

Trinidad and Tobago Needs Multi-Faceted Approach to Deal with Climate Change

Introduction

As a world energy leader in LNG, methanol and ammonia production and export and, as a small island state, Trinidad and Tobago has to place climate change adaptation and mitigation on the front burner. Developing the right policy mix, the correct incentives and identifying the synergies between climate finance and development are all pivotal.

At the Energy Chamber's recent Trinidad and Tobago Energy Conference, former US Secretary of Energy Steven Chu gave his perspective on the impacts of climate change and how the cost of carbon will drive the demand for new clean technology and trading platforms.

To demonstrate the rising costs of climate change, he gave a 32 year history highlighting both the increase in extreme events and the losses caused by the events. Quoting from a study done by re-insurance company Munich Re, he noted that these events cost US 200 billion dollars per year if counting insured and uninsured losses. Since 1950, the costliest natural disasters were weather-related with 6 out of 7 of the most costly occurring in the last 8 years alone. Chu said these trends supported the need for serious action to address climate change. He added that if the world is aggressive about carbon control then temperatures can increase at a rate four times lower than if no action was taken.

Chu felt there were several opportunities springing up from the climate crisis. He said developing wind technology was becoming cheaper and in some US states wind power was the cheapest form of energy after natural gas. The cost of PV modules has also plunged although costs started to creep back up after 2008's recession. He said in the next 20 to 40 years sustainable use of natural gas would be a game changer. Chu pointed to the opportunities for reforming natural gas to hydrogen for fuel and even carbon capture and utilisation as well as using non-biodegradable material in construction as a form carbon sequestration.

During his address he reiterated that price of carbon will drive the proliferation of new green technology and that the country needed to be flexible and keep looking for innovative ways to stay ahead of the curve.

Emission Trading Scheme Option for T&T and How it Can Be Linked to CDM

For Trinidad and Tobago, an emission trading scheme is one out of the box green initiative which could be tailored to fit our own unique situation and help link us to other global emissions trading platforms. Firstly we must establish that there is no correct Emission Trading Scheme (ETS) design. However, an ETS must be sovereign, predictable, reliable and most of all fungible (allowing for linkage). An ETS boundary for Trinidad and Tobago must be upstream to downstream. The ETS should have phased compliance caps and targets to ensure environmental goals are achieved. Also, a robust monitoring, reporting and verification regime will set the integrity of a Trinidad and Tobago ETS (TT ETS). The eventual linking of a TT ETS with an international system will increase carbon market liquidity, offer a more stable carbon

price signal, reduce transaction costs, add global opportunities for local business, and will support global climate cooperation.

The World Bank, through its Partnership for Market Readiness, has a USD100 million fund to build market readiness and implement market-based instruments, such as domestic ETS and crediting mechanisms in developing countries.

A global carbon market will not come about in a structured top down fashion but will emerge bottom up; building on systems of different foundations to respond to cap-setting, allocation, flexibility and scope based on local parameters. However, there is an opportunity for this country to piggyback on the initiative once there is Government commitment.

The Chamber has always sought innovative ways to link its membership to different financing mechanisms. In the past year, through our Energy Efficiency and Alternate Energy Committee, the Chamber has been diligently working with Petrotrin to expand the benefits of the CDM platform in which Petrotrin has invested (see box). We believe that from among our membership there exists plenty of opportunity to reduce emissions in Trinidad and Tobago and earn carbon credit revenue that can be offset or traded between governments and companies internationally under the Petrotrin CDM platform.

With government buy-in and with international recognition of the CDM investment, the Chamber is confident an enforceable and verifiable TT ETS can be designed that does not require: (1) local industry to buy allowances or permits, (2) government levy of a carbon tax (3) renewable energy subsidies or (4) a feed in tariff. Emissions will be reduced over compliance periods through sectoral energy efficiency measures and low emission development. Major incentives for a TT ETS is that it positions Trinidad and Tobago companies to generate carbon credits for exchange or offset internationally and the ETS becomes a key local economic driver.

Box

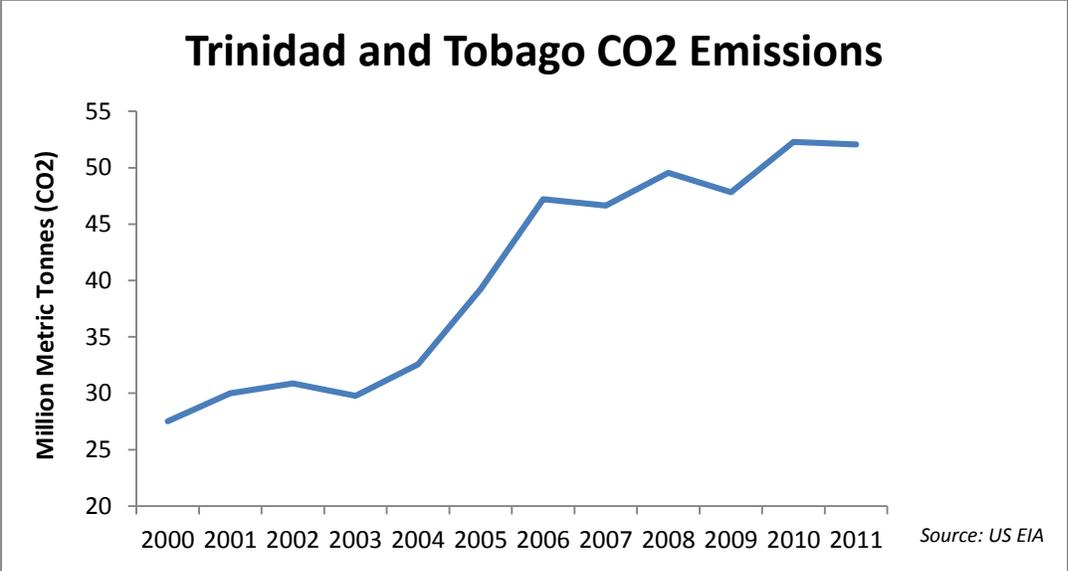
Petrotrin's Clean Development Mechanism (CDM) Project

The Petrotrin CDM project will recover methane rich natural gas released during crude oil production and transport the gas to the national gas pipeline for industrial use. This project is expected to reduce emissions by approximately 90,000 tCO₂e in the 1st year of operation and has the potential to remove 1.3 MM tCO₂e over the 20 year project span.

The benefits to be accrued to T&T are many. These include a reduction in corporate GHG emissions, a more efficient use of energy resources, and an upgrade of aging oilfield infrastructure. In August 2013, the project was successfully registered as the **first of its kind** Programme of Activities (POA) in Trinidad and Tobago under the CDM platform. Petrotrin has already invited tenders for implementation of the first project activity. This involves the capture of vented methane from 562 wells located in Palo Seco, Grand Ravine, Penal/ Barrackpore, Parrylands and Fyzabad. So far, one Lease Operator has also signed

an expression of interest in joining the POA Platform. The groundbreaking project won the Best Environmental project award at the Chamber's recent Annual Awards ceremony.

Graph 1 – Trinidad and Tobago's CO2 Emissions 2000-2011



For more information visit www.energy.tt