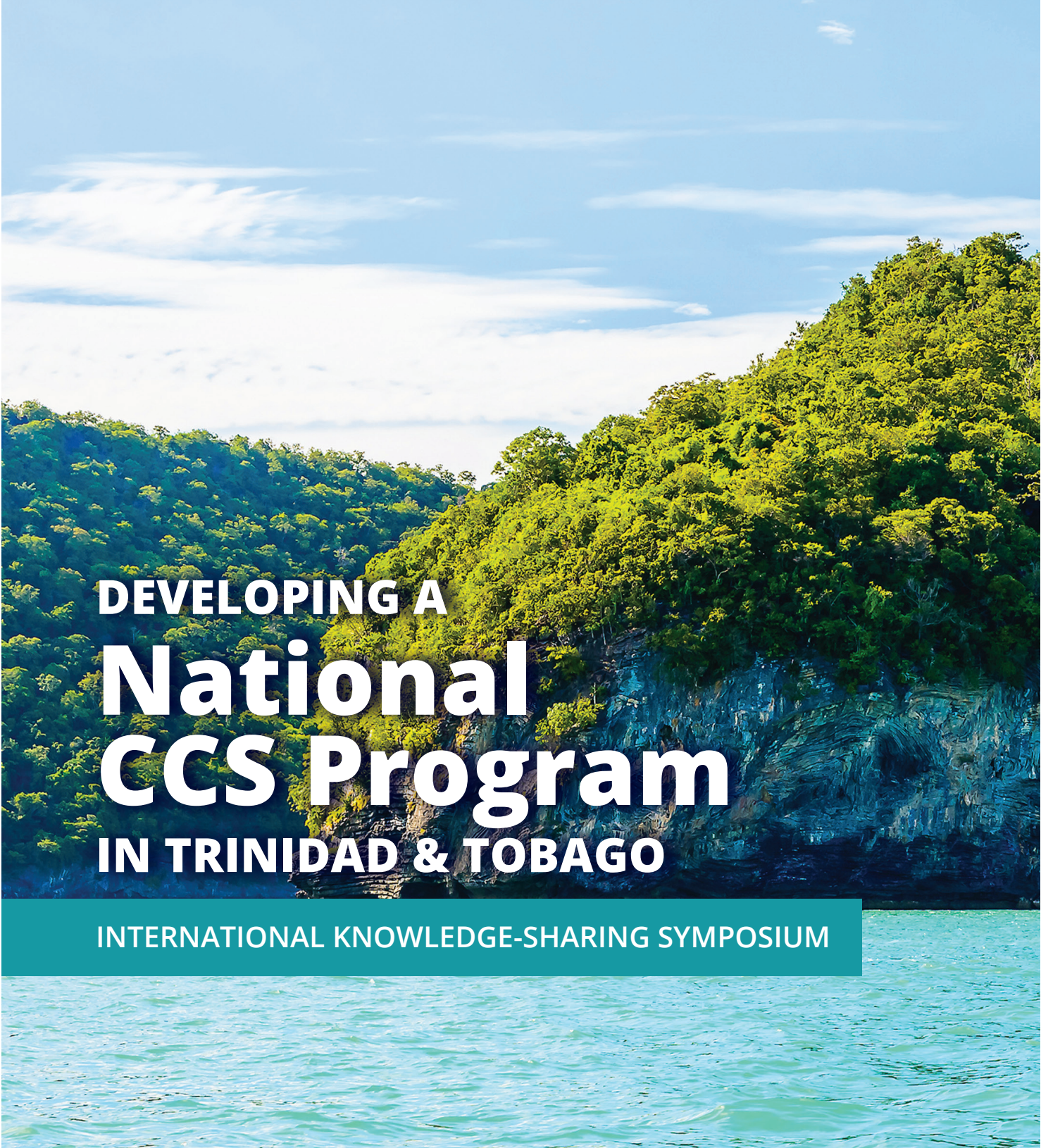




DEVELOPING A **National CCS Program** IN TRINIDAD & TOBAGO

INTERNATIONAL KNOWLEDGE-SHARING SYMPOSIUM

29 - 30TH OCTOBER, 2019

UTT Energy Campus, Pt. Lisas, Trinidad and Tobago

SCOPE

Trinidad and Tobago (T&T) have the potential to develop CCS as a part of their national carbon emission reduction and climate change mitigation strategy. This workshop will outline the foundation that is already in place for CCS in T&T and the potential for further development and technical support from international partners. It will also explore UNFCCC and other funding sources for national program development.

DAY 1

INTRODUCTION AND WELCOMING REMARKS

Chair, Andrew Jupiter, UWI

8:45am	Safety Briefing
8:50am	National Anthem - Anna Gadoo-Bhagwandass
8:55am	Welcome to UTT - Professor Emeritus Kenneth S. Julien Chairman of UTT
9:05am	Symposium Welcome - Tim Dixon, General Manager IEAGHG and Andrew Jupiter, The UWI
9:15am	Overview of CERM - Lorraine Sobers, UWI and Donnie Boodlal, UTT
9:30am	Featured Address - Honourable Camille Robinson- Regis, Minister of Planning and Development
9:50am	Tea/Coffee Break sponsored by BHP

INTERNATIONAL EXPERIENCE IN CCS

Chair, David Alexander, UTT

10:10am	Update on global scene for CCS - where we are and where we need to be, projects around the world- Tim Dixon, IEAGHG (UK, International)
10:30am	Project development - Capacity Estimation and storage site selection – Philip Ringrose, Equinor (Norway, remote)

10:50am	Integration of the whole CCS chain - Source Sink Infrastructure - Mike Monea, International CCS Knowledge Centre (Canada)
11:10am	Monitoring, safety and stakeholder engagement - Katherine Romanak - Univ. of Texas-BEG (USA)
11:30am	Decarbonising Industrial Sources of Carbon Dioxide CO₂ - Mike Monea, International CCS Knowledge Centre (Canada)
11:50am	Discussion
12:10pm	Lunch with remarks from BP
FOUNDATIONS FOR BUILDING A NATIONAL CCS PROGRAMME Chair, Lorraine Sobers, UWI	
1:10pm	Case study on building a national CCS program - Tony Surridge, SANEDI, (South Africa, remote)
1:30pm	Climate Change Initiative of the Ministry of Planning and Development - Sindy Singh, Ministry of Planning
1:50pm	Potential for CCS in Trinidad and Tobago, technical achievements and remaining gaps - David Alexander, Donnie Boodlal, UTT and Andrew Jupiter, The UWI.
2:20pm	Discussion
2:40pm	Tea/Coffee Break sponsored by BHP
DISCUSSIONS/WRAP UP Chairs, Katherine Romanak, Univ of Texas and Tim Dixon, IEAGHG	
3:00pm	Foundations for building a CCS programme, World Bank activities in CCS - Nataliya Kulichenko, World Bank Group
3:20pm	UNFCCC funding mechanisms and opportunities for engagement - Katherine Romanak- UT-BEG
3:40pm	Open floor audience Q and A to speakers
4:00pm	Conclusions, next steps, and announcement of Offshore Workshop Series - Tim Dixon, IEAGHG David Alexander, UTT, Lorraine Sobers, The UWI, Katherine Romanak, UT-BEG
4:30pm	Adjourn
POST-SYMPOSIUM RECEPTION	
5:00pm - 7:00pm	Invitation only - Cocktail Reception Location: National Energy Corporation, Rivulet Road

DAY 2

FIELD TRIP

8:30am - 11:30am	Half-day field trip to Point Lisas Industrial Estate More information provided below.
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ROUNDTABLE DISCUSSION

11:30am - 12:30pm	Lunch
12:30pm - 2:30pm	Invitation only - UNFCCC concept note development; creating a paradigm shift for CCS in the UN environment.

FIELD TRIP: POINT LISAS INDUSTRIAL ESTATE

The Point Lisas Industrial Estate is the result of the bold and unprecedented move taken by the Government of Trinidad and Tobago to develop the country's natural gas reserves. The Estate, completed in the latter years of the 1970s, is home to over 100 companies involved in a range of activities. It is the centre of the nation's petrochemical sector and the hub of natural gas processing and distribution as a fuel and feedstock. The world's leading manufacturers of ammonia, urea, methanol and other petrochemicals have selected the Point Lisas Industrial Estate because of the ease of access to natural gas resources and Port Point Lisas.

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APPENDIX 2

Minister's Address



**Honourable Minister
of
Planning and Development**

**Featured Speaker Address
to the
Carbon Capture and Storage Symposium**

Tuesday October 29, 2019

I am deeply honoured to have been afforded the opportunity to address you at this Carbon Capture and Storage Symposium, which forms part of the Carbon Emissions Road Map Project, a partnership project between our two premier learning and research institutions, the University of the West Indies (UWI) and the University of Trinidad and Tobago (UTT).

The Ministry of Planning and Development, which has been leading the charge from a governmental perspective on this global issue, is pleased to be part of this symposium which we anticipate, will shed light on the emerging opportunities available to explore the feasibility and practical implementation of carbon capture and storage technology in Trinidad and Tobago.

Though I am by no means a scientist, and cannot even lay claim to knowledge beyond the basics, it literally does not require the brain of a rocket scientist to be aware that the world is experiencing increasing averages in temperature, shifts in the seasons, an increasing frequency of extreme weather events and other climate change impacts, and the creeping onset of events such as sea level rise. I, along with the entire population, repeatedly watch in horror as short, sharp, sudden downpours dump enough rain in 30 minutes that would usually fall in a month. We swelter in crippling heat as temperatures soar and humidity increases, causing many to either run for the protection of the air conditioned offices, or refuse to leave our offices entirely.

Like all other countries in the Caribbean region, Trinidad and Tobago is designated as a Small Island Developing States (SIDS) and therefore particularly vulnerable to the impacts of climate change. Such a nomenclature does not however absolve us from the responsibility to do our part, along with the rest of the global community, to address climate change generally, and the mitigation of our greenhouse gas emissions in particular.

The recent Special Report on Global Warming by the Intergovernmental Panel on Climate Change (IPCC) stated that, at its current rate, global warming is likely to reach 1.5°C between 2030 and 2052. The 1.5°C goal is particularly important for SIDS, as warming beyond this means much greater climate impacts and in many cases, the very existence of some low-lying islands become threatened. The significance of such a threat becomes magnified when one observes that only recently, photographs have emerged of new islands being discovered because of the melting of the polar ice-caps and glaciers.

Globally, there remains an enormous and ever-widening gap between what we ought to be doing, and what we are actually doing to decrease the rate of climate change. According to the United Nations Environment Programme (UNEP) Annual Emissions Gap Report 2018, countries must triple their efforts in order to achieve the 2 °C climate target, and make five times the current effort if they are to achieve no more than a 1.5 °C increase in the global temperature. Although it is still possible to keep global warming to below 2 °C, the technical feasibility of bridging the 1.5 °C gap is dwindling. Transformative action by every single country in the world is therefore absolutely critical.

Trinidad and Tobago has long recognized its responsibility to implement actions designed not only to combat the deleterious effects of climate change, but more importantly, how it contributes to the global fight by establishing national targets known as Nationally Determined Contributions (NDCs). Indeed, Trinidad and Tobago was the first Caribbean country and second small island state to submit its international commitment to climate change, doing so as far back as August 2015. This commitment formally became the NDC of Trinidad and Tobago upon ratification of the Paris Agreement in February 2018. It is arguably, the most ambitious national target in the region.

In its NDC, Trinidad and Tobago aims to achieve a reduction in overall emissions from the three sectors by 15% by 2030, which in absolute terms is an equivalent of one hundred and three million tonnes (103,000,000) of CO₂e. The estimated cost of meeting this objective is US\$2 billion, which is expected to be met partly through domestic funding and internationally sourced financing including, but not limited to the Green Climate Fund. Trinidad and Tobago has also committed to unconditionally reduce its public transportation emissions by 30% or one million, seven hundred thousand tonnes (1,700,000) CO₂e compared to 2013 levels by December 31, 2030. We are indeed

hopeful that this goal could be achieved as we increase the number of CNG powered PTSC buses and Government vehicles in our fleet. Additional Governmental initiatives to ban the use of Styrofoam products and bottled water in Government buildings are all designed to dovetail with our other international commitments to treating with climate change.

Trinidad and Tobago has also set up an enabling framework to address climate change, the cornerstone of which is the National Climate Change Policy or NCCP, which seeks to address, *inter alia*, the impacts of climate change including sectoral vulnerability and mitigation potential in major emitting sectors; current and proposed legislation related to mitigation and adaptation, and the identification of gaps in the legislation. The National Climate Change Policy is currently being updated to include the latest scientific findings and international policy such as the Paris Agreement and the sustainable development goals.

Notwithstanding, the National Climate Change Policy addresses mitigation or reducing greenhouse gas emissions through the exploration of new and emerging technologies for carbon sequestration through cooperating with the international community to develop carbon capture and storage technology in geological formations utilizing the already abundant experience of Trinidad and Tobago in using carbon dioxide for enhanced oil recovery.

With this recognition, Trinidad and Tobago undertook preliminary feasibility studies into carbon capture and storage in 2013, and a pre-feasibility study for a carbon capture and storage project was also completed. This study included preliminary estimates of the CO₂ storage capacities and capabilities of the hydrocarbon (oil and gas) reservoirs of Trinidad and Tobago to allow for policy decisions. It was clear from this preliminary research that carbon capture and storage is possibly feasible in Trinidad and Tobago, and opportunities for project development in this field may indeed exist.

I do note however, the considerable costs associated with utilizing Carbon Capture Sequestration (CCS) for mitigating climate change in respect of not only the technology itself, but the costs associated with monitoring post-sequestration, if Trinidad and Tobago is to use this technology to meet its international commitments and reporting. The use of CCS in enhanced oil recovery has been suggested as a way of defraying costs, but in respect of achieving overall mitigation, the requisite carbon accounting for meeting those commitments would be expected to be part of the overall governance structure of any such project.

In this regard therefore, Trinidad and Tobago can benefit through the use of carbon capture and storage as a means of CO₂ emissions mitigation given our large heavy petrochemical sector as well as our history in enhanced oil recovery. The time is therefore ripe for us to conduct the necessary precise feasibility studies for CCS projects locally and for us to explore opportunities to leverage international support. The opportunities for technology transfer, and for Trinidad and Tobago to join the technology leaders in CCS and climate change mitigation is to be encouraged and supported.

In a very real sense though, Trinidad and Tobago is behind the proverbial eight ball where this research is concerned, which is why today's event is of such critical importance. The first dedicated research facility examining the multiple uses of Carbon Capture Sequestration technology opened in the United States some 30 years ago, and in the last decade the number of viable carbon capture technologies has grown dramatically. Moreover, huge developments in recent years have allowed carbon capture to be applied to a greater number of industries, from transportation to construction.

Recently pioneered utilization technologies have also allowed manufacturers to create a range of products – from trainers to mattresses to insulation foams – from captured CO₂. This has transformed it into an asset, potentially offsetting game-changing levels of emissions. I am advised that in the plastics sector, for example, CO₂ can actually be used as a raw material. Plastics are made from polymers, which are chains of repeating chemical groups akin to a string of beads. Typically, these chemical “beads” are made of petrochemicals like oil, so, if they were replaced with CO₂, the required amount of petrochemical feedstock would reduce, while making use of captured CO₂.

Other possible applications for CO₂ include the facilitation of enhanced fuel recovery through its injection into oilfields, causing oil to flow better into production wells. The research indicates that it can also be used in fuel and chemical manufacture as well as in construction, as demonstrated by cement production technologies from companies like Carbon8 and Solidia. And this is by no means an exhaustive list. With further backing, the potential for carbon capture to be deployed across other sectors appears to be enormous.

I congratulate the University of Trinidad and Tobago and the University of the West Indies on this important initiative, as it is from you we expect this research to both flow and produce fruit. For this, I assure you today of the Government's continued support and action.

In closing, I wish to underscore that the Government of Trinidad and Tobago will continue to play its part by setting the policy framework and by supporting activities on carbon capture and storage in the context that I have outlined. Our commitment to working collaboratively with you in this regard will remain unwavering. As Minister of Planning and Development, I am confident that we are on the right road in respect of our climate change mitigation strategies. I am convinced that the fruits of this symposium will take us closer to where we need to be, and I give you the assurance that as long as you do your part, you will find in your Government both an open door and a willing partner.

May God bless your deliberations, and I await the results of your work.

APPENDIX 3

Press Release

LIFESTYLE *Environment*

11 PAGES OF WHAT'S GOING ON

We have the means to limit climate change

UWI, university partners and energy stakeholders mobilise for carbon dioxide emission reduction

"THE more we disrupt our climate, the more we risk severe, pervasive and irreversible impacts, we have the means to limit climate change and build a more prosperous, sustainable future", said Tim Dixon, general manager of the IEA Greenhouse Gas R&D Programme (IEAGHG), at the recent International Knowledge-Sharing Symposium aimed at reducing carbon dioxide emissions in the energy sector.

This symposium, titled "Developing a Carbon Capture and Storage (CCS) Programme in Trinidad and Tobago", was organised by the CO₂ Emission Reduction Mobilisation (CERM) Project partners; The UWI St Augustine campus and The University of Trinidad and Tobago (UTT) in collaboration with IEAGHG and the University of Texas, Austin.

The symposium, which took place on October 29-30 at the UTT Energy Campus, Pt Lisas, included participants from several Government institutions, the local energy sector, the World Bank and the International CCS Knowledge Centre, and was sponsored by BHP and bpTT.

The UWI is partnering with



TAKING NOTES: Participants take notes during the symposium.

the University of Texas, Austin, and UTT to create a new clean industry that will store greenhouse gases underground and mitigate Trinidad and Tobago's contribution to human-induced climate change. Notably, Carbon Dioxide Enhanced Oil Recovery (CO₂EOR) and CCS have been positioned as

two key technologies in carbon dioxide emission reduction. CCS has significant potential to mitigate climate change, particularly in countries with large reserves of fossil fuels and a fast-increasing energy demand. CO₂EOR, on the other hand, has been identified by industry experts, researchers



FOR A BETTER ENVIRONMENT: Prof of Practice at The UWI, St Augustine, Andrew Jupiter, from left, Minister of Planning and Development Camille Robinson-Regis and Tim Dixon, general manager of the IEA Greenhouse Gas R&D Programme, attend the International Knowledge-Sharing Symposium to further the development of a Carbon Capture and Storage (CCS) Programme in Trinidad and Tobago.



LIKING WHAT THEY HEAR: Participants at the symposium.

and local oil producers as a viable option for increasing Trinidad and Tobago's heavy oil production.

Minister of Planning and Development Camille Robinson-Regis delivered the symposium's feature address, noting Trinidad and Tobago was the first Caribbean country and second Small Island Developing State (SIDS) to submit its international commitment to climate change back in August 2015.

"This commitment formally became the Nationally Determined Contributions (NDCs) of Trinidad and Tobago upon ratification of the Paris Agreement in February 2018. It is arguably the most ambitious national target in the region. Trinidad and Tobago declared the NDC to reduce overall emissions in the power generation, transportation and industrial sectors by 103 million tonnes of equivalent carbon dioxide emissions."

Dr Lorraine Sobers, CERM project coordinator and lecturer in petroleum engineering at The UWI, St Augustine, shared public perspectives on greenhouse gas emission reduction in Trinidad and Tobago; highlighted opportunities for carbon dioxide emission reduction through CCS and CO₂EOR and, the need for methane emission reduction.

Following the symposium, The UWI and its partners under the CERM project intend to build public awareness of the initiative in Trinidad and Tobago. Dr Sobers also noted CERM will focus on capacity building at educational institutions, international partnerships and local research and development of CCS and CO₂EOR.

Learn more about the CERM project at <http://www.thecermproject.com/>

APPENDIX 4

SPEAKER PROFILES

Featured Speaker:



The Honourable Camille Robinson Regis, MP, Minister of Planning and Development

The Honourable Camille Robinson-Regis, appointed to the Senate in 1992, entered the political landscape as the youngest Senator to be appointed to the Cabinet of Trinidad and Tobago. An attorney-at-law by profession, she held the portfolios of Minister of Information from 1992 to 1994, Minister of Consumer Affairs from 1994 to

1995 and Minister in the Ministry of Planning and Development, responsible for the environment. She became Minister of Legal Affairs 2001-2003 and became the first woman to serve as a Minister of Planning and Development in Trinidad and Tobago and CARICOM. Under her stewardship, the signature Vision 2020 Operational Plan was completed, having been developed by a multi-disciplinary team of representatives from the public and private sectors, civil society and academia. Minister Robinson-Regis has also served our country as a diplomat, having been appointed High Commissioner of the Republic of Trinidad and Tobago to Canada in 2007, a position she held until 2010.

Her exceptional career path is supported by her sound educational background, beginning with her Primary School foundation at Bishop Anstey Junior School, proceeding to Bishop Anstey High School as her Secondary and later the University of the West Indies, St. Augustine and Cave Hill campuses, where she undertook a Bachelor of Laws degree and subsequently the Legal Education Certificate at the Norman Manley Law School, Jamaica. Minister Robinson-Regis was admitted to the Trinidad and Tobago Bar in 1985. With her insight and experience, Minister Robinson Regis has returned to the Ministry of Planning and Development as the Minister, having been appointed on September 11th, 2015.



Tim Dixon, General Manager, IEA Greenhouse Gas R&D Programme

Tim Dixon is the General Manager of IEAGHG, a not for profit organization that focuses on technologies that can reduce carbon emissions, and mitigate climate change and global warming. IEAGHG is an international research programme established by the International Energy Agency in 1991 and focusing on carbon dioxide capture and storage (CCS). Tim is responsible for managing IEAGHG, ensuring that it meets the needs of its members and delivers the technical evidence-base to support CCS development and deployment around the world, and inputting to international regulatory and policy developments such as UNFCCC, IPCC and CSLF. Tim is a member of many international committees, task forces, and working groups relating to CCS, including being chair of several. He has given many presentations and published many papers relating to CCS. Prior to IEAGHG, Tim worked in UK government and AEA Technology on CCS, including as a negotiator for CCS in the UNFCCC and London Protocol.



**Professor Andrew Jupiter,
Professor of Practice, Dennis
Patrick MHTL Chair in Petroleum
Engineering, The University of
the West Indies**

Andrew Jupiter was conferred the honorary title of 'Distinguished Fellow' by The University of the West Indies (UWI) in 2013. He is currently attached to the Department of Chemical Engineering in the Faculty of Engineering at UWI and is the co-ordinator of the M.Sc. Petroleum Engineering and M.Sc. and Postgraduate Diplomas in Petroleum Engineering and Management programmes. Professor Jupiter is the holder of the Dennis Patrick MHTL Chair in Petroleum Engineering. He is also the proud recipient of the Chaconia Medal (Gold). From 1998 to 2004 the Professor of Practice served as Permanent Secretary, Ministry of Energy and Energy Industries and was one of fifty public servants honoured on the 50th anniversary of Trinidad and Tobago's Independence. Professor Jupiter was president of the National Energy Corporation of Trinidad and Tobago Limited (National Energy) from 2009 to 2012. He was the Director on several State boards. Currently, Professor Andrew Jupiter is a member of the Society of Petroleum Engineers, Fellow of the Energy Institute and Fellow of the Institute of Materials, Mineral and Mining.



Dr. Katherine Romanak , Research Scientist, The University of Texas at Austin

Dr Katherine Romanak is a Research Scientist, Bureau of Economic Geology, Jackson School of Geosciences at the University of Texas at Austin. Dr. Romanak is an expert in near-surface geochemical monitoring and environmental impacts of geologic carbon storage and has developed and implemented monitoring programs at a number U.S. DOE

Regional Carbon Partnership sites. She was the Principal Investigator of the IPAC-CO₂ response to alleged leakage at the Kerr Farm near the Weyburn-Midale CO₂-EOR oilfield and has developed an innovative process-based method for environmental assessment at CCS sites. Dr. Romanak has conducted environmental monitoring for international projects in Canada, Japan, and Australia. She has also informed global CCS policy regarding potential environmental impacts of CCS within the United Nations Framework Convention on Climate Change (UNFCCC) and the US Congress.



Phillip Ringrose, Equinor Research Centre, Norway

Philip Ringrose is Adjunct Professor in CO₂ Storage at the Norwegian University of Science and Technology (NTNU) and Specialist in Geoscience at the Equinor Research Centre in Trondheim, Norway. Philip Ringrose currently works at the Equinor Research Centre in Norway, and is Adjunct Professor at the Department of

Geoscience and Petroleum, Norwegian University of Science and Technology. His research interests include CO₂ Storage, reservoir modeling, and applications of geophysical monitoring methods. He is Chief Editor of the Journal Petroleum Geoscience. In 2018 he was appointed as Honorary Professor (Sustainable Geoenergy) at the University of Edinburgh, School of Geosciences, Edinburgh, UK.



**Dr. David Alexander, Associate
Professor, The University of Trinidad
and Tobago**

Dr David Alexander is currently the Programme Leader of the Energy Systems Engineering Unit at the University of Trinidad and Tobago (UTT). His main areas of research include Enhanced Oil Recovery, Carbon Capture and Storage and Waste Oil Management among other areas. He has served on several national and international committees as a member of the Environmental Commission of Trinidad & Tobago (ECTT), the Director of New Opportunities of the Society of Petroleum Engineers (SPETT), member of the Global Training Committee of the Society of Petroleum Engineers International (SPEI) and Membership and Education Advisor in the Energy Institute UK (Caribbean Branch). Dr Alexander holds a BSc. in Chemistry/Analytical Chemistry and a M.Sc. in Petroleum Engineering from the University of the West Indies. He also holds a Ph.D. in the field of Petroleum Engineering from the University of Trinidad and Tobago (UTT) in collaboration with the University of Texas at Austin.



Mike Monea, CEO, International Carbon Capture and Storage Knowledge Centre

Mike Monea is the President and CEO of the International Carbon Capture and Storage (CCS) Knowledge Centre a non-profit organization which he helped to establish with BHP Billiton and SaskPower. As a world-leading scientist, research and development is a key component in Mike's mission to help reduce greenhouse gases through CCS technologies. His oversight of a scale-sized Carbon Capture Test Facility has ensured that progress continues to be made with international vendors on post-combustion capture systems. Progress gained in these areas can help reduce costs and advance CCS. Mike's past experience in oil and gas has allowed him to understand the benefits of and opportunities for carbon dioxide for enhanced oil recovery (EOR) and deep saline reservoir storage.



**Dr. Anthony Surridge,
General Manager, South
African Department of
Minerals and Energy**

Since December 2006, Dr Surridge is General Manager- Cleaner Fossil Fuel Use at the South African National Energy Development Institute (SANEDI). During 2009, he established and is currently the Head of the South Africa Centre for Carbon Capture and

Storage. During 2009, he established and is currently the Head of the South Africa Centre for Carbon Capture and Storage. He drafted South Africa's first National Integrated Energy Plan, inter alia drafted four pieces of legislation, negotiated a number of international agreements, and represented South Africa at numerous international gatherings including the United Nations Framework Convention on Climate Change. He serves on the Executive Committee of the International Energy Agency's Greenhouse Gas Programme and as Co-Vice-Chairman of the Technical Group of the Carbon Sequestration Leadership Forum.



Dr. Donnie Boodlal, CERM Co-chair, Associate Professor, The University of Trinidad and Tobago

Donnie Boodlal is Lecturer/Researcher at the University of Trinidad and Tobago since 2007. He was recently appointed as a Co-Chair to the CERM Project. His work on the Cost-Effective Strategies for Greenhouse Gas Mitigation in Trinidad and Tobago is highly rated and he is

regarded nationally as being at the forefront of the field of emissions reductions. His research efforts in this field mapped carbon dioxide emissions from key industries in Trinidad & Tobago and presented a precise methodology for assessing and evaluating the financial feasibility of mitigation techniques. His work is well recognized locally and internationally. Dr Boodlal holds a B.Sc. in Mechanical Engineering, a Post Graduate Diploma in Petroleum Engineering, an M.Sc. in Industrial Innovation, Entrepreneurship and Management and a Ph.D. in Process Engineering.



**Dr. Lorraine Sobers, CERM
Project Coordinator, Lecturer,
The University of the West
Indies**

In 2016 Dr Sobers developed and spearheaded the CO₂ Enhanced Oil Recovery Road Map (CERM) Project, now the CO₂ Emission Reduction Mobilisation Project, to facilitate an integrated national approach to use CO₂ emission reduction techniques in

the energy sector. As the CERM Project Coordinator, Dr Sobers coordinates cooperation between government institutions and academia and develops the strategic direction of the collaborative initiative. Dr. Lorraine Sobers is a Fulbright Scholar with a first degree in Chemical Engineering and a Master's Degree in Petroleum Engineering from Texas Tech University. In 2012, Dr Sobers earned her Ph.D. in Petroleum Engineering at Imperial College, London. She is currently a lecturer at the University of the West Indies, St. Augustine specialising in CO₂ storage injection strategies to maximise storage.