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Low Emission Capacity Building Programme and the Intended Nationally Determined Contribution Commitment of Trinidad and Tobago

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The LECB and INDC in Trinidad and

Intended Nationally Determined Contributions (INDCs) reflect each country's goal for reducing emissions, taking into account its domestic circumstances and capabilities

The Nationally Appropriate Mitigation Actions (NAMAs) are policies, programmes and projects that developing countries undertake to contribute to the global effort to reduce greenhouse gas emissions. In Trinidad and Tobago they were developed under the Low Emission Capacity Building (LECB) programme

The Carbon Reduction Strategy (CRS) outlines a plan for reducing GHG emissions in Trinidad and Tobago through mitigation actions in three major emitting sectors, and underpins the targets and actions set out in the INDC. The National Climate Change Policy (2011) provided the policy framework upon which the Strategy for the Reduction of Carbon Emissions in Trinidad and Tobago was created

Tobago

INDC

3

NAMA

CRS

NAMA.

2

NAMA

NAMA



Global LECB Background

Launched in January 2011

Global program designed to provide coordinated, expert, capacity building support to assist participating countries in selecting the most relevant project activities to facilitate low carbon development

Joint collaboration between the European Union (European Commission and Member States) and the United Nations Development Programme (UNDP).

- Funded by:
- European Commission,
- The German Federal Ministry for the Environment, Nature, Conservation and Nuclear Safety, and
- Australian Government,

Implemented by participating countries with UNDP support. The LECB is part of the Climate Change and Disaster Risk Reduction cluster of UNDP and gains insight from and builds on global programmes and initiatives already developed by UNDP and donor countries.



LECB Global Goals



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The Programmes overall objective is to strengthen capacities in participating countries in the following ways:

- Develop greenhouse gas (GHG) inventory management systems
- Identify opportunities for nationally appropriate mitigation actions (NAMA)
- Design low emission development strategies (LEDS) in the context of national priorities
- Design systems for measuring, reporting, and verification of proposed actions and means to reduce GHG emissions
- Facilitate the design and adoption of mitigation actions by selected industries in some countries

LECB in Trinidad and Tobago

- Trinidad and Tobago is one of 25 countries and the only SIDS participating
- Joint collaboration between the Ministry of Planning and Development and UNDP
- Funded through a grant of USD 780, 000 (plus USD 350,00 upcoming)
- Commenced in July 2014
- Main objectives:
 - Development of sectoral Low Carbon Development (LCD) Action Plans and Nationally Appropriate Mitigation Actions (NAMAs)
 - Development/amendment of sectoral policies and legislation
 - Design of a National Monitoring, Reporting and Verification (MRV) System
 - Capacity building in NAMA and MRV development (training workshops)
 - Development of Trinidad and Tobago's INDC Implementation Plan



What are Intended Nationally Determined Contributions (INDCs)?



- Public climate action commitments made by countries across the globe which have adopted the historic international climate agreement at the UNFCCC Conference of the Parties (COP21) in Paris in December 2015
- The climate actions communicated in these INDCs largely determine whether the world achieves the long-term goals of the Paris Agreement: to hold the increase in global average temperature to well below 2° C, to pursue efforts to limit the increase to 1.5° C, and to achieve net zero emissions in the second half of this century.
- INDCs are the primary means for governments to communicate internationally the steps they will take to address climate change in their own countries
- INDCs reflect each country's ambition for reducing emissions, taking into account its domestic circumstances and capabilities



Trinidad and Tobago's INDC, 2015

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- Reduction objective in overall cumulative emissions from the three main emitting sectors (power, transport and heavy industry) by 15% by 2030 from Business as Usual (BAU) equivalent to 103 Million tons CO2e
- Unconditional reduction in public transportation emissions by 30% or 1.7 Million tons CO2e compared to 2013 levels by December 31, 2030
- Estimated cost of implementation is USD \$2 billion which is expected to be met partly through domestic funding and conditional on international climate financing including through the Green Climate Fund

Approach to Determining NAMAs and INDC Implementation Plan

Under the LECB four NAMA options were determined for the three major emitting sectors in consultation with key stakeholders.

Various analysis and prioritization exercises were conducted with experts and stakeholders The outputs of these included:

- 1. Legislative Gap Analysis of the Power Generation, Industry and Transport Sectors
- 2. Institutional Capacity Assessment of the Power Generation, Industry and Transport Sectors
- 3. Low Carbon Development (LCD) Action Plans, including NAMAs, for the Power Generation, Industry and Transport Sectors



How is Trinidad and Tobago meeting its INDC targets



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	POWER GENERATION	TRANSPORT	INDUSTRY – OIL AND GAS	INDUSTRY - PETROCHEMICAL
NAMA OPTIONS	Renewable energy promotion (wind and solar)	Integrated public transport system	Flaring and venting reduction	Financial incentives for GHG emission reductions

NAMAs developed focused significantly on actions around renewable energy, energy efficiency and energy conservation

NAMAs cannot be implemented without having the appropriate enabling environment for low carbon development

NAMA Power Generation: Renewable Energy Promotion (solar& wind)

- 1. Review energy pricing
 - Immediate Activities: Rate determination
 - <u>Short Term Activities</u>: Update rates implementation
- 2. Promote energy conservation and efficiency
 - <u>Immediate Activities</u>: Recommend EE & EC measures to Gov't; Recommend actions to reduce natural gas; Determine local energy standards;
 - <u>Short Term Activities</u>: Design EE & EC programme for Gov't; Implement Energy Smart Exchange Programme; Conduct feasibility study for CCGT; Conduct energy audits for power generation plants
 - <u>Medium Term Activities</u>: Implement local voluntary energy rating programme; Implement upgrade programme for CCGT power plants; Implement energy efficiency improvements in power generation plants; Pursue ISO certification for power plants; Implement phase-out programme for aging power plant technology
 - Long Term Activities: Implement EE & EC public awareness programme; Implement EE & EC improvements in residential and commercial sectors



NAMA Power Generation: Renewable Energy Promotion (solar& wind)

- 3. Promote renewable energy and alternative energy
 - Immediate Activities: Formalize policy decree of 10% RE by 2021; Develop EE & EC roadmap for achieving RE policy decree; Establish mandatory co-generation policy decree; Review and formalize National Feed-In Tariff Policy; Review and amend RIC and T&TEC Acts to enable RE; Conduct feasibility study of waste-to-energy plant(s); Conduct feasibility research of RE &EE financing options
 - <u>Short Term Activities</u>: Undertake feasibility study and install desalination plant for Tobago; Implement public awareness programme on RE fiscal incentives; Implement pilot project for macro installation waste to energy plant; Implement pilot microinstallation PV solar project; Implement pilot macro-installation PV solar project;
- 4. Promote knowledge and awareness
 - <u>Short to Long Term Activities</u>: Implement education campaign on EE, EC & RE for primary and secondary schools



NAMA Industry- Petrochemical/Oil and Gas: Financial incentives for GHG emission reductions

- 1. Promote energy conservation and energy efficiency in the industry sector
 - Immediate Activities: Formalize ESCO Policy to legitimize ESCOs and approve procedures to access fiscal incentives for energy audits and EE measures; Conduct energy audits of firms in industry sectors
 - <u>Short Term Activities</u>: Develop and implement certification process for ESCOs
 - <u>Short to Medium Term Activities</u>: Design and implement sectoral awareness campaign on ESCO policy & fiscal incentives for EE
- 2. Promote renewable energy and alternative energy:
 - <u>Medium Term Activities</u>: Research feasibility of Industrial use of RE for low-energy processes; Research feasibility of utilizing waste heat in industrial sites for thermal desalination of water to be reused
 - <u>Medium to Long Term Activities</u>: Implement voluntary RE scheme for industry sector and select industrial firms to take part in pilot RE projects
 - Long Term Activities: Develop and implement pilot project for thermal desalination plant at selected industrial sites



NAMA Industry- Petrochemical/Oil and Gas: Financial incentives for GHG emission reductions

- 3. Knowledge Management and Awareness for Industry Sector
 - <u>Short Term Activities</u>: Create online repository of EE & EC actions, best practices, case studies, success stories and challenges for the industry sector and general public on energy audits
 - <u>Short to Medium Term</u>: Implement Sectoral Training Programme for building capacity in EE, EC, GHG monitoring and reporting
 - <u>Short to Long Term Activities</u>: Implement Industry EC and EE Challenge and Recognition Programme; Implement public awareness programme on Industry EC and EE Challenge and Recognition Programme
- 4. Establish National Monitoring, Reporting and Verification (MRV) System



INDC Implementation Plan Climate Finance Plan



Climate Finance Plan

- Set up institutional arrangements for financing the INDC
- Identify funding gaps and needs
- Assess public and private financing options
- Develop sectoral climate finance plans
- Assess direct access requirements to international climate funds
- Develop project pipeline and funding proposals
- Increase private sector engagement and investment
- Integrate into National MRV System

Potential Sources of Funding

103 Million tons CO₂e US \$2 billion

- The Green Fund
- Public Sector Investment Programme (PSIP)
- International NAMA Facility
- Global Environmental Facility (GEF)
- Global Environmental Facility Small Grants Programme (GEF SGP)
- Green Climate Fund (GCF)
- Sustainable Energy and Climate Change Initiative
- International Climate Initiative



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Thank You