to procrastinate and I wish to give you the assurance that we will move swiftly in 2017 to take the necessary policy decisions that will ensure our country's long term energy future.

I thank you.