



Government of the Republic of Trinidad and Tobago

Feature Address

Delivered by

Dr. The Honourable Roodal Moonilal, MP

Minister of Energy and Energy Industries

At

SPETT's 2025 Mature Basin Energy Symposium

Cara Suites

On

“Rejuvenation our Mature Fields and Basins: Driving the Next Wave”

July 1st, 2025

Salutations

- Members of the Board of the Society of Petroleum Engineers (SPE),
- Representatives of the oil and gas companies,
- Sponsors of this event,
- Members of the media,
- Ladies and gentlemen.

Good morning, it is an honour to address this symposium on the rejuvenation of our mature basins – a timely topic. It is noteworthy too that this is the first time I am addressing members of the oil and gas fraternity.

I am also pleased that the opportunity has presented itself from the SPE, one of the most recognized professional organizations in the world of oil and gas with members whose intellectual and technical inputs will be important to Trinidad and Tobago going forward.

It is no secret that Trinidad and Tobago's hydrocarbon basins are mature, having been in production since the early 20th century.

- The Southern Basin has been in production since 1908;
- The TNA (Trinidad Northern Areas) acreage, which is better known as Trinmar has been in production since 1955;
- The prolific Columbus Basin has been in production since 1972;
- The North Coast Marine Area (NCMA) has been in production since 2001; and
- The Angostura area has been in production since 2005.

These basins have sustained the economic life of Trinidad and Tobago but are now past their peak production. That does not mean they have reached the end of their economic life.

By applying new technologies, managing acreage, reducing costs and cultivating partnerships, we can fully realize the potential of our mature basins. The success of this approach was recently demonstrated by recent discoveries in the Teak, Samaan and Poui (TSP) area which would not be possible without new seismic acquisition and interpretation.

To ensure that Trinidad and Tobago continues to play a vital role in the global energy arena, one of the key pillars of this government is the reemergence of Trinidad and Tobago as the energy hub of the Caribbean. I remain committed as Minister to being accessible and promoting the ease of doing business in the energy sector. One of the major obstacles to increasing oil and natural gas production is the lack of operational efficiency linked to Government approvals, that companies must navigate. In the energy sector, time is money. A study conducted by the Energy Chamber revealed that the approval process for new upstream projects require 33 major approvals from 8 Ministries or agencies. Government approvals are required for almost every activity and at every stage from seismic acquisition to exploration drilling to the operationalization of the Field Development Plan.

Given the urgent need to get projects off the ground, the Ministry of Energy and Energy Industries will host a National Symposium on the Ease of Doing Business in the energy sector. At this symposium the industry will be invited to air their concerns and to make recommendations. These recommendations will aim to de-bottleneck the approval process along the energy value chain and accelerate the development of projects in the energy sector.

The successful exploration for and production of crude oil and natural gas in Trinidad and Tobago can be attributed to our upstream companies applying advanced seismic techniques such as ocean bottom cable (OBC) and ocean bottom node (OBN), machine learning and a skilled and experienced cadre of energy professionals.

In 2012 to 2015 there were two very important seismic surveys that took place in Trinidad and Tobago. BP conducted a historic Ocean Bottom Cable seismic survey over its acreage and this laid the foundation for BP's developments that materialized in the last decade including Cypré.

The other was BHP's huge deepwater survey of 2014 to 2015 which resulted in the discoveries in the deepwater, most notably what is today the Woodside Calypso project.

Trinidad and Tobago's geology, which has been linked to similar geological formations in Venezuela and Columbia, has been a prolific producer of oil and gas. The main areas of hydrocarbon exploration in Trinidad and Tobago have been the Columbus Basin, the Southern Basin onshore and offshore, Caroni Basin and Gulf of Paria Pull-apart Basin, Carupano Basin and Central Range/Darrien Ridge. These basins contain a vast quantity of data derived from exploration and development activities which allow for the re-evaluation of the resources, utilizing latest technology and lessons learned from previous exploration activities.

To date the country has produced in excess of 3 billion barrels of oil from exploration and development activity in shallow water and on land with more than 1 billion barrels of oil being produced in the prolific Columbus Basin.

While the basins have been extensively explored there still remains untapped potential. In particular, much of the deep potential and continental slope of the Columbus Basin shelf have been largely untested. The recent oil discovery by EOG/BP with the Beryl well affirms the potential of the Teak, Samaan and Poui (TSP) Deep Area. A significant part of this area is currently under licence and it is the Ministry's intention to engage the licensees to accelerate exploration activity in the deep horizons of TSP.

Currently, there is exploration activity across all basins. On land, exploration activity is being undertaken in six blocks. At this time, the licensees are planning to acquire and process seismic data. The initial feedback in the evaluation of hydrocarbon prospects has been positive. Within the next twelve months, the drilling of the first of the twenty-six contracted exploration wells will commence with the majority of wells to be drilled within the next two to four years. However, the drilling programme needs to be accelerated to boost onshore oil production which has been declining. Onshore production, which amounted to 22,616 barrels per day in 2015 declined to 18,004 barrels per day in 2020 and slipped further to approximately 17,000 barrels per day in 2025. This decline will continue unless urgent action is taken.

Heritage which has the largest onshore acreage, accounts for the majority of the decline in onshore oil production over the last five years. Notably, in 2015 the onshore production from then Petrotrin stood at 21,387 barrels per day. In 2020, under Heritage, onshore production decreased to 10,264 barrels per day and experienced a further decline to 9,667 barrels per day in 2025. Whereas its lease operators, enhanced production service contractors and farmout operators achieved a marginal increase in oil production over the same period. Heritage needs to make better use of its acreage and one policy consideration would be a re-assessment of how they partner with the Lease Operators and Farmout companies.

Among the measures proposed by Heritage to improve oil production, is the targeting of deeper horizons in its land acreage. This was previously not possible as Heritage did not have deep rights for its onshore blocks namely: its Cruze Horizon Block, Guapo Oropouche Brighton Horizon Block, Herrera Horizon Block and Mayaro-Guayaguayare Horizon Block.

Following negotiations with the Ministry of Energy and Energy Industries, the licences of Heritage for these onshore blocks are being amended to include Heritage's right to the deeper horizons. In return, Heritage has committed to the drilling of one exploration well in each of the blocks ranging in depth from 5,500 feet true vertical depth to 13,500 feet true vertical depth over the next three years.

The targeting by Heritage of the deeper horizons will resuscitate oil exploration on land and with success would open up a new chapter in onshore oil exploration. This will encourage onshore operators in newly licensed acreage, as well as already licensed areas, to drill deeper targets to optimize the basins potential. We are aware of the concerns of the small land-based oil companies and some of their counterparts offshore about the fiscal regime's competitiveness and this is something we are prepared to address with careful consideration.

In 2015, Petrotrin's offshore production was 21,468 barrels per day. However, Heritage's offshore oil production has followed the same trend as its onshore production, declining to 17,690 barrels a day in 2020 and then to 17,226 barrels a day in 2025. This trend needs to be reversed and accordingly the new Heritage Board of Directors will be mandated to develop a strategy for increasing oil production within the earliest timeframe.

However, the outlook for oil in the short to medium term is positive. There are a number of gas fields coming onstream in the near term that are rich in condensate. The Mento development, the joint venture between EOG and BPTT, which delivered first gas on May 29, 2025 is projected to reach liquid peak production at a rate of 8,200 barrels per day.

Crude oil produced by Perenco from redrill workovers in the Poui field is expected to add **2,900** barrels of oil per day to the base production in early 2026. Crude oil from Heritage Offshore's East Soldado Field Development, which is currently being drilled by Enterprise Offshore Drilling Rig 264 is also expected to add an additional **2,000** barrels of oil per day by the fourth quarter 2025.

The joint venture between BPTT and EOG is moving forward to expedite production from the Coconut field following the announcement of the final investment decision. The Coconut field is projected to contribute an additional 3,000 barrels of oil per day by 2027.

EOG is advancing this initiative alongside the recent oil discovery at the Beryl well in the TSP Deep Area, in collaboration with BPTT. The joint venture between BPTT and EOG is currently working towards a Final Investment Decision for the Beryl oil discovery. Initial production is anticipated in the fourth quarter of 2028, with expectations to reach a peak output of 15,000 barrels per day by 2029.

Based on the current suite of projects, oil production is projected to increase in the period 2025 to 2028. I will stay away from giving specific numbers. As you know while we bring on new projects we are also combating natural decline which is sometimes difficult to predict. With regard to onshore production, the responsibility really resides with Heritage and the Lease Out Farmout community as well as other independent producers. As a Government, land-based production is important to us

from the perspective that it creates more employment and has spin off benefits for communities.

As with oil, natural gas production has been on the decline. In 2015, 3.8 billion cubic feet of gas was produced. Currently, gas production currently stands at 2.54 billion cubic feet per day. This is unacceptable. In 2025, gas supply has received a boost with the coming onstream of projects by BPTT and EOG Resources. In April, BPTT's Cypre Phase 1 development came onstream with a peak production of 350 million standard cubic feet per day. This was followed by the delivery of first gas in May from the Mento field, a joint-venture between BPTT and EOG Resources which will produce at peak 225 million standard cubic feet per day. Later this year BPTT will complete Phase 2 of the Cypre project. Once again, the Cypre development has demonstrated that the application of Ocean Bottom Cable (OBC) seismic in 2012 to 2013 coupled with fiscal incentives in 2014 has led to increased production. While these projects are welcomed, it must be mentioned that they would really be combatting natural decline from maturing reservoirs.

Over the next three years, a continuous stream of offshore projects will come on production. BPTT will bring onstream projects in 2027, namely Ginger and its joint-venture with EOG Resources, Coconut. These gas projects will bring onstream peak production of 600 million standard cubic feet per day. Shell has also taken a positive Final Investment Decision on its Aphrodite project in the East Coast Marine Area. Production is expected to begin in 2027 with peak output projected at 107 million standard cubic feet per day. Shell's Manatee gas development is also projected to come onstream in 2027 with a 10% uplift in previously forecasted volumes. In recognition of this target, they have reclassified this advancement as Manatee PLUS. We welcome Manatee PLUS. In light of this, we have noted with great enthusiasm, Shell's newfound aspiration to triple gas production by 2027.

In the period 2028 to 2029, BPTT will bring on stream several gas projects. These comprise Juniper Phase 2 with a peak production of 213 million standard cubic feet per day, Matapal Phase 2 with a peak production of 99 million standard cubic feet per day and Cassia TP 61 with a peak production of 127 million standard cubic feet per day. There is also associated gas from the Beryl oil discovery which is projected to come onstream in late 2028.

There are however a number of other projects for which a Final Investment Decision has not been taken. These comprise projects by Perenco and Woodside. In the first quarter of 2025, Perenco conducted a successful appraisal of its Onyx gas field. The subsurface data is currently under review and development options are to be evaluated in collaboration with the Ministry of Energy and Energy Industries.

Woodside's Deepwater project, which has gas reserves of 3.5 trillion cubic feet, is currently in the development stage. It is projected to add 700 million standard cubic feet per day to domestic gas production. The Ministry is working closely with the stakeholders of these projects to facilitate an accelerated development of these gas resources to stabilize and improve domestic gas production.

The current and upcoming gas projects will however only provide relief in the short to the medium term. The natural gas reserves auditors, De Golyer and Mc Naughton in the latest gas audit, advised that it would be necessary to accelerate the execution of contingent resource development projects and exploration efforts to convert prospective resources into reserves and contingent resources, to meet gas demand. Prospective resources at the end of 2023, were estimated at 58.25 trillion cubic feet, with 41.1 trillion cubic feet being attributed to the shallow-water region and 17.15 trillion cubic feet to the deep-water area.

The Ministry, acting on the findings of De Golyer and Mc Naughton, embarked on a series of competitive bid rounds for blocks in the shallow water and deep-water areas. In the last Deepwater bid-round, the Ministry invited bids for blocks in the deep-water acreage off the northern and eastern coasts of Trinidad and Tobago. The outcome of the exercise was the grant of three Production Sharing Contracts to a Consortium comprising BP Exploration Operating Company Limited and BG International Limited, a subsidiary of Shell, for Blocks 25(a), 25(b) and 27.

Pursuant to the obligations within the Production Sharing Contracts, seismic data was acquired over these blocks in 2024. Processing of this data is underway with an expected completion date of September 2025. The results of the processing will be used to inform potential plays within the blocks which would be subject to further analysis.

For the last Shallow Water Bid Round, four Production Sharing Contracts were awarded. The estimated gas resources for these blocks are estimated at 1.5 trillion cubic feet. For the Modified U(c) Block, seismic data was acquired by Shell in record time and is currently being processed, in satisfaction of the obligations of the Production Sharing Contract. The outcome of this evaluation will guide Shell's entry into the next phase under which there is an obligation to drill an exploration well.

Similarly, EOG has commenced seismic acquisition for the Lower Reverse L Block which will inform the decision to drill an exploration well in the next phase. For the NCMA 4(a) Block, EOG is preparing to drill an exploration well during 2026, with survey works to facilitate this drilling targeted for Q4 2025. Preparations for the survey works, including the Certificate of Environmental Clearance application is

underway. For Block NCMA 2, BPTT is undertaking seismic re-processing activities which will inform the decision to drill an exploration well in the next phase.

In keeping with its programme to sustain hydrocarbon exploration, the Ministry launched in January this year its deep-water bid-round. This bid round contains twenty-six (26) deep water blocks located off the eastern and northern coasts of Trinidad and Tobago. The blocks which are located in water depths ranging from 1,000 – 2,500 meters are of Proven Cretaceous source, with Pleistocene to Miocene reservoirs located at depths between 3,300 to 6,000 metres, with a combination of stratigraphic and structural traps.

The deadline was initially July 2nd, 2025 but was extended to 12 noon on September 17th, 2025. Successful bids will be announced three (3) months following the close of bidding. There has been strong and renewed interest in the blocks with multiple recent requests for data and additional time particularly by those companies that are not currently operating in Trinidad and Tobago. This is testimony to the heightened investor confidence in the energy sector.

This interest has in part been generated by the recent and ongoing exploration successes of the neighbouring Guyana/Suriname basin play concepts, analogues with deep-water areas of Nigeria and Equatorial Guinea and the country's successful Woodside Calypso deep-water discovery. We look forward to a successful deep-water bid-round and while this has been the preferred mode for the award of blocks we are flexible to unsolicited proposals out of bid-round. We are currently considering one such proposal and if the negotiations are successful a major announcement will soon be made.

The current oil and gas initiatives will sustain the country's basic hydrocarbon demands in the short to medium term. However, to ensure a sustainable oil and gas

sector in the long run, we must take more comprehensive actions. We have exploited intensely our oil and gas resources on land and in shallow water with the focus on the low hanging fruit. Our deeper horizons in these areas and our deep-water province have been largely unexplored. As a result, we have been denied the opportunity to potentially discover new oil and gas resources in our prolific hydrocarbon basins. This is a matter that needs to be addressed and it is our intention to enter into dialogue with the energy companies to determine a way forward.

Further, we have not facilitated diversity among the operators. This has resulted in limited participation in our bid rounds, a moderate appetite for risk taking and the selective application of new technologies in the upstream sector. Our aim therefore will be to have the widest cross section of upstream companies participating in our oil and gas industry. Put simply, we need new companies in the upstream side of our industry who would bring new approaches to doing things.

The Energy Sector remains the central tenant to our economic development. In keeping with my Government's commitment to accountability and transparency, I remain keenly aware of value creation for each citizen equally. The energy sector will continue to be the main contributor of wealth for the nation as well as the source of much needed foreign exchange. Sadly, I recently took note of a statement made by the Honourable Prime Minister of the St. Vincent and Grenadines, where he made comments on Trinidad and Tobago's forex situation and compared our money to monopoly money. He should have shared his wisdom with his colleagues who are responsible for the collapse of our economy. It is pity he did not share his thinking with the former administration over the last decade which could have reversed this crisis with prudent management and enhanced investments in the energy sector. Further, the closure of Petrotrin and the Pointe-a-Pierre refinery would have

contributed in no small measure for the decline in forex. On another occasion we will speak on our plans to restart the refinery.

As a petroleum economy, we are entering into a new phase of our evolution after 117 years of commercial petroleum production. The low hanging fruits have been exploited. Notwithstanding, Trinidad and Tobago has been recognized as and is indeed a prolific hydrocarbon basin. Our deeper horizons on land and in shallow water as well as our deep-water province have been largely unexplored. We have just metaphorically scratched the surface. Innovations in drilling technology, such as autonomous underwater vehicles and real-time data analytics, are improving operational efficiency and safety. Artificial intelligence is transforming energy management by optimizing resource allocation and forecasting demand. The integration of AI and Internet of Things (IoT) with devices are also opening new avenues for innovation in the energy sector. Let us use the technology to chart the next 100 years of hydrocarbon production in this country. We can achieve this objective if the industry and the professionals of organizations such as the SPE work together in unison and I am confident that we can.

In closing, I extend my best wishes to the organizers of the SPETT's 2025 Mature Basin Energy Symposium for a successful event. It was an honor to deliver this feature address. I look forward to the sharing of innovative ideas and collaborative approaches to developing solutions for our energy sector. To all participants, I hope you find the experience enriching and I appreciate your focused attention on my address.