Government of the Republic of Trinidad and Tobago
Ministry of Planning and Development

THE PARIS AGREEMENT 2015

POTENTIAL ROLE OF THE AIR POLLUTION RULES (2014) IN IMPLEMENTING THE PARIS AGREEMENT IN TRINIDAD AND TOBAGO

Kishan Kumarsingh

Head, Multilateral Environmental Agreements Unit and Former Co-Chair of the UN Negotiations on the Paris Agreement

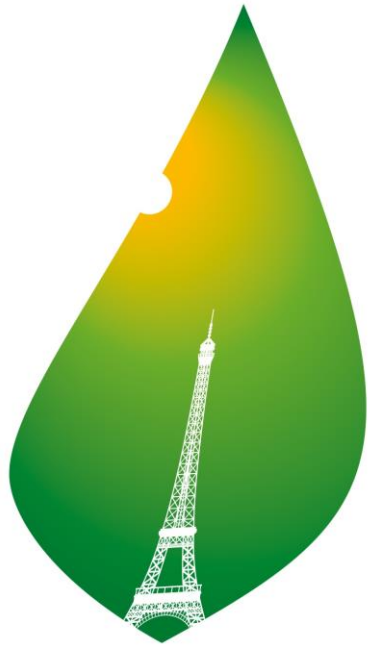
PARIS AGREEMENT KEY OUTCOMES

Paris Agreement

- To enter into force in 2020 upon ratification of 55 Parties accounting for 55% global emissions

COP Decisions

- Giving effect of the Agreement
- Sets out framework for further negotiations to finalize rules, modalities, etc. required for operationalising the Agreement to be negotiated between 2015 and 2020

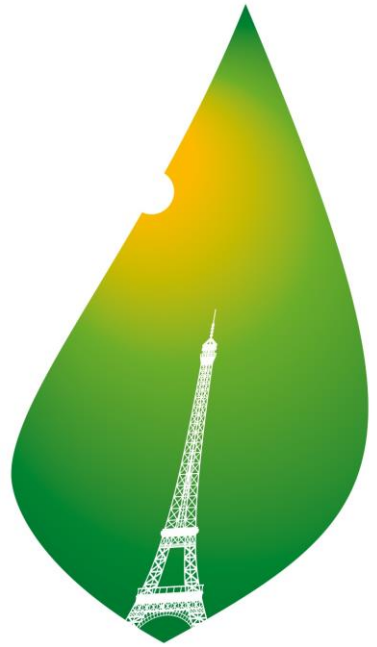


COP21 · CMP11
PARIS 2015
UN CLIMATE CHANGE CONFERENCE

PARIS AGREEMENT KEY OUTCOMES

Overall

- Limiting global temperature increase well below 2^0C, while urging efforts to limit the increase of temperature to 1.5^0C;
- Global peaking 'as soon as possible" with achieving a balance of emissions with sinks in the second half of the century (carbon neutrality);
- Undertaking a global stocktake in 2023 and every five (5) years thereafter which will seek to ensure that there is collective progress towards achievement of the long term goals;
- Special recognition of the circumstances of SIDs



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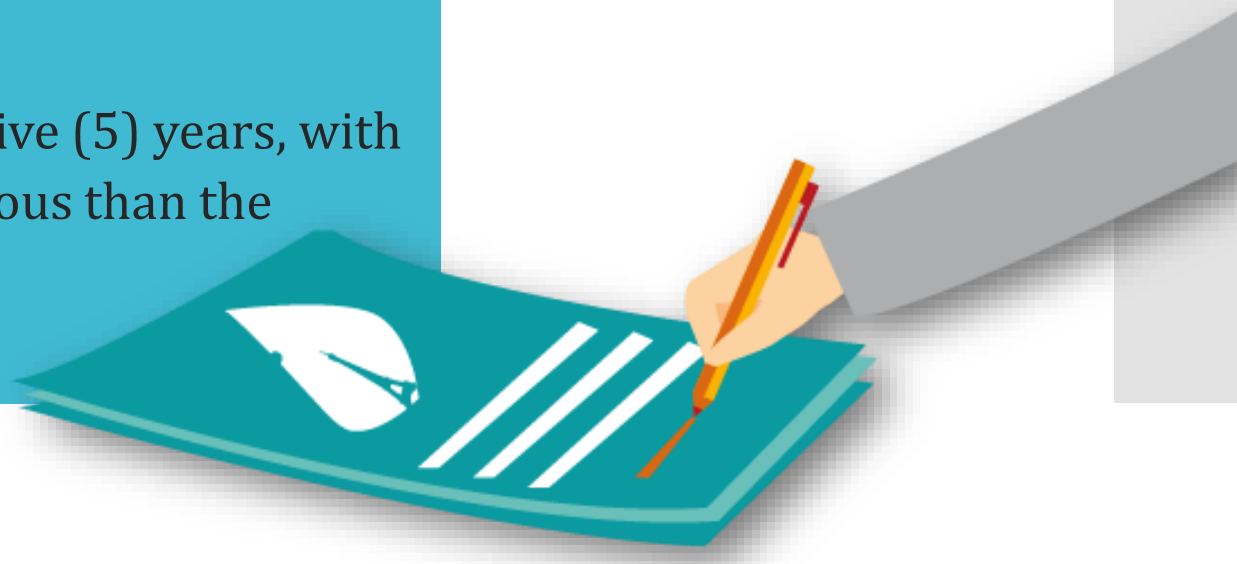
UN CLIMATE CHANGE CONFERENCE

PARIS AGREEMENT KEY OUTCOMES

Mitigation

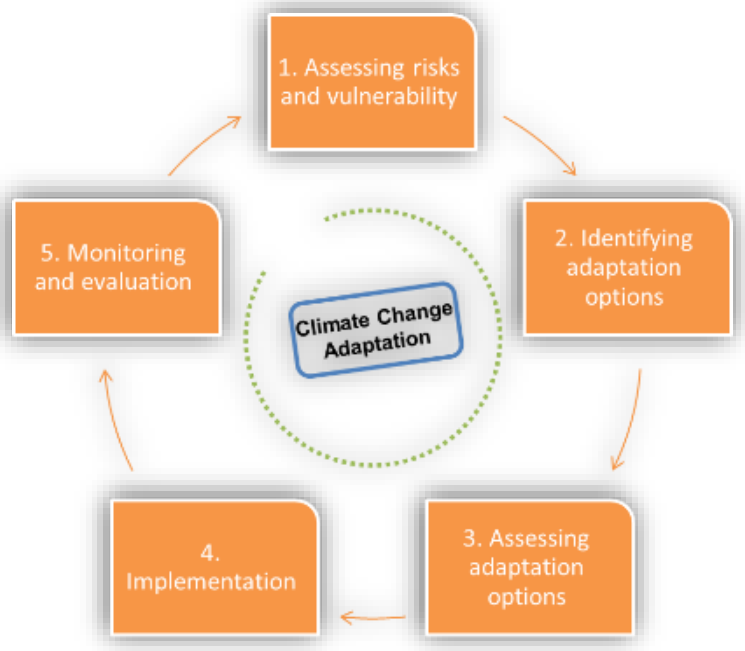
- Establishing binding commitments by all Parties to make Nationally Determined Contributions (NDCs), and to pursue domestic measures aimed at achieving them;
- Committing all Parties to regularly report on their emissions and the progress made in implementing and achieving their NDCs, and to undergo international review;
- Committing all Parties to submit new NDCs every five (5) years, with the clear expectation that they will be more ambitious than the previous submission;



PARIS AGREEMENT KEY OUTCOMES

Adaptation

- Adaptation planning process – action plans, policies
- Assessment of vulnerability – people, places and ecosystems
- Building climate resilience – economic diversification, sustainable management of natural resources
- Monitoring and evaluation of implementation
- Adaptation communication to UNFCCC (considered in global stocktake)



PARIS AGREEMENT KEY OUTCOMES

Loss and Damage

- Extending a mechanism to address loss and damage resulting from climate change, which explicitly will not involve or provide a basis for any liability or compensation;

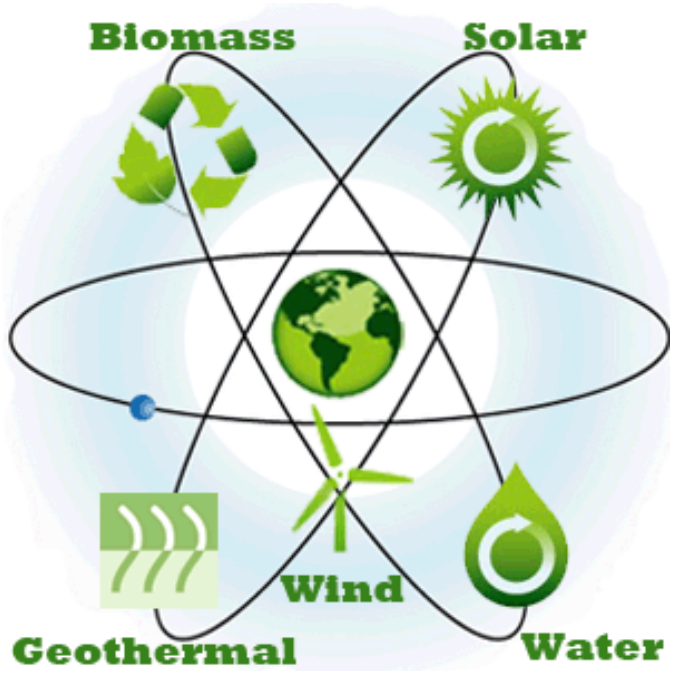
Climate Finance

- Mobilising $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Developed countries to provide finance, with an invitation for developing countries to voluntarily do so
- Developed countries to continue obligations under the Convention
  - Shall provide financial resources to assist developing countries with mitigation and adaptation

PARIS AGREEMENT KEY OUTCOMES

Technology Transfer

- Strengthen cooperative action
- Continuation of the Technology Mechanism
- Technology Framework established to provide overarching guidance to the Technology Mechanism
- Developed countries to provide finance



PARIS AGREEMENT KEY OUTCOMES

Transparency and Compliance

- Development of an enhanced transparency system for all countries:
  - A critical component of the Agreement; the transparency framework agreed to by parties ensures that all countries are on a level playing field with flexibility for developing countries;
  - Facilitate tracking of progress – linked to global stocktake
  - Reporting of inventory of greenhouse gases
  - Information necessary to track progress in implementing (i)NDCs
  - Information on financial, technology transfer and capacity building support received

OVERALL IMPACT AND MESSAGE FROM THE PARIS AGREEMENT

“Business as usual is risky business”

- **Christina Figueres, Executive Secretary of the UNFCCC**

- It is NOT going to be “business as usual”
- Action required by ALL countries
- Current NDCs will not achieve temperature goal (more ambition needed)
- Bottom-up approach with international scrutiny
- Provides framework for engagement of private sector/business (carbon pricing, market mechanisms)

OVERALL IMPACT AND MESSAGE FROM THE PARIS AGREEMENT

Strong Signal to Business and Private Sector (positive reaction of non-state actors):

- More than 800 of the largest companies around the world favour a global deal to tackle climate change.
- Mission Innovation - The following countries doubled their respective clean energy research and development over the five (5) years to 2020:

  - Australia, Brazil, Canada, Chile, China, Denmark, France, Germany, India, Indonesia, Italy, Japan, Mexico, Norway, Saudi Arabia, South Korea, UAE, UK, US

http://www.mission-innovation.net/

OVERALL IMPACT AND MESSAGE FROM THE PARIS AGREEMENT

Strong Signal to Business and Private Sector (positive reaction of non-state actors):

- International Solar Alliance (Initiative of India) – 121 countries ramping up investments in clean energy.
- Transformative Carbon Asset Facility (Germany, Norway, Sweden and Switzerland) – a new $500 million initiative that will find ways to create incentives aimed at large scale cuts in greenhouse gas emissions in developing countries to combat climate change.
- Nitric Acid Climate Action Group – for all facilities used for manufacturing nitric acid to be equipped with nitrous oxide abatement technology by 2020.
  - Offers guidance and information, and provides financial support for those countries willing to pursue low-cost potential post 2020

Indian Prime Minister Narendra Modi address at the launch of the International Solar Alliance at COP21

ACTION ITEMS UNDER THE PARIS AGREEMENT FOR TRININDAD AND TOBAGO

Preparing for 2020 and Beyond

ACTION ITEMS UNDER THE PARIS AGREEMENT FOR TRININDAD AND TOBAGO

- Five year NDC cycles: Under the Agreement, all countries will communicate their Nationally Determined Contribution every five (5) years, starting in 2020.
- Targets must be submitted 9-12 months in advance of the respective COP, ensuring time for clarity and transparency through review.
- Each Nationally Determined Contribution should show a higher level of ambition from the preceding submission.
- Formulation and communication of long term greenhouse gas emission development strategies

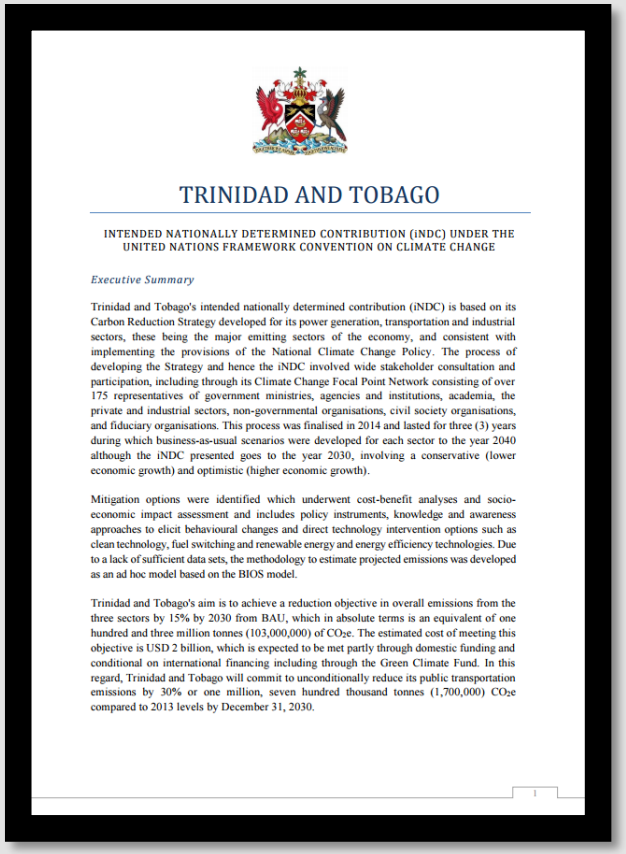
ACTION ITEMS UNDER THE PARIS AGREEMENT FOR TRINIDAD AND TOBAGO

Decision urges Parties with iNDC to 2030 (Trinidad and Tobago) to update or communicate these contributions by 2020

- Opportunity to revisit the iNDC or reconfirm it (in keeping with principle of no-backtracking)
- iNDC becomes NDC on signing and ratification of the Agreement

Reporting on transparency (subject to development guidelines)

- National Inventory of GHG emissions (IPCC methodology) (National Communications, Biennial Updated Reports)
- Information necessary to track progress in NDC implementation and achievement



TRINIDAD AND TOBAGO

INTENDED NATIONALLY DETERMINED CONTRIBUTION (iNDC) UNDER THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Executive Summary

Trinidad and Tobago's intended nationally determined contribution (iNDC) is based on its Carbon Reduction Strategy developed for its power generation, transportation and industrial sectors, these being the major emitting sectors of the economy, and consistent with implementing the provisions of the National Climate Change Policy. The process of developing the Strategy and hence the iNDC involved wide stakeholder consultation and participation, including through its Climate Change Focal Point Network consisting of over 175 representatives of government ministries, agencies and institutions, academia, the private and industrial sectors, non-governmental organisations, civil society organisations, and fiduciary organisations. This process was finalised in 2014 and lasted for three (3) years during which business-as-usual scenarios were developed for each sector to the year 2040 although the iNDC presented goes to the year 2030, involving a conservative (lower economic growth) and optimistic (higher economic growth).

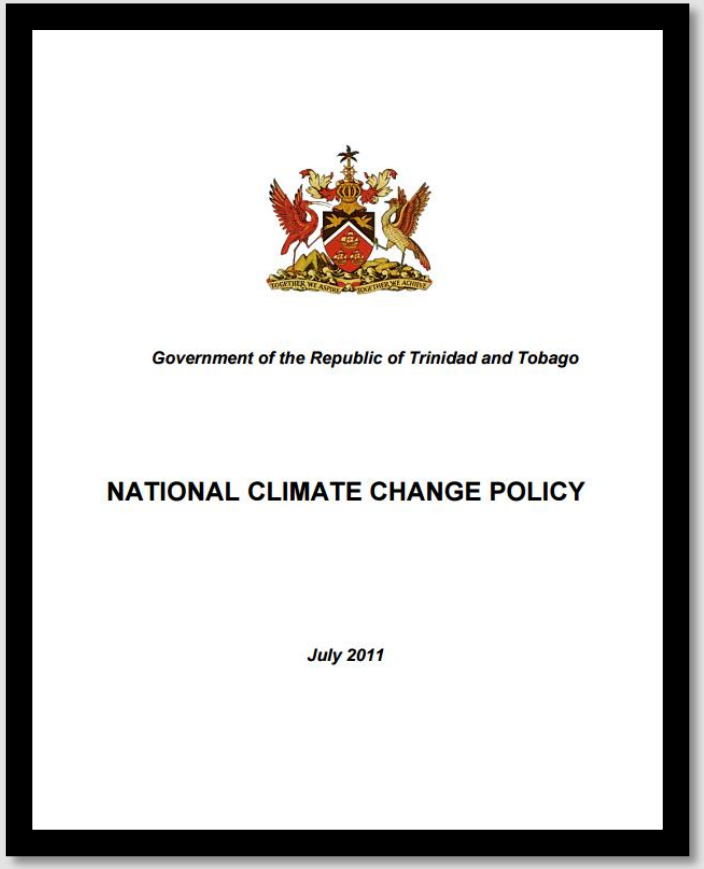
Mitigation options were identified which underwent cost-benefit analyses and socio-economic impact assessment and includes policy instruments, knowledge and awareness approaches to elicit behavioural changes and direct technology intervention options such as clean technology, fuel switching and renewable energy and energy efficiency technologies. Due to a lack of sufficient data sets, the methodology to estimate projected emissions was developed as an ad hoc model based on the BIOS model.

Trinidad and Tobago's aim is to achieve a reduction objective in overall emissions from the three sectors by 15% by 2030 from BAU, which in absolute terms is an equivalent of one hundred and three million tonnes (103,000,000) of CO_2e. The estimated cost of meeting this objective is USD 2 billion, which is expected to be met partly through domestic funding and conditional on international financing including through the Green Climate Fund. In this regard, Trinidad and Tobago will commit to unconditionally reduce its public transportation emissions by 30% or one million, seven hundred thousand tonnes (1,700,000) CO_2e compared to 2013 levels by December 31, 2030.

ACTION ITEMS UNDER THE PARIS AGREEMENT FOR TRINIDAD AND TOBAGO

Policy and legislative framework to facilitate preparation of NDCs, and reporting obligations and other obligations under the Paris Agreement (Ministry of Planning and Development (MPD))

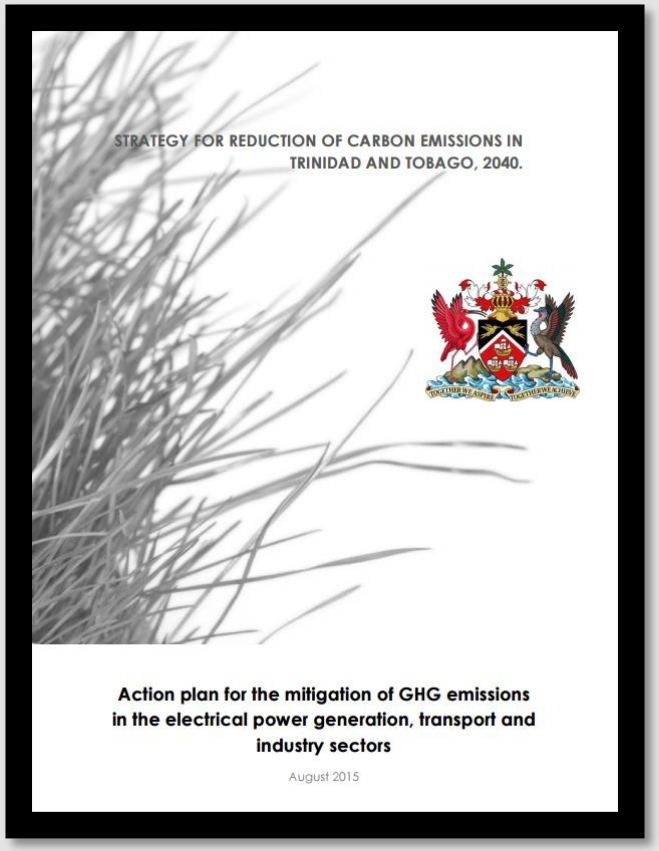
- National Climate Change Policy (NCCP) – broad policy framework – to be revised in 2016 to include the international policy context (Paris Agreement and post-2015 SDGs) coordinated by the Multilateral Environmental Agreements Unit of the MPD
- Analysis of policy and legislative gaps for implementing the NCCP with a view to revising or developing relevant policies and legislation to create enabling environment for NCCP implementation
- Creation of enabling environment for carbon trading (as appropriate)



ACTION ITEMS UNDER THE PARIS AGREEMENT FOR TRININDAD AND TOBAGO

Actions being/to be undertaken:

- Action plan for implementing recommendations of policy and legislative review (on approval by Cabinet)
- Implementation plan for iNDC and CRS
- Development of a capacity building programme (LECB) to target key stakeholders
- Development of Nationally Appropriate Mitigation Actions (NAMAs) to contribute to NDC achievement
- Development of a MRV system to measure, report and verify emissions and therefore track progress of NDCs and reduction of carbon footprint



ACTION ITEMS UNDER THE PARIS AGREEMENT FOR TRININDAD AND TOBAGO

Institutional Framework

- Action plan for implementing recommendations of policy and legislative review (on approval by Cabinet)
- Cabinet-appointed Inter-Ministerial Committee for providing high-level oversight
- Climate Change Focal Point Network
- MEAU coordination of NCCP implementation
- Nationally Appropriate Mitigation Actions (NAMAs) tracking and verification
- Regulatory framework based on MRV system

TRINIDAD AND TOBAGO'S iNDC

Unconditional Commitment

"Trinidad and Tobago will commit 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."

TRINIDAD AND TOBAGO'S iNDC

Gases Addressed

- Carbon Dioxide (CO_2) – GWP: 1 (100yr)
- Methane (CH_4) – GWP: 28-36 (100yr)
- Nitrous Oxide (N_20) – GWP: 265-298 (100yr)

HOW GREENHOUSE GASES ARE REGULATED IN OTHER JURISDICTIONS

Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations (2012)

- Energy Intensity Limit: 400 tonnes CO_2/GWh/y

Renewable Fuels Regulations (2013)

- Aims to reduce GHG emissions by requiring an average 5% renewable fuel content in gasoline and 2% renewable content in diesel fuel

Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations

- Emissions standards

Emissions Reporting

- Inventorying and Reporting Framework

Canada:
Canadian EPA (1999)

HOW GREENHOUSE GASES ARE REGULATED IN OTHER JURISDICTIONS

Stationary Sources

- Clean Power Plan which put the nation on track to cut harmful pollution from the power sector by 32% below 2005 levels, *Renewable Fuels Regulations (2013)*

Final Greenhouse Gas Tailoring Rule

- Permitting system – "tailors" the requirements of these Clean Air Act permitting programs to limit covered facilities to the nation's largest greenhouse gas emitters: power plants, refineries and cement production facilities

Transportation/Mobile Sources

- Reduced greenhouse gas emissions and improved fuel use

Emissions Reporting

- Inventorying and Reporting Framework

USA:

EPA/Clean Air Act

HOW GREENHOUSE GASES ARE REGULATED IN OTHER JURISDICTIONS

- *Directive 2010/75/EU*

  Nitrous oxide emissions standards:

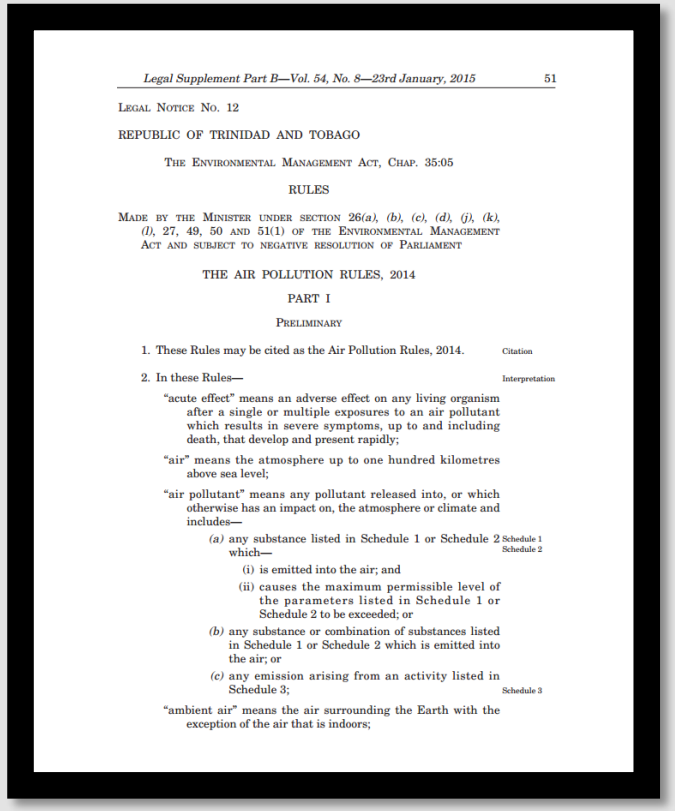
  - Existing Plants – 20-100 ppmv (0.12 - 0.6kg/tonne 100% nitrc acid)
  - New Plants – 20-300 ppmv (0.12 – 1.85kg/tonne 100% nitric acid)

- *F-gases GWP 23 000*
- *Emissions Trading Scheme*
- *Emissions Reporting*
  - Inventorying and Reporting Framework

European Union

PROVISIONS OF AIR POLLUTION RULES (2014)

In the Context of the Paris Agreement and iNDC



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LEGAL NOTICE NO. 12

REPUBLIC OF TRINIDAD AND TOBAGO

THE ENVIRONMENTAL MANAGEMENT ACT, CHAP. 35:05

RULES

MADE BY THE MINISTER UNDER SECTION 26*(a), (b), (c), (d), (j), (k), (l)*, 27, 49, 50 AND 51(1) OF THE ENVIRONMENTAL MANAGEMENT ACT AND SUBJECT TO NEGATIVE RESOLUTION OF PARLIAMENT

THE AIR POLLUTION RULES, 2014

PART I

PRELIMINARY

1. These Rules may be cited as the Air Pollution Rules, 2014. Citation

2. In these Rules— Interpretation

"acute effect" means an adverse effect on any living organism after a single or multiple exposures to an air pollutant which results in severe symptoms, up to and including death, that develop and present rapidly;

"air" means the atmosphere up to one hundred kilometres above sea level;

"air pollutant" means any pollutant released into, or which otherwise has an impact on, the atmosphere or climate and includes—

(a) any substance listed in Schedule 1 or Schedule 2 which— Schedule 1 Schedule 2

(i) is emitted into the air; and

(ii) causes the maximum permissible level of the parameters listed in Schedule 1 or Schedule 2 to be exceeded; or

(b) any substance or combination of substances listed in Schedule 1 or Schedule 2 which is emitted into the air; or

(c) any emission arising from an activity listed in Schedule 3; Schedule 3

"ambient air" means the air surrounding the Earth with the exception of the air that is indoors;

PROVISIONS OF AIR POLLUTION RULES (2014)

In the Context of the Paris Agreement and iNDC

"Air pollutant means:

any pollutant released into, or which otherwise has an impact on, the atmosphere or climate and includes–

(a) any substance listed in Schedule 1 or Schedule 2 which– (i) is emitted into the air; and (ii) causes the maximum permissible level of the parameters listed in Schedule 1 or Schedule 2 to be exceeded; or

(b) any substance or combination of substances listed in Schedule 1 or Schedule 2 which is emitted into the air; or

(c) any emission arising from an activity listed in Schedule 3;"

PROVISIONS OF AIR POLLUTION RULES (2014)

In the Context of the Paris Agreement and iNDC

Schedule 1:

Stipulates maximum permissible levels for ambient air

Schedule 2:

Stipulates maximum permissible releases from stacks

- Only non-methane volatile organic compounds included (tropospheric ozone precursors), other GHGs not included (NOx –may include nitrous oxide, but stipulated as nitrogen dioxide (non-GHG) GHGs not included

Schedule 3:

Designated activities

Note: These activities include most, if not all that would give rise to GHGs – confirming that such emissions are classified as an "air pollutant"

PROVISIONS OF AIR POLLUTION RULES (2014)

In the Context of the Paris Agreement and iNDC

- Register of Air Pollutant (Section 3 pursuant to Section 49(2) of EM Act)
  - quantity
  - in a form determined by the Authority

- Registration (Section 4)
  - source emitter: tracks emitters
  - emission rates
  - emission data (quantity and concentrations)
  - air pollution management programmes (mitigation)
  - **any other relevant information** (Presenter's emphasis)

Note: Read conjunctively, the register ostensibly provides for a one-off register of pollutants, but the registration of emission rates can facilitate derivation of annual quantities

PROVISIONS OF AIR POLLUTION RULES (2014)

In the Context of the Paris Agreement and iNDC

- Contents of Permits (Section 19(1))
  - quantity of air pollutants permitted to be released
- Conditions of Permits (Section 20(1))
  - reduction targets as determined by the Authority be met in respect of releases of air pollutants;
  - the monitoring of air pollutants be conducted in accordance with the methods specified in the permit;
  - monitoring equipment as specified by the Authority be installed, used and maintained;

(POTENTIAL) ROLE OF THE AIR POLLUTION RULES (2014)

General Considerations

- The APR 2014 contains the primary elements for implementing the country's iNDC in respect of the industrial and energy (power generation) sectors and by extension the Paris Agreement.
- The Rules do not include provisions for mobile sources and therefore do not address the transportation emissions.
- Consideration should be given to amending/streamlining the Rules to explicitly provide for addressing greenhouse gases and avoid ambiguity.

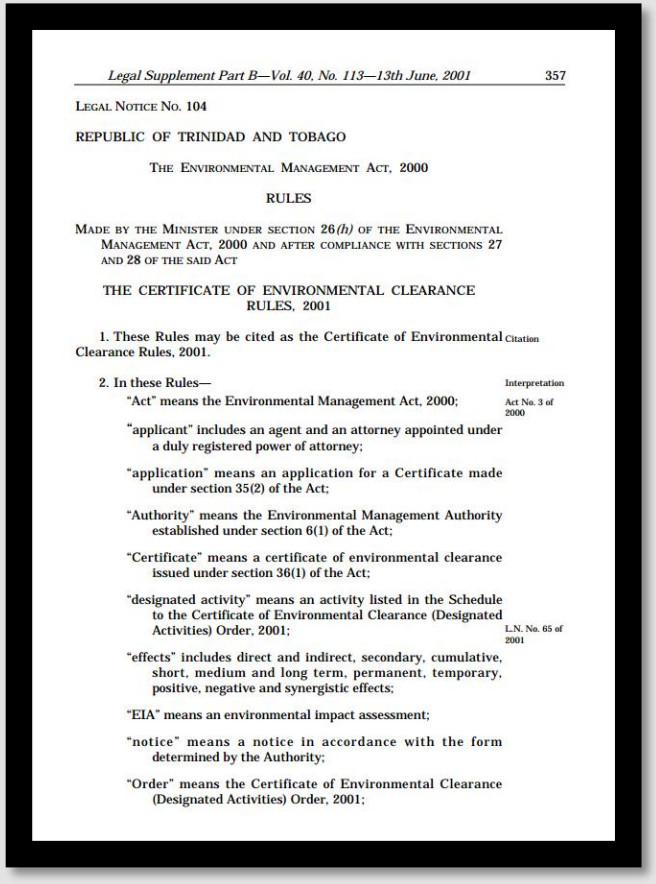
(POTENTIAL) ROLE OF THE AIR POLLUTION RULES (2014)

Further Considerations

- MRV framework (following the finalization under the LECB project)
  - Measurement methodology
  - Reporting format
  - Verification procedures (including independent auditing)
- MRV applied to greenhouse gases arising from activities (a new Schedule)
- Reduction targets (Inclusion of stack release standards for GHGs by sector/activities (e.g. nitrous oxide from nitric acid production), and other GHGs as may be appropriate
- Stipulation of abatement technologies
- Directly, or in concert with other legislation, address transportation emissions

CEC RULES – NEW PLANTS

- Maximize the utility of the Certificate of Environmental Clearance (CEC) Rules to include:
  - Deployment of best abatement technologies for GHGs for new plants
  - Inventorying and reporting emissions as conditions of CECs for activities giving rise to GHG emissions
  - Measurement methodology
  - Reporting format
  - Verification procedures (including independent auditing)



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LEGAL NOTICE NO. 104

REPUBLIC OF TRINIDAD AND TOBAGO

THE ENVIRONMENTAL MANAGEMENT ACT, 2000

RULES

MADE BY THE MINISTER UNDER SECTION 26*(h)* OF THE ENVIRONMENTAL MANAGEMENT ACT, 2000 AND AFTER COMPLIANCE WITH SECTIONS 27 AND 28 OF THE SAID ACT

THE CERTIFICATE OF ENVIRONMENTAL CLEARANCE RULES, 2001

1. These Rules may be cited as the Certificate of Environmental Clearance Rules, 2001. Citation

2. In these Rules— Interpretation

"Act" means the Environmental Management Act, 2000; Act No. 3 of 2000

"applicant" includes an agent and an attorney appointed under a duly registered power of attorney;

"application" means an application for a Certificate made under section 35(2) of the Act;

"Authority" means the Environmental Management Authority established under section 6(1) of the Act;

"Certificate" means a certificate of environmental clearance issued under section 36(1) of the Act;

"designated activity" means an activity listed in the Schedule to the Certificate of Environmental Clearance (Designated Activities) Order, 2001; L.N. No. 65 of 2001

"effects" includes direct and indirect, secondary, cumulative, short, medium and long term, permanent, temporary, positive, negative and synergistic effects;

"EIA" means an environmental impact assessment;

"notice" means a notice in accordance with the form determined by the Authority;

"Order" means the Certificate of Environmental Clearance (Designated Activities) Order, 2001;

ANY QUESTIONS?

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