



**Government of the Republic of Trinidad and Tobago**

**MINISTRY OF ENERGY AND ENERGY INDUSTRIES**

**FEATURE ADDRESS**

**BY**

**THE HONOURABLE STUART R. YOUNG M.P.**

**MINISTER OF ENERGY AND ENERGY INDUSTRIES &**

**MINISTER IN THE OFFICE OF THE PRIME MINISTER**

**AT**

**THE PRESENTATION OF THE**

**GAS AUDIT RESULTS FOR YEAR END 2021 AND FOR YEAR END 2022**

**AT**

**THE MINISTRY OF ENERGY AND ENERGY INDUSTRIES**

**PORT-OF-SPAIN**

ON

TUESDAY 7<sup>th</sup> MAY, 2024

3:00 P.M.

**Salutations:**

1. Permanent Secretary, Ministry of Energy and Energy Industries, Penelope Bradshaw-Niles
2. Other Permanent Secretaries and Deputy Permanent Secretaries.
3. Vice President - Senior Engineer, DeGolyer and MacNaughton, Juan Pablo Francos
4. Representatives of the Energy Companies
5. Members of Staff at the Ministry of Energy and Energy Industries
6. Members of the Media
7. Other invited Guests



Good afternoon,

Welcome to the Results of the Annual Audits of the Non-Associated Natural Gas Reserves and Resources of Trinidad and Tobago for Year End 2021 and for Year End 2022. As the Government promised, we are here today to communicate openly and transparently with the country to promote not only a deeper understanding but also an update on our hydrocarbon resources that remain the driving force of the economy. The presentation of the results of the audits has not followed the usual timeframe as we have new auditors on board which required a greater level of interaction with Ministry and Industry in the conduct of the audits but also I must take personal responsibility and apologize for the delay as the audit results have been ready for sometime but due to my professional commitments I was unable to present until today so that fault is mine.

Let me provide some background on our new audit consultant, DeGolyer and MacNaughton. After the five (5) year contract with our previous auditor, Ryder Scott Company ended with the Year End 2020, Cabinet granted approval in 2021 for the Ministry of Energy and Energy Industries (MEEI) to engage an independent petroleum consultant to conduct annual gas reserves and resources audits for the five-year period 2021 to 2025. Following a highly competitive tender process, a team from the Ministry conducted evaluations and selected DeGolyer and MacNaughton

(D&M) from a field of five (5) prestigious international petroleum consultants which tendered bids. Due to the date that the contract was awarded, the audits for Year End 2021 and Year End 2022 were conducted at the same time. These are the first and second audits of the current 5 year contract.

The main objective of the Audit is the provision of an **independent** certified statement of the country's natural gas Reserves and Resources in an internationally recognized reporting format.

DeGolyer and MacNaughton, which does not have a vested interest in any of the hydrocarbon resources being evaluated, is well placed to provide an independent assessment of our natural gas volumes. A major benefit of this independent audit is that it is insulated from the pressures facing an International Oil and Gas Company competing for project investments based on these resources. DeGolyer and MacNaughton uses internationally recognized and accepted standards that have been approved by the World Petroleum Council, the Society of Petroleum Engineers, the American Association of Petroleum Geologists, and the Society of Petroleum Evaluation Engineers. The use of this standard means that the methodology and technical vocabulary in the report produced by DeGolyer and MacNaughton, can be widely understood in the industry and used as a basis for the development and shaping of national energy strategies. Indeed, in order for industry to better

understand the basis of Government's decision making, the detailed audit reports are made available annually to each gas operator for its fields by the MEEI.

The current international reserve standard, last revised in 2018, introduced the terms Technically Recoverable Resources, as well as P1 + C1 Resources. I will use these terms from here on. Since we last presented to the nation on the Gas Audit a little over 2 years ago, the results of the current audit have shown a downward revision in the Technically Recoverable Resources.

If we examine **Chart One (1)**, which references Total Unrisked Technically Recoverable Resources (formerly Proved + Probable + Possible) from 2002 to 2022, we observe the consistent upward trend in Total Unrisked Technically Recoverable Resources over the 2016 to 2019 period followed by a marked decline from 2020 to 2022. At the same time, gas production fell significantly between 2019 and 2021, due to project delays caused by the COVID 19 pandemic. There was a small increase in our production in 2022.

The P1 + C1 Technically Recoverable Resources, which were formerly referred to as Proved Reserves, experienced a 6.2% increase from 2020 to 2021. Between 2020 and 2021, there was a 168% Replacement of this Resource, compared to 57% replacement between 2019 and 2020. This means, as shown in **Chart Two (2)**, that 0.93 TCF of P1 + C1 Resources produced were actually replaced by additions

amounting to 1.56 TCF in that year, raising the P1 + C1 Resources from 10.2 TCF to 10.9 TCF.

Moving on to 2022, the P1 + C1 Technically Recoverable Resources, experienced a 5.9% increase from 2021 to 2022 and during the same period there was a 165% Replacement of this Resource. This meant, as shown in **Chart Three (3)**, that 0.99 TCF of P1 + C1 Resources produced were replaced by additions amounting to 1.63 TCF in that year, raising the P1 + C1 Resources from 10.9 TCF to 11.5 TCF.

Exploration Resources were static from 2020 to 2021 but then rose by almost 3% between 2021 and 2022. The effect of these additions is seen in **Chart Four (4)**. This rise follows a decline between 2017 and 2019 due to the movement of deep-water volumes into this category.

So in layman's terms what that means is that the end of 2021 we're looking at resources that we have been able to quantify at about 11.5 TCF and some of the additions to the resources are the work that has been done in deep-water.

The Year End 2021 and Year End 2022 Audit reports highlight the following movements within the P1 + C1 Technically Recoverable Resources category:

1. The Woodside operated assets volumes increased by 49% during the period because of two Bongos field appraisal wells which successfully confirmed

volumes in blocks in the North, Central and South sections of the field during the second half of 2021.

2. The second largest volume increase by an operator came from Shell, which added large Manatee volumes as a result of the 2019 agreement between the Government of Trinidad and Tobago and the Government of Venezuela, which set the allowable recoverable volume on the Trinidad side and the execution of the Manatee Production Sharing Contract on November 17, 2021.
3. Touchstone tripled its volumes consequent on the CAS-Deep-1 well drilled in the first quarter of 2021 which led to a revision of the Gas In Place estimate and an increase in the expected recovery.
4. BPTT, the operator with the country's largest P1 + C1 technically recoverable resources, had both upward and downward revisions, with the overall impact being a small downward revision of 4.1%. And of course I look forward to hopefully in the not too distant future, the success we may have with the Manakin-Cocuina field that will again increase the reserves of the fields available to us.
5. EOG had a downward revision of 13.0% during the period due to field performance and a reevaluation of Ibis and Mento volumes.



The Year End 2021 and Year End 2022 Gas Audits were the first audits conducted in person since the border closure brought on by COVID 19. The return to an in-person experience was especially useful as the role of country auditor is new to the consultant. As I speak the data is being gathered for the Year End 2023 audit has concluded and independent evaluations are underway on mapping Shell's Aphrodite discovery, the performance of EOG's Osprey East wells and BP's infill drilling in Mango, Angelin and Savonette, to name but a few examples.

As was the case for the 2021 and 2022 audits, you can be assured that the Government will continue its drive for transparency in the energy sector, and to keep the public reliably informed of the results of the 2023 and future audits.

The outlook for natural gas continues to be promising for Trinidad and Tobago as we continue to encourage exploration as well as appraisal and developmental drilling so that resources can be moved from the categories of higher risk to the lowest risk P1 + C1 technically recoverable resources category. Operators continue to invest in natural gas as evidenced by BP's Cypre development which started drilling the first of seven wells in February and is planned to target a resource estimate of 479 BCF and deliver first gas by 2025. Development drilling is also ongoing by Touchstone in the onshore Cascadura gas field, as well as exploration

and development drilling by EOG in Parula. On October 3<sup>rd</sup> 2023, the Shallow Water Competitive Bid Round was opened and will close later this month on May 27<sup>th</sup>. We are optimistic, given the interest by some of the companies to changes made in the terms and conditions of this Shallow Water Bid Round.

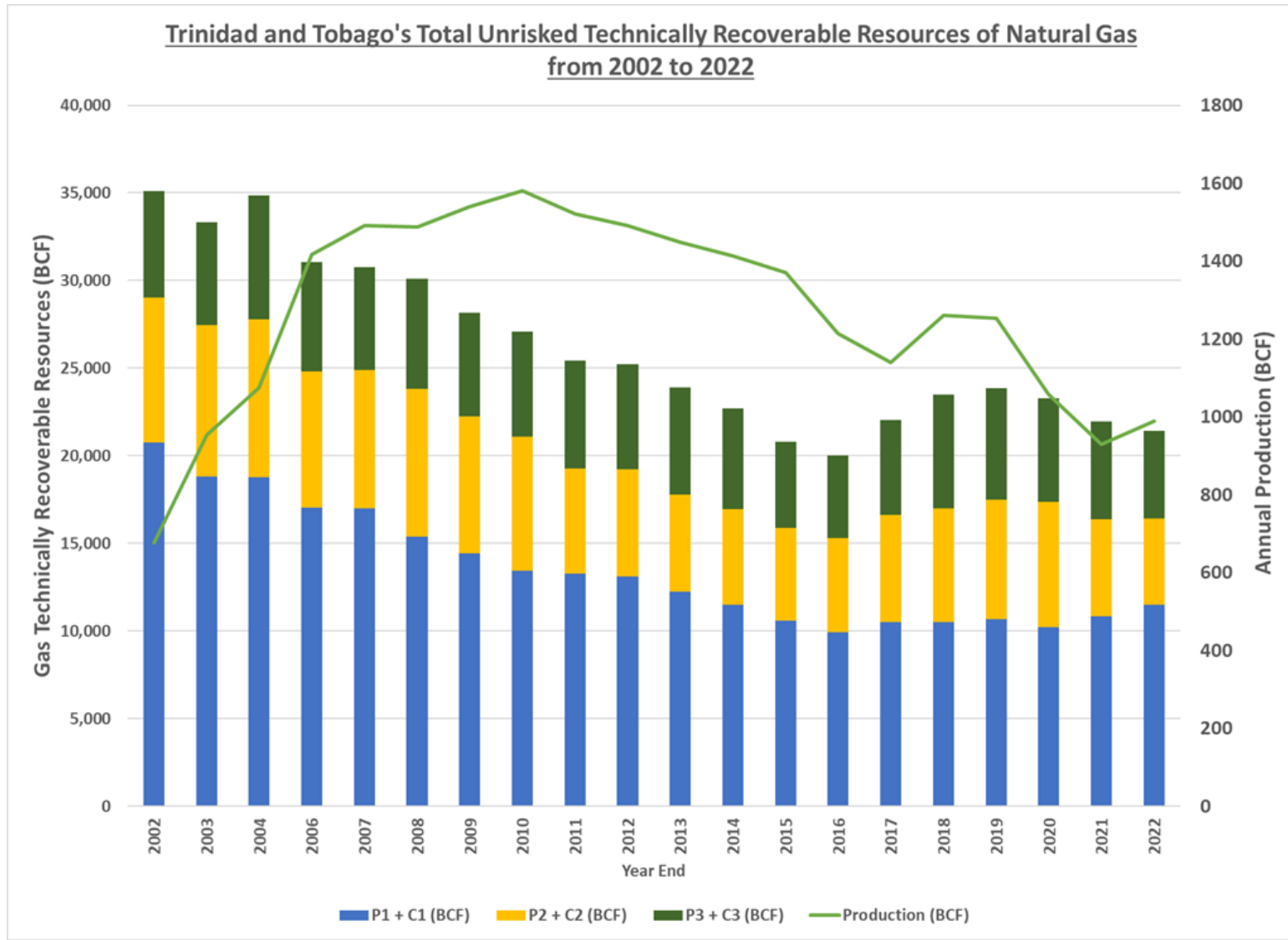
I take this opportunity to express on behalf of the Government sincere thanks to Juan Pablo Francos and the DeGoyler and MacNaughton Team for the quality work they've done in completing these audits on time to the MEEI satisfaction.

What I can also report to you the population of Trinidad and Tobago is that last week when I was in London I used the opportunity to meet with Executives from shell and bp and both companies remain aggressive and bullish on Trinidad and Tobago and have reaffirmed their commitment to continue in Trinidad and Tobago and we spoke about some exciting projects that we expect to have developed in Trinidad and Tobago as we go forward . what I can say is that all of the up-streamers EOG, Woodside, Perenco and others would also have similar sentiments.

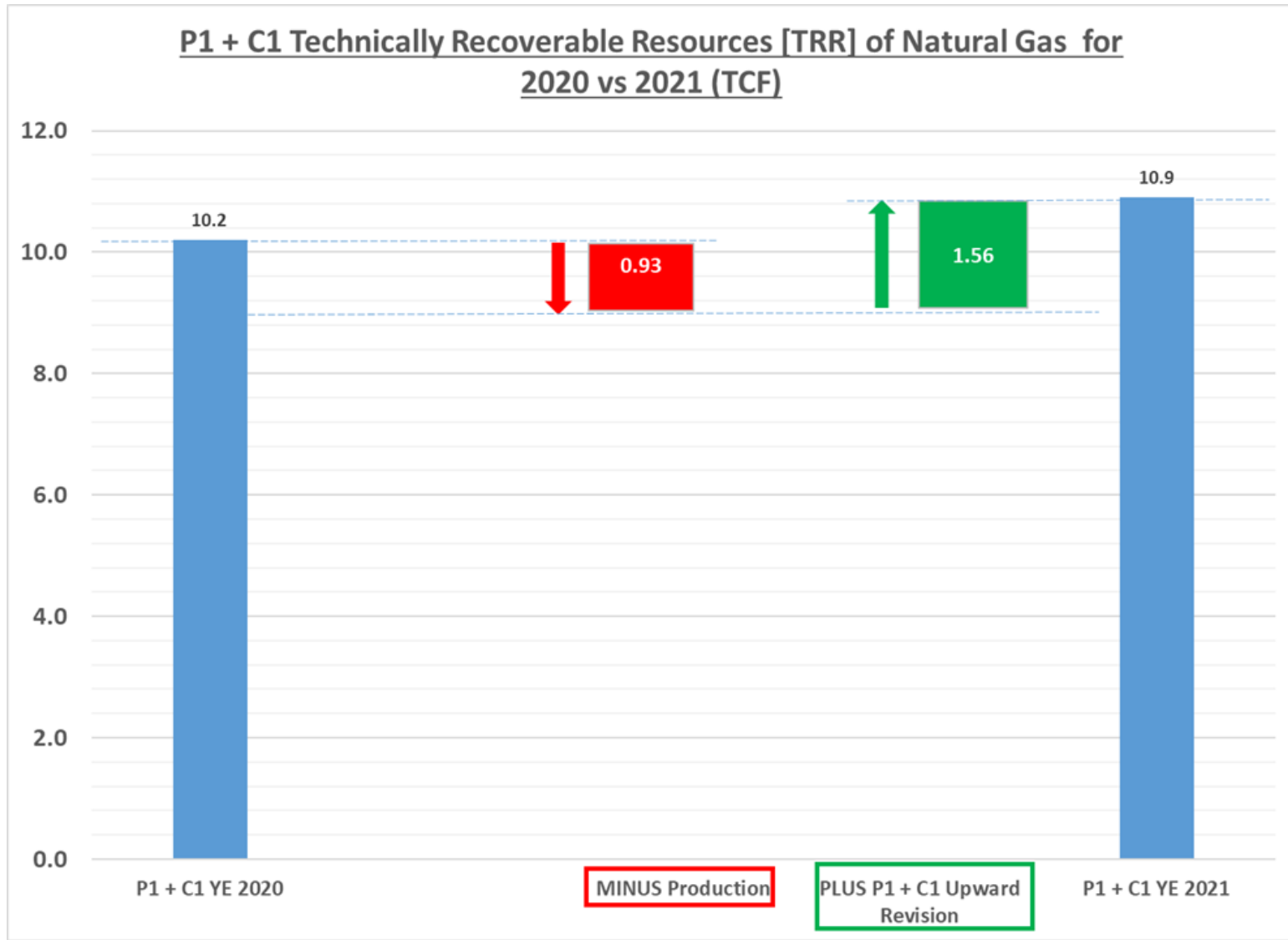
As we go forward I caution that Trinidad and Tobago is a mature province and as we continue to exploit our resources we do face declines with the continued exploration and appraisal wells. I hope that we will be able to move some of our resources and our reserves into into the the proven and probable categories . there

is also some work that was done recently in the Columbus Basin and I look forward to some success in that area. With some new drilling techniques. That will be used in the future .

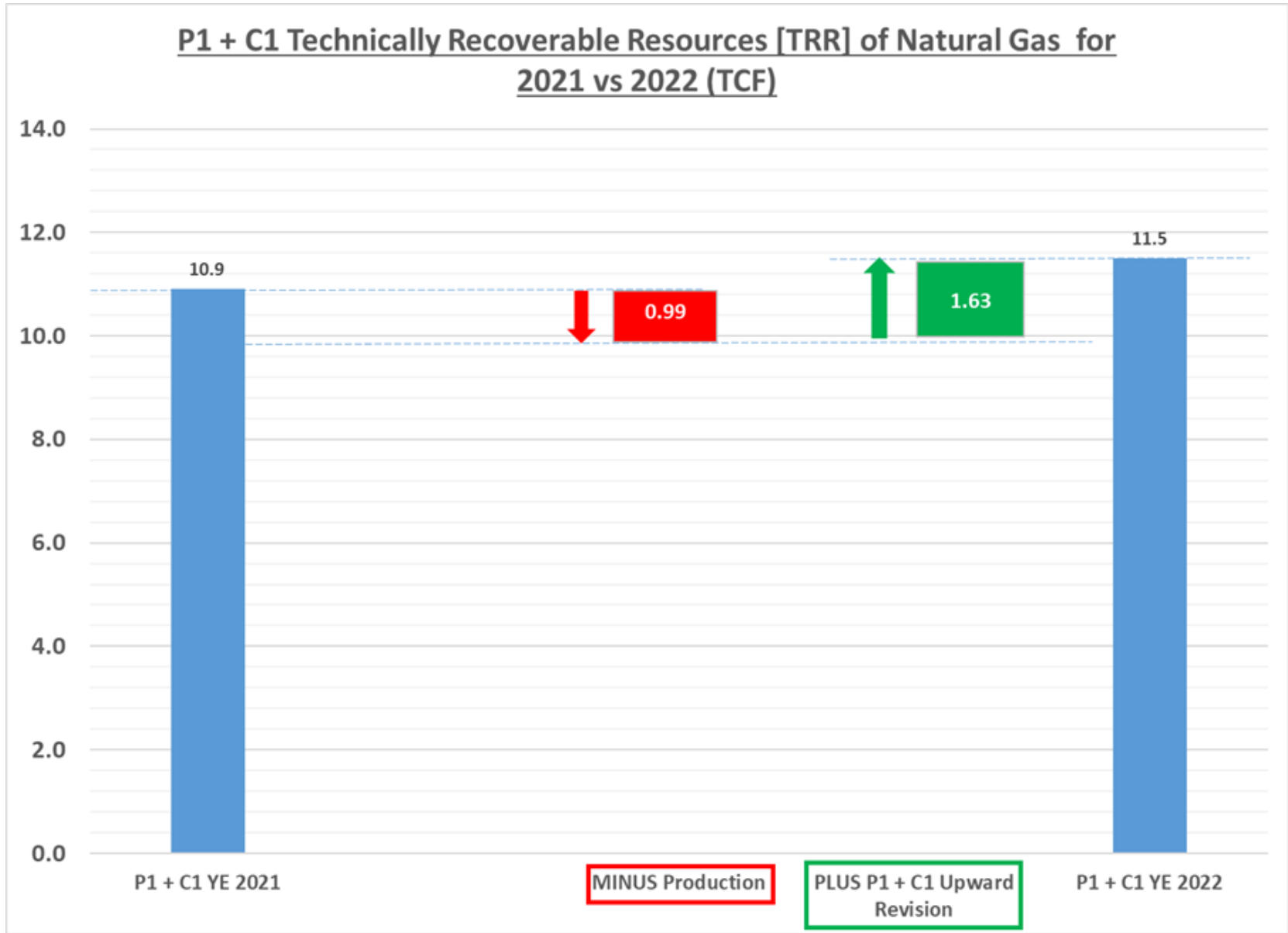
### Chart One



**Chart Two**



**Chart Three**



## Chart 4

**Trinidad and Tobago Total Unrisked Gas Prospective Resources**  
**2008 to 2022**

