



Update on the development of a National Carbon Capture and Storage Programme in Trinidad and Tobago

“Can CCS Decarbonise Industry in South America and help the oceans”

Prof. Andrew Jupiter - University of the West Indies

February 12th 2020

Presented at a conference in Bergen, Norway

Commitment by the Minister of Planning and the Environment (T&T)

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- “T&T can benefit from CCS as a means to CO₂ emissions mitigation given the large heavy petrochemical sector as well as the country’s history in enhanced oil recovery. It is encouraged and supported by the ministry for T&T to join in CCS initiatives.”
- “The time is now for us to conduct necessary precise feasibility studies for CCS projects locally and for us to explore opportunities to leverage international support.”
- “CO₂ is an asset that can be used to provide economic benefits to T&T”.
- “The government of T&T will continue to play its part by setting the policy framework and by supporting activities on CCS.”



Minister of Planning and the Environment, 2019

COP 23 and 24

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The Potential of Carbon Capture and Storage (CCS) in Trinidad and Tobago





Getting it done – October 29th, 2019

– Day 1





Getting it done – October 30th, 2019

– Day 2





Summary of CCS Symposium

INSTITUTIONS THAT PARTICIPATED

- UTT
- UWI
- UTEXAS
- NGC
- MINISTRY OF ENERGY AND ENERGY INDUSTRIES
- BP
- BHP
- SHELL
- COLUMBUS ENERGY RESOURCES LIMITED
- MIC
- MINISTRY OF PLANNING AND THE ENVIRONMENT
- INTERNATIONAL KNOWLEDGE CENTER
- IEAGHG
- SANEDI
- WORLD BANK
- EQUINOR
- ATLANTIC LNG
- EMA
- ENERGY CHAMBER
- TOSL ENGINEERING LIMITED
- MINISTRY OF NATIONAL SECURITY

FEEDBACK FROM STAKEHOLDERS AFTER DAY 2

Outstanding Questions

- Drop EOR?
- Does a regional opportunity for CCS exist?
- Can T&T become the storage hub for the Caribbean?
- How to make T&T carbon negative?

Desired Outcomes, Next Steps

- Geological storage atlas
- Capex and Opex estimation
- Incentives for private industry (carbon price)
- Infrastructure assessment (pipelines)
- Long term goals (hydrogen, oil & gas, ammonia export)
- Enhancing production (methanol, ammonia & power generation)
- Public outreach
- Repurpose the people decarbonize the mindset
- Utilization of the captured CO₂
- Potential economic benefits
- Value drivers & values proposition aid for funding
- Exploration + production + development commitment with reductions in emissions

CERM - Carbon Dioxide Emission Reduction



- The University of the West Indies
- The University of Trinidad and Tobago
- Ministry of Energy and Energy Industries
- Petroleum Company of Trinidad and Tobago
- The National Gas Company of Trinidad and Tobago



Way forward for National CCS programme in T&T 2019/2020

- **Joint Industry and Academia Partnerships - CERM**
- **International Partnerships** (signing of strategic MOU's)
 - Between local universities, UTexas)
- **Funding by International Agencies**
 - World Bank – Letter sent to Ministry of Finance via Ministry of Planning
 - GCF
- **Continue conducting local research**
 - Storage Atlas

ANY QUESTIONS?

