



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

**FEATURE ADDRESS**

**BY**

**SENATOR THE HONOURABLE FRANKLIN KHAN**

**MINISTER OF ENERGY AND ENERGY INDUSTRIES**

**AT**

**THE PRESENTATION OF THE  
CRUDE OIL AUDIT RESULTS FOR YEAR END 2018**

**AT**

**THE MINISTRY OF ENERGY AND ENERGY INDUSTRIES**

**PORT-OF-SPAIN**

**ON**

**WEDNESDAY 5<sup>TH</sup> AUGUST, 2020**

**10:00 AM**

## **Salutations:**

1. Honourable Ministers of Government
2. Acting Permanent Secretary, Ministry of Energy and Energy, Sandra Fraser
3. Other Permanent Secretaries
4. Chairmen and CEO's of State Entities
5. Representatives of the Energy Companies
6. Members of Staff of the Ministry of Energy and Energy Industries
7. Members of the Media
8. Other specially invited Guests

## **Title Slide**

Good morning,

Welcome to the Results of the Audit of the Crude Oil Reserves and Resources of Trinidad and Tobago for Year End 2018, prepared by Netherland, Sewell & Associates, Inc. (NSAI). NSAI is a worldwide leader of petroleum property analysis to industry and financial organizations and government agencies. It was established in 1961 and has offices in Dallas and Houston, Texas. With 60 plus Engineers, Geologists, Geophysicists and Petrophysicists and 75 plus Engineering and Geology Analysts, the company was uniquely qualified to conduct this study for the Ministry since the lead on the audit has performed many evaluations of properties in Trinidad since the early 1990s.

This is the second audit produced by NSAI for the Ministry of Energy and Energy Industries (MEEI) after Cabinet in 2011 approved the engagement of an independent petroleum consultant to conduct audits of the crude oil reserves of Trinidad and Tobago for two separate periods for the MEEI. Following a highly competitive tender process in 2012, a team from the Ministry conducted evaluations and selected

the NSAI from a field of four (4) prestigious international petroleum consultants that tendered bids. The first of the two crude oil audits approved by Cabinet was completed in March 2013 and gave a snapshot of our reserves and resources at 1 January, 2012.

The second audit, an audit of the Crude Oil Reserves and Resources as at 31 December 2018 commenced in October, 2018 with a round of onsite reviews of the data supplied by the operating companies. A second round of onsite reviews occurred in March 2019. Members of staff from the MEEI were assigned to manage the project and a Draft Report Review was held between the MEEI team and NSAI in Dallas in October 2019. The project was successfully completed in February, 2020. The estimates in this report have been prepared in accordance with the definitions and guidelines set forth in the 2018 Petroleum Resources Management System (PRMS) approved by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists and the Society of Petroleum Evaluation Engineers. Thus, our hydrocarbon resources are being assessed in accordance with industry standards and the detailed country report produced by the independent petroleum consultant NSAI, does provide a reliable basis for the development of national energy strategies.

## **Slide 1**

Permit me now to summarize and compare the results of the most recent audit with that of 1 January, 2012. As can be seen in **Slide 1**, which summarizes the audit by its major categories of Reserves, Contingent Resources and Prospective Resources, all categories of Reserves increased between the 2012 audit and the 2018 audit. Proved Reserves jumped by 10.3 % from 199.5 million barrels to 220.1 million barrels. Probable Reserves rose by 16.6% from 85.5 million barrels to 99.7 million barrels and Possible Reserves climbed by 8.5% from 124.8 million barrels to 135.5 million barrels. The 20.6 million barrel increase in Proved Reserves is a hopeful sign, and is thanks to the maturity of, and operator commitment to proved undeveloped opportunities Onshore Trinidad and in the West Coast Marine Area.

If we turn now to our Resource Categories as can be seen on **Slide 1**, NSAI's Best Estimate of the nation's Contingent Resources (2C) rose by 17.2% - from 58 million barrels in 2012 to 68 million barrels in 2018. A 36.8 % decrease in the 2C estimates for the East Coast Marine Area between audits was offset by a 25.7 million barrel addition from Onshore Trinidad in 2018. This contribution came from several well-known fields such as Barrackpore, Penal and Parrylands, as well as one operational and one proposed flooding project. While promising, several geologic, economic,

and technical hurdles need to be overcome for these resources to be promoted to reserves.

Those of you who attended last November's presentation of the Gas Audit Results for Year End 2018, will remember me boasting in my address about the very significant increases in our Prospective Resources due to Deepwater oil leads identified in blocks operated by BHP. I'm proud to announce that NSAI's independent, Best Estimate of our Unrisked Prospective Resources is now a mammoth 3.2 billion barrels! This is an increase of 773.4% over the Unrisked Prospective Resources at 1 January 2012 of only 368.2 million barrels. This notable Resource estimate, more than 90% of which was identified in the Deepwater would not be possible without the achievements of BHP and its partner Shell in acquiring, processing and interpreting prospects identified in the Southerly Deepwater Blocks of TTDA 3, TTDA 5 and TTDA 6. With the Invictus drillship now in transit to Trinidad and Tobago from the Gulf of Mexico to drill the Broadside prospect, a commercial discovery in any of its several stacked Miocene targets, would de-risk the prospective resources identified by NSAI significantly and be very good news for Trinidad and Tobago.

## **Slide 2**

Notably, as can be seen on **Slide 2**, between 2018 and 2012, the share of total proved reserves belonging to the East Coast Marine area declined from 31% to 18%, due to natural depletion while Onshore's share of the total increased to 52% from 36% due to better performance. The West Coast Marine Area's share meanwhile decreased slightly from 33% to 30%.

The shift in reserve distribution are due to:

1. The acceleration in the average annual decline rate for Marine oil production from 3.4% to 4.9% between audits.
2. The decrease in the average annual decline rate for Onshore oil production from 1.0 % to 0.9% between audits.

The latter achievement may be attributed to the diligent work of the many Onshore licensees and sublicensees.

When the proven reserves of condensate for 2018, estimated by the Ryder Scott Company, are added to the proven crude oil reserves, our proven reserves of crude oil and condensate are 256.9 million barrels. This exceeds the figure at 1 January 2012 by 14.0 million barrels or 5.7%. Upward Revisions based on better production

performance and committed projects resulted in a reserves replacement ratio of 107.2 % between audits. The reserves to production ratio based on the oil and condensate production and reserves in 2018 on a proved basis is 11.1 years. This is an increase of 54.2 % from the 2012 figure of 7.2 years. This change is in part due to the decreased production of 23.2 million barrels in 2018, which was 10.4 million barrels less than was produced in the year preceding the 2012 audit. But our significantly higher proved reserves of crude oil and condensate in 2018, relative to 2012 was another factor.



### **Slide 3**

Besides the potential oil windfall in the Deepwater, since the 31 December, 2018 cut-off date for this audit there have been several encouraging oil discoveries and continued exploration and development by operators, referenced on **Slide 3**, that can have a positive impact on reserves:

- BHP's Block 3a Ruby field, which will boost the country's production by 15,000 bopd in 2022, has been approved and could be promoted from Contingent Resources to Reserves in a future oil audit.
- Exploration is continuing in the 2013 Onshore Competitive Bid Round Blocks of Ortoire and Rio Claro as Touchstone and Lease Operators Limited respectively follow up on the Barakat, Coho, Cascadura discoveries.
- Columbus Energy announced in April an oil discovery in the Lower and Middle Cruse sands at the Saffron Well, located in the South West Peninsula.

- The 2020 DeepWater Nomination Period is almost completed and should result in a Competitive Bid Round that would permit the continued development of reserves and resources for the future.
- Trinmar began using the Mobile Offshore Production and Compression Unit (MOPU) since December 2019 to perform production and compression duties. It is expected to add approximately 1,840 bopd on average incremental production for 2019/2020.

Let me close by updating you on the status of another important Audit. The Year End 2019 Trinidad and Tobago Natural Gas Reserves Audit Report is in final draft form and will be completed in a matter of a week or two. Like many other activities in light of COVID-19, the Audit's Data Collection meetings, Ministry staff training and Mid Project Review Meetings have gone virtual this year without missing a beat! In keeping with Government's policy to maintain open channels of communication and to encourage public awareness of the critical gas sector, an update on this will be provided at the appropriate time.

Thank you very much.

I am open for questions by the Media on the foregoing.