



## The EMA's Role in Carbon Management

(EMA Corner, Sunday 17<sup>th</sup> January, 2016)

In 1994 Trinidad and Tobago ratified the United Nations Framework Convention on Climate Change (UNFCCC) in recognition of the need to “*stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system*”. Against this backdrop we reiterated our commitment to carbon management in local policy through the National Environmental Policy (2006) and the 2011 National Climate Change Policy (NCCP). Carbon management broadly refers to efforts to reduce carbon dioxide (CO<sub>2</sub>) and other greenhouse gas emissions. There are two critical aspects to carbon management:

1. Emission reduction through policy measures, technological interventions and market-based mechanisms.
2. Emissions measurement and monitoring.

Despite the express provisions for CO<sub>2</sub> in local environmental laws, including the Environmental Management Act Chap 35:05 (EM Act), the Environmental Management Authority (EMA) plays a critical role in our domestic carbon management; striving for targets set under the United Nations Sustainable Development Goal #13 (SDG #13) – “*Taking urgent action to combat climate change and its impacts*”

The EMA's policy measures to mitigate greenhouse gas emissions primarily focus on the protection and enhancement of carbon sinks such as forest and mangrove ecosystems. Under the Certificate of Environmental Clearance Rules, 2001 (CEC Rules) the EMA ensures that development activities minimize the net loss of vegetative cover. Under the Environmentally Sensitive Areas Rules, 2001, the EMA prohibits the damage and destruction of important carbon sinks such as the Matura Forest and Nariva Swamp. The ability of these areas to reduce carbon emissions is one of the driving factors behind the National Restoration, Carbon Sequestration Wildlife, and Livelihood Project launched by the EMA in 2010. This project funded by the Green Fund involves the collaboration of the EMA, University of the West Indies, Forestry Division and dozens of Community Based Organisations to achieve the reforestation of 500 hectares of the Nariva Swamp by March 2017. The community groups are trained in fire prevention ensuring both sustainability of the project and alignment with SDG #13's target “*to promote mechanisms for raising the capacity for effective climate change*

*management in Small Island Developing States with particular emphasis on local communities”.*

Two technological interventions discussed in the context of Trinidad and Tobago are Carbon Capture and Storage and Enhanced Oil Recovery (EOR). The former is the process of permanently storing CO<sub>2</sub> emissions from industry in underground geological formations and the latter is the injecting of CO<sub>2</sub> into dwindling oil reservoirs to increase production. Both approaches are explicitly mentioned as key research areas under the NCCP (2011) and the National Strategy for the Reduction of Carbon Emissions (2015). EOR is thought to be more economically viable for Trinidad and Tobago given its potential to increase revenue in the absence of a carbon market. Further its feasibility has already been established locally through a series of pilot projects executed by PETROTRIN over the period 1973 – 1990 which yielded increased production between 2% - 8% original barrels of oil in place. With respect to these types of projects, the current iteration of the EM Act positions the EMA to ensure that potential negative impacts are properly mitigated and proper measures are put in place to foster long term sequestration through the CEC Rules.

Market-based mechanisms for carbon management generally refer to carbon trading schemes in which some entities generate carbon credits from reducing their emissions and sell those credits to other entities through a broker. The Ministry of Energy and Energy Industries, Ministry of Planning and Development and the Trinidad and Tobago Energy Chamber have been at the forefront of developing a domestic emissions trading system. This responsibility is best vested with the Energy Chamber since buy-in from industry, which produces an estimated 74% of the country’s total carbon emissions, is better achieved when carbon market development is led by a non-governmental entity that is familiar with commodity markets. The EMA may adopt the essential responsibility of compiling national greenhouse gas inventories, as well as, implementing the monitoring, reporting and verification of Nationally Appropriate Mitigation Actions; critical jobs for meeting reporting obligations of the UNFCCC, as well, as ensuring that carbon management in Trinidad and Tobago is properly executed.

Aware of the rapidly evolving context of global carbon management, the EMA recently concluded a two-year technical cooperation with the Inter-American Development Bank to strengthen its capacity in relation to climate change. From this study, amendments to the EM Act and its subsidiary legislation to explicitly address carbon management and climate change issues have been proposed. Also, under consideration is the establishment of a Climate Change Unit and an integrated Management Information System to better handle the work to be done. These proposals will build on the EMA’s decade-long legacy of climate change education and its contributions guiding national carbon management through participation in technical steering committees. Together they stand as a testament to Trinidad and Tobago’s

ongoing commitment to one of the targets under SDG 13 which is to “*integrate climate change measures into national policies, strategies and planning*”.

The meaningful reduction of carbon emissions in a manner that is economically sound and socially equitable depends on the combined efforts of many public, private and non-governmental actors. Today, the EMA is addressing carbon management within the limits of its governing framework – the EM Act and subsidiary legislation. Tomorrow, the EMA hopes to revise the framework and build its capacity to better facilitate carbon management strategies and ensure that they are employed responsibly and appropriately in the ongoing journey towards sustainable development.